

Adult Learning in the Milieu of a Local Environmental Movement

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Abstract

This study investigates the processes of informal adult learning within a grassroots environmental movement in Greece. Focusing on a community collective dedicated to protecting a local creek in a northern Athens suburb, the research is grounded in the theoretical frameworks of transformative learning, communities of practice, and critical ecopedagogy. Employing a qualitative case study methodology, the analysis draws on narratives from six activists gathered through semi-structured interviews. The findings indicate that engagement in environmental activism fosters multifaceted learning, manifested through: peer knowledge exchange and experiential problem-solving; identity transformation and civic empowerment; the development of embodied and affective ecological awareness; and the emergence of grassroots pedagogies for mentoring and public engagement. Conversely, participants also cited significant challenges, including activist burnout, institutional neglect, and a lack of formal recognition for their knowledge. In conclusion, this study demonstrates that environmental movements serve as dynamic learning ecosystems where adults cultivate critical, relational, and embodied knowledge.

Keywords: Adult learning, Environmental activism, Transformative learning, Ecopedagogy

1. Introduction

This study investigates the adult learning dimensions that arise from participation in an environmental initiative situated in Athenian suburb of Chalandri. The research centers on the Association for the Protection of the Environment and Creek of Penteli–Chalandri, a community movement founded in 1990 to safeguard a local creek that traverses both municipalities. The association's enduring activism aims to preserve the creek's ecological integrity, resisting urban development pressures that threaten its function as a natural refuge within the metropolitan landscape. As a long-standing environmental collective with a documented history of persistence, this case offers valuable insights into the intersection of local advocacy, informal adult learning, and socio-ecological resistance (SOS Rematia Blog).

By examining the everyday pedagogical processes embedded in environmental activism, this study contributes to scholarly discourse on informal learning within social movements. It demonstrates how adult education unfolds through grassroots, extra-institutional practices and informs critical debates on ecological citizenship, sustainable development, and the socio-material production of knowledge through collective action.

Grounded in foundational theories of adult learning, this investigation addresses the following research question: How does informal learning manifest among adult participants in grassroots environmental movements in northern Athens? The study adopts a qualitative case study methodology, employing in-depth participant narratives and thematic analysis to illuminate these experiential learning processes.

2. Theoretical Framework

This research is grounded in three complementary conceptual frameworks, each of which illuminates distinct dimensions of learning. First, Mezirow's (1991) transformative learning theory provides a foundational understanding of how adult learners experience cognitive shifts through critical reflection on disorienting dilemmas encountered in activist contexts. Second, Lave and Wenger's (1991) community of practice framework elucidates the sociocultural processes through which knowledge is co-constructed via participation in collective environmental actions. Third, building on Kahn's (2010) critical ecopedagogy, the study examines how environmental learning functions as both a pedagogical practice and a political act, foregrounding issues of ecological justice and planetary sustainability. By integrating these complementary theoretical frameworks, this study advances a multidimensional conceptualization of activist learning that encompasses cognitive, emotional, social, and embodied processes. This framework supports an exploration of how environmental activists construct meaning, cultivate knowledge, and transform both themselves and their communities through direct action.

3. Environmental Movements: A Concise Literature Review

Environmental movements have long been recognized as fertile grounds for learning outside traditional educational institutions. Scholars such as Hall and Clover (2005) and Kilgore (1999) argue that social movements function as informal educational spaces, where individuals gain knowledge through participation, storytelling, conflict, and collective reflection. These settings enable forms of "learning from below," characterized by active engagement, shared values, and lived experience. As exemplified by Crowther et al. (2005, p. 9):

Learning from below refers to those forms of knowledge production and circulation that emerge organically from oppressed communities' struggles, constituting a counter-hegemonic challenge to institutionalized education systems. It is characterized by its roots in lived experience, collective ownership of learning processes, and explicit orientation toward social transformation.

The activities of the Protection of the Environment and Creek of Penteli–Chalandri movement exemplify this notion of "learning from below" through their integration of local ecological knowledge with activist praxis—a process that, as Crowther et al. (2005) argue, generates more radical sustainability paradigms than those typically offered by institutional environmental education. As they note (p. 41), "When communities fuse their vernacular ecological knowledge with activist resistance—what we might call 'militant localism'—they produce sustainability paradigms that are both more radical and more contextually grounded than those offered by institutional environmental education."

Environmental movements provide unique spaces for learning (Foley, 1999). As Hall and Clover (2005, p. 586) assert, environmental movements function as "living laboratories" for adult learning, a claim empirically validated in Walter's (2005) study of rainforest activism. Activities such as campaigning or protesting foster knowledge about sustainability, systems thinking, and collective responsibility (Crowther et al., 2005; Hall & Clover, 2005). These learning processes are not merely cognitive but also embodied and affective, involving close relationships with place, nature, and community (Kahn, 2010). The evolution of environmental movements in Greece has been marked by a multifaceted trajectory, shaped by socio-political, economic, and cultural dynamics. Although environmental awareness remained peripheral in Greece for much of the 20th century, the post-1970s era witnessed a progressive rise in ecological activism. This surge was spurred by both global environmental discourse and domestic challenges, including rapid urbanization, environmental degradation,

and unsustainable resource exploitation. Characterized by their grassroots nature and localized focus, Greek environmental movements frequently intersect with broader socio-political concerns such as equity, public welfare, and democratic engagement (Sotiropoulos, 2004). Operating at the intersection of formal political structures and informal civic initiatives, these movements provide valuable insights into citizen mobilization around ecological issues within a context of institutional uncertainty and economic instability. Although robust academic literature on this topic remains limited, evidence drawn from newspaper and magazine articles, pamphlets published by social collectives, and public debates suggests that environmental movements in Greece have played a pivotal role in fostering ecological awareness and shaping policy responses, demonstrating both local and transnational influences (e.g., Tsekos & Mathopoulos, 2008). From grassroots activism against destructive development projects to broader campaigns for biodiversity preservation and climate justice, these movements highlight the intersection of environmental, social, and political struggles. While challenges such as state repression, economic constraints, and fragmented mobilization persist, Greek environmental movements continue to evolve, adapting to new ecological crises and leveraging digital activism. Ultimately, the Greek case underscores the importance of community-driven resistance and the enduring tension between unsustainable growth models and the pursuit of environmental sustainability. Future research could further explore the movements' transnational linkages and their potential to influence green policymaking in an era of escalating ecological uncertainty.

4. Methodology

Six personal narratives of activists are explored in this research (pseudonyms: Petros, Eleni, Marina, Makis, Rania, and Voula). Participants were recruited using purposive sampling to ensure the inclusion of activists representing a spectrum of involvement, ranging from recent entrants to experienced, long-term organizers (Patton, 2015). This sampling strategy was deliberately designed to capture a heterogeneous group thereby facilitating a comprehensive exploration of varying perspectives within the movement (Creswell & Poth, 2018). The selection criteria were informed by the study's aim to understand how differing levels of engagement and demographic factors might influence participants' experiences and learning processes (Maxwell, 2013).

The participants' narratives were collected through semi-structured, in-depth interviews lasting 60–90 minutes, conducted between March 1 and June 30, 2025. These narratives were elicited through questions regarding participants' involvement in the movement, the activities they engaged in, and their learning processes—both self-directed and socially mediated—as well as the emotions experienced during these learning encounters. Additional questions addressed issues that emerged during the course of the interviews. Semi-structured interviews were selected because they are recognized in the literature for their immediacy, ability to facilitate communication, encouragement of emotional expression, and capacity to yield a comprehensive understanding of participants' perspectives, perceptions, and intentions (Cohen et al., 2007). Interviews were conducted in a welcoming and supportive environment designed to put participants at ease and foster open, honest dialogue, thereby encouraging them to share their experiences and viewpoints freely.

The participants, all actively engaged in the Protection of the Environment and Creek of Penteli–Chalandri movement, shared narratives that encompass both discrete moments and broader trajectories over time. More generally, these accounts reflect themes of activism, interpersonal relationships, emotional engagement, and learning. Each narrative provides insight into a participant's interpretation of social practice while also illuminating the broader

network of social relations in which they are embedded, as narratives are inherently shaped by cultural context (Pamphilon, 1999). As articulated by Ganz (2009, p. 12):

The narrative practices of 'story of self,' 'story of us,' and 'story of now' provide movements with a framework to: (1) root collective identity in personal experience, (2) articulate shared values, and (3) motivate urgent action. This tripartite storytelling cultivates the agency and solidarity that sustain long-term organizing efforts.

Ultimately, this study contends that storytelling serves not merely a communicative role but operates as a transformative mechanism through which individuals interpret their lived experiences, construct identities within broader sociopolitical contexts, and mobilize toward collective action (Clandinin & Connelly, 2000). Storytelling in social movements has been shown to foster critical reflection, shape collective memory, and support the emergence of political agency (Choudry, 2013; Ganz, 2011). Through a structured yet flexible narrative inquiry process, the study not only illuminates participants' lived experiences but also foregrounds the interplay of individual agency and broader socio-cultural forces in shaping meaning-making.

Finally, it should be noted that informed consent was obtained from all participants prior to data collection, ensuring they were fully aware of the study's purpose and procedures. Confidentiality was rigorously maintained through the use of pseudonyms and secure data storage practices to protect participants' identities and personal information. The researcher upheld the principles of respect, beneficence, and non-malfeasance throughout the study.

Additionally, reflexivity was practiced continuously, with the researcher critically reflecting on her dual positionality as both observer and participant in certain movement activities to mitigate potential biases.

5. Findings

The results of our analysis revealed the following recurring themes in the narratives of our research participants.

5.1 *Informal Learning Spaces and Peer Exchange*

The findings highlight the importance of non-formal and informal learning spaces, such as public assemblies, planning meetings, casual discussions during Creek walks, online chats, and movement events. These findings echo Illeris's (2007, pp. 83–97) emphasis on the social context of learning and reinforce the value of horizontal knowledge exchange, as seen through participant collaboration, storytelling, and mutual mentoring. The emotional and affective dimensions of learning also emerged clearly, resonating with theories of embodied learning (Merriam, 2008), particularly during moments of public engagement or confrontation. The following interview excerpts are illustrative.

"We didn't sit around waiting for someone to train us or give us a manual—we just dove right in. They always say, 'You need experience first,' but we didn't have time for that. The Creek's under threat and no one's coming to save it but us, the locals. So we got to work—organizing awareness events, putting up posters, chatting with neighbors, reaching out to the municipality. I can't even count how many mistakes I made, but honestly, each one taught me something. Real stuff. The kind of learning no classroom could've ever given me." (Petros)

It may seem incredible to you as you hear it, but I have learned a lot through our activities. The most important thing is not what I have learned, but how I have learned it. Talking to others, listening to others and then working it out on my own, in my mind ... you understand ... and if

I still have questions I try again ... many times I search the internet, books and ask again. I wonder why teachers in schools don't do the same ... why they insist only on lectures and books ... in a few words, in the movement I learned to learn (Eleni)

"Nobody handed us a manual on how to lobby the municipality—we learned by doing. At first, we didn't even know who to talk to. We showed up at the wrong office, filled out forms we didn't understand, and got blank stares when we demanded action. The first time we presented our case in the regional council, we brought messy handwritten notes and no data. The council members barely looked up. The second time, we came with photos, petitions from citizens, even a decision draft. ... You make mistakes, of course. You trust the wrong civil servants, miss a deadline, or forget to bring some credential. But every mistake becomes a lesson the next time. Now, when new neighbors join our group, I tell them: 'Don't wait until you know everything. Start where you are. Fail forward.' Because the real education isn't in a book—it's in the trying, the stumbling, and the refusing to quit. (Marina)

"When you're up against big money and political power trying to exploit our Creek, it's easy to feel outmatched. We don't have fancy lawyers or scientific experts on payroll. No one's handing us research studies or policy briefs. But what we do have is each other - and we've learned to turn that into our strength. Through our neighborhood networks, we piece together knowledge like knitwear. The neighbor next door, who studies environmental science, helps us understand many things for the preservation of the creek...and at our assemblies, someone always brings a new piece of information - maybe a news article about similar fights elsewhere... The real education happens in our actions. When we're collecting signatures door-to-door, every conversation teaches us something new - about people's concerns, about hidden connections, about who in city hall might actually listen. During protests, we learn from veteran activists how to get media attention, how to keep people energized. (Rania)

"When we first started fighting to protect the Creek, I couldn't tell a zoning law from a fishing license! But when you see would-be trespassers of the land and local politicians making shady deals, you learn fast. I began by pestering every knowledgeable person that I knew – a lady lawyer, the biology teacher of my son, even the librarian who helped me find the right books. At first, the legal documents might as well have been in another language. But we formed a study group, broke it down paragraph by paragraph. We discovered loopholes they didn't think we would find - like how the bylaw prohibiting building on the banks of the Creek could stop their construction plans in cold blood. .. What's powerful is that this knowledge doesn't just protect our Creek - it arms our whole community. Now when I hear about threats to other green spaces... "(Voula).

Ultimately, the environmental protection movement examined in this study functions as a learning ecosystem—a dynamic, adaptive context where adults learn through interwoven personal, social, and political experiences. This finding underscores the need to reconsider how learning is conceptualized in adult education and highlights social movements as critical, yet often undervalued sites of lifelong learning.

Moreover, the findings emphasize the centrality of experiential learning (Kolb, 1984) within social movement engagement. Rather than acquiring knowledge through formal education, participants described how learning emerged through active involvement—such as organizing advocacy campaigns, participating in protest actions, and engaging with local governance structures. Viewed through a complementary lens, these processes align with the concept of situated learning (Lave & Wenger, 1991), in which knowledge is collaboratively constructed through participatory social practice.

5.2 Identity Transformation through Activism

A prominent theme emerging from all participants' narratives was the transformation of personal identity resulting from their involvement in community-based environmental activism. Participants described a shift from viewing themselves in narrowly defined professional roles to embracing a broader civic identity. This transformation often involved a heightened sense of agency, empowerment, and connectedness to broader societal issues.

For example, several participants reflected:

"Before becoming involved in the community action group, I primarily identified as a teacher—someone focused on the classroom and formal education. My role felt limited to curriculum and pupils. However, through my engagement with this movement, I began to see the broader societal implications of my work and my capacity to influence change beyond the school setting. Participating in collective initiatives, organizing meetings, and engaging with local campaigns transformed my sense of agency. I no longer see myself only as an educator, but as an active citizen—someone with the voice, tools, and community support to advocate for justice and challenge the status quo." (Petros)

"Before I got involved, I honestly thought activism was something extreme—something for radicals or people on the fringes. It felt distant from my everyday life. I never imagined myself in that role. But through participating in campaigns, attending meetings, and working with others in my community for protection of the Creek, I've come to see activism in a completely new light. It's not about being loud or disruptive—it's about caring enough to take action, to speak up for what matters. I've learned that being an engaged citizen means stepping beyond the passive role of observer and becoming actively involved in shaping our shared spaces and policies. It's empowering, and now I feel a deeper sense of responsibility and connection to my neighborhood and the environment. This experience didn't just change how I act—it changed how I see myself as part of a community" (Eleni)

"Back before I got involved with the group for the protection of the Creek, I'd panic at the idea of speaking in front of people. I never thought I had anything special to say. But once I started helping out at events and campaigns I ended up in situations where I had no choice but to speak up. Like explaining things to people or chatting with kids during their visits to the Creek. Slowly, I got used to it. I even spoke once at a meeting of a school's parents' association about the necessity of protecting the Creek! I was shaking, but I did it. And each time, I felt a bit braver. Now, when I talk about things I care about, it feels natural. I've changed a lot. I feel stronger, more involved. Honestly, this whole thing taught me that you don't learn just by reading—you learn by jumping in, messing up, and keeping at it because you care. (Marina)

The above narratives illustrate a redefinition of self—not merely as a professional confined to institutional settings, but as an empowered civic actor capable of influencing structural change. Such identity shifts align with transformative learning theory (Mezirow, 1991), which emphasizes perspective transformation through critical reflection and social engagement. The participants' experiences suggest that learning through action enabled them to reconstruct their identities in relation to the political and social dimensions of their environment.

5.3 Embodied Experience – Sensory and Emotional Learning in Field Events

Participants consistently described their learning as an embodied, sensory experience rooted in collective activities aimed at protecting the Penteli–Chalandri Creek. Rather than abstract or theoretical, this learning emerged through tactile engagement, emotional resonance, and heightened environmental awareness. The protection of the green area surrounding the

Creek—through various public events and actions—created multisensory learning moments that participants claimed left a lasting impression beyond what conventional education could offer. This experiential learning aligns with theories of embodied cognition (Varela et al., 2017) and sensory pedagogy (Ellsworth, 2005), where understanding is constructed through bodily engagement with the world. These embodied encounters were described as transformative. Participants reported that physical efforts and sensorial immersion deepened their ecological consciousness and created emotional connections to the environment that sustained their continued involvement. These findings suggest that environmental movements provide unique learning spaces where sensory experience and bodily participation are central pedagogical forces.

The following interview excerpts support the idea of sensory and emotional learning.

“Sometimes I think my body understood before my mind did. Like, when we walked through the Creek and saw trash everywhere ... it wasn’t just something I saw, I felt it. My chest tightened, I felt angry ... I remember to shed tears once after a local kid came and said, ‘Thank you for making the Creek nice and clean.’ That moment stuck with me. It’s not just learning facts about the environment of the Creek ... it’s learning through your skin, your breath, your heart. That’s how I know I’ve changed my mind” (Rania)

“Oh, it’s all in the senses—learning out here isn’t about reading reports. It’s the smell of the wet soil when we dig, the sound of birds coming back after we cleared a space, the feel of the sun on your back when you’ve been out planting all morning. I remember touching the bark of an old tree we saved, and thinking, this matter. I could actually feel how alive the place was. Those little things stay with you. You begin to notice changes—like how the air smells fresher after a cleanup. That kind of learning sticks with you because your whole body is involved, not just your head.” (Makis).

5.4 Pedagogies of Activism: Teaching Others

Activists often took on teaching roles, mentoring newcomers or leading community workshops. This suggests that social movements are not only sites of learning but also spaces of peer pedagogy and grassroots education, where knowledge circulates across different levels of experience. This supports Crowther’s (2013) argument that informal adult education embedded within social movements plays a critical role in fostering collective capacity-building, as it enables participants to develop shared knowledge, critical awareness, and the collaborative skills necessary for sustained activism.

“When I first joined the group, I was just trying to understand how everything worked—what we were doing, how meetings went, what my role could be. I didn’t feel like I had much to offer at that point. But as I got more involved, I started to see that new people had the same questions I used to have. Slowly, I began helping them out—explaining how things work, introducing them to others, just making sure they didn’t feel lost like I did in the beginning. Without really noticing, I became the person who supports the newcomers. And you know what? It feels really good. It’s like I’m giving something back, keeping the circle going. I’ve realized that being part of something isn’t just about what you do ...it’s about helping others find their place too”(Petros)

“One of the things we always try to do is bring new people into the movement. It’s not just about having more hands to help—it’s also about sharing what we’ve learned and helping others understand why this matters. A big part of what we do is explaining things: what the threats to the Creek are, why local action makes a difference, how each person can contribute. We don’t sit people down in a classroom ... it just happens almost naturally. We talk during

meetings, over coffee after meetings, or while setting up events. That kind of informal education is really part of our actions. It's how people get informed, inspired, and start seeing themselves as part of something bigger" (Marina)

In conclusion, the pedagogies of activism extend beyond the boundaries of formal education, emerging organically through action, dialogue, and collective engagement. Activists do not merely participate—they also teach by mentoring newcomers, sharing lived knowledge, and modeling practices of resistance and care. These forms of grassroots teaching are deeply relational and often reciprocal, highlighting the collective nature of learning within social movements. Ultimately, activism becomes both a site and a method of education, where knowledge is transmitted not through authority, but through experience, solidarity, and shared purpose.

5.5 Structural Barriers and Learning Constraints

Despite the positive learning outcomes, several barriers were identified, including time constraints, burnout, lack of institutional support, and limited access to expert knowledge. These challenges reflect underlying structural inequalities and underscore the need for greater recognition of learning that occurs outside formal educational institutions (Hall & Clover, 2005). Addressing these barriers may enhance the sustainability of both learning processes and activist engagement.

The following excerpts from interviews highlight the structural obstacles and constraints encountered by the activists.

"Look, we all care about the creek ... this is why we are engaged in. But the fact remains that we are all volunteers, with most of us balancing full-time jobs or studies. I remember experiencing total burnout just a few months after starting...before I even figured out how things are supposed to work. You try to get answers from the regional authorities, and no one replies. You ask for help, and everyone's stretched thin. After a while, it feels like you're carrying the weight of the world with no map and no rest. And the worst part is, it's not because we don't care, it's because the system isn't built to support ordinary people trying to make change.". (Petros)

"Sometimes it feels like we're reinventing the wheel — no structure, no support. When I first joined the group, I assumed there would be some kind of guide or training, maybe even just someone to walk us through how things are supposed to work. But no — we were figuring things out from scratch. One week we were trying to organize a public debate, the next we were dealing with municipal bureaucracy without any clear plan. It can get frustrating. You want to help, but without a system in place, everything takes twice as long. " (Voula)

"We usually chat about how things went after events or actions. It doesn't have to be as our official meeting; sometimes we just hang out with coffee, talking things through. Being honest and saying what you really think is key. I've realized that just doing an action isn't the whole picture; you also need time to rethink it. There were moments when I felt totally overwhelmed or stressed, and then someone else would say they felt the exact same way. Such moments are priceless. When you actually stop and listen to how others were feeling or what was going through their heads, it makes you way more understanding. It brings you closer to the group and to each other in a deeper way." (Makis)

Activists engaged in social movements often face a range of interconnected barriers that hinder their ability to participate, learn, and sustain action over time. One of the most pervasive challenges is burnout and emotional fatigue, as prolonged involvement—particularly in causes marked by moral urgency or systemic injustice—can lead to

psychological exhaustion and disillusionment (Gorski & Chen, 2015). This emotional strain is frequently compounded by a lack of financial and material resources, as many grassroots initiatives depend on unpaid labor and struggle to secure stable funding or institutional backing (Hall et al., 2012). Consequently, movements often operate under precarious conditions that restrict their capacity to organize effectively or develop lasting educational structures (Foley, 1999).

Another significant obstacle arises from the informality and instability of movement structures. While decentralized, non-hierarchical organizing can foster participation and democratic engagement, it may also lead to confusion, uneven workloads, and internal conflict due to the lack of clearly defined roles, responsibilities, or strategic direction (Maeckelbergh, 2009). This structural ambiguity can impede the learning process, particularly for newcomers who may struggle to access mentorship or institutional memory (Crowther et al., 2005).

Additionally, activists frequently face a lack of public recognition for their knowledge practices, as the informal and experiential learning within movements is seldom acknowledged by formal education systems or policy frameworks (Clover & Hall, 2010). This lack of validation can diminish both their external influence and internal confidence. In some cases, the situation is further exacerbated by external repression—including policing, surveillance, or legal threats—which not only deters participation but also undermines trust and solidarity within the group (Della Porta, 2013).

Structural inequalities based on gender, race, class, or disability can further restrict who feels welcomed or empowered within activist spaces, leading to the marginalization of certain voices and the reproduction of dominant power dynamics—even within progressive movements (Kilgore, 1999). At the same time, everyday constraints such as work obligations, caregiving responsibilities, and time limitations present significant challenges for adult learners striving to balance activism with other aspects of life (Finger & Asún, 2001).

Finally, internal tensions and disagreements—whether ideological or interpersonal—can fragment movements or impede collective learning. Without intentional practices for dialogue, reflection, and conflict resolution, such challenges may result in disengagement or splintering (Brookfield & Holst, 2011). Together, these barriers illustrate that while social movements offer rich opportunities for adult learning and transformation, they are also shaped by complex limitations that must be actively addressed to sustain meaningful participation and growth.

6. Discussion

This study explored how participants in a local environmental movement engage in informal and non-formal learning. Through thematic analysis of narrative data, several interconnected themes emerged that align with—and expand upon—established adult learning theories.

Participants described learning as occurring within specific social, ecological, and political contexts. This affirms Lave and Wenger's (1991) notion of situated learning, where knowledge is embedded in the practices of activist collectives. Rather than being acquired through formal instruction, knowledge developed through shared action, reflection, and problem-solving within a real-world ecological struggle. Many also reported, in varying forms and intensities, experiencing disorienting dilemmas—such as direct encounters with environmental degradation or institutional neglect—that prompted critical reflection and shifts in worldview. These accounts resonate with Mezirow's (1991) theory of transformative learning, suggesting that activism often catalyzes profound personal and cognitive development.

Beyond individual transformation, participants highlighted their roles in educating others through storytelling, public engagement, and advocacy. In this way, they functioned as both learners and educators, engaging in what Gergen (2009) calls a dialogical process of co-constructing knowledge: *“Knowledge is not a mirror of the world, but a by product of coordinated action. It is not a reflection of an objective reality but is constructed in relationships through language and dialogue”* (p. 71). In short, participants framed learning not only as personal growth but also as a political act aimed at mobilizing the local community.

Nevertheless, participants identified significant challenges, including emotional fatigue and frustration in the context of collective action. These constraints underscore the uneven dynamics inherent in movement-based learning, highlighting the need for emotional resilience and critical reflexivity to sustain long-term activist engagement (Hall et al., 2012).

These findings reinforce the understanding of environmental movements as dynamic learning environments. They invite adult educators and policymakers to recognize the educational significance of activism and to value informal learning spaces as vital arenas for ecological and

7. Conclusion

The study reported in this paper examined adult learning within the milieu of environmental activism, focusing on participants involved in the grassroots movement for the Protection of the Environment and Creek of Penteli–Chalandri in northern Athens. Framed through the lens of social movement learning (Hall et al., 2012; Crowther et al., 2005), the research employed narrative inquiry and thematic analysis to trace how learning unfolded through collective action. Findings revealed that participants developed experiential and embodied knowledge (Kolb, 1984), engaged in critical reflection (Mezirow, 1991), experienced shifts in personal and civic identity (Brookfield, 2005), and participated in informal peer education (Foley, 1999). These forms of learning were not imposed but emerged relationally and organically through participation in the movement’s practices and struggles, affirming social movements as generative spaces for adult learning and civic transformation (Choudry & Kapoor, 2010). Future research could build on these insights by examining learning across different types of movements, exploring intergenerational learning within activism, or assessing the long-term impacts of such learning on individuals and communities.

References

- Brookfield, S. D., & Holst, J. D. (2011). *Radicalizing learning: Adult education for a just world*. Jossey-Bass.
- Brookfield, S. D. (2005). *The Power of Critical Theory: Liberating Adult Learning and Teaching*. Jossey-Bass.
- Choudry, A. (2013). Activist education at the intersections of power, history and politics. In A. Choudry & D. Kapoor (Eds.), *NGOization: Complicity, Contradictions and Prospects* (pp. 17–34). Zed Books.
- Choudry, A., & Kapoor, D. (2010). Learning from the Ground Up: Global Perspectives on Social Movements and Knowledge Production. In Aziz Choudry & Dip Kapoor (eds.), *Learning from the Ground Up: Global Perspectives on Social Movements and Knowledge Production*. (pp. 1-13). Palgrave Macmillan.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative Inquiry: Experience and Story in Qualitative Research*. Jossey-Bass.

- Clover, D. E., & Hall, B. L. (2010). Social movement learning. In E. Peterson (Ed.), *The international encyclopedia of education* (pp. 168–173). Elsevier.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). Routledge.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Crowther, J., Galloway, V., & Martin, I. (2005). *Popular education: Engaging the academy: International perspectives*. NIACE.
- Della Porta, D. (2013). *Can democracy be saved? Participation, deliberation and social movements*. Polity Press.
- Ellsworth, E. (2005). *Places of Learning: Media, Architecture, Pedagogy*. Routledge.
- Finger, M., & Asún, J. M. (2001). *Adult Education at the Crossroads: Learning Our Way Out*. Zed Books.
- Foley, G. (1999). *Learning in Social Action: A Contribution to Understanding Informal Education*. Zed Books.
- Ganz, M. (2009). Why stories matter: The art and craft of social movement storytelling. *Harvard Kennedy School Faculty Research Working Paper Series*.
- Ganz, M. (2011). Public narrative, collective action, and power. In S. Odugbemi & T. Lee (Eds.), *Accountability through Public Opinion: From Inertia to Public Action* (pp. 273–289). World Bank.
- Gergen, K. J. (2009). *An Invitation to Social Construction* (2nd ed.). SAGE Publications.
- Gorski, P. C., & Chen, C. (2015). "Frayed all over": The causes and consequences of activist burnout among social justice education activists. *Educational Studies*, 51(5), 385–405.
- Hall, B. L., & Clover, D. E. (2005). Social movement learning. In L. English (Ed.), *International encyclopedia of adult education* (pp. 584–589). Palgrave Macmillan.
- Hall, B. L., Clover, D. E., Crowther, J., & Scandrett, E. (Eds.) (2012). *Learning and Education for a Better World: The Role of Social Movements*. Sense Publishers.
- Illeris, K. (2007). *How We Learn: Learning and Non-Learning in School and Beyond*. Routledge.**
- Kahn, R. (2010). *Critical pedagogy, ecoliteracy, and planetary crisis: The ecopedagogy movement*. Peter Lang.
- Kahn, R. (2012). *Ecopedagogy: Educating for sustainability in schools and society*. Routledge.
- Kilgore, D. W. (1999). Understanding learning in social movements: A theory of collective learning. *International Journal of Lifelong Education*, 18(3), 191–202. <https://doi.org/10.1080/026013799293784>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage Publications.

- Maeckelbergh, M. (2009). *The will of the many: How the alterglobalisation movement is changing the face of democracy*. Pluto Press.
- Merriam, S. B. (2008). Adult learning theory for the twenty-first century. In S. B. Merriam (Ed.), *The Third Update on Adult Learning Theory* (pp. 93–98). Jossey-Bass.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
- Pamphilon, B. (1999). The zoom model: A dynamic framework for the analysis of life histories. *Qualitative Inquiry*, 5(3), 393–410.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.
- Sotiropoulos, Dimitri A. (2004) *Formal weakness and informal strength: civil society in contemporary Greece*. Hellenic Observatory, London School of Economics and Political Science, London, U.K. <http://eprints.lse.ac.uk/5683/1/sotiropoulos16.pdf>
- Tsekos, C. A., & Mathopoulos, D. P. (2008). Environmental news in Greece: evaluation of the way newspapers deal with environmental issues. *International Journal of Environmental Studies*, 65(2), 209–218. <https://doi.org/10.1080/00207230701832572>
- Varela, F. J., Thompson, E., & Rosch, E. (2017). *The Embodied Mind: Cognitive Science and Human Experience*. MIT Press.
- Walters, S. (2005). Social Movements, Class, and Adult Education. *New Directions for Adult and Continuing Education*, 106, 53–62.