

Adult learning, circumstantial activism and ecological habitus in the coal seam gas protests

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Abstract

This paper outlines adult learning in the space of an important campaign against mining for coal seam gas (CSG). Recently, the government of Victoria became the first state to ban *fracking* for CSG in Australia. This significant legislative outcome could not have been achieved without the concerted campaigning of activists through the Lock the Gate Alliance (LTGA), in Central Gippsland. The campaign is mainly composed of *circumstantial activists* who have come together due to the serious threat from fracking to the quality of their land and water supply. This case study research examines adult learning in the field of a campaign. The findings from this research make clear activists learn to think critically about the environment and the impact of fracking for CSG. They learn communication skills, group work and networking skills. They develop a *feel for the game* of activism by *learning informally* through socialisation with experienced activists from the LTGA and the Environmental Non-Government Organisation Friends of the Earth (FOE). In turn, FOE resource the coalition and provide opportunities for both informal learning and nonformal learning to the protestors. Drawing on Bourdieu's writing on *practice*, this paper outlines practices within the LTGA field that are influential in the knowledge and skill development of the activists.

Keywords: environmental adult education; informal learning; coal seam gas; Bourdieu

Introduction and Context

Interest in environmental justice issues has gradually increased in Australia over the past two decades. The crises emerging from climate change, land conservation and environmental sustainability are major issues of concern for environmental activists (Flowers & Chodkiewicz, 2009; Larrie & Newlands, 2017). In Australia and internationally, large multinational resource companies are searching for gas, in a market with increasingly depleted gas resources. Fracking for coal seam gas (CSG), by extracting further gas resources from the earth, has become a prominent concern for farming communities, where the imposition of hydraulic fracking on both public and private land has the potential to contaminate important water and land resources (Lloyd, Luke, & Boyd, 2013). CSG involves injecting high-pressure fluid into gas seam and rocks in order to extract resources such as natural gas or oil (Hamawand, Yusaf, & Hamawand, 2013; Larrie & Newlands, 2017; Willow, 2014). Mining by large multinational companies by horizontal drilling and hydraulic fracturing or fracking for gas has emerged as a major environmental concern (Lloyd et al., 2013). As Willow (2014, p. 238) claims:

In recent years, the merger of horizontal drilling and hydraulic fracturing (often shorthanded as fracking) techniques has made the extraction of fossil fuels from deep shale rock layers feasible and lucrative.

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The anti-CSG movement in Australia is composed of a diverse range of people coming from different political and ideological positions; they are commonly focused on the effect fracking for CSG will have on their land, water and communities (Larraine & Whitehouse, 2019; Larrie & Newlands, 2017; Lloyd et al., 2013; LTGA, 2019; Ranson-Cooper, Ercan, & Duus, 2018). Central Gippsland is a farming country well known as the *food belt* of Victoria, because it produces a large amount of Victoria's fresh produce such as dairy, meat, fruit and vegetables. Here, a coalition of anti-CSG groups has joined together to prevent multinational mining companies from *fracking* for CSG. Seasoned environmental activists involved with the Environmental Non-Government Organisation (ENGO) Friends of the Earth (FOE) farmers, tree changers, concerned community members and 'cockies, blockies, croppers and greenies' (Hutton, 2012, p. 16) have formed an alliance to educate the community about the dangers of fracking for CSG (Larraine & Whitehouse, 2019; Ollis, 2020; Ollis & Hamel-Green, 2015). This is an unlikely but important alliance of groups opposed to fracking who have collectively built a broad-based environmental movement. Hutton (2012, pp. 16–17) notes that bringing together people who are not necessarily aligned with any political ideology is an essential strategy if they are to have an impact on the powerful discourses of mining corporations. The diversity of people in the movement is its strength; the involvement of activists in previous campaigns and social movements is varied, because many of the movement's members have not been involved in social movements before and do not necessarily identify themselves as activists (Ollis & Hamel-Green, 2015). There are four central concerns of the community organisers involved in this campaign. Firstly, the risk to the Australia's best food-producing land and natural environment. Secondly, Australia is one of the driest continents on the planet with water resources becoming increasingly scarce; protesters believe the current mining boom will inevitably impact on water purity. A third concern is the impact of pollution through mining on the air as well as water quality. The focus here has also been on how the industry is using precious water resources in the fracking process and also the potential for contamination of water supplies (Hamawand, Yusaf, & Hamawand, 2013 cited in Muhhamed, 2015). The fourth and final concern of the LTGA is the impact on community life in rural communities due to fracking (LTGA, 2019).

My previous research has focused on the educational dimensions of activism and what activists learn as they participate in the protest. The 'lifelong activists' are experienced activists. They have been involved in a range of campaigns and social movements over a long period of time. Some are influenced by parents or significant mentors, who were involved in politics or activism; others became involved in activism in student politics at university (Author 2). The newcomer activists I refer to as 'circumstantial activists'; they have not followed the usual path to activism by having early socialisation into politics and by having parents or significant early political mentors. They are not necessarily aligned with progressive left politics, political organisations and social movements (Author 2). They have come to activism due to a disruption, a crisis or a series of events that have motivated them to act. In the case of the CSG protesters, the serious threat to the quality of their land and water supply has motivated them to act (Author 1). This is important as Kahn (2010) has claimed what is needed to prevent environmental devastation is the collaboration and cooperation of a strong and diverse movement of scholars, environmentalists, activists, green groups, teachers, students, industry, Environmental Non-Government Organisations (ENGOS), business, governments and the broader citizenry.

Methodology

This qualitative case study research was conducted with activists from a coalition of anti-CSG groups through the 'Lock the Gate Alliance' (LTGA) with the NGO FOE. This research uses a case study methodology to explore the educational experiences of the protestors (Yin, 2012). In-depth interviews were conducted with 23 protestors to gain insight into the knowledge and

skills that were developed during activists' involvement in the campaign. The interviews for this research were conducted in the central Gippsland towns of Poowong, Seaspray and Koo Wee-Rup in Victoria, Australia. Access to participants in the research was facilitated through FOE. Interviews were primarily conducted face to face in central Gippsland. The transcripts from the interviews were given to participants to check for accuracy. The research participants who were interviewed for the research included 16 participants we define as circumstantial activists; they are novice campaigners. Five participants are experienced activists, who had been involved in a range of campaigns over their lifetime. They generally identify themselves as being a part of the environment movement. We also interviewed two of the paid FOE activist organisers, who are experienced activists. Those interviewed for the research came from a diverse range of backgrounds. They are a diverse group of people. They were local farmers, tree changers and retired professionals. Some were identified as environmentalists and were seasoned activists. However, many had not been involved in activism before, but the common issue of fracking had brought them together. Their central motivation to act was concern about the environmental degradation of their land and water supply and the subsequent impact fracking could have on their local community. The research questions and sub-questions for this qualitative research study are listed below:

What are the stages and processes of learning and identity formation for activists engaged in the CSG protests?

- What is the role of formal, nonformal and informal learning in the learning of activists?
- How does an 'activist identity' develop in the course of activism and activists' learning?
- What part do circumstances play in 'becoming an activist'?
- What are the facilitating conditions for improving and supporting activists learning?

The method of in-depth interviews was used to obtain the data (Clough & Nutbrown, 2007); it aligned with the methodology of case study research which sought to uncover the in-depth experiences of activists (Marriam, 1998). Case study methods generally provide thick descriptions of the data. They enable an in-depth understanding of the experiences of the research participants (Stake, 2003, 2006). Case study research is a flexible form of qualitative enquiry which provides a holistic and in-depth investigation of a phenomenon (Stake, 2006; Yin, 2012). Interpretative case study research acknowledges there may be multiple meanings and multiple realities that exist when you are dealing with the human experience (Harrison, Birks, Franklin, & Mills, 2017).

In addition to the case study data, a member of the research team attended several meetings of the LTGA. We accessed background information on the campaign from the LTGA alliance and quit coal websites. The data analysis commenced by having several readings of the data. The data were then coded using the qualitative data analysis programme NVIVO. The coding process enabled themes to emerge from the data. Using category construction, the themes from the data emerged (Braun & Clarke, 2006). This research was given ethics approval through an Australian university ethics committee. All research participants either chose their own pseudonym or were allocated one in order to protect their anonymity.

Theoretical Framework and Conceptual Analysis

Conceptually, my approach to this research is informed by informal adult learning, and it is this overarching concept that informs my analysis of activism in the CSG protests. First, the importance of how relationships are built in adult learning, those built between the learners themselves and the relationships between the facilitators and learners. Theorists such as Jarvis (2009) and earlier theorists such as Vygotski and Cole (1978) have examined how building relationships with learners is important in education. We now know that relationships are central to much of adult learning and that most people learn informally for most of their lives (Beckett & Hager, 2002). This was demonstrated in the writing of Lave and Wenger on situated learning, which outlines how adults learn in the situated site of practice, in workplaces, in small groups and in communities — by sharing knowledge and problem-solving with others (Lave & Wenger, 1991). We learn by social interaction with one another and this is not necessarily a cognitive act. Much of the literature on popular education and social movement learning gives primacy to cognition and critical thinking in the educative experiences of activists (Newman, 1994). However, this research focuses on the everyday practices of activists within a field in a relational sense, including how people learn within this field and how their habitus is developed. This understanding of practice uncovers what protestors learn in their everyday practice and what knowledge they acquire through observing practices within the field, often without being conscious that they are learning anything at all.

To understand how these relationships are shaped and structured and how they provide opportunities for informal learning is central to this research. While Bourdieu's theory is one which gives primacy to relationships, it is also a theory of action (Bourdieu, 1990). Bourdieu's theory sought to integrate an understanding of practical knowledge based on ... 'the continuous decoding of the perceived — but not consciously noticed' (Bourdieu, 1977, p. 8). This relational ontology commenced by beginning to analyse the ways in which people organised, practiced and interacted with each other. There are a number of Bourdieu's thinking tools that I use to discuss the findings in this research. Firstly, Bourdieu's concept of habitus is integral to this understanding of informal learning. Bourdieu believed certain habits, practices and dispositions are developed and reproduced largely through socialisation (Bourdieu, 1984). Habitus is a collective process through which generative dispositions of the family, class, social environment and cultural traditions contribute to a habitus within a social field (Bourdieu, 1977). The field is used to describe the space or field of struggle. A field is a system of social positions, it is 'a field of struggle within which agents compete or confront each other' Bourdieu (1998, p. 32). Field and habitus work together; habitus is the practices and dispositions of agents that are brought to the field. Bourdieu uses the term *cultural capital* to define the resources, knowledge, skills, abilities, networks and connections that players bring to the field. Agents are advantaged or disadvantaged based on the cultural capital they have (Bourdieu, 1984). This can include inherited capital, social position and social networks. Doxa is the concept that long-held beliefs, thoughts, ideas and practices that seem to be orthodoxy, correct and natural have more often than not been imposed by a struggle of competing visions. Doxa is a point of view of the dominant, which generally presents and imposes itself as a universal view (Bourdieu, 1998). Illusio is from the Latin word ludas, meaning game; Bourdieu (1977, 1990, 1998) attributes importance to the social game. Hence, being in the game, believing the game is worth playing, to engage with the logic of the field, means you must master the practice within it (Bourdieu, 1990).

Adult education and activism

In recent years, it has been recognised that learning in communities, campaigns, activists' groups and social movements are significant sites of adult learning (Choudry, 2015; Crossley, 2002; Earl, 2018; Hall, 2009). In Australia, the work in this field was led by Griff Foley in his important book 'Learning in Social Action', in which he explored the incidental learning that occurs informally in sites or spaces of rich activity, such as Neighborhood Houses and Centres, environmental campaign groups and women's organisations. Learning was identified as incidental, informal, tacit and applied and not always recognised as real adult learning (Foley, 1999). Jesson and Newman (2004) claim people learn both individually and collectively through their engagement in social movements. Walter (2012) argues that central to these concerns has been the role of social movements in facilitating collective and individual adult learning, and the significant role of activist educators in advancing the important work of social movements. In reviewing the literature, this paper primarily focuses on the popular education tradition and social movement learning. Larraine and Whitehouse (2019) claim theories of popular education and social movement learning intersect. Heidermann (2019, p. 309) argues theories of popular education and social movement learning have much in common, but the tools from both literatures are rarely used together. He claims 'That these two literatures are so close, but so far apart is rather astonishing given their overlapping concerns for issues of resistance, solidarity, democratization and social transformation'.

The international literature includes the work of Freire (1972, 1998), Mayo and Thompson (1995), Crowther, Martin and Galloway (2005) and in Australia, the work of Foley (1999, 2001), Branagan (2007), Newman, (1994, 2006) and Whelan (2005) who examined learning and activism in the environmental movement. The term popular education describes how people both individually and collectively learn through their participation in social movements (Crowther et al., 2005). Jesson and Newman (2004, p. 251), state 'learning in the sense we use here means learning by people acting collectively to bring about radical and emancipatory social change'. Popular education is a tradition in the field of adult education which broadly encompasses community development activity, activism and social change. Learning and education in this sense is a necessary part of the effort to achieve significant social change in some way (Walter, 2012). According to Crowther, Martin and Galloway (2005, p. 2), popular education is a process of acting towards a social order which is more just and egalitarian. It usually has some of the following characteristics:

'Its curriculum comes out of the concrete experience and material interests of people in communities of resistance and struggle;

its pedagogy is collective, focused primarily on a group as distinct from individual learning and development;

it attempts where possible, to forge a direct link between education and social action'.

Foley (1999) argues there are three dimensions of learning in activism: an analysis of the political economy, the operation of micropolitics and ideology and knowledge of discourses at play in society. Jesson and Newman (2004, p. 261) outline three key areas of activists' adult learning, 'instrumental learning' — providing skills and information to deal with practical matters, 'interpretive learning — which has a focus on communication' and 'critical learning — activists learn problem solving skills, through reflection new meaning is produced'.

Much of the research on learning in social action has focused on cognitivism and the critical intelligence of activists as they work towards issues of social change (Foley, 1999, 2001; Newman, 1994, 2006) or social learning in the situated site of popular education or social movements (Ollis, 2012). Learning in the social environment of protest is an emotionally charged practice, where emotions are often the drivers for taking action (Gould, 2004; Jasper, 2009). Protests are sites of education where adults engage in holistic, purposeful and embodied learning (Drew, 2015; Ollis, 2011, 2012). Choudry (2015, 2018) claims social movements are knowledge generators. He states learning occurs mainly informally through the collective efforts of the activities of the social movement. Others note, learning in social action is not just informal, but it is also incidental, tacit and applied and therefore not always recognised as real adult learning (Branagan & Boughton, 2003; Foley, 2001; Ollis, 2012). Earl (2005, p. 108) analysed the popular education movement 'Occupy' in the United Kingdom and found activists with limited formal education were reading philosophy and sociology books associated with historical materialism and change such as Marx. She argues through activists' self-learning they were developing 'an epistemological curiosity'.

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Environmental education has a complex relationship with activism. However, activism remains an important yet at times controversial component of environmental theory, research and practice (Lowen-Troudeau & Niblett, 2017). The literature on learning in environmental activism tends to draw mainly on social movement learning (Jasper, 2009; Jasper & Goodwin, 2004; Swain, 2005). Hall (2009, p. 46) argues there are three central propositions to social movement learning:

- 1. 'informal learning occurring by persons who are part of any social movement;
- 2. intentional learning that is stimulated by organized educational efforts of the social movements themselves; and
- 3. formal and informal learning that takes place amongst the broad public, the citizens, as a result of the activities undertaken by the a given social movement'.

Clover (2003) claims adult education in the environmental movement requires bringing people together to discuss new ecological understandings of the world. 'Environmental adult education begins from a platform of recognizing people's ecological knowledge (s) and bringing these together through dialogue and debate to create new ecological understandings of our world' (p. 10). Nilan (2017, p. 370) found environmental activists in Indonesia develop an ecological habitus, which enabled them to link local issues of environmental sustainability to global issues of capitalism and growth. She makes the point that 'The idea of developing ecological habitus moves well beyond simple acquisition of knowledge. It means not only gaining relevant knowledge, but also embedding sustainability as a lived quotidian practice'.

Chase (2000, p. 17) claims environmental activists acquire skills and knowledge in five areas: 'technical knowledge, political knowledge, life skills, knowledge of organizations, and skills through personal growth'. One of the important roles of environmental movements and NGOs is to 'bring about behavioral and social change for sustainability' (Flowers & Chodkiewicz, 2009, p. 298). Having conversations about the environment and environmental practices in our everyday lives is important in developing eco-literacy (Goldman, Pe're, & Yavetz, 2015). These community education strategies are central to raising environmental awareness. They are fundamental to passing on knowledge about environmental devastation and the consequences of nonaction for the planet. Central to this is learning to deconstruct discourses of power, and social and popular education movements harnessing transformative resistance against these discourses (Foley, 2001; Hall, 2009). Radical environmental groups such as the Earth Liberation Front adopt violent direct-action tactics to educate the public about environmental devastation. Informed by deep ecology and anarchism, this leaderless organisation uses mainly print- and web-based education strategies to educate its followers (Loadenthal, 2013).

Differently, Kopina (2014, p. 227) argues for an affirmative action pedagogy for the environment, one which is 'integrated into its practice and theory, instructed by critical pedagogy'. Similarly, Kahn (2010) claims education is important if we are to avoid environmental devastation. He asserts we need more eco-literacy education about unsustainable environmental practices, bringing scholars, the public and activists together across interests and connections by building a deep dialogue and critical reflexivity across progressive education groups to counter the planetary crisis (Kahn, 2010). Hall (2009) similarly states that in most cases of social movement learning, value is placed on people working together and building alliances across diverse groups. In the CSG protests, building a broad-based movement of people has been key to the movement's success. This will be outlined further in the next section as I introduce some of the data from the research.

Central Gippsland and coal seam gas

Central Gippsland is a farming country well known as the 'food belt' of Victoria, because it produces a large amount of Victoria's fresh produce such as dairy, meat, fruit and vegetables. Here, an unlikely coalition of people has joined together to prevent multinational mining companies from 'fracking' for CSG. Seasoned environmental activists involved with the ENGO FOE, farmers, tree changers, concerned community members and '¹cockies, blockies, croppers and greenies' (Hutton, 2012, p. 16) have formed an alliance to educate the community about the dangers of fracking for CSG (Ollis & Hamel-Green, 2015). This is an unlikely but important alliance of groups opposed to fracking who have collectively built a broad-based environmental movement. As Hutton (2012, pp. 16–17) notes, bringing together people who are not necessarily aligned with any political ideology is an essential strategy if they are to have an impact on the powerful discourses of mining corporations. As he claims 'the Lock the Gate movement is an alliance between progressives and conservatives, left and right, city and country, farmers and environmentalists'.

The diversity of people in the movement is its strength, as their involvement in previous campaigns and social movements is varied. Some are experienced and identify themselves as activists. However, the majority of circumstantial activists do not identify as activists at all. In addition, some of the protestors have feelings of antipathy towards *greenies*. Gail does not identify as an activist, she claims she has a duty of care to preserve the environment:

No, I don't really see myself as an activist. I was in New Zealand and they had a placard and it read 'I am not protesting against, it is my duty to care for', it was something in that wording and I thought — yeah, it's not actually about anything but it is a duty of care.

John a local farmer and former engineer is adamant that he is not an activist at all but someone who is against fracking for CSG.

No, I don't — I'm just another anti coal seam gas bloke!

Tim argues his involvement in the LTGA is driven by his concern for the impact of fracking on the land and as he is a concerned resident he is motivated to be involved in the campaign.

I'm not an activist — I'm a concerned resident.

Cathy a farmer has some anxiety about identifying as an activist too. When asked if she identifies as an activist she stated:

No definitely not I'm not out there to jump in front of cars, that's what some of them feel they have to do or you actually go and make a nuisance of yourself, you just want to tell it how it is. You don't want to be a pain to the community or anything.

Differently, Jane has learned to work with the Greens. The contradictions and tensions around this unusual alliance are illustrated in the quote below. For example, she will participate in CSG protests, but she still would like to farm cattle. As a farmer, her livelihood is dependent on this:

I'm not sure whether you're aware but the Greens don't necessarily get on with farmers and there are lots of issues but until you actually sit down and talk to a farmer over the issues over the years you probably don't get it or you don't care, it doesn't matter. So we get involved with the Greens which is great but it's still mainly around unconventional mining because we still want cattle in the high country.

As the data above demonstrate some of the strategies and tactics associated with direct action are alienating and this was affirmed in several of the interviews with circumstantial activists, because they did not necessarily identify as an activist.

In Australia and internationally, as large multinational resource companies search for gas, in a market with increasingly depleted gas resources, fracking for CSG has become the new norm for accessing further gas resources from the earth. Indeed, it has become a prominent issue of concern for farming communities, where the imposition of hydraulic fracking has the potential to contaminate important water and land resources (Lloyd et al., 2013). There are four central concerns of the community organisers involved in the campaign. Firstly, the risk to the Australia's best food-producing land and natural environment. Secondly, Australia is one of the driest continents on the planet with water resources becoming increasingly scarce; protesters believe the current mining boom will inevitably impact on water purity. A third concern is the impact of pollution through mining on the air as well as water quality. The focus here has also been on how the industry is using precious water resources in the fracking process and also the potential for contamination of water supplies (Hamawand, Yusaf, & Hamawand, 2013 cited in Muhhamed, 2015). The fourth and final concern of the LTGA is the impact on community life in rural communities due to fracking.

Adult Learning in the 'Lock the Gate Alliance'

The LTGA campaign has managed to foster education through building a successful ecological habitus, a collective social practice that exudes dispositions that are emulated and embodied (Crossley, 2003). The LTGA encourages informal learning through protesters' engagement by providing a space for the protesters to socialise in locally based action groups and larger meetings of the LTGA. It is here largely through socialisation that protesters learn the strategies of campaigning. The protesters are learning skills associated with community development and community organising (Ife, 2002).

Drawing on international research about the impact of fracking for CSG resources and armed with several case studies of farmers' experiences of mining companies using their land to mine, this coalition of activist groups has been able to build a campaign to prevent mining for CSG in Victoria. This is not an easy process; the mining companies have the support of the government, big business and mainstream media, and Australia has a long history of supporting mining. Listed below are the key areas of learning in the LTGA, identified in the data.

Group work skills and networking

Many of the activists are involved in small local action groups in the LTGA. They are learning skills by being a part of a local environment group. Skills such as written and verbal communication, group work and networking are developed by being engaged with other groups across the broader LTGA. When they were asked what skills they learned throughout the campaign, participants frequently referred to learning how to work with groups and how they learned the importance of networking. Gail who had no experience in working with groups responded with the following:

Well basically simple things like running community meetings, everything I've done is basically foreign. These are things that I'm not practiced in and I had no comprehension on even who to contact to book a community hall, I had nothing!

On the other hand, Jane claims she learned skills associated with the organisation of meetings.

I do the organising, setting up meetings, setting up dates, speakers, getting people together, right down to the lady who does the sausage sizzle and that sort of thing.

Most of the circumstantial activists spoke about the importance of learning key skills such as networking, bringing people together, organising meetings, handing out flyers, booking a hall or a meeting room or holding an information stall at local community events in order to educate the local community about the impact of fracking.

Critical Cognition Skills

What was clear from the data is that engaging in the campaign developed the protester's critical cognition skills. These skills were built through having everyday conversations with others in the alliance and primarily through socialisation with other activists. Significantly, most of the circumstantial activists gained critical knowledge through self-learning by spending hours researching the internet, reading journals, articles and campaign information and through informal learning conversations between people in the LTGA. This enabled them to build their knowledge about the risks associated with fracking for CSG. The dialogue from the data below from circumstantial activist Tim reveals his understanding of the power of multinational companies:

You can see companies wrecking the place, destroying the habitat I suppose, peoples livelihoods with no consideration at all for the future and our politicians are letting that happen. I can see the criminal aspect of that, it mightn't be law type criminal, but it is criminal to society and human behavior.

John shows his agency and motivation to avoid further environmental damage to his land and the cost to the environment in the quote below:

The only thing that motivates me is that we can't afford to destroy this agricultural land, this is the food bowl of Victoria. It it's a very, very concentrated area, very rich soil, very rich ground, they just can't afford to destroy it. There's too much underground water here, you only need to see what comes out of our place here, if you ruin that you've ruined every-thing. It will take millions of years to get it back but it takes them only five minutes to destroy it.

Similarly, Alana connected the issue of fracking for CSG to the impact the process would have on the environment, and the effect that fracking would have on farming produce and the local community.

Well when you find out things like there are two exploration licences in Poowong that inspires me. Although I'm not just doing it for Poowong, I'm truly not. I had a friend the other day and she said 'wouldn't it be awful if we looked out here and we could see gas wells'? I said 'I don't think I could live here'. But I'm not really doing it for that, because it's not just spoiling my view that motivates me, it's spoiling the whole Gippsland food bowl that upsets me.

The quotes from the protesters reveal their understanding of the implications of fracking, which they link to broader political, economic and environmental issues. This is a major theme in the data and was reaffirmed consistently throughout the interviews. Gail connects fracking for CSG to local community rights or lack of rights as well as the impact fracking would have on the local environment and farming community. When she was asked why she decided to be involved in the LTGA she said:

Well I think really the coal seam gas was actually the trigger. I keep myself well informed globally, I made that sort of just from an interest and learning point of view but this is like 'the lion stepped too far'! That's the trigger it's the step over the line but then it's multifaceted. It's the environmental side, it's the social side, it's about people's rights or lack of, it's about the interconnectivity between neighbour to neighbour.

Differently, Jane believed gas and oil companies were ignoring the collective intelligence and expertise of the local community, who had a great deal of knowledge and skill.

That's why I feel that these big gas and oil companies and I'm talking the big guys to the little guys and the politicians, are forgetting they're taking the intelligence of the communities for granted. Our communities are full of retired scientists, retired lab workers, retired teachers, retired gas industry people, from farms, you name it they are in communities everywhere.

The quotes outlined above highlight the intelligent, critically cognitive problem-solving capacity of the protestors. They are able to see the broader politics at play in the race to mine their land. What is interesting to note from the statements above is the emotional agency of those involved in the campaign and how this is linked for some to their initial agency to be involved in the LTGA.

Communication Skills

Most of the protesters learned communication skills of some kind such as skills associated with interpersonal communication through their local group in the alliance. 4Written communication skills were built and developed through writing letters to politicians and emails to members of the local community. All of the respondents to the research spoke about honing their communication skills in some way. Some of the protesters, like Barry, learned to speak publicly at events.

Well yes, in that it's been another thing that has forced me to do some public speaking and to stick my own head up on activities. So yeah, I think that has been an area of personal growth for me over the last few years.

Gail says she learned her communication skills by developing information sheets. She would drive in the middle of the night dropping them off in letterboxes. She also learned how to educate the local community in a way that was not too threatening. She claims she learned how to condense information, 'I can't put this amount of knowledge out there because it's too overwhelming how can I just strip it down to get those main points?'

Learning from Experienced Activists

Worth noting is the significant role that FOE has played in providing formal and nonformal education to the circumstantial activists. Nonformal workshops were facilitated by FOE on direct-action strategies such as blockading, public speaking and using the media. The experienced activists have been able to play a central organising role in bringing the coalition of smaller groups together for strategic planning. FOE's considerable cultural capital is derived from being an ENGO, which has enabled them to gain high-level media attention to the campaign through the use of their campaign website, media releases and other social media platforms. Alongside these events, more structured training in nonviolent blockades was delivered by FOE to the alliance. This theme is illustrated in the data below. The comments made by Tina reveal FOE's involvement was mutually beneficial as FOE had expertise in campaigning and the protestors had local knowledge which was, in turn, useful for FOE:

At that stage, FOE was coming to every community meeting by industry and Quit Coal. So, it was a huge effort on their behalf and very well appreciated because they had the experience, although there was so much they didn't know about the local community.

Lisa found FOE shared knowledge and information with the protestors which was helpful in terms of resourcing the group:

They don't have an ego, they don't have an ego, they're just people. They share stuff, share information, share their knowledge, anything they can do to help they share. They are sharers, which is wonderful because often groups aren't sharers.

On the other hand, Anita was amazed by the public speaking skills of one of the FOW organisers, which she said she would like to emulate:

We had a public meeting here in Gormandale and FOE came and a few other people came, we had a lot of people. The way she spoke, the eloquence in her voice, the passion in her voice, it was just magnificent. That sort of stuff, the way she handled herself and the grace about her as well — it was excellent. I'd love to be able to do that, she was just awesome and the way they dedicate themselves.

As outlined in the quotations from the protesters, a significant theme that emerged from the data is the admiration the protestors held for the knowledge, skills and expertise of the FOE activists. The relationship that has been built between these experienced environmentalists and the circumstantial activists was essential and important for the overall success of the campaign.

Learning Informally, Incidentally and Socially

Significantly, knowledge, skills and expertise have been passed on to other members of the alliance, through socialisation at local groups and larger LTGA meetings. An example of this is that the LTGA used large-scale protests such as building a human sign with 450 people on the oval in the town of Poowong's oval, declaring it 'CSG free'. Public campaign events offered protestors further opportunities for social and informal learning and direct-action tactics. Regular meetings provided opportunities for knowledge and campaign strategy sharing and the exchange of skills knowledge and ideas. The data revealed that locally based campaign meetings were instrumental in terms of building the knowledge and skills of the circumstantial activists. This is illustrated in the quote from Tina, who discussed the importance of sharing ideas within the LTGA.

That's it, the sharing of ideas, definitely the sharing of ideas. ... That's where the beauty of the network has been that we spread it out, and we say 'hey this is new, does anybody know about that? You need to be willing to be humble, to take advice and seek it, because you want to benefit, it all gets back to 'how do you effect change?

Jane says she learned a great deal from watching and observing other activists at meetings, she claims this happened, 'just through being there and watching and learning, that's where you learn, not through a text book'. John says he learned a great deal through conversation with others involved in the campaign. He would 'ask a lot of questions and read a lot of papers'. Like Jane, he learned at the LTGA meetings where he 'would listen and ask a lot of questions and see what sort of answers you get'.

Discussion

As the data in this paper have uncovered, the LTGA, in conjunction with the leadership and support of the experienced activists in FOE, has managed to create an effective ecological habitus. A collective understanding of the risks associated with mining for CSG and *fracking* has been achieved through the development of individual activist skills and knowledge and through building the collective practices of the group. Returning to Bourdieu's (1977, p. 72) concept of practice and habitus being a 'structured structuring structure' is supported in the data as the protesters learn community development practices such as group work, community education and how to run small- and large-scale community meetings. The informal and structured training practices adopted by FOE have been successful in building relationships with the circumstantial activists and lifelong activists in the alliance. The dispositions, habits and practices of the group around environmental sustainability have created an effective ecological habitus. This affirms Nillan's (2017) proposition of an activist habitus being a social practice one which supports and maintains how people engage, interact and learn from each other. Clover's (2003) claim of environmental adult education's capacity to build new understandings about environmental sustainability has been affirmed in the data where newcomer activists who through interaction in the movement, self-learning and information sharing were able to build critical knowledge about the impact of fracking on the land, water supply and the environment. According to Bourdieu, the importance of the 'orchestration' of the habitus is the way it produces a 'commonsense world', which gives the players a 'consensus' on the meaning of the practices. This occurs through 'continuous re-enforcement' of the rules of the game. As Bourdieu states 'in short, the habitus, the product of history, produces individual and collective practices' (Bourdieu, 1977, p. 80).

Key to this campaign's success has been the education of the activists themselves, but on a broader level significant value lies in the environmental education that occurs in local communities, the public and the citizenry by the LTGA. This supports Hall's (2009) proposition that formal and informal learning occurs among the broad public and citizens. It has been achieved through strategic, public actions, through LTGA campaign meetings, through rallies and embodied direct actions such as human signs.

Of significance are the skills and knowledge development of the protesters themselves. For the circumstantial activists, their skill and knowledge development is significant because as the data have revealed, some of the skills associated with being a part of a group or network are entirely new to them. The experienced activists in the group are not only able to further hone their skills but also pass on knowledge about successful campaigning through the social practices within the habitus. Key skills and knowledge about community development practice, such as group work, highly developed communication skills, networking, public speaking and running public meetings and actions were identified in the data as being significant. All of the activists revealed they had developed critical cognitive understandings about the politics of the campaign and the broader impact of mining on the environment in central Gippsland. They understood the risks to the community due to CSG mining are significant. They were able to look critically at the players in the field and understand the impact of government policy and the influence that the doxa of big business and mining could have on the outcome of the campaign. These activists were building and or extending their 'epistemological curiosity' not only through their own self-learning but also through socialisation with other activists in the LTGA. This affirms Earl's (2005, p. 108) research on activists in the Occupy movement who also developed a desire to learn and read philosophy and theory in order to build their knowledge. Through social practice in the field, activists are able to draw on the cultural capital the newcomer and experienced activists bring to the field. The habitus and the dispositions and practice within in it are transferred unconsciously through pedagogic actions, as Bourdieu (1977, p. 87) argues, ... 'practical mastery is transmitted in practice'.

Further in this campaign, the LTGA has managed to bring a broad alliance of people with different values and political beliefs together to educate the community, even though many of

the CSG protesters did not identify themselves as activists and some had reservations about greenies. The long-held doxa that environmentalists and farmers did not have common interests appears to have been suspended in the LTGA. This is because the FOE activists, alongside the protesters, have built a habitus that has engaged the alliance. The FOE organisers have cultural capital they bring to the field. They know how to successfully campaign. The farmers and community members also have a specific and needed capital they bring to the field in areas such as knowledge about local community needs, sustainable farming practices and knowledge about local community politics. These forms of capital work together and contribute to the campaign's success. The circumstantial activists have suspended the doxa of antipathy towards the environmentalists and the Greens, but this change, as revealed in the data, does not extend to the farmers always being involved in more sustainable farming practices. Bourdieu's concept of *illusio* relates to the protestors gaining 'a feel for the game' of protest, an understanding of the importance of the game, a belief that the game is worth playing, that their individual differences are not significant in the larger game of protest. As Bourdieu (1998, pp. 76-77) claims, 'Interest is to "be there" to participate, to admit the game is worth playing, and the stakes created in and through the fact of playing are worth pursuing; it is to recognise the game and recognise its stakes'. The initial hesitance of the circumstantial activists identifying as activists has not changed, but the long-held doxa of environmentalists and farmers having competing interests has been suspended. They now believe they have a common purpose and a common problem. They know the stakes of the game are high, and that powerful interests of government and big business want to stop them. In order to be successful, the FOE organisers and the protesters need each other, their interests are now aligned.

Returning to Bourdieu, who argues every social field, tends to require those who participate in the field, to believe that playing the game is worthwhile (Bourdieu, 1998). Whether the *illusio* will continue to be suspended in the LTGA alliance, or whether the campaigners will continue to work with each other on other environmental campaigns is hitherto unknown and requires further research. Nevertheless, the achievements of the alliance are significant as no other state in Australia has been able to achieve a moratorium on CSG exploration, followed by a complete ban. This significant social change is now enshrined in legislation by the Victoria Government, largely because of the efforts of the alliance. In effect, the LTGA case study in central Gippsland reveals how deep conversations can occur across various players in the environmental movement. It reveals how activist groups, farmers, business and tree changers are able to work together for a common pedagogical goal. This affirms Kahn's (2010) proposition that what is required to arrest environmental devastation is a deep critical dialogue between all of the players in the movement — scholars, the public, activist groups, conservationists, ENGOS, government, business and others who have a common interest in preserving and protecting the environment for future generations to come.

Conclusion

This paper has outlined a case study of the LTGA and the rich learning of activists as they participate in a campaign against mining for CSG, in Central Gippsland, Australia. Those interviewed for this research were predominately newcomers to protest and were resourced by experienced activists in the group and the ENGO FOE. It has been argued that the protestors learn largely informally through socialisation with other activists and are influenced by the habitus of the LTGA. In the field of the campaign, these circumstantial activists have developed knowledge, skills and expertise through the practices and dispositions of the movement, by observing the practices of experienced activists. Of significance is the unusual alliance of farmers, tree changes and seasoned activists, who bring various forms of cultural capital to the LTGA alliance. The key to this successful campaign is the ability of the LTGA to suspend the long-held *doxa* that these groups who are concerned about the impact of fracking for CSG have competing interests. The LTGA has been able to build an environmental habitus which crosses the divides and boundaries of a disparate and complex environmental movement, where the perception of competing interests

has been suspended. Through critical pedagogical actions, the LTGA has been able to change government policy. Regardless of their differences, this broad alliance takes seriously their custodial role of looking after the planet for future generations to come. They have built an ecological habitus of practice, and a successful one too. This group of activists has managed to achieve a complete ban on fracking for CSG.

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Note

1 Cockies, blockies, croppers and greenies are terms used by Drew Hutton, a key activist in the LTGA. The term 'cockies' refers to small dairy farmers in Australia, known colloquially as 'cow cockies'. The term 'blockies' is used to describe small-farming enterprises (Hutton, 2012, p. 16).

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