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CHAT Learning Theory for Labor Educators: Work Process Knowledge, Activity Theory, and Communities of Practice Labor Studies Journal XX(X) 1–7 © 2011 UALE Reprints and permission: http://www. sagepub.com/journalsPermissions.nav DOI: 10.1177/0160449X11425658 http://lsj.sagepub.com

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Abstract

[AQ: 2]

Keywords [AQ: 3]

At the 2011 UALE annual conference, two workshops (Carter and Martin; Wills) referred to CHAT, or cultural-historical activity theory, as a way to understand learning in the labor movement. CHAT is a fairly recent (mid-twentieth century) body of learning theories that emphasize the socially contextualized, developmental, interactive, and collective nature of learning (Cole 1996, Illeris 2002, **[AQ: 4]**2009). This article briefly describes three theoretical approaches that are within the CHAT tradition. While many labor educators are inspired by Paulo Freire ([1970] 2002), his ideas, which shaped popular education throughout the developing world and influenced the critical literacy movement in the United States, have to be stretched to apply to the US workplace. The three approaches described here do not require as much stretching. Although none by itself accounts for how people learn to be activists, each one has analytic power and combined, they are a useful tool for planning, designing, implementing, and evaluating labor education.

The person whose learning is the focus for labor educators is someone who goes to work to earn a living and fends off attacks on his job while struggling to make it safe, decent, and survivable for himself and others. Such a person is at least a workplace leader and activist, and possibly a union activist. In mainstream discussions of adult

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Corresponding Author: Helena Worthen, 21 San Mateo Road, Berkeley, CA 94707 Email: hworthen@illinois.edu education, what the activist knows may be termed "oppositional knowledge" if it is acknowledged at all. More often, adult educators let activists' knowledge fall into a void between workplace literacy and job training. In practice, activists' knowledge is often viewed by employers as a threat. Knowing too much about workers' rights and solidarity gets people fired, blacklisted, and physically attacked. Labor educators recognize this knowledge when we see it. We can describe it: broad, emotionally charged, steeply slanted in the sense of looking at the workplace from the perspective of the worker, and collectively held. But in order to teach it, we need to talk about how it is learned. To guide the discussion, we need theory.

Work Process Knowledge

Boreham, Fischer, and Samurçay (2002) modeled work process knowledge (WPK) on prior research involving empirical reports of workplaces in the European Union that were transitioning to increasingly computer-based forms of organization. Work in such organizations is not routine but requires constant innovation and the ability to respond quickly to new demands. So does the work of an activist. The authors give three epistemological characteristics of WPK (Boreham, Fischer, and Samurçay (2002, 8-9):

- It is immediately useful for work.
- It is theoretical, or at least "includes a dimension of theoretical understanding" that arises out of "efforts to resolve contradictions between what the theory predicts will happen (or what standard operating procedures are telling the workers to do and the reality that confronts them)."
- It is collectively held "not just throughout a workforce but in the very collective memory of communities of practice and artifacts and technology within them" (Boreham, Fischer, and Samurçay (2002, 9).

Each characteristic of WPK is present in activists' knowledge, with some differences. First, activists' knowledge is "useful for work" but the work here is not the production process of the workplace. Activists' knowledge does not directly increase the number of hotel rooms cleaned, automobiles manufactured, or tests graded. Instead, it is useful for protecting and improving the working conditions under which workers clean, manufacture, and grade. Second, like WPK, activists' knowledge includes a dimension of theoretical understanding that arises as problems at work are addressed and resolved. It requires an accurate and thorough grasp of the production process: what is safe to lift or breathe, how long efforts can be expended without exhaustion, what other demands are being made on workers, the fair distribution of opportunities and penalties. Activists' knowledge is broad; a good activist's knowledge expands to assessing the economics of the work and the industry, since one of the core contradictions is how the wealth created by work is captured and distributed. This contradiction is the ultimate

"problem" that generates the theoretical understanding. Finally, activists' knowledge is collectively held: parts of it are known by many people, while parts are embedded in the history and the artifacts (e.g., contracts) of the workplace. This means that activists' knowledge, like WPK, depends on opportunities to communicate: "Workers need a social structure for creating shared meanings in order to make the situation more intelligible and controllable" (Boreham, Fischer, and Samurçay 2002, 9).

However, WPK takes the workplace to be hierarchical but neutral or conflict-free. Thus it does not account for the emotional intensity with which activists' knowledge is held. Activists' knowledge is learned in conflict. Conflict awakens emotion. Most studies of emotion at work are really about motivation (e.g., Roth [2008]): **[AQ: 5]**positive emotion produces motivation; a motivated employee will work more efficiently. To explain how conflict in the workplace produces learning, we turn to activity theory.

Activity Theory

Yrjo Engestrom (1987, 2001, 2008), a Finnish educator, developed activity theory (AT) to model how learning and social change are linked through a process of development driven by contradictions. The process is represented as an activity system, which is the unit of analysis. Conflict comes both at the level of contradictions and when total activity systems, each driven by a different purpose, are in conflict. Engestrom's activity system model has as its base the community. An example of a community might be a workforce of hotel housekeepers. In one activity system, they clean rooms in order to keep the rooms filled and the hotel profitable. But in another activity system, the housekeepers clean hotel rooms because that is how they make a living. The contradiction between these two systems is where the conflict lies. The first activity system of the workplace operates in order to produce goods and services that in turn produce wealth. The second activity system operates in order to bring in paychecks without injuring backs or shoulders, without exposing housekeepers to harassment or humiliation, and to stabilize and regularize jobs as much as possible through representation. Both activity systems have the workforce community as their base, but their purposes are different. Learning happens when, because of the dialectical relationships among the components, the balance of power changes and the new potentials for strategy and action emerge and are leveraged. The workings-out of changes in the balance of power involve activists in risky challenges that require courage and creativity, thus infusing the attendant learning with emotion.

Activists' knowledge is also distinguished by its steep perspective—its slant or bias—that can be explained by Engestrom's model. The idea that knowledge is shaped by what it is used for is not a new one: every map is organized to facilitate the map reader's search. Thus, a steward who is seeking an explanation for a workplace accident will map the workplace in terms of hazards. The union negotiator who is concerned about the impact of an attendance policy will look at the workforce and see how many are women who have children or elders at home and will thus be differentially affected by such a policy. This is not just a way of collecting pieces of isolated data. This is how knowledge is organized, or learned, to make it useful.

Using WPK and AT we can now examine how the knowledge learned by activists comes to be collectively held, theoretically developed, emotionally charged and carries a steeply slanted, advocate's perspective mobilized for conflict. But a union is also an organization that has to survive when a leader retires. A third approach, the concept of communities of practice, helps us understand how activists' knowledge is promulgated to new leadership and passed along to the next generation.

Communities of Practice

For labor educators, the term "apprenticeship" means the formal arrangements made to train workers in the building and other trades. Jean Lave and Etienne Wenger, however, took the abstract notion of apprenticeship and studied learning in diverse nonschool contexts (Lave and Wenger 1991) where a newcomer over time develops into a skilled "old-timer" (Lave 1991). They model this as a movement from edge to center, from novice to expert, from member to leader. Their influential study considered midwives in the Yucatan, butchers in a supermarket, members of Alcoholics Anonymous, tailors who sew in a marketplace in Africa and quartermasters in the military asking how, in the absence of school or direct teaching, people learned the practices of their community. Translating this into the work of union representation, labor educators can talk about the process of leadership development from member to activist to leader.

Lave and Wenger note conditions that need to be in place in a community of practice (COP) for it to replicate itself beyond the first generation. These conditions are familiar to labor educators who are designing leadership development programs. If one or more of these conditions is absent or distorted one can argue that learning in the sense of passing on the COP will not take place. These conditions are:

- The path from novice to expert is recognized as legitimate by the full community of practice, including senior and junior members of the community.
- The process is public and known to all.
- Participation is not trivial or marginal but involves making real contributions to the overall process of production.

By contrast, in a COP where the critical knowledge is a secret and people who want it are viewed as threats, an additional layer of difficulty is added to the normal tensions between one generation and the next as the replacement process moves along.

CHAT Theories in Labor Education Practice

Figure 1 lists questions that a labor educator confronting a request to design a curriculum might ask. In some cases the terminology is different but the question is really the

Work Process	Activity Theory	Communities of Practice
Knowledge		
What is the problem?	What is the activity system? What is its purpose? What activity systems are in conflict with this one? What is their purpose?	What is the practice? What is its core purpose?
Who is touched by the problem?	What is the community from which the subject has emerged? How activated is this community?	Who is in the community of practice and who is not? What are its edges and what do they look like?
What is supposed to happen? What is actually happening? What is the difference?	What is the division of labor that produced the subject? Was this a good process? Are these the right people?	Do newcomers feel that they are welcome and valued? Or are they resented? Is the path by which some go from being a member to being a union leader transparent and public? Or is it secret, protected information? Is the work they are being given real, valued work, or are they given busy-work ?
What is the history and social context of the problem? What tools and resources are needed to fix the problem?	What tools are available to the subject? What is missing? What are the history, customs, and laws constraining or empowering the subject? Are there enough resources in the activity system to support an effective fight?	Are the tools and resources appropriate and sufficient? Are they up-to-date? Are there new tools that the younger generation can use?

Figure 1. Each approach raises characteristic questions about how to think about and design an educational program.

same; in other cases, the questions illuminate different dimensions of the situation. To visualize when one approach might be tried first before the others, think of the WPK questions as being asked by someone negotiating a contract, the AT questions being asked by someone enforcing the contract, and the COP questions being asked by someone training new stewards.

I drew on these CHAT theories to design a day-long workshop in response to a railroad workers' union request to prepare a class for an annual meeting of safety representatives. A recent crisis that had its roots several years earlier became the focus of this class. Originally, cars in a certain yard were switched using a hump over which they were rolled onto different tracks to make new trains. When the technology changed, the yard was regraded, but not well enough to prevent cars from silently

starting to roll by themselves. Following workers' complaints, there were three to five years of mounting warnings and alerts, committee meetings, and eventually a statelevel investigation after one switch operator had an arm crushed and amputated. The switch operator, a young musician with a family, was the same safety rep who had previously submitted complaints asking the company to address the problem.

The curriculum treated the safety representatives as a COP. It attempted to build knowledge incrementally that was broad and both practical and theoretical. It replayed the tragedy as a participatory drama by tracking the efforts of dozens of people over the years to call attention to the hazard. It provided practice documenting safety incidents, filling out reports, testifying, role-playing union and joint safety committee meetings, taking minutes and checking minutes. At points where raising the complaint through successive levels of the hierarchy met obstacles, participants regrouped to address power issues. Throughout the workshop, participants used original documents foreshadowing the ultimate tragic accident, including the complaints written by the injured safety rep.

Faced with a request to design a similar class, a labor educator might work with the organizers of the class and other union leaders using questions like those in the table above to prepare the curriculum. Such an approach makes the theory behind the curriculum design transparent to class organizers and brings them into the educators' community of practice.

Labor Educators, Adult Educators, and Learning Theory

Labor educators are interested in how activists learn. In addition to the two workshops noted above, the UALE conference offers a track of teaching demonstration workshops. On the UALE listserve, labor educators share all kinds of curricula. But labor education, despite its importance to working people—who vastly outnumber high-school and college students—has a low profile in the adult education world. The power of theory to explain what we do using terminology shared with mainstream adult education discourse may raise awareness that there is something to be learned about work beyond literacy skills or job training. Whether this knowledge is called "oppositional," "activists' knowledge," or some other name depends on who is talking.

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Bio

Helena Worthen holds a PhD in Education from UC Berkeley and was a labor educator at the University of Illinois until 2010. She is currently a Visiting Scholar at the UC Berkeley Center for Labor Education and Research. As Vice President of the United Association for Labor Education, she has primary responsibility for organizing the annual conference.