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# **Situated Learning and On-Farm Apprenticeships: Political Implications of Negotiating Apprentice Identity**

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**Keywords:** apprenticeship, identity, situated learning

**Abstract:** By drawing upon the tradition of situated and activity perspectives of adult learning, this mixed methods study underscores the sociocultural and politicized processes by which farmer/learners negotiate apprentice identity. Our findings offer implications for the formation of equitable apprenticeship learning experiences and career pathways.

Apprenticeship learning is rooted in a theoretically vibrant tradition of adult learning that emphasizes the significance of socially-constructed and tool-mediated activity in adult systems of learning and cognition (Brown, Collins & Duguid, 1989; Lave, 1988; Lave & Wenger, 1991; Paradise & Rogoff, 2009; Resnick, 1987; Schunk, 2012; Wilson, 1993). Situated and activity perspectives have the potential to help us better understand the complexity of individual and social interaction within authentic activity (Biesta, 2006), the embeddedness of human agency and social conditions that, together, inform our educational practices (Billet, 2006), and the role of power in sociocultural mediation and learning (Niewolny & Wilson, 2009; Sawchuck, Duarte & Elhammoumi, 2006). Situated learning theory, in particular, provides a sharp theoretical lens through which we may understand the authentic and sociocultural experiences that comprise apprenticeship forms of learning (Lave, 1988; Lave & Wenger, 1991).

On-farm apprenticeships, as an illustration of adult learning, have gained momentum in extension and community educational contexts. This is largely due to the recent, “new” farmer phenomenon that underscores contemporary adult agrifood education. A swell of federally funded initiatives has launched a large number of training programs nationally, to address the unique and diverse educational needs of new farmer audiences (Niewolny & Lillard, 2010). Apprenticeships are increasingly popular in the education of adult beginning farmers (Parr & Trexler, 2011). Like other forms of new farmer training and program development, apprenticeships are contextually complicated (Barnett, 2012; Hamilton, 2010; Pilgeram, 2011). The new farmer education question has not grown in isolation from a number of agrifood discourses (see Niewolny & Wilson, 2007; Niewolny & Lillard, 2010). Particularly, grassroots, policy, and academic circles are creating space for the emergence of alternative agrifood movements (Allen, 2004), or alternative food system work, which has been described as the synthesis of numerous efforts “to make the production, distribution, and consumption of food more sustainable” (Lehner, 2013, p. 49). We and others (see Hamilton, 2010) argue that on-farm apprenticeships are informed by these food system politics through the lenses of farm labor and social justice, among other issues defined by alternative food movements (Constance, Renard & Rivera-Ferre, 2014). In light of the power structures that impact farmers/learners’ viable entry and sustainable living, greater criticalness in the design and nature of these new learning experiences is necessary. Drawing upon situated learning theory, we explore on-farm apprenticeships from a critical perspective to better understand this form of adult education. We focus on the socially mediated identity formation of start-up farmers within on-farm

apprenticeships in the Commonwealth of Virginia; the practices, structures, and institutional activity that inform these instances of apprenticeship learning; and implications for the ways in which the apprenticeship model (re)produces (in)equitable learning spaces for farmers/learners.

### **Theoretical Framework**

On-farm apprenticeships can be understood through the lens of situated learning theory. Situated learning can be understood as a constructivist position of knowledge production (Schunk, 2012), and as one perspective of constructivist learning in/through/from experience (Fenwick, 2003). In situated learning, the learner is not divorced from context, and knowledge is constructed within a reciprocal and fluid relationship with environs through enculturation and activity (Brown, et al, 1989; Lave, 1988). Identity, within situated learning theory, is said to shift through negotiating new social ways of being within a particular context, which constitutes learning (Wenger, 1998). Vygotsky's (1986) theories on the zone of proximal development, intersubjectivity, and centrality of language also mediate learning, thus we also embrace this parallel tradition of sociocultural learning to explore on-farm apprenticeships.

These perspectives of adult learning hold that learning occurs through individuals' recursive negotiation and participation with/in socially-informed context. Billet (2006) and Fenwick (2003) have remarked that these frameworks illustrate how social structures and individual agency are relationally interdependent in learning experiences. According to Wilson (1993) and Niewolny and Wilson (2009), scholars who purport a situated or activity perspective illustrate how learning and cognition are culturally-constituted through tool-mediated activity and socially-structured relations of power (also see Biesta, 2006; Sawchuck, et al, 2006; Fenwick, Edwards & Sawchuck, 2012). From this critical position, we are able to see how our educational practices may (re)produce social relations of power, some of which may be inequitable, especially if left unexamined and/or unchallenged in the everydayness of practice.

### **Methodology**

As a descriptive study, we used a concurrent mixed methods approach (Creswell, 2010) to understand the on-farm apprenticeship experiences of start-up farmers/learners and host farmers/educators. In conducting this study, we are situated within the ontology of historical realism (Lincoln & Guba, 2000). Within our research paradigm, we strive for an exploratory description of the phenomenon of on-farm apprenticeships. Thus, our mixed methods design was what Greene (2007) calls a complementary strengths stance.

We conducted qualitative in-depth interviews with host farmers (n=5), on-farm apprentices (n=5), and farmers who were former apprentices (n=2). Interviews were semi-structured (Fontana & Frey, 2000), and audio-recorded, transcribed verbatim, and coded in a semi-open coding scheme. For quantitative background data, we also conducted a 38-question survey of farmers in Virginia who hosted apprentices (n=45), to better understand the apprentices, apprenticeship program structure, and the social context of farmer learning. The survey was disseminated online and in paper format, through on-farm apprenticeship listings, the extension service listserv, at agricultural education events, and hosting organizational venues

### **Findings**

In this paper, we focus on the qualitative strand of the project to present three findings that together illustrates the sociocultural formation of farmer/learner identity. First, we illustrate how on-farm apprentices negotiate farmer identities through the socially, physically and emotionally

mediated experiences of work with/in the farm experience. Secondly, we show how this learning experience is embedded within the food system politics of the alternative agrifood movement for both expert (mentor) and novice (mentee) farmer. Lastly, drawing upon the former, we begin to understand how socioeconomic structures and conditions of the new farmer issue may actually grant privilege to some learners while limiting others from full participation in on-farm apprenticeships (see MacAuley, 2014, for further elaboration of findings).

Our first finding demonstrates how apprentices negotiate expert identities rooted within host/educator job needs and farming practices. Here, physical and emotional meaning making was noteworthy to the formation of apprentice identity through a range of on-farm work and start-up tasks in which farmers/hosts trained apprentices. To that end, farmer/hosts provided a Vygotskian zone of proximal development for apprentices, where emotional and intersubjective exchange with/in the mentor-mentee relationship is crucial to learning. Here apprentices illustrate the physical and emotional embeddedness of their situated learning experiences:

*Like, what better way to learn to farm, than to farm? It gets ingrained in your muscles... You learn it in your body, I mean you learn something like that, and it's kind of hard to unlearn it.*

*I could see how pissed he was, and it wasn't that he yelled at me or anything, but that he was really upset. And part of it to me, was like, what I did mattered...and the way I did it, and whether or not it worked, and how much time I spent [mattered]. I learned a lot just by watching people's reactions.*

Relatedly, our findings also hinted at the everyday contextual elements that occur within a socioeconomic relationship of work with/in the farm experience. Here we begin to understand how the everyday negotiation of identity of novice learners is located in a certain “entrepreneurial” lifestyle of farm work, which is often novel to apprentices. For example, one host/educator emphasized this with their apprentices: “We’d prioritize the farming lifestyle, what it really means to do it and to do it full time... just learning the day to day operations.” Through these emergent themes, therefore, we begin to see how physical, emotional, and social domains, together, inform the learning experiences of these on-farm apprenticeships.

Second, our findings suggest that on-farm apprenticeships in this study appear to be embedded within the food system politics of *alternative agrifood movements* (AAMs) (Allen, 2004), where they develop identities not only as new farmers but as agents of change that work to promote the various politics of the movement. Specifically, AAM advocates exhibit the values of environmentalism, localism, agrarianism, food quality, emancipation, diversity, and food justice (Constance, Renard & Rivera-Ferre, 2014; Lyson, 2004; Sbicca, 2012). Our findings illustrate how both farmers/hosts and apprentices/learners invariably expressed a number of values and advocacy positions consistent with the aforementioned strains in the AAM discourse, and that they explicitly recognized their participation within a social movement as part of their new farmer identity. Both apprentices and host farmers explain:

*So when I went to [University], and I began to kind of learn about factory farming and food systems, and of course instantly became a vegetarian, and a food rights activist, and just started really educating myself about what was happening in the world.*

*I haven't quite determined what my role in this movement will be yet... I know that I want to live my life by those ideals of sustainable agriculture, and be a part of the food process, the journey.*

*That was a huge driving force, was to figure out how to live in a way that we could have that world... less pollution, more biological diversity, cleaner world, healthier people.*

Thus, this finding points to the sociocultural mediation of learning through the formation of a political identities, specifically ones in which are consistent with the AAM discourse, including food rights (e.g., emancipation and justice), less pollution and biodiversity (e.g., environmentalism), and health (e.g., food quality). Participants also explicitly identified themselves with AAMs, as shown in the language of “activism,” and “movements.” Thus, we might consider that on-farm apprentices could be a congruent form of, and/or a forum for, political expression within AAMs.

Third, related to the former, our findings begin to illustrate potential barriers to full participation in this community of practice (Lave, 1988; Lave & Wenger, 1991). This is best explained by the way in which on-farm apprenticeships may present inequitable working conditions for apprentices, including low/no pay reported by apprentices. Although many farmers expressed a value in teaching their apprentices the craft of farming, both qualitative and quantitative strands show that the most common motivation for hosting apprentices was the need for “cheap labor,” which, as one farmer described, positioned the learner as a “laborer” without “focusing on [the] teaching.” Another farmer describes labor and learning on the farm:

*And I think a lot of farmers do really want to work independently, but they know they need the labor, they know an apprentice is low cost... the living situation is just very bad for the intern, or the intern thinks it will be much more romantic than the actual grunt work.*

While conditions of cheap or free labor are clearly concerning as an element of labor justice, these labor standards may also essentially exclude low-income groups from possible entry into the farming system scheme through the apprentice model, as those groups may lack financial and social capitals to accept low/no pay for the apprenticeship's duration. This class-based issue is further explained by one apprentice:

*You actually end up losing a lot of money as an apprentice...It's also to me, a class issue, right? The people who can afford to take the financial risk of doing apprenticeships are people who have either done a great job at saving money, or have had the support of their families while they're in school, or while they're in the apprenticeship. And so that makes apprenticeships only accessible, usually, to people who come from well-off backgrounds.*

Here we illuminate a critical social justice issue within on-farm apprenticeships. On-farm apprenticeships, as a community of practice, may limit access to low-income learners that is perhaps unintended or hidden from farmers/hosts due to the socioeconomic structuring of contemporary farming systems. And if we query and complicate on-farm apprenticeships further, we can begin to ask: if these barriers are prohibitive to apprentice participation, how does this affect AAMs' call for new farmer diversity and food system justice?

### **Implications for Adult Education Theory/Practice**

This research illustrates how new farmer identities are negotiated within a community of practice, which is inherently embedded in the socially and culturally structured relationships of power between expert and novice farmers on-farm, the farmscape and the politics of farm labor, and the larger structuring of the alternative agrifood movement. Practically, considering the rise of on-farm apprenticeships, and the data presented here, we argue that adult educators have the opportunity to address the training of beginning farmers informed by situated learning. These opportunities center on the importance of emotionally mediated learning within the mentor-mentee relationship, fair treatment of apprentices, and greater inclusivity of farmers/learners.

Theoretically, this study also illuminates issues of power and social complexity in the discourse on situated learning, as applied to the promotion of emancipatory social conditions for adult learners. Particularly, we underscore a mechanism through which power differentials inform the farmer/host and apprentice/learner relationship, which could effectively perpetuate structural inequities through on-farm apprenticeships. We suggest that the low inclusivity of on-farm apprenticeships, and unfair labor practices, if left unexamined, could self-replicate through new farming and agrifood systems, informed by knowledge constructed within apprenticeship experiences. Thus, we demonstrate how the reproduction of power can be an important consideration within situated learning as a theoretical framework.

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