The Pennsylvania State University

The Graduate School

SOCIAL MOVEMENT LEARNING ABOUT JUST TRANSITION IN CENTRAL APPALACHIA

A Dissertation in

Adult Education with a dual title in Comparative and International Education

by

Colleen Unroe

2021 Colleen Unroe

Submitted in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

August 2021

This dissertation of Colleen Unroe was reviewed and approved by the following:

John D. Holst Associate Professor of Lifelong Learning and Adult Education Dissertation Advisor Co-Chair of Committee

Rebecca Tarlau Assistant Professor of Education and Labor and Employment Relations Co-Chair of Committee

Mark A. Brennan Professor and UNESCO Chair in Community, Leadership, and Youth Development

Ann Tickamyer Professor emerita of Rural Sociology and Demography (Affiliate) Women, Gender, and Sexuality Studies

Heather Toomey Zimmerman
Professor of Education
Director of Graduate Studies for the Department of Learning &
Performance Systems

Abstract

This study utilizes adult learning, working-class, hegemonic masculinity, and political economy theories to explore the education and learning that supports engagement in the Just Transition movement in Central Appalachia. The central research question is as follows: in communities with economies formerly dominated by the coal industry, how does an organization promoting multiple Just Transition initiatives use education and learning to support engagement in this work? The sub-questions that guide this study are as follows: (1) how does the gendered history of the coal industry and the changing political economy of the post-coal reality influence the educational efforts of an organization working toward a Just Transition? (2) how do informal and non-formal learning opportunities attempt to promote a just transition in the region? (3) how have people perceived these informal and non-formal learning opportunities as transforming themselves, their communities, and/or region and nation over the past decades?

In this case study, data was collected between November 2019 and July 2020. Data included 14 semi-structured interviews of Eastern Kentucky members and staff of the grassroots community organization, Kentuckians for the Commonwealth. Written documents, curricula of non-formal education, observational data, and the organizational website also served as important sources of data. Field notes and analytic memos were instrumental and aided in the analysis of data.

An important finding of this study is that the organization created a community of practice, which was instrumental in enhancing the engagement of community members in the organization's initiatives. Within that community of practice, there was a dialectical

relationship between non-formal education and informal learning. Additionally, some informal learning occurred which was unrelated to the non-formal education. Another finding was that the changing gendered history and political economy of the coal industry shaped how the organization approached its work. More specifically, the organization moved from attempting to hold the hegemonic coal industry accountable to environmental protections to, instead, pushing for proactive alternatives through Just Transition. Within their Just Transition efforts, the coal industry continued to shape which projects and campaigns were pursued by the organization, including how people grappled with the loss of identity, dealt with legacy effects of the coal industry, maintained a focus on energy production through a focus on renewable energy and energy efficiency, and engaged with voter empowerment. Both non-formal education and informal learning played an important role in the organization fulfilling its mission, which is illustrated throughout this study.

TABLE OF CONTENTS

LIST OF FIGURES	VII
LIST OF TABLES	IX
ACKNOWLEDGEMENTS	
CHAPTER 1 OVERVIEW	1
STATEMENT OF THE PROBLEM	
RESEARCH QUESTIONS	
BACKGROUND	
CASE STUDY DESCRIPTION	
JUST TRANSITION INITIATIVES	
Environmental Justice Campaigns	
Benham \$aves Community Energy Project	
Renew East Kentucky/Rural Electric Cooperative Reform	
Legislative Reform	15
Empower Kentucky Plan	
KFTC'S EDUCATIONAL PRACTICES	17
Appalachia's Bright Future	18
Power House Project	19
Empower Kentucky Leadership Network	20
Skills-based Trainings	
Cultural Exchanges	
ORGANIZATION OF CHAPTERS	24
CHAPTER 2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK	
POLITICAL ECONOMY OF CENTRAL APPALACHIA.	
COAL'S HEGEMONY AND POWER	
SOCIAL CHANGE EFFORTS IN APPALACHIA	
GENDER IN APPALACHIA	
DEFINING JUST TRANSITION	
EDUCATIONAL THEORETICAL FRAMEWORK	
Adult Environmental Social Movement Learning (SML)	
Informal Learning	
Non-formal Education	58
Situated Learning and Communities of Practice	
FEMINIST THEORIES.	
Working-class masculinity	
CONCLUSION	68
CHAPTER 3 METHODS	70
RESEARCH QUESTIONS	
CASE STUDY DESIGN	71
DATA COLLECTION	
Semi-structured Interviews and Participant Recruitment	
Participant Observation	
Organizational Literature	
Curriculum	
Other Data	
Researcher Positionality	
CODING AND ANALYSIS	
VALIDITY AND RELIABILITY	97

CHAPTER 4 GLOBAL POLITICAL ECONOMY OF COAL'S INFLUENCE ON EDUCATION	Triangulation	98
THE CONTEXT THAT KFTC EMERGED FROM 1880S TO 1990: A GENDERED POLITICAL ECONOMY ANALYSIS OF THE HISTORICAL DOMINATION OF THE COAL INDUSTRY		
THE CONTEXT THAT KFTC EMERGED FROM 1880S TO 1990: A GENDERED POLITICAL ECONOMY ANALYSIS OF THE HISTORICAL DOMINATION OF THE COAL INDUSTRY. Loyally to the Industry. 104 Influence on Politics. 115 Influence on Politics. 116 KFTC'S FIRST DICADE: ISSUES KFTC HISTORICALLY WORKED ON IN THE REGION. 118 (1981-1990). 118 LARGER-SCALE EXTRACTION, FEWER WORKERS: SHIFTS IN THE COAL INDUSTRY (1990-2008). 129 Friends of Coal. 130 SHIFT IN ORGANIZATIONAL APPROACH. 131 Just Transition in KFTC. 132 Just Transition in KFTC. 134 COAL'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021). 144 Coal is Less Dominate. 144 Coal is Less Dominate. 144 Challenging the perception of Obama's So-Called "War on Coal" (2009-2016). 155 So-Called Trump Country (2016-present). 155 Critiques of Just Transition. 166 KFTC MAKING GLOBAL CONNECTIONS (2008-2021). 157 Legacy Impacts of Coal. 169 Legacy Impacts of Coal. 160 Legacy Impacts of Coal. 161 Continued Focus on Energy. 177 Engagement with Elections. 178 CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 175 LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK. 181 IMPACT OF EDUCATION AND LEARNING. 184 Demonstration of Efficacy. 185 Solidarity. 205 ANALYSIS OF THE LEARNING. 216 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 227 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 228 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 229 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 220 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 221 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 222 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION. 225 LIMITATIONS. 226 LIMITATIONS. 227 LIMITATIONS. 228 LIMITATIONS. 227 REFERENCES. 235	Reflexivity	99
ANALYSIS OF THE HISTORICAL DOMINATION OF THE COAL INDUSTRY	CHAPTER 4 GLOBAL POLITICAL ECONOMY OF COAL'S INFLUENCE ON	
ANALYSIS OF THE HISTORICAL DOMINATION OF THE COAL INDUSTRY Loyalty to the Industry. 108 Threats. 111 Influence on Politics. 1116 KFTC 'S FIRST DECADE: ISSUES KFTC HISTORICALLY WORKED ON IN THE REGION. 1118 (1981-1990). 118 LARGER-SCALE EXTRACTION, FEWER WORKERS: SHIFTS IN THE COAL INDUSTRY (1990-2008) 122 Friends of Coal. 136 SHIFT IN ORGANIZATIONAL APPROACH. 133 JUST Transition in KFTC 138 DIFFERENT ELEMENTS OF JUST TRANSITION. 141 COAL 'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021). 144 Coal is Less Dominate. 144 Coalies Less Dominate. 144 Challenging the perception of Obama's So-Called "War on Coal" (2009-2016). 155 So-Called Trump Country (2016-present). 155 KFTC MAKING GLOBAL CONNECTIONS (2008-2021). 155 Critiques of Just Transition. 166 KFTC TODAY. 166 Legacy Impacts of Coal. 166 Continued Focus on Energy. 177 Engagement with Elections. 177 CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 175 LEADERSHIP DEVEL OPMENT AS EDUCATIONAL WORK. 181 IMPACT OF EDUCATION AND I LEARNING. 186 Demonstration of Efficacy. 186 Skills Development. 197 Consciousness-raising. 198 Understanding Power. 200 Solidarity. 200 ANALYSIS OF THE LEARNING. 214 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 224 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 222 CONTRIBUTIONS TO FEMINIST THEORY. 225 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 222 CONTRIBUTIONS TO FEMINIST THEORY. 226 CONTRIBUTIONS TO FEMINIST THEO	EDUCATION	103
Loyalty to the Industry. 108		
### Threats ### Th	ANALYSIS OF THE HISTORICAL DOMINATION OF THE COAL INDUSTRY	104
Influence on Politics	Loyalty to the Industry	108
KFTC's First Decade: Issues KFTC Historically Worked on in the Region 118 (1981-1990). 121 118 1-1990 118 128 139 130 131 131 132 132 133 134	Threats	112
(1981-1990)		
LARGER-SCALE EXTRACTION, FEWER WORKERS: SHIFTS IN THE COAL INDUSTRY (1990-2008). 12: Friends of Coal. 13: SHIFT IN ORGANIZATIONAL APPROACH 13: Just Transition in KFTC 13: DIFFERENT ELEMENTS OF JUST TRANSITION 14: COAL'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021). 14: COAL'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021). 14: Coal is Less Dominate 14: Challenging the perception of Obama's So-Called "War on Coal" (2009-2016) 15: So-Called Trump Country (2016-present). 15: KFTC MAKING GLOBAL CONNECTIONS (2008-2021) 15: Critiques of Just Transition 16: KFTC TODAY 16: Identity 16: Legacy Impacts of Coal. 16: Continued Focus on Energy. 17: Engagement with Elections 17: Engagement with Elections 17: ENAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 175: LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK 18: IMPACT OF EDUCATION AND IFARNING 18: Demonstration of Efficacy. 18: Skills Development 19: Consciousness-raising 19: Consciousness-raising 19: Understanding Power 20: Solidarity 20: ANALYSIS OF THE LEARNING 21: CONCLUSIONS 22: CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA 22: CONTRIBUTIONS TO FEMINIST THEORY 22: CONTRIBUTIONS TO FEMINIST THEORY 22: CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 23: IMPLICATIONS 22: IMPLICATIONS 22: IMPLICATIONS 22: IMPLICATIONS 22: IMPLICATIONS 23: FUTURE RESEARCH 23: REFERENCES 23:	KFTC'S FIRST DECADE: ISSUES KFTC HISTORICALLY WORKED ON IN THE REGION	118
Friends of Coal		
SHIFTIN ORGANIZATIONAL APPROACH Just Transition in KFTC JIFFERENT ELEMENTS OF JUST TRANSITION. COAL'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021). (Coal is Less Dominate. (Challenging the perception of Obama's So-Called "War on Coal" (2009-2016). 15. So-Called Trump Country (2016-present). SFTC MAKING GLOBAL CONNECTIONS (2008-2021). (SFTC TODAY. Identity. Identity. Identity. Identity. Identity. Identity. ICHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 179. LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK. IMPACT OF EDUCATION AND LEARNING. Demonstration of Efficacy. ISENSIES Development. Skills Development. ISENSIES Development. ISENSIES Development. ISENSIES Development. ISENSIES Development. ISENSIES OF THE LEARNING. CHAPTER 6 CONCLUSION. CONCLUSIONS. 220 CHAPTER 6 CONCLUSION. 221 CONTRIBUTIONS TO FEMINIST THEORY. CONTRIBUTIONS TO FEMINIST THEORY. CONTRIBUTIONS TO FEMINIST THEORY. 222 CONTRIBUTIONS TO FEMINIST THEORY. 223 CHAPTER RESEARCH. 235 REFERENCES. 236 REFERENCES.		
Just Transition in KFTC		
COAL'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021)	Just Transition in KFTC	13 <i>6</i>
Coal is Less Dominate	DIFFERENT ELEMENTS OF JUST TRANSITION	141
Challenging the perception of Obama's So-Called "War on Coal" (2009-2016)	COAL'S INDUSTRY'S DEMISE: PRODUCTION DECLINE (2009-2021)	144
So-Called Trump Country (2016-present) 154		
KFTC MAKING GLOBAL CONNECTIONS (2008-2021) 157 Critiques of Just Transition 166 KFTC TODAY 165 Identity 165 Legacy Impacts of Coal 169 Continued Focus on Energy 177 Engagement with Elections 172 CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 175 186 Leadership Development as Educational Work 181 IMPACT OF EDUCATION AND LEARNING 186 Demonstration of Efficacy 186 Skills Development 199 Consciousness-raising 199 Understanding Power 200 Solidarity 200 ANALYSIS OF THE LEARNING 214 CONCLUSIONS 221 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA 222 CONTRIBUTIONS TO FEMINIST THEORY 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 223 IMPLICATIONS 223 IMPLICATIONS 223 FUTURE RESEARCH 235 REFERENCES 235	Challenging the perception of Obama's So-Called "War on Coal" (2009-2016)	151
Critiques of Just Transition	So-Called Trump Country (2016-present)	154
KFTC TODAY 165 Identity 165 Legacy Impacts of Coal 165 Continued Focus on Energy 172 Engagement with Elections 172 CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 179 172 LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK 181 IMPACT OF EDUCATION AND LEARNING 186 Demonstration of Efficacy 186 Skills Development 192 Consciousness-raising 195 Understanding Power 200 Solidarity 205 ANALYSIS OF THE LEARNING 214 CONCLUSIONS 221 CHAPTER 6 CONCLUSION 223 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA 224 CONTRIBUTIONS TO FEMINIST THEORY 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 225 IMPLICATIONS 225 LIMITATIONS 231 FUTURE RESEARCH 235 REFERENCES 235	KFTC MAKING GLOBAL CONNECTIONS (2008-2021)	157
Identity 165 Legacy Impacts of Coal. 166 Continued Focus on Energy. 177 Engagement with Elections. 174 CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 179 175 LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK 181 IMPACT OF EDUCATION AND LEARNING. 186 Demonstration of Efficacy. 186 Skills Development. 192 Consciousness-raising. 198 Understanding Power. 200 Solidarity. 205 ANALYSIS OF THE LEARNING. 214 CONCLUSIONS. 221 CHAPTER 6 CONCLUSION 223 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA 224 CONTRIBUTIONS TO FEMINIST THEORY. 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION. 225 LIMITATIONS. 225 LIMITATIONS. 231 FUTURE RESEARCH. 235 REFERENCES. 235		
Legacy Impacts of Coal	KFTC TODAY	165
Continued Focus on Energy		
CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 175 LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK 181 IMPACT OF EDUCATION AND LEARNING 186 Demonstration of Efficacy 186 Skills Development 192 Consciousness-raising 192 Consciousness-raising 200 Solidarity 200 ANALYSIS OF THE LEARNING 214 CONCLUSIONS 222 CHAPTER 6 CONCLUSION 223 CONTRIBUTIONS TO FEMINIST THEORY OF APPALACHIA 224 CONTRIBUTIONS TO FEMINIST THEORY 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 225 IMPLICATIONS 225 LIMITATIONS 225 LIMITATIONS 225 REFERENCES 235		
CHAPTER 5 NON-FORMAL EDUCATION AND INFORMAL LEARNING IN KFTC 1792 LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK		
LEADERSHIP DEVELOPMENT AS EDUCATIONAL WORK IMPACT OF EDUCATION AND LEARNING. Demonstration of Efficacy. Skills Development. 192 Consciousness-raising. Understanding Power. Solidarity. ANALYSIS OF THE LEARNING. CONCLUSIONS. 222 CHAPTER 6 CONCLUSION. CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 224 CONTRIBUTIONS TO FEMINIST THEORY. CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION. 125 IMPLICATIONS. 226 LIMITATIONS. 237 REFERENCES. 236 REFERENCES.	Engagement with Elections	174
IMPACT OF EDUCATION AND LEARNING. 186 Demonstration of Efficacy. 186 Skills Development. 192 Consciousness-raising. 198 Understanding Power. 200 Solidarity. 205 ANALYSIS OF THE LEARNING. 214 CONCLUSIONS. 222 CHAPTER 6 CONCLUSION 223 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 224 CONTRIBUTIONS TO FEMINIST THEORY. 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION. 225 IMPLICATIONS. 225 LIMITATIONS. 231 FUTURE RESEARCH 232 REFERENCES. 235		
Demonstration of Efficacy.186Skills Development.192Consciousness-raising198Understanding Power.200Solidarity.205ANALYSIS OF THE LEARNING.214CONCLUSIONS.22CHAPTER 6 CONCLUSION223CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA.224CONTRIBUTIONS TO FEMINIST THEORY.226CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION.228IMPLICATIONS.229LIMITATIONS.231FUTURE RESEARCH.232REFERENCES.235		
Skills Development192Consciousness-raising198Understanding Power200Solidarity209ANALYSIS OF THE LEARNING214CONCLUSIONS222CHAPTER 6 CONCLUSION223CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA224CONTRIBUTIONS TO FEMINIST THEORY226CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION228IMPLICATIONS229LIMITATIONS231FUTURE RESEARCH232REFERENCES235	IMPACT OF EDUCATION AND LEARNING	18 6
Consciousness-raising198Understanding Power200Solidarity205ANALYSIS OF THE LEARNING214CONCLUSIONS22CHAPTER 6 CONCLUSIONCONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA224CONTRIBUTIONS TO FEMINIST THEORY226CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION228IMPLICATIONS229LIMITATIONS231FUTURE RESEARCH232REFERENCES235		
Understanding Power200Solidarity209ANALYSIS OF THE LEARNING214CONCLUSIONS22CHAPTER 6 CONCLUSIONCONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA224CONTRIBUTIONS TO FEMINIST THEORY226CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION228IMPLICATIONS229LIMITATIONS231FUTURE RESEARCH232REFERENCES235		
Solidarity		
ANALYSIS OF THE LEARNING		
CONCLUSIONS 223 CHAPTER 6 CONCLUSION 223 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA 224 CONTRIBUTIONS TO FEMINIST THEORY 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 228 IMPLICATIONS 229 LIMITATIONS 231 FUTURE RESEARCH 232 REFERENCES 235		
CHAPTER 6 CONCLUSION 223 CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA 224 CONTRIBUTIONS TO FEMINIST THEORY 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 228 IMPLICATIONS 229 LIMITATIONS 231 FUTURE RESEARCH 232 REFERENCES 235		
CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA. 224 CONTRIBUTIONS TO FEMINIST THEORY. 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION. 228 IMPLICATIONS. 229 LIMITATIONS. 231 FUTURE RESEARCH. 232 REFERENCES. 235	CONCLUSIONS	22
CONTRIBUTIONS TO FEMINIST THEORY 226 CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION 228 IMPLICATIONS 229 LIMITATIONS 231 FUTURE RESEARCH 232 REFERENCES 235		
CONTRIBUTIONS TO THEORIES OF ADULT EDUCATION	CONTRIBUTIONS TO POLITICAL ECONOMIC THEORY OF APPALACHIA	224
IMPLICATIONS 229 LIMITATIONS 231 FUTURE RESEARCH 232 REFERENCES 235		
LIMITATIONS		
FUTURE RESEARCH		
REFERENCES. 235		
	FUTURE RESEARCH	232
APPENDIX A INTERVIEW PROTOCOL (ACTIVE MEMRERS) 257	REFERENCES	235
	APPENDIX A INTERVIEW PROTOCOL (ACTIVE MEMREDS)	255

APPENDIX B INTERVIEW	PROTOCOL	(STAFF).	 260



LIST OF FIGURES

Figure 1 KFTC's Diagram of Key Organizing Strategies	9
Figure 2 Photo of Manual Coding Process	94
Figure 3 Trends in Coal Employment in Central Appalachia by Mine Type	127
Figure 4 Joel Pett Political Cartoon of Coal Influence on the Kentucky Legislature	130
Figure 5 U.S. Coal mining Employment by Production Region	147
Figure 6 U.S. Annual Electricity Generation by Energy Source	148
Figure 7 Learning in the Community of Practice	185

LIST OF TABLES

Table 1 Political Economy Theories for Appalachia 30
Table 2 Different Definitions of Just Transition 46
Table 3 Demographic Information of Interview Participants and Interview Details75
Table 4 Observational Data from Participant Observation 77
Table 5 Campaign Documents Analyzed
Table 6 KFTC's Work Related to Coal's Changing Political Economy in Central
Appalachia
Table 7 Evolution of KFTC's Just Transition Framework 163

Acknowledgements

First, I dedicate this dissertation to my Dad and my Aunt Mary Beth who both passed away while I was in graduate school. I am grateful to know that even though they were not here to see me get across the finish line, they would be proud of me, and I wouldn't have gotten here without their love and support. Also, although it has been many years since my mom passed, she also has always been in my heart and reflections throughout this whole process and is a constant inspiration because teaching was her passion.

I also want to thank all the Kentuckians for the Commonwealth (KFTC) members and staff, so many of whom I consider family, who provided me with information and insights about the work they do. I am most indebted to Teri Blanton, Roy Silver, and Carl Shoupe. Teri has been like a second mom to me and was a great resource for making sense of reflections when I got stumped. Roy has always been a great cheerleader and has an encyclopedia for a brain. Carl and his crew have always treated me like family. I am grateful for the time spent with Patty Tarquino in the office for so many years and our continued friendship. I am also grateful for my mentors when I was an Eastern Kentucky community organizer with KFTC, including Lisa Abbott, Jerry Hardt, Burt Lauderdale, the *original* Harlan County Fab Five (Carl Shoupe, Stanley Sturgill, Bennie Massey, Rutland Melton, and Roy), Kevin Pentz, Randy Wilson, Robert Gipe, Mickey McCoy, Nina McCoy, Sue Tallichet, Ivy Brashear, Leslie Craft, Jill Robertson, Tricia Watts, Jenny Williams, Tim Dunn, Martin Richards, Tom Hansell, Derek Mullins, Dave Newton, Michael Aldridge, Ed Cortas, Meg Parish, and an array of KFTC leaders who have been involved for many years. Others who had a significant impact on my development as a community organizer in Kentucky, including Kentucky State Representative Attica Scott, the former director of Kentucky Jobs with Justice, former Kentucky State Representative Jim Wayne, and State Senator Brandon Smith.

I am also so appreciative of the opportunity to learn from other leaders across the Central Appalachian region through the Alliance for Appalachia, like Paula Swearengin, Ann League, Herb E. Smith, Liz Barrett, Mimi Pickering, Jane Branham, Bill McCabe, Adam Wells, Sandra Diaz, Matt Wasson, Dana Kuhline, Janet Keeting, and more. My hope is that some aspects of this study will be helpful in strengthening the organizing for Just Transition in Appalachia. Friends and peer mentors Allyn Maxfield-Steele, co-director of Highlander Research and Education Center, Shameka Wright-Parrish who is running for Louisville Mayor, and Ben Fink, formerly of Appalshop. I also hope that capturing the important knowledge building that occurs within the movement can help other community organizations.

I am grateful for my dissertation committee members John, Becky, Mark, and Ann. I am especially grateful for John and Becky for all their insights as my co-chairs and encouragement to go deeper with my analysis and understanding. I also want to thank Fred Schied who helped me through the beginning part of my doctoral experience and continues to give me important perspective. Will Diehl has been so kind to me,

particularly following the passing of my dad and navigating the rest of grad school while grieving. Although Jose Cossa just joined the faculty last year, I appreciate his insights, kindness, and groundedness as a scholar rooted in challenging hegemonic dynamics within academic scholarship. Craig Campbell has been kind and thoughtful to me regarding our mutual desires to conduct qualitative research in a manner rooted in community. I also want to thank Carol Fantaskey, Jennifer McLaughlin, Kolette Shiner, and Roy Clariana from the Department of Learning and Performance Systems for all their assistance over the years. Graduate school consisted of incredibly trying times for me, and each of these individuals were kind and incredibly helpful to me on an academic front as well as through their recognition of my humanity.

I am so thankful for so many people who helped me along the way. The ABD-ers, Carol Rogers-Shaw, Heh Youn Shin, and Xiaoqiao Zhang. For other grad school friends, Tulare Park, Indira Bailey, Eric McGinnis, Nanre Nafziger, Erika Keka Pioltine Anseloni, Dorca Kisare-Ressler, Arup Sengaupta, Jennifer Miller, Danielle Ely, Rosario Castro Bernardini, Hye Su Kuk, Mai Atta, Enes Gökçe, Kiran Badwal, and Tabitha Stickel. For my TAWS (The Academic Writers' Space) online writing crew, Joe'l Staples, Anna Mooney, Haley Auguston, Cristina Watson, Dawn Lazerte, Alison Miller, Kathryn Peterson, and Cheryl Feldman. For my other State College friends, including many veterans and musicians, Crissy Hall, Marika Hall, Jugaad Sawhney, Dave Jones, Kimesse King, Sean Kramer, and many more. The graduate school process really does take a village.

For other Adult Education academic mentors, Edith Gnanadass helped me find my voice and confidence, particularly to assert my feminist positionality. Ramo Lord talked with me on the phone for more hours than I can count to help me think through how to understand and apply different adult learning theories, understand different methodologies, and think out loud about my major findings. Davin Carr-Chellman has always been so kind, thoughtful, and encouraging, specifically to publish before I thought I was ready. Kimeka Campbell has been both supportive, as well as a shining example of what an activist scholar can look like outside of the Ivory Tower.

I am saddened that Reverend Dr. Donna "Mama" King passed away earlier this year because she was always rooting for me in this doctoral process since we became friends at the Black History gathering for the local Community Diversity Group in 2018. I feel so grateful for having had the opportunity for her to be one of my activist-scholar mentors, close friend, and my pastor at the St. Paul AME (African Methodist Episcopal) Church in Bellefonte, Pennsylvania. Her work through the church and the Frederick Douglass Freedom Talks, which described the history of the church's involvement with racial justice and equity starting with the Underground Railroad was the embodiment of praxis and the power of conscientização, which essentially is equivalent to consciousness raising in English. I am so grateful to have learned and laughed with Mama King; we had big dreams of expanding on a panel we did together about music in social justice work at the Pedagogy and Theater of the Oppressed Conference in 2019 and to write together about

anti-racism work and liberation theology. I miss her dearly and think of her often when I engage in community organizing.

In addition, we have lost many Appalachian Mountain Warriors who have left this earthly plane much too soon due to health issues from living and fighting in coal-producing counties in Central Appalachia. I carry Elandria Williams in my heart; her conviction and insight about popular education, social justice, and radical self-care have shaped my understanding of social change. Her loss was much too soon, but I am grateful that I was friends with and had the opportunity to learn from Elandria about solidarity economies, radical self-care, and her vision rooted in popular education and Beautiful Solutions during her many years on the Education Team of the Highlander Research and Education Center in East Tennessee. Chuck Nelson from West Virginia passed away about a week after I successfully defended my dissertation. Chuck was a UMWA deep miner and a strong community activist against mountaintop removal coal mining. I first became close with Chuck when a small group of Appalachian environmental justice activists went to Cape Cod, Massachusetts in 2008 to speak at a public hearing in support of the Cape Wind Project. He always encouraged people to find their voices and speak truth to power.

Other Appalachian community activists, advocates, teachers, and organizers we have lost since I left Eastern Kentucky in 2011, include people from across the Central Appalachian region, including the following: Kentuckians include Daymon Morgan, McKinley Sumner, Jim Webb, Mary Jane Adams, Raleigh Adams, Archie Fields, Scott Lucero, Wanda Humphrey, Robin Daugherty, Betty Howard, Truman Hurt, and Margaret Ricketts; Lenny Kohm, who lived in Western North Carolina, played an instrumental role in saving the Arctic National Wildlife Refuge; Tennesseans include Vicki Terry, Carol Judy, and, as I already mentioned, Elandria Williams; the West Virginians consisted of Judy Bonds, Larry Gibson, Chuck Nelson (as I mentioned above), and Sid Moye and Virginian, Pete Ramey. The movement for environmental justice also includes the recent losses of several musicians for the mountains, including Justin Townes Earle, as well as both Elaine Purkey and John Prine who passed from COVID-19.

I am also so thankful for Michelle Kaiser's kindness, friendship, guidance, and mentorship over the years. Sarah Lydic helped me find the humor along the way of this journey. Alan Maimon and Stormy Stark were involved with the end of the dissertation process as I was coming around third base and heading home.

I am thankful for my cherished friendships from the mountains and beyond. This includes my cherished friends from my time living in Eastern Kentucky, who I have remained close with since, including Tricia Watts, Leslie Craft, Jill Robertson, Brittany Combs Howard, and Audra Slocum. Parson Brown, who is my "Ride or Die" bestie from the greater Front Royal, Virginia area and has consistently been there for me when I needed to laugh, cry, and plot, scheme, and dream related to the environmental justice organizing work in Appalachia. Mindy Dawn Silvergarden, who is from Nanty Glo in Cambria

County, Pennsylvania, helped me feel connected to [I'm going to throw an] Apple-At-Cha, while living in Apple-a-sha.

For my Buckeye besties, Julie Ujvari Kohler has remained a close friend since we sat next to each other in home room in 7th grade, which was many moons ago. Christy Schumaker has taught me so much about radical self-care and taking care of oneself. Katherine Schlademan who became a close friend through our mutual love of books and The Learned Owl Bookshop in my hometown and has always been there to lend a hand, an ear, and a laugh. Jason Hamad has listened to me express frustrations about politics and other challenges over the years, as well as significantly expanding my knowledge of musicians.

My family, including those who I were a part of my coming up and those who I claim these days, means so much to me. This includes my extended family in the mountains of Virginia in Iron Gate/Clifton Forge (population 388 and 3,884 at the 2010 census) where my grandpa grew up, and New Castle (population 153 at the 2010 census). I am grateful for my Aunt Peach and Aunt Sheila, my mom's remaining living sisters, and Aunt Peggy and Uncle Ray, my dad's sister and brother-in-law. My cousins, who are also my close friends, include Bart Pascoli, Todd (and his lovely wife Taryn) Jirousek, Ryan Jirousek, Jon Pendleton, Fran Smith, and the list could go on and on. And last, but not least, for my big brother Joel and my three nieces Keira, Keely, and Charlie who reminded me more times than I can count that I could do this and that we will get through life's joys and challenges together.

One of the greatest things I have gained while being a community organizer and graduate student is that if we wait until we are perfect, we will be waiting too long. We need to stand up despite our imperfections because as the title of Myles Horton and Paulo Freire's (1990) book says, "We make the road by walking." For those of us who are able, we must continue striving to create the Appalachian Mountain Warriors' vision, a Just Transition for a region that has given so much of blood, sweat, and tears to make this imperfect and great nation, a reality.

Really and truly, we stand on the shoulders of giants. Despite the disappointments, challenges, and failures that are an inevitable part of the work of creating social change for justice, I remain on the Hope Train, especially as I, and we, continue to take action for justice. Charles Booker, who is running for U.S. Senate in Kentucky, is a prime example of why I believe that better future beyond coal is possible. So, the next question is what are you going to do today to make this world a more equitable, justice, and sustainable world?

Chapter 1

Overview

This chapter, the first of six, provides a brief introduction to the context and history of coal in the Central Appalachian region. It also introduces the case study organization, Kentuckians for the Commonwealth (KFTC), their Just Transition initiatives, and some of their related non-formal educational activities. Importantly, this overview chapter describes the significance and statement of the problem with my main research question and related sub-questions of the study.

This dissertation explores how a community organization promoting multiple Just Transition strategies uses education and learning to promote engagement in this work in Central Appalachia. This study contributes to the body of knowledge related to social movement learning in Adult Education and social movements in Appalachian Studies. This study is the first study to explore the educational practices and learning in Central Appalachia that have developed to support the Just Transition of the economy. It begins with situating Central Appalachia in the global climate justice movement.

From September 20th to 27th, 2019, over 7.6 million people participated in Global Climate Strikes in 185 countries calling for an immediate phase-out of fossil fuels; this was the largest set of actions in the climate justice movement (Rosane, 2019). There is increasing recognition that communities formerly dependent on fossil fuels need support to transition away from fossil fuel dependency (Pollin & Callaci, 2019). Grassroots organizations describe this work as Just Transition, "a strategy for reconciling the needs of workers with the imperative of environmental reform" (Abraham, 2017).

Since the Central Appalachian region is becoming a post-industrial region, developing an economy which does not depend on coal is more important than ever. Furthermore, the legacy of coal mining and related working-class masculinity shape the process of transformation of the economy.

Adult education for social justice and environmentally sustainable development is a process of learning skills or competencies for social change (Brookfield & Holst, 2010). It is essential to support this transition, though scholars have yet to explore this kind of learning happening within organizations working for Just Transition in Central Appalachia. Since current efforts to transition the Appalachian economy is multi-faceted, examining different educational strategies taken by a community organization and the related learning addresses a gap in the literature and is an important contribution to the academic literature in the field of Appalachian Studies and Adult Education. This dissertation is a case study of the grassroots community organization KFTC and their work on Just Transition. It explores and illuminates the ways in which learning and education occur and are critical components of the organization's ability to successfully advance its Just Transition initiatives.

Statement of the Problem

Changes in economic, environmental, and health conditions in the coal-producing region of Central Appalachia, which includes Eastern Kentucky, East Tennessee, Southwest Virginia, and Southern West Virginia, have created a need for education about a Just Transition. This region has long been associated with extreme poverty and unequal distribution of land where outside corporate interests colonized the region through

resource exploitation (Caudill, 2001; Montrie, 2003). The coal industry negatively affects residents' health, miners' working conditions, and environment quality; these negative effects continuously increase (Ahern et al., 2011; Aken et al., 2009; Bell, 2013; Griffith et al., 2012; Lindberg et al., 2011). Nevertheless, the local communities' strong identification with coal mining also continues (Bell & York, 2010).

During the last two decades, increased mechanization of the coal industry reduced employment, increased productivity, and caused greater environmental damage (Carley, Evans, & Konisky, 2018). From 1985 to 1997, direct coal employment dropped by 50%, while production hit its peak in 2011 (McIlmoil, Hansen, Askins, & Betcher, 2013). Since 2011, coal production has dropped, due in part to a shift towards an increase in low-carbon natural gas development and environmental regulations (Carley et al., 2018). Coal employment declined as the industry shifted to different forms of mining that enable the coal companies to maximize profits. One example is mountaintop removal mining (MTR), where explosives are used to remove mountaintops. Then, the "overburden," or mountain above the coal seam, is pushed into the valleys below to expose the coal seams (McIlmoil et al., 2013). This type of mining produces two-and-a-half times more coal per worker than underground mining (Hansell, 2018). The increasing negative effects of the coal industry on the environment and on health, as well as a significant drop in employment in recent years has spurred an increased focus on transitioning the economy to one not dependent on coal mining. The region is close to a post-coal moment and needs to build a new economy.

Just Transition is a social movement that brings together grassroots organizations in different locations and is a relatively recent convergence of different approaches that integrate environmental and economic justice issues (Abraham, 2017; Tarus et al., 2017; Taylor et al., 2016). As a result, there has been minimal research on educational practices in this movement in Appalachia. This research seeks to fill this gap.

Additionally, this research is significant to the field of adult education because the identification of adult educational practices that result in engagement can serve as a model to improve adult education for other community organizations in Appalachia and for other fossil-fuel dependent economies. For example, individuals involved with social change efforts could acquire greater knowledge of issues, develop skills, and enhance effective practices of community organizations and collective action while increasing critical consciousness (Niesz et al., 2018). This analysis identifies ways in which a community organization bolsters informal and non-formal learning through the creation of reflexive practice and communities of practice. With the recent growth of the global climate justice movement and deindustrialization occurring across the globe, identifying effective educational practices can improve adult learning, which enables people to better support policy reform and job creation that is rapidly needed as communities shift away from fossil fuels.

This dissertation is based on a qualitative case study of a community organization working on Just Transition in Central Appalachia data with data collected between November 2019 and September 2020. Case study research explores in-depth a contemporary phenomenon in its real-world context (Yin, 2003).

Research Questions

The central research question is as follows: in communities with economies formerly dominated by the coal industry, how does an organization promoting multiple Just Transition initiatives use education and learning to support engagement in this work? The sub-questions that guide this study are as follows: (1) how does the gendered history of the coal industry and the changing political economy of the post-coal reality influence the educational efforts of an organization working toward a Just Transition? (2) how do informal and non-formal learning opportunities attempt to promote a just transition in the region? (3) how have people perceived these informal and non-formal learning opportunities as transforming themselves, their communities, and/or region and nation over the past decades?

Background

Background for this study summarizes the history of the region and the organization, as well as the structure of the organization and its mission—all of which are crucial for understanding context.

After the Civil War, the local economy of Central Appalachia began shifting away from subsistence farming towards logging and underground coal mining; timber and coal left the region to develop the Industrialized North (Billings & Blee, 2000; Montrie, 2003). By the end of the nineteenth century, absentee landowners owned two thirds to three-quarters of the region, leaving most of the resident population without land ownership or title (Montrie, 2003). Much of the conversion of land ownership occurred following the rapid growth and demand for coal to supply steam engines and the railroad

system (Hansell, 2018; Stoll, 2017). Coal camps began opening in the 1880s and maintained a unitary system of power affecting all aspects of the miners' and their families' lives, including company-owned housing (Eller, 1982, 2008; Gaventa, 1980). The start of coal mining varied across the region; for example, in Harlan County, Kentucky, coal was first shipped out of the county in 1911 following the completion of the L&N Railroad (Eller, 1982). By the end of the 1920s, the region was transformed due to industrialization (Eller, 1982).

Following World War II, mechanized contour strip mining spread and expanded, particularly in the 1950s. Currently, various mining methods are used in Central Appalachia. Depending on geology, contour mining, auger mining, and underground mining are among the various approaches to extracting coal, each resulting in different amounts of environmental degradation (Strobo, 2012). Following a movement to ban strip mining, the Surface Mining Control and Reclamation Act was enacted in 1977, which served to regulate the practice (Montrie, 2003). Community organizations have formed across the Central Appalachian region in attempt to hold the coal industry accountable to that law and to pursue environmental protection. Since this period, the role of the coal industry in the economy has had booms and busts, but coal industry employment has declined over time; yet, the communities still identify strongly with the coal industry, despite its damage to their communities and their livelihoods (Bell & York, 2010).

Case Study Description

KFTC was created in 1981 in Eastern Kentucky and has evolved to be a statewide, multi-issue organization that works on a range of different economic, social, and environmental justice issues. This organization emphasizes leadership development of its members and has been at the forefront of environmental justice organizing, as well as Just Transition work in the heart of the coal-producing counties of Eastern Kentucky. The non-formal education and informal learning in this organization is integral to engagement in its work and is the focus of this case study.

In 1981, the organization grew out of a participatory research project sponsored by Highlander Research and Education Center called the Land Ownership Task Force, which consisted of six Appalachian states documenting that out-of-state companies owned most of the land and paid very little taxes in the coal-producing regions (Appalachian Land Ownership Task Force, 1981). According to Kentuckians for the Commonwealth's (1991) book documenting their first ten years, KFTC was formed in Eastern Kentucky and originally called the Kentucky Fair Tax Coalition to push for the unmined minerals tax. During the 1980s, another core issue that KFTC worked on was the broad form deed in which coal companies could strip mine a property owner's land without permission. This eventually led to the Save the Homeplace campaign that resulted in changes to Kentucky's Constitution to protect landowner's rights.

Over time, the scope of the organization's work expanded to be statewide; some of the additional issues on which they worked included hazardous waste incinerators, out-of-state garbage, and oil and gas issues. In the mid-1990s, KFTC started addressing

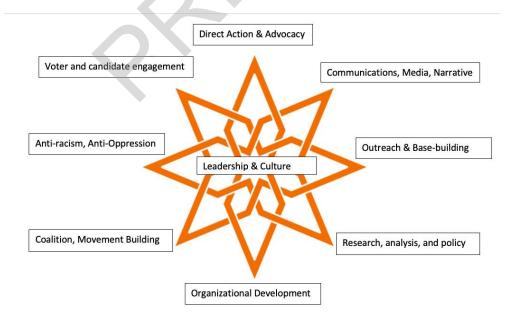
economic justice issues, which included welfare reform and the role of money in politics. The organization also protected Black Mountain, the highest mountain peak in the state, from surface mining. Local issues have ranged from use-of-force policies in Louisville, limits on logging in the Daniel Boone National Forest, water privatization in Lexington, and a living wage. The organization also worked on comprehensive tax reform, raising the minimum wage, voting rights for former felons, sustainable energy, and voter registration.

At the time of the study, KFTC membership was approximately 12,000 duespaying members with fourteen chapters across the state, four of which are in Eastern Kentucky. The active involvement varies from chapter to chapter and depends on the time of year. There is currently a larger number of members in the urban centers than rural communities. Many people make phone calls during the legislative session or prior to elections. This organization helped citizens develop strategies to address social, economic, and environmental justice issues in communities in Eastern Kentucky degraded by coal, including Just Transition work (Kentuckians for the Commonwealth [KFTC], 2021). Each chapter has a representative and alternate on the Steering Committee, which is the main decision-making body for the organization; they also have five members on the Executive Committee that makes decisions between Steering Committee meetings. There are also organizational and issue-based committees that develop strategy, including the Land Reform, Economic Justice, and New Energy and Transition committees. Governance committees include the Personnel, Leadership Development, and Finance Committees. KFTC's 23 staff members play an explicitly

background role and help KFTC members develop their own stories and speak for themselves.

Figure 1 highlights core organizational priorities for KFTC. This diagram was shared during one of the Empower Kentucky Leadership Network virtual trainings. All of the different elements in the diagram are a part of KFTC's community of practice. Numerous elements of this diagram are involved with KFTC's Just Transition work. For example, the Communications, Media, and Narrative element of the work includes highlighting stories of successful examples of Just Transition. Communication is both internal and external to the organization, which includes the development of print materials and website resources that educate people about this work. The Research, Analysis, and Policy work element of Just Transition includes the Empower Kentucky *Figure 1*

KFTC's Diagram of Key Organizing Strategies



energy plan, which engaged 1,200 Kentuckians in the development of the plan through workshops, listening sessions, house parties, interviews, and an online survey (Empower Kentucky, 2021). Synapse Energy Economics supplemented this public process with data. The environmental justice analysis of the state is another example of research conducted that contributes to Just Transition. The Direct Action and Advocacy elements are consistent with the organizing that KFTC members are most engaged with and are often informed by non-formal education. Reflecting on practice also is a part of the learning process. The Coalition and Movement Building element related to Just Transition includes the regional Alliance for Appalachia, the Climate Justice Alliance, and the Green New Deal Network.

One of the efforts that increased over time, which is relevant to this study, is the emphasis on elections within KFTC's organizing work. This work touches on many of the organization's key organizing strategies. The coal industry's stranglehold over the local and state politics in the state is one of the reasons voter engagement has become a bigger part of KFTC's work. Initially, their electoral work was non-partisan, which included voter registration, candidate surveys, and candidate forums. According to participants, they sought to infuse the issues into the public dialogue. In 2010, they created a political action committee to support candidates that were reflective of their vision as shared by one of the interviewees. This included a focus on local and state-level elections. This shift in strategy was due in part to the shift in the legislature towards more conservative values and the lack of progress on many of the organizational goals.

Just Transition Initiatives

For this study, I explored the education and learning related to Just Transition initiatives being pursued by KFTC in the coal-producing region of the state. Many different initiatives were occurring across the region. Although I focused on several specific Just Transition initiatives, KFTC members described their engagement with other parts of the organization overall. The direct action and advocacy work explored in this study included challenges to environmental injustices and pursuit of Just Transition Alternatives. Environmental justice campaigns, the Benham \$aves Project, rural electric cooperative organizing, and the creation of the Empower Kentucky energy plan are among the campaigns that the organization has worked on over time. I describe these Just Transition initiatives in detail to illustrate some of the main ways that KFTC pursues this body of work. I also describe three of KFTC's non-formal education activities related to Just Transition.

Environmental Justice Campaigns

First, according to their website and interviews, there are numerous examples in the history of the organization of coordinated action against the coal companies that broke laws and whose actions resulted in injustice (KFTC, 2021). This included pollution to groundwater and surface water, damage to people's homes from blasting, subsidence, flooding, stolen land, and crumbling roads from overweight coal trucks. Mountaintop removal mining and valley fills has been the most egregious form of coal mining, resulting in the destruction of thousands of miles of streams and negative impacts on people's health. Related campaigns have included challenging mining permits, pushing