LEARNING TO FISH, FISHING TO LEARN: GUIDED PARTICIPATION IN THE INTERPERSONAL ECOLOGY OF PRACTICE

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I. Introduction

My earliest memory of fishing is watching a bobber in the water. It’s red and white, resting on the surface of the shimmering lake—and I’m watching it intently. I’m staring at the bobber because my father has told me that the bobber will let me know when a fish bites my worm. My father has impaled a ruddy brown night crawler on my fishhook—a gross but compelling piece of surgery to a five-year old. He then threw the hook, line, and sinker—plus bobber and worm—into the lake fifteen feet from the shore. I know—because my father has told me so—that if the bobber sinks under the surface of the water, a fish has bitten my worm (and hook) and I should yank my pole, hard but not too hard. Although I watch my bobber as hard as I can, praying for it to bob, I also secretly watch my twin brother Gary and my father, wondering whose bobber will bob first. Suddenly, in a moment intensified by expectation, mystery, and memory, my bobber disappears . . .

At Marblehead harbor, circa 1954, you could rent a rowboat with life jackets, “drop-lines,” and some sea worms. Boy, if you thought night crawlers were ugly, you ought to see sea worms—I definitely want Dad to handle these squiggly critters. My father patiently explains to Gary and me that flounders eat worms off the bottom of the ocean floor, so we have to make sure our worms are dangling right on the bottom—not floating two feet off the bottom and not slack on the bottom with the line too loose to feel a bite. The trick, he says, is to feel the bottom with your lead weight, which makes a little “thunk” when you hit bottom, and then to raise your hand six inches. Frankly, after a few tentative tries I’m confused, frustrated, and want to cry. The boat is rocking and I can’t tell when my sinker is thunking on the bottom. My father reaches over and puts his hand over mine—he raises and lowers my hand—our hands—slowly and gently. “There, do you feel that bump? That’s the bottom.” With his hand guiding mine,

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I definitely could feel the thump. I was sure I would catch a flounder.

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For me, learning to fish with my father and brother is a metaphor for a theory of guided participation and for a theory of ecological learning I continue to develop in this article. Like others, I learned a new skill through the expert guidance of a more accomplished practitioner who welcomed my brother and me to a communal practice—not by interrupting his fishing but allowing us to join it. We were “instructed” in fishing not by lectures on the shore-long expositions on Dad’s theory of fish, bait, and equipment—not by long post-mortems on our naïve theories of fishing and critique of our performance, but rather through participatory trial and error, emulation, and occasional advice and assistance. Similarly, this article socializes the workplace by describing a system of guided participation that catalyzes student learning in clinics and on the job. In developing this theory of guided participation, I draw heavily on several strands of clinical theory, especially insofar as it describes role modeling, collaboration and mentoring. In addition, however, I emphasize the value of participation itself—the great teacher—and the importance of attending to the intensity, breadth, and depth of students’ participatory performances in practice settings. I also trace lateral sources of learning—the web of interpersonal connections and joint activity with non-supervisory peers that guide and support the acculturization of novices into expert practice communities like law. Even when returning to clinician’s traditional concerns about supervisor/supervisee interactions, I expand on current theory, putting less emphasis on top-down teaching and idealized forms of supervision and much more emphasis on theories of expertise and the circumstances of its replication.

Clinical theory currently emphasizes that student learning is highly dependent on a close, supportive, but ultimately non-directive relationship with a clinical supervisor whose principal agenda is:


2. “Central to the clinic experience is the relationship between supervisor and student. If the relationship is based on mutual respect and understanding, the supervisor has the basis for striking the right balance between demanding performance and supporting the learning before and after-the-fact, not lawyering during-the-fact. In contrast to clinical theory, a theory of ecological learning emphasizes the value of meaningful co-participation in communal tasks, mutual respect from supervisors and peers, and responsiveness from the entire social environment. It suggests that students are capable of being relatively independent and self-directed learners; when they are given freedom and sufficient guidance to participate meaningfully in the authentic activities of a practice, they do not necessarily need to be controlled by an educator. Likewise, counter to some clinicians’ claims, students are not completely at the mercy of any substandard practice and ethical hooliganism to which they are exposed. No matter how performance given. The learning that results can be exceptional.” Margaret Martin Barry, Clinical Supervision: Walking That Fine Line, 3 CLIN. L. REV. 137, 165 (1995).

3. Robert Condlin, Learning From Colleagues: A Case Study of the Relationship Between “Academic” and “Ecological” Clinical Legal Education, 3 CLIN. L. REV. 337, 347 (1997) (“Clinical supervisory relationships tend to be defined and understood explicitly in teacher-student terms, and are likely to have instruction as their major if not exclusive goal.”); Ann Shalleck, Clinical Contexts: Theory and Practice in Law and Supervision, 21 N.Y.U. L. REV. & SOC. CHANGE 109, 179 (1993-94) (“the teacher engages in a very self-conscious decision-making process in shaping supervision. From the moment of the initial relationship, the teacher begins a continuing evaluation of how best to structure supervision to accomplish her educational project. . . .”).

4. “[T]he world of law office practice, like any system, has its vulnerabilities, mistaken skill notions, and untrustworthy exemplars, and experiencing it in an unexaggerated or uninterpreted form sometimes can teach the wrong lessons.” Condlin, Learning From Colleagues supra note 3, at 343-44.

5. Lawrence Hellman has produced a stinging critique of outside legal work by law students based on the subcompetent and unethical practice to which they are exposed. Lawrence K. Hellman, The Effect of Law Office Work on the Formation of Law Students’ Professional Values: Observation, Explanation, Optimization, 4 GEO. J. LEGAL ETHICS 537 (1991). Based on anecdotal journal evidence collected by students working in externships, Hellman estimates that the majority of students are exposed to varying degrees of professionalism during a one semester, part-time externship program. “In their practice environments, many students are exposed to unprofessional conduct by attorneys that shocks them in terms of its frequency and seriousness.” Id. at 543. “Many students saw a lawyer lie, cheat, steal, or disserve a client, frequently doing so as if this were ‘business as usual’ in the legal profession.” Id. at 575. The net effect of this exposure may be a lessening of students’ professional standards, a socialization to degraded norms of practice, and a profound sense of disillusionment. Id. at 605.

To correct for the deficiencies of practice, Hellman recommends more exposure to clinicians who would boost students’ immune systems, their ability to withstand the contaminated world of practice. “The analysis of the journals present here also supports the notion that to optimize the educational and professionalizing impact of student field placement programs, such programs should act as a law school component designed to purify the nonconstructive influences to which many students are subjected in the field.” Id. at 610. “Perhaps openly confronting the students - in a protected setting - about the reactions we now know many of them are having to their first encounters with the practice environment could help to ‘cushion’ the ‘wall of intimidation’ and diminish the likelihood that students will react to this ‘collision’ by lowering their personal standards.” Id. at 608-09. See also, Kate E. Bloch, Subjective Lawyering and Other Clinical Extern Paradigms, 3 CLIN. L. REV. 259 (1997) (discussing three models that externship clinicians might utilize in responding to ethical dilemmas experienced in practice).
pervasive these deficiencies may be, most students have the latent ability to recognize, critique, and reject outrageous and unprofessional practice on their own.6

Similarly, in direct contradiction of clinical theory, students do not have to be subjected to the constant discipline of dialogue with "educators" or of mandatory self-reflection in order to learn competent practice. Although I agree that theory has a modest and pragmatic role in learning—a role that emphasizes the limited comprehensibility, but remaining utility, of theoretical discourse between experts and novices—theorists must be supplemented by clear assignments, direct clarification, shared problem-solving, modeling, and narrative explorations of practice exemplars. Much of students' learning in practice-based settings is indirect, operational, and ultimately social; this learning is distributed in the relationships students establish with all of their peers and mentors and in the interactions they negotiate in order to perform their lawyering tasks. Ultimately, a theory of ecological learning suggests that there are certain forms of participation, a certain quality of interactions, and a number of different interpersonal connections in the workplace that facilitate competence and reproduce a community of practice. This theory provides the metaphor of guided participation, participation that is measured by the degree to which one is permitted to engage in the valued, authentic activities of a practice domain and permitted to forge workplace "connections that count."9

In Section II, I first explore supervisory sources of learning in traditional clinical terms, describing a full range of teaching/learning interdependencies with clinical supervisors including role-modeling, top-down collaboration, mentoring, case supervision, feedback, and mandatory reflection. However, it is not clear that ecological learners benefit from workplace experiences solely because they receive "in-

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6 The fear that students will be seduced by bad practice seems wildly exaggerated. Law students are not one-day-old ducks who "imprint" with the first larger animal to whom they are exposed. Moreover, students are ordinarily exposed to more than a single performance and more than a single performer. They also have reflective and dialogic capacity for evaluation and critique. If bad performances poisoned the possibility of learning, how can we explain how so many survive bad parenting or teaching?


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9 For a strong critique of the quality of supervision found in the typical legal workplace, see Hellman, supra note 5, at 543. "This study indicates that it is frequently the case that student practitioners receive totally inadequate supervision and instruction." Id. "Seventeen of the 81 journals, about 20%, included entries in which an intern complained about the lack of adequate guidance, supervision, or feedback." Id. at 758.

10 Preliminary empirical research at Northeastern in the context of its cooperative legal education system has found that the quality of supervision is not statistically significant in students' assessment of whether they learned on the job. Givelber et al., supra note 1, at 41.

11 "Completion of the tasks becomes the way the student can measure her success, both quantitative—just by the completion itself—and qualitatively—by evaluating the actual effectiveness of the completed work." Jennifer Howard, Learning to "Think Like a Lawyer" Through Experience, 2 CLIN. L. REV. 167, 182 (1995). Stacy Caplow summarized her year long experience as an Assistant U.S. Attorney similarly by acknowledging, "While I was at the U.S. Attorney's Office, my greatest stimulation came from the work itself. . . . I savored the process of digging into issues, developing skills, and the feeling of doing important work well. . . . Like my students, I relished the action - unknotted legal issues, strategizing, appearing in court, negotiating with an adversary - and was content simply to become a better practitioner." Stacy Caplow, A Year in Practice: The Journal of a Reflective Clinician, 3 CLIN. L. REV. 1, 45 (1996).
community founded on relationship, interdependency, and acceptance. By focusing on participation, we can develop a new understanding of learning derived from fully engaged performance of a spectrum of activities and derived from a process of enculturation enabled by many others. That participation will involve many forms of coordinated action, but it will also involve task-talk and performance-talk, discourse that helps to structure performance and discourse that
teller's past and future action in the world.” Lave & Wenger, supra note 8, at 80. See Brook K. Baker, Self-Directed Learning Post-Modernized: The Role of Autonomy, Self, and Self-Realization in Law Student Work Experience (draft 1994) (on file with the author). “Ultimately, I believe the most important result of a clinical experience is the student’s relationship with a new part of herself: the part that is a lawyer.” Howard, supra note 11, at 180.

13 I don’t think it’s possible to overemphasize the importance of fitting in most human interactions. Especially when confronting novel social situations, most of us search for clues and cues on how to act like we “belong.”

Many social psychological and social anthropological theories assume that people are highly sensitive to the social significance of their conduct... and are motivated to create desired impressions on others. From this view, all behavior settings are potentially threatening for newcomers. Other setting members may focus their attention on the newcomer and the newcomer will be alert to every cue. All of these things may increase the newcomer’s level of self-consciousness, that is, the sensitivity to the impression one is making upon others. What matters most to the newcomer is not how he or she views his or her own behavior and its consequences, but rather how others view them.

Urs Führer, Behavior Setting Analysis of Situated Learning: The Case of Newcomers, in UNDERSTANDING PRACTICE: PERSPECTIVES ON ACTIVITY AND CONTEXT 179, 198 (Seth Chaiklin & Jean Lave eds., 1993).

One of the interesting discoveries about newcomer behavior is the effect of prior knowledge about the behavior setting as it interacts with the newcomer’s desire to avoid embarrassment. Newcomers with little prior knowledge about the setting and its ritual activities are more likely to engage in “discrepancy-reducing” behaviors and in “impression management.” Id. at 204. In other words, newcomers are likely to conform to overt behaviors even at the cost of seeking information about the operating principles of the system. Excessive concern about impression management is most acute when the newcomer is in a crowded setting, when the old timers’ behavior toward the newcomer is interpreted as being highly evaluative, and when the other participants are effortlessly engaged in the appropriate sequence of actions. Id. The maladaptive response of newcomers, if they cannot rapidly conform to behavior norms, is to cover up their incompetence even to the point of withdrawal. Id. at 205.

Condlin discusses this phenomenon more under the rubric of feeling stupid. “More than anything else in their conversations with supervisors, students were concerned profoundly and pervasively with not ‘looking stupid,’ and this concern seemed to drive everything they said and did.” Condlin, Learning from Colleagues, supra note 3, at 398. “It sometimes seems as if a small thundercloud of insecurity hung over everything the students said and did, causing them to interpret supervisor comments in their most negative light and to see experiences in their most debilitating form.” Id. at 369. Stacy Caplow, a clinician who reentered practice as an Assistant U.S. Attorney for a year, noted her insecurity about fitting in and her lack of confidence in her abilities. She acknowledged that if she felt self-doubts despite years of experience and elevated her status as an academic, “my students must experience these feelings to an exponentially higher degree—and for a longer period of time.” Caplow, supra note 11, at 11.

is part of performance itself. When focusing on lateral sources of learning, we value students’ transactional relationships with non-supervisory co-workers and peers who also help guide them across the unfamiliar terrain and through the puzzling performances they will undertake. Although some of their interactions with peers will involve direct communication, most of that communication will be indirect, emotive, or contextually implicit. Thus, there are many forms of workplace memory, implicit environmental feedback, and communicative interdependencies with co-workers, peers, and staff that support learning on the job. The collective behavior and pooled resources of all of these colleagues ultimately determine the breadth, depth, and quality of the novice’s participation in a social practice domain.

In Section IV, I turn to the more traditional concern of clinicians and focus on expert/novice interactions and explore how students acquire competence through interaction with their more senior colleagues.14 After briefly summarizing evidence concerning the nature of expertise and the differences between expert and novice performance, I identify multiple circumstances that might facilitate its replication. First, a theory of ecological learning emphasizes a participatory alliance where the novice and the novice’s performances are valued. Next, students need to be kept busy with assignments they can perform (with a stretch); they must be able to receive clarification and guidance; and they must be given a sequence of assignments that eventually involves them in the central activities of the domain. In addition to task-centeredness and directiveness with respect to students’ undertakings, experts should model performance and explore practice exemplars to expose students to a broader array of vicarious experiences that intensify the complexity of novices’ cognitive and participatory resources for future endeavors. Finally, I propose that the most important “timing” of expert guidance, through talk or otherwise, is not primarily before- or after-the-fact, but rather fully participatory guidance-in-action and that such guidance need not evidence any magical degree of intensity in order to be effective. The quality of collaboration and the depth of participation become more important than the quantity of supervisory oversight.

Ultimately, I propose a model of guided participation in apprentice-like opportunities as the best means to assist the socialization of a

14 This particular relationship has been of central concern to legal educators, especially clinicians, so it will receive special attention here. Ultimately, that attention will call into question some operative assumptions in clinical theory about the centrality, degree, timing, locus, and form of supervisory feedback.
novice and to ensure the rapid replication of expertise. To realize the potential of learning through guided participation, we must decrease the tight control of legal educators over learning and validate the widespread work experiences of our students in clinics, externships, and part-time work as the most important resource for the development of skills, motivation, and perspective. Rather than simply tethering students to an educator, we should encourage, recognize, and validate their participatory and interpersonal learning in practice settings. Instead of talking about narrowing the gap, while maintaining an absurd dichotomy between school and practice or between clinics and law offices, legal educators should begin to figure out the best ways to maximize the learning potential in our students' ubiquitous experience of law-related work during law school.

II. Supervisory Sources of Learning - The Clinical Model: Role-Centered, Education-Focused, and Supervisor-Centric

In broad outline, mainstream clinicians are on an educational "mission from God" - a mission that emphasizes role modeling and emulation, collaboration and mentoring, and supervision and feedback. According to prevailing assumptions, if clinicians fail their quest to impart learning (or add value) through their interactions with students, student learning aborts. Thus, clinicians have developed an increasingly sophisticated and comprehensive theory of clinical supervision, a theory that focuses on planning students' learning, on placing students "in role" with primary responsibility for client representation, on helping students to develop elegant theories of practice, and on providing close didactic supervision. As part of providing this close supervision, clinicians are exhorted to engage in learning-mode discourse, to provide after-the-fact autopsies of student performance, and to facilitate multiple forms of reflection, including critical reflection on the American legal system.

15 See Howard Gardner, The Unschooled Mind: How Children Think & How Schools Should Teach (1991); Lave & Wenger, supra note 8; Rogoff, supra note 8.
17 Dan Aykroyd, The Blues Brothers (Universal Studios 1980). I sympathize with clinicians about the burdens and precariousness of our survival lives on the fringe of the Academy, and I know that students learn well under the tutelage of clinicians. The criticism implicit in this analysis is aimed at the assumption that students can learn only under the guidance, direction, and supervision of specialized clinical educators.
18 I think that critical reflection is likely to be the most important added value of clinical teaching. Moreover, I realize that I have additional work to do in advancing a

supervisory mission, they accelerate the development of skills, values, and perspective. Although this synopsis of clinical learning theory undoubtedly does violence to the nuances of clinical practice and although it concentrates more on the central core of clinical theory rather than its iconoclastic fringes, this synopsis can be usefully compared with a theory of ecological learning. I developing that theory, I do not reject all of the hard-earned insights embodied in current clinical theory, nor do I doubt that there may be added value in many of the pedagogical practices of mainstream clinicians, particularly their focus on critique. What I will eventually challenge, however, is a supervisory theory that prizes theory, talk, and reflection over participation, collaboration, and guidance.

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<tr>
<th>Chart 1</th>
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<tr>
<td>CURRENT CLINICAL MODEL</td>
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<td>STUDENT ROLE</td>
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<td>Direct representation of live client with primary case responsibility</td>
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<td>Relatively self-reliant with respect to performance</td>
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<td>Relatively dependent with respect to learning</td>
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<td>Engage in constructive conversation</td>
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<td>Provide after-the-fact feedback</td>
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<td>Facilitate reflection and critique</td>
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<tr>
<td>4. Case supervision and feedback</td>
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<tr>
<td>5. Guided self-reflection</td>
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A. Student Roles and Clinical Pedagogy

The concept of putting students in role, with major responsibility for client representation, goes back to the very roots of the clinical movement. By representing clients, students could feel the pressure of ecological learning to address concerns about whether students can learn to critique legal culture and the prevailing legal order during the process of participatory socialization to the conventions of practice. Although many clinicians prefer to control that critique within a poverty law clinic, I hope eventually to demonstrate that the rough and tumble of ordinary practice provides good grist for critique and that clinicians should add "critical value" to these real world experiences inside and outside the clinic. I'm certain that the end product we seek is students who have capacity to critique not just in clinic but the capacity to critique, resist, and transform legal conventions in their future professional lives.

19 "At the foundation of this teaching [in a live-client clinic], is the assumption that students learn more when they have more responsibility—right up to the moment responsibility overwhelms and paralyses them." Jennifer P. Lyman, Getting Personal in Supervision.

20 For a compelling first-person account by a clinical student about the thrills and chills of lawyering more or less to her own, see, Howard, supra note 11.

21 "It is a far different experience for the student in making and implementing decisions with the client if the student does not believe that the clinical supervisor is always there to pull the student's 'fat out of the fire.' This increased sense of responsibility results in greater investment by the student in the lawyering process ... ." David F. Chavkin, Am I My Client's Lawyer: Reconceptualizing the Supervisor-Student-Client Relationship, 51 SMU L. Rev. 1507, 1531-32 (1998). "Accepting the responsibility for being a 'student attorney' [with primary authority for cases] had many effects on me, some positive, and some negative." Howard, supra note 11, at 180-81. "The fear of making a mistake became a prime motivator behind my actions and the basis of my intensity in the clinic." Id. at 181.

22 Advocates of clinical legal education contend that one of its chief virtues is that it holds great promise for improving law school instruction in professional responsibility. In a carefully supervised legal clinic, the theory goes, law school faculty members can concentrate on serving as preferred role models and, especially with the help of a classroom component, can require students to notice and reflect upon issues of professional responsibility encountered in their student practice in the clinical setting. Hellman, supra note 5, at 554-55.

23 "Seeing, participating in, and, most importantly, reflecting upon the law in action provides the student with an opportunity for engaging in self-conscious critical analysis of legal institutions, rules, and procedures that is rooted in, yet transcends, the student's own experience." Shalleck, supra note 3, at 140. See, e.g., Jane Harris Aiken, Striving to Teach Justice, Fairness, and Morality, 4 CLIN. L. Rev. 1 (1997) (discussing the role of clinics in revealing and opposing systems of oppression).

24 In law school, as in all efforts at formal education, teacher must strive to assist the student in 'learning how to learn,' that is, in becoming a self-directed learner." J.P. Ogilvy, The Use of Journals in Legal Education: A Tool for Reflection, 3 CLIN. L. Rev. 55, 68 (1996).

25 "From the student's perspective, there seem to be two methods of supervision in relation to completion of the tasks: 'hide the ball' or 'don't hide the ball.'" Howard, supra note 11, at 183. "Without question this approach [of non-directive hiding the ball], although probably more beneficial in the long run, can be excruciating as it is experienced." Id. at 184.

26 Shalleck, supra note 3, at 137 n. 17. Chavkin argues that clinicians might rescue clients not out of any direct relationship with the client but through temporary supervisory support to the student. For Chavkin, the clinician should not present the client because that representation weakens student learning. Instead, the clinician should properly supervise the student so as to fulfill an ethical obligation of non-negligent supervision. Chavkin, supra note 21, at 1542-44.

27 The supervisor's role is akin to that of a mentor with a twist; one whose guidance is driven by the desire to foster self-reliance and competence but who has the power to become more directive, and will do just that, if the client's interests are at risk. Such a supervisory commitment to be directive only when necessary can be very intimidating for the student who "wouldn't mind a little hand holding at the moment, thank you." Barry, supra note 2, at 146.

28 See Gary Bellow, On Teaching The Teachers: Some Preliminary Reflections on Clinical Education as a Methodology, in CLINICAL EDUCATION FOR THE LAW STUDENT 374, 380-82 (Council on Legal Education for Professional Responsibility ed., 1973); Shalleck, supra note 3, at 138 ("By examining role characteristics, we grasp those aspects of a role that powerfully shape our own understanding and behavior."); but see Minna Kotkin, Reconceptualizing the Role Assumption in Clinical Legal Education, 19 N. Mex. L. Rev. 185 (1989) (discussing and questioning the pedagogy of role assumption in clinical education).

29 [Most clinical programs share two common attributes, which may be regarded as being at the heart of clinical pedagogy. The first is non-directive teaching. Ours is a methodology that allows students to make mistakes so that they can learn how to learn" on their own, both during and after law school. Clinicians tend to give students answers with great reluctance; if we are teaching effectively, the students will learn on their own.

30 Martin Guggenheim, Fee-Generating Clinics: Can We Bear the Costs?, 1 CLIN. L. Rev. 67, 678-79 (1995). See Shalleck, supra note 3, at 154 ("If, however, the teacher delays intervention until after the students have acted, then they may 'own' the experience more deeply. As a result, the experience may provide a powerful basis for later reflection and understanding."); see generally James H. Stark, Jon Bauer & James Papilo, Directiveness in Clinical Supervision, 3 U. Pu. B. Int'l L. Rev. 1, 35 (1993); Chavkin, supra note 21, at 1527-24 (arguing that students learn better if clinicians postpone and/or minimize interventions and if student have to work through their problems without step-by-step guidance).

31 Condlon, Learning from Colleagues, supra note 3 passim (discussing the importance of learning-mode discourse in clinical supervision). Certain legal writing specialists have also proposed a Socratic dialogue for supervisors. Mary Kate Kearney & Mary Beth Beasley, Teaching Students How to "Think Like A Lawyer": Integrating Socratic Method with
about lawyering and legal skills, (5) to provide plenty of after-the-fact feedback, and (6) to assure multiple opportunities for guided reflection.


34 Caplow, supra note 11, at 5 (describing the “long-standing endorsement by clinicians of ‘reflection’ as a core component of experiential learning and the clinical law teaching method”).

35 Condir, Learning from Colleagues, supra note 3, at 436-37 (“students cannot be permitted to practice in an uncritical, unself-conscious fashion, internalizing questionable habits, beliefs, and values, without knowing that they are doing so”); Lisa G. Lerman, Fee-For-Service Clinical Teaching: Slipping Toward Commercialism, 1 CLIN. L. REV. 685, 691 (1995) (“Careful thought, observation, and reflection produce meaning”), supra note 10, at 223 (“Whether in supervision session, case rounds, written journals, or self evaluations, reflection is one of the hallmark practices of clinical methodology.”); J.P. W. Trawick, The Skill of Evaluation as an Explicit Goal of Clinical Training, 21 PAC. L.J. 967 (1989) (arguing that the ability to evaluate oneself and others must be an explicit goal in clinical education); Amy L. Ziegler, Developing a System of Evaluation in Clinical Legal Education, 42 J. LEGAL EDUC. 575 (1992) (arguing that both the clinician and the student

The first piece of this educator-centric dogma was that clinicians must have an explicit, though flexible, educational agenda. Ultimately, clinicians call the educational shots, they write the playbook, they send in the learning plays from the sideline (to use my whole bag of football metaphors all at once). Although clinical educators are no longer the lecturing “sage on the stage,” they are still the educational “guide by the side”—a guide who had the best knowledge of the secret path to learning. Without this guide, students would get lost on the way after which they would practice aimlessly as lawyers. As part of this educator-centric focus, clinicians were urged to promulgate theories about lawyering skills. In additional to exploring such theory and making it available to their students, clinicians were also encouraged to engage in learning-mode conversation with their students. Although Robert Condir has been the principal proponent of this focus on constructive dialogue, he is by no means the only one. In

should be reflective in everything they do). For an extended discussion critiquing current thought about reflection see, Baker, Beyond MacCrater, supra note 1, at 334-37.


37 See note 31, supra.

38 Condir, Learning from Colleagues, supra note 3, passim. Although initially intrigued by the theory of ecological learning, Robert Condir, like many before him, remains worried about the seductive charm of incompetent and unethical practice, especially because of the alleged communicative incompetence of many practitioners and students. Plain bad talk—what he calls persuasion mode discourse, and the unwillingness of either supervisors or students to engage in mutually trusting and exploratory dialogue—is one of the factors of practice that is most likely to permit students to repeat their mistakes or block their learning. Instead of using learning mode discourse, the most appropriate form of conversation with one’s colleagues, Condir’s students and their supervisors used persuasion mode discourse—communicative subterfuges, misdirections, and manipulations designed to achieve their unworthy competitive goals at the expense of learning. Thus, for Condir, “the process of ecological learning can be a deeply problematic one, in which students are absorbed into a practice world where communication patterns discourage student reflection more that they enhance it.” Id. at 416.
addition to championing theory and good talk, an even larger body of clinicians has extolled reflection—the mantra of clinical legal education. According to clinical orthodoxy, learning is stillborn—it is latent at best and routinized at worst—unless there is reflection on the anomalies of practice.

B. Supervisory Sources of Learning: Role-Modeling, Top-Down Collaboration, Case Supervision and Feedback, Guided Self-Reflection

Although the primary virtue of practice-based experience is the opportunity it provides for experiential learning in a colorful and chaotic context, clinicians acknowledged that practice-based experiences also offer multiple opportunities to observe and emulate the profession, data, and themselves as subjects like all other subjects.” Id. at 437.

Anne Shalleck also describes learning through supervisory conversation with a clinical student. “Supervision is an ongoing dialogue between student and teacher about that representation. The teacher gives shape to the dialogue through each decision about what to include in, and how to conduct, the discussion. The student’s practice is the focus of the supervisory discussion, but the teacher frames how that practice is understood. In legal institutions, and lawyering.” Shalleck, supra note 32, at 110. Although it is the case that the educator who possesses the ability to identify and address “those issues that are most in need of individualized dialogues.” Id. at 139-40. “Because supervision involves ongoing decisions about when and how to intervene in the students’ experience, the teacher must constantly assess the effects of this intervention on the students’ interpretation and understanding of their experiences.” Id. at 152. See also Gary Laser, Significant Curricular Developments: The MacCrate Report and Beyond, 1 CLIN. L. REV. 425, 435 (1994); Lerman, supra note 33, at 691 (“Some of the best learning is accomplished through a lengthy reflective dialogue in which the student is able to raise and explore a wide range of questions about how to address a legal problem.”).

Akebono, supra note 28, at 725 ("saying that the new experience give[s] access to elite and senior practitioners who offer...a larger catalogue of excellent skill images and thus...students develop more sophisticated standards of practice.


Professor Laser is concerned about negative role-modeling offered by externship supervisors compared to carefully selected clinical supervisors. “In an externship, the role model for that first practice experience is an outside lawyer whose primary interests and training are not in education. In the in-house clinics, the role model is an educator who has been selected for the high quality of his skills, values, and artistry.” Laser, supra note 37, at 437; see Condlin, Learning from Colleagues, supra note 3, at 344. Likewise, Professor Motley states that “one danger of out-of-house placements is that our students may be exposed to poor lawyering...and that they might come away from the experience with serious misconceptions about their professional roles and work.” Motley, supra note 42, at 226. Professor Tarrows Motley’s concern that novices experience pressure “to conform to the ‘normal’ behavior [of the practice] which may not be consistent with the behavior they want...Moreover, the desire to conform underlies the student/lawyer’s inchoate understanding that the practice setting is observational, either of the master himself or of others, already trained workers”;}
a sense of collaborative enterprise demonstrate a remarkable degree of positive regard, trust, and acceptance. Thus, it is precisely because novices are trusted to do vital work in a collaborative, increasingly co-equal relationship that the novice may feel most committed to her learning. Combined with high standards and expectations for performance, which are also positively correlated with maximal results, a collaborative relationship is often considered to be a precondition to student success in a clinical setting.

The ideal of a collaborative relationship is quite comparable to the clinical emphasis on a mentoring relationship between an expert practitioner and the newer professional with whom she works. The idea of a working team, struggling together to solve new problems, across different levels of expertise, is considered to be highly supportive of learning. “Ultimately, my greatest sense of accomplishment derived from the team effort that went into the case… [Extreme gratifying to me, my co-counsel fully accepted me and appeared to value the contribution I was making to the group effort].” Caplow, supra note 11, at 39.

"Probably the most important element of an andragogically sound model for clinical supervision is the establishment of a co-counsel relationship… “ Bloch, supra note 47, at 348. See Hoffman, Stages, supra note 32, at 138 (emphasizing the development of a co-equal relationship over time as the student becomes more capable and more self-directive); Sullivan, supra note 45, at 123 (arguing that egalitarian relations lead to empowerment).” Sullivan, supra note 45, at 123; Bloch, supra note 47, at 346. Despite his enthusiasm for collegial working relationships between student and teacher, Bloch was apparently distrustful of placement settings. Id. at 348. He offers no theoretical or experimental support for this reservation. David Chavkin, on the other hand, does; he questions the presumption of a co-counseling/collaborative relationship even for clinicians, arguing that Bloch’s “andragogical principles seem to suggest a minimally intrusive role for clinical supervisors,” Chavkin, supra note 21, at 1530, and that students learn better when they have total autonomy and responsibility for client representation, id. at 1531-35.


Although there is no doubt that many clinicians have become experts at establishing such relationships with their students, especially in case-supervised clinics, there is no reason to suggest that collaborative relationships cannot be established with many practitioners as well. Practitioners too have the need for relationship, they too need a smooth working team to serve the interests of their client constituencies. Performance of social tasks, especially the social tasks of lawyering, requires cooperation. This does not mean, however, that there are no dictatorial, power hungry, interpersonal oppressors among practitioners (or academics). There are. Moreover, practitioners face time pressures and efficiency demands that may counteract their true need for collaboration. See, e.g., Cole, supra note 52; Mettner et al., supra note 32; cf. Mentoring: Contemporary Principles and Issues (Theresa M. By & C. Thomas Holmes eds, 1992); Charles C. Healy & Allic J. Welcher, Mentoring Relationships: A Definition to Advance Research and Practice, 19 EDUC. RESEARCHER 17 (Dec. 1990); Maryann Jacobs, Mentoring and Undergraduate Academic Success: A Literature Review, 61 REV. EDUC. RES. 505 (1991).
mentoring relationship tries to accelerate and smooth the transformation of an "awkward" novice into an accomplished adept. It does so both by concentrating on the novice's role transformation—paying particular attention to the development of professional role identity—and by taking a long-term view on career development—being attuned to the breadth and depth of practice competencies. Although immediate tasks must certainly be performed, and performed well, the primary object of the mentoring relationship is the eventual role maturity and professional competence of the novice.55 Relying on the ideal of a collaborative, emotionally supportive,56 and participatory relationship,57 the mentor58 will attend to the whole student or new associate as well as to the task at hand.59 The mentor will be focused on product and person, the quality of the first and the professional development of the second.60 The mentor will guide the mentee's acculturation into the local practice pointing out its salient features and giving helpful tips. The mentor will guard her charge from the most egregious mistakes and dangers at the same time that she presents the mentee with increasingly complex opportunities for success.61

In addition to suggesting role-modeling and discussing the importance of appropriate collaborative or mentoring relationships, current clinical theory requires that the student receive high-quality supervision as part of the learning experience.62 When clinicians think about

55 "The primary dynamic of the mentoring relationship is the assistance and support provided to the protégé by the mentor. This support can take many forms but it is always intended to help the protégé succeed . . . ." Jacobi, supra note 54, at 513. See Healy & Welcher, supra note 54, at 17 (emphasizing career development and "identity transformation, a movement from the status of understudy to that of self-directing colleague").

56 Jacobi, supra note 54, at 513 (emphasizing emotional and psychological support).

57 "We proceed on the premise that greater participation, and the discourse that necessarily goes with it, is also an appropriate model for supervision." Meltzer et al., supra note 32, at 422 (relying on the legal counseling model of shared responsibility and control articulated by Professor Rosenthal).

58 "A mentor is defined as a 'wise and trusted counselor or teacher.'" Id. at 423. See Jacobi, supra note 54, at 506-12 (collecting multiple descriptions of mentor/mentee roles, functions, and relationships).

59 Perhaps this self-interest helps explain why so many legal experts other than clinicians have acted as mentors in the past and why they can be expected to perform that function in the present even under the efficiency pressures of the modern law office. Meltzer et al., supra note 32, at 424. "[M]entors cultivate qualitative changes in the protégé's approach to tasks rather than his or her immediate productivity." Healy & Welcher, supra note 54, at 18.

60 Jacobi, supra note 54, at 513.

61 Although the benefits of mentoring are often thought to flow primarily to the protégé through mentoring. Healy & Welcher, supra note 54, at 17, 9:20; Meltzer, supra note 32, at 410-11, 423-44.

62 "Individualized supervision of student work is the recognized method of clinical supervision in a law clinic, we ordinarily project ourselves into the role of a "super" supervisor, idealizing ourselves as the ones who most directly affect actual task performance and learning. Thus, most of the clinical literature on supervision imagines that the "best" supervisors (someone like us) routinely use before-the-fact instruction and after-the-fact feedback—and plenty of both, but do so non-directively and non-obtrusively. Although clinicians assign students to role and distribute cases to students, we usually leave final preparation and actual performance of tasks to the students themselves; we assign clients after which students self-assign tasks, subject to practice protocols mandated by the office. Accordingly, pursuant to the prescriptions of school-based educators, proper supervision in the workplace requires thoughtful case assignments, including clarification of roles and tasks before performance,60 a period of largely self-reliant experimental teaching. . . . The number one prescription, repeated almost as a ritual incantation in recent writings on clinical education, is 'supervision.'" Hoffman, Clinical Course Design, supra note 32, at 279-80 quoting Grossman, Clinical Legal Education: History and Diagnosis, 26 J. LEGAL EDUC. 162, 186 (1974) (emphasis added); accord Report on the Future of the In-House Clinic, supra note 32, at 563 ("Faculty supervision of student work is probably the most critical component of a clinical program."). Professor Krelling describes a supervisory cycle that in its first stages—initial conference and pre-performance conference—focuses on task supervision. Later stages—observation, pre-conference analysis and strategy, post-performance conference, and final evaluation—focus on feedback. Krelling, supra note 32, at 318-336. Professor Tarr has a five-step model of effective supervision evaluation: (1) focusing the evaluation on only a few specifics, (2) identifying the goals of the performance, (3) identifying cause and effect in the outcome of the performance, (4) articulating a theory of action, and (5) revising that theory in light of the experience. Tarr, supra note 33, at 968-969, 984-88. Professors Meltzer and his co-authors question the rigidity of planned stages and prefer concepts of assessment, dialogue, checking-in and checking-out, and evaluation. Meltzer et al., supra note 32, at 432-42.

60 Once the student has developed her own plan for case development, case supervision requires the supervisor to place performance tasks in context and to identify performance criteria so that the student can appreciate the relevance and competencies of her activity. See Alice Alexander & Jeff Smith, A Practical Guide to Cooperative Supervision for Law Students and Legal Employers, 29 LAW ORY. ECON. & MGMT. 207, 211-15 (1986-89). Learning is enhanced when the task has been made explicit. Alexander and Smith define this function as direction, "the employer's responsibility for adequately defining and explaining work assignments." Id. at 212-14. This definition includes explaining the purpose of the project, the factual background, and the effort, format, and resources to be used. It also entails refining the assignment and answering student questions. Though many clinicians urge role autonomy and non-directiveness at the late pre-performance stage, Meltzer and his co-authors recommend a period of "checking in and checking out" between task definition and final task performance where "the party to the [supervisory] relationship seek help, clarification, reassurance, or relief." Meltzer et al., supra note 32, at 439. Similarly, within their framework, Alexander and Smith emphasize that the student has responsibilities too, especially in assessing herself and in seeking clarifications of assignments. Alexander & Smith, supra at 219-21. Our study of co-op experiences at Northeastern found that the ability to obtain clarification was one of the four statistically significant factors in the quality of the student's learning experience. Glacier et al., supra note 1, at 41. During the pre-performance stage, Schön recommends there be a coach who "can, with questions, instructions, advice, or criticism, describe some feature of
performance by the student, and then an expansive regime of feedback about performance after-the-fact.64
Because explicit feedback has been extensively explored by clinicians, we now have a detailed list of effective elements: (1) feedback should focus on the performance65 not the student;66 (2) it must be focused on a limited number of skills or goals;67 (3) it must be invited and immediate;68 (4) it must be positive69 as well as honestly critical;70 (5) it must be appropriately non-directive71 yet sufficiently detailed72

[the practice] and the assignment so that the novice can progress in her task. SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 101. 64 Feedback after performance of the assigned task, the time when most clinicians check back in, is “information from the environment which tells a system whether it is moving towards its goal effectively or not.” Without feedback, we cannot effectively evaluate and change behavior to bring performance closer to our goals. Meltsner et al., supra note 32, at 440-41, quoting WILLIAM TORBERT, LEARNING FROM EXPERIENCE 8 (1972). See Robert L. Bangert-Downs, Chen-Lin C. Kulik, James A. Kulik & Mary Teresa Morean, The Instructional Effects of Feedback in Test Like Events, 61 REV. EDUC. RES. 213, 214 (1991) (arguing that without feedback, mutual influence between the learner and the environment is impossible). Without feedback, we understand neither our triumphs nor our disasters; we cannot appreciate those aspects of our performance that we need to reconceive. See Howard, supra note 11, at 185 (noting that supervisory feedback gives the student insight into her work, her successes and failures). Feedback from the social environment can create “surprise.” This surprise, in turn, causes us to reflect on our tacit knowledge in the process that Schön calls “reflection-in-action.” SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra, note 40, at 28-36; see Quigley, supra note 34 passim (using the related concept of the disorienting moment).

65 Tart, supra note 33, at 987. Focusing on performance means identifying the attributes of successful work. One such list can be found in Alexander & Smith, supra note 63, at 216-17.

66 Hoffman, Clinical Course Design, supra note 32, at 297.
67 “Performers can absorb a limited amount of information and change a small part of their behavior after a performance. . . . The evaluation should focus on one or two areas.” Tart, supra note 33, at 984-85. “[The clinician should not feel that she has to point out every problem.” Campbell, supra note 32, at 693.
68 Barry, supra note 2, at 156; Meltsner et al., supra note 32, at 440-41.
69 Meltsner et al., supra note 32, at 440. “To help make students more receptive to feedback, the clinician should be generous with praise.” Campbell, supra note 32, at 693.
70 Hoffman, Clinical Course Design, supra note 32, at 296-97. “Many clinicians have pointed out that for feedback to be effective, it must be honest.” Campbell, supra note 32, at 693.
71 Clinicians have focused on the virtues of explicit feedback involving written comments or dialogue with the supervisor exploring the novice’s successes and failures. To be instructive and useful, however, explicit feedback must be consonant with maintaining a positive collaborative relationship between the supervisor and student. Depending on how much the student and supervisor value autonomy, self-directiveness, and experimentation, the supervisor will be more or less directive and evaluative in giving feedback. See Stark et al., supra note 29.
72 Rather than using the concept directiveness, Professor Condlin distinguishes between a “persuasion mode” of supervision and a “learning mode.” Robert J. Condlin, Socrates’ New Clothes: Submitting Persuasion for Learning in Clinical Practice Instruction, 40 Mo. L. REV. 223 (1981) [hereinafter, Condlin, Socrates’ New Clothes]. The persuasion mode is a response to ambiguity in which a person [the teacher] is and specific73 so that student can improve her next effort;74 (6) it must be objective, but nonjudgmental;75 (7) it must be directed at changing the theory of performance;76 and (8) because students progress through stages of development, the need for and the nature of supervisory feedback evolves over time.77

Finally, high quality, idealized clinical supervision requires that supervisors ensure that students have multiple opportunities for guided self-reflection.78 According to the mantra of reflection, the unexamined life of a clinical student is a life not worth living.79 No decent student would allow a student to move on to his or her next task without a ritual degree of reflection whether in a journal, in grand concerned primarily with asserting or developing his own conception of the meaning of ambiguity. The learning mode is a response in which a person is concerned more with investigating, understanding, and clarifying the ambiguity in an interdependent fashion [with the learner].

Id. at 231. The distinction is between a cold, closed, rational, and competitive form of discourse and an open, exploratory, self-reflective, and cooperative form of discourse. Id. at 238-48.

72 Meltsner et al., supra note 32, at 440.
73 Hoffman, Clinical Course Design, supra note 32, at 296; Alexander & Smith, supra note 63, at 215; Campbell, supra note 32, at 687 (“Regardless of the stage in the writing process, to be constructive, feedback should be specific.”).
74 Hoffman, Clinical Course Design, supra note 32, at 298.
75 Meltsner et al., supra note 32, at 440. The advice to give non-judgmental advice is potentially at odds with the common understanding that we learn from our mistakes and they we need feedback about our level of competence judged against conventional or even exemplary standards of proficiency.
76 Nina Tart, like Kreiling, suggests that the student articulate her goals for the performance, identify the cause and effect of the performance, discuss the existing theoretical model of performance, and finally articulate a new theory-of-action based on this evaluation of performance. Tart, supra note 33, at 985-88.
77 “Several studies have indicated that students’ perceived need for freedom in the supervisory relationship increases during the course of the relationship. As students progress toward the goals of competence and professionalism, they expect to be treated as professionals.” Hoffman, Stages, supra note 32, at 301. For example, for feedback on writing to be most helpful, it has to be appropriate to the stage in the writing process. Campbell, supra note 32, at 686. To do final editing on a rough draft not only wastes the supervisor’s time, it also privileges the product over the process. Id. at 687.
78 See notes 33, 38-39, supra and accompanying text. For an extended critique of current clinical assumptions about reflection, see, Baker, Beyond MacCrate, supra note 1, at 334-37.
79 This shared conception of a reflective learning cycle rests on four assumptions: (1) that the goal of Reflection is abstraction or Theory; (2) that Reflection should ordinarily be articulated out loud; (3) that Reflection is most effective when shared with an educator who can help that learner deepen and broaden her theoretical insights; and (4) Reflection is the method of learning-how-to-learn from experience. Id. at 334.
80 “I want students to improve their ability to be reflective in all aspects of their personal and professional lives, not just within the cognitive domain and not just with legal problems.” Ogilvy, supra note 24, at 76. But see Lyman, supra note 19, at 224 (noting that too much reflection may encourage a form of extreme self-absorption resulting in an “over-examined life”).
rounds, or in direct inquisitive conversation with the clinician. The grist for students' self-reflection is the student herself--the role she adopted, the diagnosis she made, the planning she undertook, the strategies she deployed, and the actual performance she enacted. Her thoughts and actions are believed to contain latent theories of how the world works and how lawyers should think and act. Because the student is inexperienced as a lawyer, unsophisticated about legal institutions, and unfamiliar with legal culture, these theories-of-action are necessarily naive and ill formed. According to the prevailing clinical view, if those theories are left latent, they risk repetition, then calcification. No matter how little students know, no matter how incomplete their experience, students need to engage in self-examination if their understanding of lawyering is to become clearer and more acute.

The clinician's role in this self-reflection is surprisingly indirect at first. Because of the pervasive ethic of non-directiveness, the student has to bootstrap her understanding of self with little actual direct sub-

80 Lyman, supra note 19, at 223. I have long suspected that our desire that students self reflect is an expression of our own need to see or hear "into" the learning of our students. Particularly when evaluation of learning is based on performance rather than tests, the teacher often wonders "How do I know that the student is really learning?" One way to get an answer to this question is to make the student write or talk. If we hear what we want or hope to hear, we receive some validation about our own efficacy as a teacher.

81 Phyllis Goldfarb, A Theory-Practice Spiral: The Ethics of Feminism and Clinical Education, 75 Minn. L. Rev. 1599, 1650 n.214 (1991); Kretling, supra note 32, at 225.

82 "Only experience that is reflected upon seriously will yield its full measure of learning." Paul Bergman, Avrom Sherr & Roger Burridge, Learning from Experience: Nonlegally Specific Role Plays, 37 J. LEGAL EDUC. 535, 537 (1987); Laser, supra note 37, at 434 ("Reflection upon performance is the method by which students are educated in the art of lawyering. Reflection is essential because this body of knowledge is usually tacit and must be brought to consciousness.").

83 The clarion call to reflection is based on the assumption that the student has some basis of knowledge by which to evaluation her performance. "This simply is not the case for many novice clinic students. Personally, I consistently spent a considerable amount of time reflecting-I knew what I thought. I wanted to know what Professor Barry [the supervisor] thought." Howard, supra note 11, at 205.

Likewise, much of the value of reflection is based on the assumption that reflection can capture and report our tacit knowledge, an assumption disproved by many studies. See Baker, Beyond MacCrate, supra note 1, at 338-40. "Tacit knowing or knowing-in-action has this property: we exhibit it by the competent behavior we carry out but we are unable to describe what it is that we do. Or if we do give descriptions, they are often wrong." Schön, Educating the Reflective Practitioner, 2 CLIN. L. REV. 231, 243 (1995). Even a seasoned clinician has spoken about the difficulty of being accurate in her self-assessments. "My internal self-sawing reminded me how hard it is to judge ourselves accurately and objectively, even after many years of experience and a broad base of comparison." Caplow, supra note 11, at 21-22. Despite this observation, however, Caplow also acknowledged that she was capable of being reasonably accurate in her own internal self-criticism. Id. at 27.

84 "[T]he role of the teacher is to aid the students by the 'right kind of telling,' to see on their own behalf and in their own way what they need most to see." Laser, supra note 37, at 435.

III. PARTICIPATORY AND LATERAL SOURCES OF LEARNING

In the complex interpersonal ecology of practice, students can learn, and learn well, through the central, fluid dyad involving the supervisor/expert and the student/novice—a dyad emphasized in current clinical theory. However, they can also learn from participation itself and from collaborative interaction with broader array of legal workers and peers—additional social resources emphasized by a theory of ecological learning. In this section, we first explore those factors that positively and negatively affect the intensity and quality of a student's participation in the workplace. We also explore the elaborate web of non-supervisory relationships that compose the legal workplace, a so-
cial field rich with connection and collaboration. Learning from colleagues is not limited to learning from supervisors—there is learning to be had from peers, co-workers, support staff, and clients as well.85 Thus, a theory of ecological learning widens the scope of social learning, highlighting learning that is more participatory than experiential, more lateral than hierarchical.

A. Participatory Sources of Learning in Context

My central thesis in this subsection is that students learn best, in fact inevitably,86 through coordinated social action, through participation in the world of practice, and that a principal goal of legal educators should be to intensify and enrich the quality of participation. “Participation in something beyond the individual self is the motivation for the homonomous (connected) self” which seeks “teamwork, shared resources, and peer networks.”87 The newcomer’s success as a co-participant—as a well situated learner—depends in substantial part on his being brought from the fringes to the interior of the practice through a process Lave and Wenger have called “legitimate peripheral participation.”88 By use of this concept, Lave and Wenger emphasize “that learners inevitably participate in communities of practitioners and that the mastery of knowledge and skills requires newcomers to move toward full participation in the sociocultural practices of a community.”89 This concept is more than an experiential theory of learning by doing; it is a perspective that “learning is an integral and inseparable aspect of social practice. . . . Learning is not merely situated in practice—as if it were some independently reifiable process that just happened to be located somewhere; learning is an integral part of generative social practice in the lived-in world.”90 As such, learning is more a process of successful enculturation to coordinated forms of behavior than it is of knowledge acquisition.91 Thus, a theory of social participation and of enculturation shifts the analytical focus from the student as learner and the teacher as educator “to learning as participation in the social world” and from the realm of cognitive processes to the more-encompassing view of entering and enacting a social practice.92 When combined with the current clinical supervisory model, a theory of participatory learning promotes a much richer and more complex understanding of how our students learn in and from practice and how they use the interpersonal resources of practice to guide their enculturation to a community of lawyers. This changed focus can be modeled in the chart below.

Despite the elegant simplicity of a theory of participation, legal educators should be concerned about how participation works. Without being comprehensive, the following list of questions address at least some of the concerns that legal educators might have about the quality of participatory learning and the factors that increase or decrease it.

How do students learn from participation? It’s fine to assert that learning is a process of enculturation into a social practice, but how exactly does the student “learn” from participation? Are there certain qualities in the practice setting, qualities of the work performed, or qualities of interactions with others that are necessary to learning through participation? What role does coordinated action play? What role does communication play? What forms of environ-

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85 Although this article will not undertake an extensive analysis of learning from clients, that law students and lawyers do learn from clients is undeniable. See, e.g., Lucie E. White, Subordination, Rhetorical Survival Skills, and Sunday Shoes: Notes of the Hearing of Mrs. G., 38 BUFL. L. REV. 1 (1990); Phyllis Goldberg, A Clinic Runs Through It, 1 CLIN. L. REV. 65, 67-69 (1994). In particular, by representing a client, lawyers learn about role dynamics and conflicts as someone else’s legal agent as well as the possibilities of legal change. In coming to terms with the diverse lives of clients, lawyers can broaden their appreciation of the pluralism of life.

86 “It is difficult, when looking closely at everyday activity . . . to avoid the conclusion that learning is ubiquitous in ongoing activity, though often unrecognized as such.” Jean Lave, The Practice of Learning, in UNDERSTANDING PRACTICE: PERSPECTIVES ON ACTIVITY AND CONTEXT 3, 5 (Seth Chaiklin & Jean Lave eds., 1993). “We have come to the conclusion . . . that there is no such thing as ‘learning’ sui generis, but only changing participation in the culturally designed settings of everyday life.” Id. at 5-6.

87 MERKIAM & CAPFARELLE, supra note 8, at 218.

88 LAVE & WENGER, supra note 8.

89 Id. at 29.

90 Id. at 31, 35.

91 Rather than the acquisition of abstract knowledge, learning is best conceived as a process of enculturation. Brown et al., supra note 40, at 33.

92 Learning does not exist in a vacuum; it is a social construct. The concept of expertise cannot exist independently of a community of knowledge. The knowledge about which one is considered by others to be expert is developed, defined, evaluated, maintained, and transmitted by those in the community who are qualified to make judgments about what counts as expertise. If that is so, then we acquire expertise not in a vacuum, but as novices who must be socialized into a community of knowledge. . . . The process of becoming an expert is at least as much a social process as an exercise of individual effort and intellect. Put this way, expert thinking is successful socialization.

Joseph M. Williams, On the Maturing of Legal Writer: Two Models of Growth and Development, 1 J. LEGAL WRITING INST. 1, 13 (1991). If it is true that learning a profession is enculturation to a practice, then it makes sense to ask how long one must stay in an educational waiting room. Although we might agree that law school is an important, perhaps even essential, step in learning certain conventions of analysis and argumentation, there is no compelling defense of the Academy’s claim to be the exclusive agent of enculturation during the first three years of a legal education. Any reasonable view of enculturation would permit, indeed encourage, exposure to other legal actors besides law professors and to social participations and activities other than reading books, sitting in classrooms, and working in educator-dominated clinics.
mental feedback facilitate performance itself and provide lessons from performance? How should participation change over time?

What internal and external factors increase or decrease the quality of students’ participation and how might educators positively affect those factors? Experience suggests that not all students learn equally in practice settings and that there might be a variety of internal and external factors that affect the quality of student learning. What internal factors intensify a student’s sense of social engagement at work and her commitment to excellence in her performances? What interpersonal, institutional, and cultural factors draw the student into the center of the practice domain and what factors exile students to the periphery?

1. How Participation Works.

A social participation theory of adult education emphasizes the motivational\(^9\) and social dimensions of connection that infuse a student’s decision to pursue learning in the workplace,\(^9\) it also reconceptualizes the workplace as an organic, life-long place of learning.\(^9\) Placing learning in practice and locating learning in participation contextualizes learning and encourages students to enter a cognitive apprenticeship with senior practitioners and workplace colleagues where they can collaborate to resolve authentic dilemmas within the contours of an established social practice.

Ample evidence shows that most learning is contextual and interpersonal—that learning occurs as a result of transactions and adaptations with one’s environment and as a result of interactions with yardsticks, laboratory, escape, gap-filler, career compass, and, most importantly, as the means by which they are able to become active in relation to their own learning and educational development.” Mahler, supra note 32, at 596 n.194 (citation omitted). Not only do students want to escape the constraints of intellectualizing about a system they have not yet experienced, they also want to put on grownup clothes and reverse the infantilization that so many students undergo in school. “Although they cater to academically gifted students, law schools do not treat most students as adults. Faculty, with varying degrees of intensity, view many students as ‘ignorant, unmotivated, insincere, selfish, materialistic, and unwilling and unable to take greater responsibility for their professional growth and development.’” Id. at 563 (citation omitted).

\(^9\) GARDNER, supra note 15, at 123-24. “[P]articipation at all times implies a social dimension to human action, an interaction to some end, however diffuse, an organization of others for some common purpose.” COURTS, supra note 8, at 95.


Looking at work from the perspective of its learning potential is fundamentally different from looking at it simply in terms of skills needed in order to perform well on the job. The latter view reduces work from a rich, multi-layered experience to a one-dimensional means-end relationship between worker and skills, where workers need to acquire certain skills in order to become employable and to contribute to an increase in productivity.


Brown et al., supra note 40 (arguing cognitive apprenticeships, embedding learning in authentic activity that makes use of the social and physical context.) “The term apprenticeship helps to emphasize the centrality of activity in learning and knowledge and highlights the inherently context dependent, situational, and enculturating nature of learning.” Id. at 39.

The recently introduced situated cognition paradigm stresses precisely the importance of contextualized learning, and puts forward the ‘cognitive apprenticeship’ view of learning and instruction as an approach embracing the basic characteristics of situated acquisition of knowledge and skills. . . . Cognitive apprenticeship methods try to encode students into authentic practices through activity and social interaction in a way similar to that evident—and evidently successful—in craft apprenticeship. In other words, constructive learning processes should be embedded in contexts that are rich in resources and learning materials, that offer opportunities for social interaction, and that are representative of the kinds of tasks and problems to which the learners will have to apply their knowledge and skill in future [sic].

myriad others in that environment.97

Knowledge—perhaps better called knowing—is not an invariant property of an individual, something that he or she has in any situation. Instead, knowing is a property that is relative to situations, an ability to interact with things and other people in various ways. . . . In the view of situated cognition, we need to characterize knowing, reasoning, understanding, and so on as relations between cognitive agents and situations. . . .98

Specifically, an appreciation of apprentice-like opportunities rests in substantial part on the opportunity it provides for organic, contextualized learning.

Most crucial for our purposes is the fact that the learning in the apprenticeship is heavily contextualized—that is, the reasons for the various procedures being taught are generally evident, because the master is in the process of producing goods or services for which there exist an explicit demand and an evident use.99

97 Brown et al., supra note 40; James G. Greeno, David R. Smith & Joyce L. Moore, Transfer of Situated Learning, in TRANSFER ON TRIAL: INTELLIGENCE, COGNITION, AND INSTRUCTION 99 (Douglas K. Detterman & Robert J. Sternberg eds., 1993); LAVE & WENGER, supra note 8, JEAN LAVE, COGNITION IN PRACTICE: MIND, MATHEMATICS AND CULTURE IN EVERYDAY LIFE 23-44 (1988); Rogoff, supra note 8. The concept of behavior settings helps to explain the degree to which participation is bounded and constrained by existing convention. "Many human actions in everyday life occur in settings where actions are highly constrained and organized." Fuhrer, supra note 13. Under this theory of behavior settings, the individual characteristics of people operating within a particular behavior setting are not nearly as important as the social structure and role dynamics of the setting. A behavior setting thus serves as a location of collective action where "people in settings interact with each other as role partners." Id. at 181. Under this system of analysis, "many daily recurring actions are clustered in a more or less standardized way within certain small-scale places." Id. at 187. These "places" have "rather permanent and enduring qualities in terms of repeated behavior, time, place, and physical attributes." Id. Here people "carry out a routinized program of actions with specifiable time and place boundaries." Id. See, Baker, Beyond MacCrane, supra note 1, at 319 n.123.

98 Greeno et al., supra note 97, at 99-100.

99 GARDNER, supra note 15, at 122 (emphasis in original). Other educators agree that knowledge and skill enablers are enhanced by a contextualized learning environment which: (1) accommodates the constructive nature of learning; (2) integrates the acquisition of domain-specific knowledge and more general and thus transferable cognitive skills; (3) takes into account individual difference in knowledge, intention, ability, and approaches between learners; and (4) embeds learning in realistic contexts involving functional activities and interactions with others. See LAVE, supra note 97; De Corte, supra note 96, at 96 ("Recent research points to the need to anchor learning in more realistic and authentic situations.").


Particularly important in the inculation of disciplinary understanding is that apprenticeship methodology builds naturally on intuitive childhood understandings even as it confronts, challenges, and modifies those intuitions with more expert understandings. Indeed, apprenticeship may well be the means of instruction that builds most effectively on the ways in which most young people learn. . . . To the extent that they feature more formal notations or concepts, these are introduced to the learner directly in the context in which they are wanted, and the learner sees for himself the ways in which they may be applied. Here the differences from formal schooling are most salient. Of course, the learner's misconceptions and stereotypes may interfere with mastery, but they are perhaps less likely to emerge, and more likely to be counter indicated when they do emerge, because the learner is working closely with a master who may be experienced in meeting and muting such erroneous beliefs and practices.

Even in the most advanced industrialized countries, certain trades and professions are best learned by working alongside a master, observing what he does, and passing through a graded set of challenges and opportunities. . . . Many vocations and avocations are profitably approached through apprenticeship techniques. . . . And revealingly, some of the most demanding pursuits in the society, from graduate study at the university to medical internships to the role of a senior aide in a political or business environment, amount to apprenticeship arrangements.

GARDNER, supra note 15 at 124, 123-24; cf. STEPHEN F. HAMILTON, APPRENTICESHIP FOR ADULTHOOD: PREPARING YOUTH FOR THE FUTURE (1990) (recommending an expanded system of apprenticeship for primary-non-college bound students).100

100 Gardner, supra note 15, at 181. Gardner proceeds to catalogue the multiple reasons why apprenticeships are such powerful contexts for learning. Why do apprenticeships work effectively? . . . They provide rich information, nearly all of which pertains in some readily recognizable way to future performances and prospects of demonstrable importance within a society. They permit aspiring youngsters to work directly alongside accomplished professionals, hence establishing personal bonds . . . Frequently they also feature interim steps of accomplishment . . . Peers and others of slightly differing competence can often help and instruct one another. Apprenticeships often are highly motivating; youngsters enter directly into the excitement that surrounds an important, complex, and sometimes mysterious undertaking, where the stakes for success (and the costs of failure) may be high. Finally, apprenticeships embody centuries of lore about how best to accomplish the task at hand, and this lore can be invoked or exemplified at the precise moment when it is needed, rather than at some arbitrary location in a lecture, text, or syllabus.

Id. at 124. Gardner's account of the strengths of apprenticeships is remarkably similar to Michael Meltsner's: When lawyers learned their trade in the law office, the gap between theory and practice was smaller than it is today. The new lawyer's training was not sequential but simultaneous and thus doctrine and desire, money and ethics, words and music, had to be sorted, balanced and resolved in a single process of professional commitment.
maximize learning is to perform, not to talk about it." Thus, a pedagogy that empowers our students to develop genuine understandings must be primarily contextual and participatory rather than didactic and prescriptive. Rather than instruction, there is conversation, guidance, and feedback—forms of social support that draw the novice into more meaningful and effective participation in the full range of activities within a social practice domain.

Traditional clinical theory has also tended to over-emphasize the importance of explicit feedback and reflective or learning-mode dialogue with supervisors. As valuable as such feedback and dialogue might be, a proposition still to be proven, explicit feedback from a supervisor may pale in comparison with the importance of environmental feedback which is implicit, e.g., an assignment accepted and used without comment. Such acceptance implicitly demonstrates positive regard for the student and his or her acceptance in the workplace. By giving students more autonomy and responsibility and by respecting their ability to perform valuable work, workplace colleagues communicate that the novice is beginning to fit it. Likewise, learning

The perspective of clients was part of the very fabric of discovering and analyzing doctrine. The neophyte received prompt feedback about his performance from the environment in which he worked. Lessons in human relations, fact gathering, interviewing, counseling and negotiation, in blood and guts if you will, were among the first rather than the last learned by the new practitioner and they were learned when the young lawyer was on the line. A result of the shift to academic preparation is that young lawyers and their senior lost the apprentice-master relationship that was key to the way law was learned in the law office.


102 "Social learning theory posits that people learn from observing other people." MERRIAM & CAPPARELLA, supra note 8, at 134. "Virtually all learning phenomena resulting from direct experiences can occur on a vicarious basis through observation of other peoples' behavior and its consequences for the observer." Id. at 135 (citation omitted); see ALBERT BANDURA, SOCIAL LEARNING THEORY 22-54 (1977).


104 "The skillful learner acquires something more like the ability to play various roles in various fields of participation." LAVE & WENGER, supra note 8, at 20.

105 Id. at 22. See LAVE, supra note 97; cf. Paul Brent & Linda Keiger, On Teaching Professional Judgment, 60 Wash. L. Rev. 527, 559 (1984) ("Perhaps even more than most skills, problem-solving and judgment are developed largely through trial and error in practice. Such is the case with any art, craft, or practice.").

106 GARDNER, supra note 15, at 21; LAVE & WENGER, supra note 8, at 109.

107 In one of his most striking statements, Condlin says "The content of conversation is everything in clinical (or any other kind of) instruction. There is no design or structural protection against bad conversation, and no design or structural moral that good conversation cannot transcend and transform." Condlin, Learning From Colleagues, supra note 3, at 437. In Condlin's view, context is not primary, experience is not primary, activity and participation are not primary. Learning mode discourse with the supervisor, and the supervisor alone, is first among all others. In, on the other hand, join Lave and Wenger in viewing talk as a part, albeit an important part, of the ecology of legal practice. Verbal discourse can be an effective means of exchanging information about needs and intentions. It can convey information about past experience and accumulated knowledge. It can lubricate the social contract and increase the affective and collegial bonds that help work get done. It can be and is a constituent piece of lawyer's performance art. But talking with a supervisor about practice is not the bedrock of learning. There are more talk partners than supervisors and there is much more than learning-mode discourse in learning. The key distinction in this more ecological view of language is that a newcomer uses talk in order to participate and as a means of performance rather than merely as tool for learning.

108 Our study of learning on co-op did not find the presence of written or oral feedback on work product to be a statistically significant factor in learning on the job. Givelber, supra note 1, at 41.

109 Bangert-Downs et al., supra note 64, at 214 (distinguishing environmental/implicit feedback and intentional/explicit feedback: cf. MARSIC & WATKINS, supra note 95 (emphasizing implicit learning in the workplace).

110 The trust implicit in assigning valuable work is an invitation to participate in the way of life of the expert. See Eisele, supra note 40, at 94. "In performing specific legal tasks, students experience feelings of responsibility to others, independence, competency, immediacy, and contribution as members of a professional community." Marc Feldman, On the
mode discourse with a supervisor might pale in comparison with the importance of performance talk and task talk. Performance talk is communication that occurs in the course of performance itself permitting co-workers to coordinate their performance and to move the task forward. Task talk is communication about the performance, directions, clarifications, advice, and suggestion, which help someone understand and undertake their tasks. Conversation in both forms, with multiple co-participants, is designed to get the job done.

Rogoff goes to great length to emphasize indirect forms of communication involving: (1) “shared activity with communication that includes words as well as actions, and ... tacit activities and arrangements” and (2) “tacit forms of communication in the verbal and non-verbal exchanges of daily life and the distal arrangement ... involved in the regulation of ... activities, material goods, and companions.”

It is clearly wrong to assume that much, let alone most, of the feedback from the social environment is explicit. To recognize the predominance of implicit feedback is not to denigrate the benefit of explicit feedback, but to put it in its proper place as only one feature in the ecology of learning. To put it differently, the implicit feedback reintroduces the reality that supervisors and other colleagues do not have to talk to be heard.

In addition to emphasizing the importance of indirect communication in a community of practice, Lave and Wenger distinguish between talking about a practice and talking within one.

Talking within itself includes both talking within (e.g., exchanging information necessary to the progress of ongoing activities) and talking about (e.g., stories, and community lore). Inside the shared practice, both forms of talk fulfill specific functions: engaging, focusing, and shifting attention, bringing about coordination, etc., on the one hand; and supporting communal forms of memory and reflection, as well as signaling membership, on the other. ... For newcomers then the purpose is not to learn from talk as a substitute for legitimate peripheral participation; it is to learn to talk as a key to legitimate peripheral participation.

The theoretical proposition offered by Rogoff and Lave and Wenger was partially confirmed by Stacy Caplow’s report of her year-in-practice at the U.S. Attorney’s office. Although Caplow acknowledg-

edged that she learned a lot from the feedback of colleagues and de facto supervisors, she also asserted that “I absorbed a lot from them mostly through osmosis and alert observational skills rather than any intentional teaching on their part.” Like other clinicians, Caplow valued talk and ranked it at the high end of learning technologies. But unlike many clinical theorists, Caplow found that her most productive conversations were with a knowledgeable peer, not an instructor. Caplow’s mutually revealing, supportive, and occasionally directive conversations with her friend convinced her “it is still better to have a companion, partner, collaborator or other responsive associate who can be, at appropriate times, either encouraging, skeptical, helpful, or challenging. ...” These reinforcing conversations reaffirmed for me the value of peer connections, the supportiveness of some type of collaboration. Caplow reminds us that ordinary conversation with peers is an important part of figuring out where we are, what we’ve done, and how we might proceed. These conversations are borne of friendship and collegiality, however, not of teaching and hierarchy.

2. Enhancing the Quality of Participation.

Despite my enthusiasm for participatory sources of learning, there are clearly features of the workplace, the work, and the student that can negatively impact the quality of such learning. At the very least, it seems likely that participatory learning happens best when the student has a real opportunity to immerse him or herself in a practice setting and is motivated to do so. Accordingly, substantial part-time or full-time opportunities are likely to be preferable to programs that...

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111 Rogoff, supra note 8, at 17, 16. “This contrasts with the more usual focus on explicit even didactic dialogue that has characterized Vygotskian theory as well as American views of socialization.” Id. at 16.
112 See Sullivan, supra note 45, at 125, 126 n.35 (much self disclosure “is unconscious, even inadvertent”).
113 LAVE & WENGER, supra note 8, at 109.

114 Caplow, supra note 11, at 42. See, Bryant Garth & Joanne Martin, Law Schools and the Construction of Competence, 43 J. LEGAL EDUC. 469, 482-88 (Tables 6-9) (1993) (reporting that learning from peers was the second most important source of learning for new lawyers after their own repeat experience.) In addition to learning through the process of implicit feedback and osmosis, however, Caplow “hungered for the more detailed, leisurely conversations found in a clinic.” Caplow, supra note 11, at 42.
115 “She was very direct and unparting with her advice, her attention, and her support. ... Her focused and incise comments were more helpful to me than the discursive, carefully and tactfully framed feedback we generally give to students.” Caplow, supra note 11, at 43. “Our discussions reflected the ‘high interpersonal intensity’ attained when people engage in mutually beneficial and supportive exchanges that are the hallmarks of the most successful incubations of a reflective practicum.” Id. at 42.
116 Id. at 43-44. Drawing on the power of peer relationship and peer learning, an increasing number of clinicians are beginning to use grand rounds as a way to supplement and broaden students’ understanding of their clinical experiences. See, e.g., David F. Chavkin, Training the Ed Spares of Tomorrow: Integrating Health Law Theory and Practice, 60 BROOK L. REV. 303, 331-33 (1994); Quigley, supra note 34, at 56 (“The addition of other students’ experiences to the student’s knowledge is an important part of adding context to the student’s experience and allows for some consideration of the universal applicability of the knowledge gained.”).
only offer a minimum number of hours in a clinic or in a law office. The transaction costs associated with constantly moving back and forth from the classroom to the office can erode students' sense that they really are participating in a practice. Similarly, it makes a difference if students feel accepted and valued, if they feel a sense of affiliation that makes their participation "legitimize." To feel valued, students should be kept busy, be given tasks that they can perform, be given answers to their questions, and be treated honestly. Although our research at Northeastern did not identify additional factors affecting how the workplace and the work positively influence students' sense of learning, it is highly likely that students benefit from doing a variety of work across the spectrum of lawyering activities, and from becoming increasingly engaged in the core activities of the domain. When they also meet exacting standards of practice, the quality of their social learning is likely to increase.

Barriers to participation, both internal and external, can derail students' ability to learn through participation. When students feel devalued, disrespected, neglected, or excluded, it is certainly possible for motivation and performance to suffer.

When the affected stu-

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117 The fact that Northeastern students have four full-time, three-month work quarters may explain why our students are so satisfied with their learning on co-op. See Givelber et al., supra note 1, at 25-27.

118 For Love and Wenger, acceptance, demonstrated by close affiliation and other signs of welcome, comes first in making the replication of expertise possible. "Acceptance by and interaction with acknowledged adept practitioners make learning legitimate and of value from the point of view of the apprentice." Lave & Wenger, supra note 8, at 110. "It should be clear that, in shaping the relation of masters to apprentices, the issue of conferring legitimacy is more important than the issue of providing teaching." Id. at 92.

119 Id. at 38-43.

120 Id.

121 Given that expert knowledge may not only be domain specific, but task specific as well, it is important to acquaint the novice with the broad range of activities within the domain. See John Baer, Creativity and Divergent Thinking: A Task-Specific Approach 7 (1993). The staging or sequence of these exposures, however, is also important. "The ordering of learning and of everyday practice do not [necessarily] coincide. . . . [P]eripheral, less intense, less complex, less vital tasks are [frequently] learned before more central aspects of practice." Lave & Wenger, supra note 8, at 96 (emphasis added). After those initial exposures, "movement through the system with increasing expertise results in a pattern of overlapping expertise, with knowledge of the entry level tasks most redundantly represented and knowledge of expert level tasks least redundantly represented." Id. at 75 (citation omitted).

122 Instead of being stuck with the fringe activities of a sphere of social practice, novices should be exposed to increasingly robust, diverse, and central activities of a community of practice. "In summary, rather than learning by replicating the performances of others or by acquiring knowledge transmitted in instruction, we suggest that learning occurs through centripetal participation in the learning curriculum of the ambid community." Lave & Wenger, supra note 8, at 110.

123 As one moves towards more intensive, more valued forms of participation, one becomes more empowered as a community member. Id. at 36. By the same token, if systems
tunities for engagement. Although most of the responsibility for learning through participation undoubtedly rests with the student, legal educators can facilitate such learning first by recognizing it, next by calibrating the practice environments they control, and last by enabling the student to problem solve creatively when confronting internal and external barriers to participation.

B. Lateral Sources of Learning From Peers

I have previously described the interpersonal resources of the workplace according to the canon of clinicians, a canon that focuses on the supervisor as the primary source of learning through role-modeling, top-down collaboration, case supervision, feedback, and self-reflection. However, the supervisor and supervisee do not work in splendid isolation; there are many other connections, relationships, and resources in the total ecology of the workplace that help support fledgling performances. Indeed, a whole network of colleagues and peers supports the acculturation of student lawyers to the world of practice. Fundamentally, advocates of ecological learning trust the entire social ecology of the workplace—lateral as well as vertical—to support, inform, and guide the novice in her performances and in her quest for knowledge and skills. These features of peer support can be modeled as follows to expand on the clinical model:

\[ \text{CHART 3} \]

<table>
<thead>
<tr>
<th>STUDENT ROLE</th>
<th>LATERAL PEDAGOGY</th>
<th>LATERAL SOURCES OF LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collaborative work and communication with many legal workers on one or more legal cases.</td>
<td>Offer multiple interpersonal resources in the workplace.</td>
<td>Peer modeling.</td>
</tr>
<tr>
<td>3. Relatively independent with respect to learning.</td>
<td>Facilitate the development of positive interpersonal relationships.</td>
<td>Multiple resources and distributed knowledge in the workplace.</td>
</tr>
</tbody>
</table>

Multiple disciplines and perspectives, particularly relational feminists, have reminded us about our need for connection as well as autonomy.\[126\] Although these feminist scholars run the risk of essentializing women's gender-bound commitments to connection, they have also poignantly described the multiple nurturing relationships that guide and support. Likewise, advocates for practice-based learning imagine a fluid arrangement of relationships that arise from the traditions of the workplace, that adapt to the needs of the newcomer, and that evolve over time as the novice gains competence and as she consolidates her professional identity in a new practice community.\[129\] Within this web of relationships, both interpersonal communication and coordinated action are essential to performance and identity.\[130\] Task-oriented work-talk with peers is itself a kind of activity, a form of participation; this collaborative and functional dialogue is the medium through which social action is coordinated, identities framed, and culture reproduced.\[131\]

Contrary to a central thesis of clinical pedagogy, a productive sense of teamwork, collaboration, and calibrated guidance is not limi

FERT VFebruary PSYCHOLOGICAL THEORY AND WOMEN'S DEVELOPMENT (1982); KELLER, supra note 9. In the legal context, see, e.g., PATRICIA A. CAIN, Teaching Feminist Legal Theory at Texas: Listening to Difference and Exploring Connection, 38 J. LEGAL EDUC. 165 (1988) (describing a feminist pedagogy, the predominant features of which were trust, listening, sharing, and relationship); LINDA MORTON, Creating a Classroom Component for Field Placement Programs: Enhancing Clinical Goals with Feminist Pedagogy, 45 MICH. L. REV. 19 (1993) (describing a feminist pedagogy of students discussing their learning experiences in an externship program); PAUL J. SPIEGELMAN, INTEGRATING DOCTRINE, THEORY, AND PRACTICE IN THE LAW SCHOOL CURRICULUM: THE LOGIC OF JAKE'S LADDER AND THE CONTEXT OF AMY'S WEB, 38 J. LEGAL EDUC. 243 (1988) (advocating a legal curriculum that surfaces and employs the ethic of care as part of the education repertoire of law schools). See generally BERNHARB, supra note 103 (discussing the matrix of constitutive and sustaining relationships that socialize individual members of a collective).

Like these feminists, certain postmodernists also suggest that the collapse of Self "vanishes fully into a stage of relatedness," KENNETH J. GEROGEN, THE SATURATED SELF: DIMENSIONS OF IDENTITY IN CONTEMPORARY LIFE 17 (1991), as do some contextualists who emphasize a relational connection and compassion as the final accommodation to the imperatives of location and culture, FRANCISCO J. VARELA, EVAN THOMPSON & ELEANOR ROCHER, THE EMBODIED MIND: COGNITIVE SCIENCE AND HUMAN EXPERIENCE 247-53 (1991).

Any sophisticated discussion of workplace relationships should at some point address the subtle and challenging insights of feminism on the forms, rewards, and perils of relationships in the workplace. See MONA HARRINGTON, WOMEN LAWYERS: REWRITING THE RULES (1994); HART, supra note 95.

129 "Individualization does not precede association; rather it is the kinds of associations which we inherit that define the kinds of individuals we will become." BERNHARB, supra note 103, at 71.

130 "The inter-subjective constitution of the self and the evolution of self-identity...[depend] on communicative interaction with others... The 'I' becomes an 'I' only among a 'we,' in a community of speech and action." Id.

131 See id., at 254 n. 21. "Language..."
Workplace knowledge is distributed in the file drawers, computer banks, and “war-stories” of the workplace. Workplace knowledge is reflected in the protocols, procedures, and interpersonal relationships co-workers use to get work done. Most particularly, workplace knowledge (and the willingness to share it) is distributed among multiple co-workers – associates, paralegals, support staff, and other interns. Thus, any discussion of ecological learning in the workplace would surely be incomplete if it ignored co-workers and peers and focused on only the supervisor/novice relationship. We have all heard too many stories of secretaries training associates and of law students helping each other to expect that the only source of support and guidance within a practice setting is top-down. In concert with anecdote, researchers in the field are becoming increasingly aware of the entire network of contextual workplace knowledge and staff collaboration that enriches and constrains learning opportunities for the novice. According to this research, not only is organizational memory embedded in the routines, practices, and memorable examples of

1. Class discussion about approaches taken by other students
2. Preparation
3. Group collaboration
4. Student’s own performance
5. Self-reflection and journals
6. Feedback for instructor on journals and negotiations
7. Classroom instruction by the professor.

In their major study of how new lawyers learn professional craft, Bryant Garth and Joanne Martin discovered that the vast bulk of learning comes from two sources, repeat experience and observation/advice from other lawyers in their offices. Garth & Martin, supra note 114, at 483-86 (Tables 6-9). Likewise, a survey of craft workers from 1966-76 found that 40 percent of the workers thought they had acquired their skills through informal means, as opposed to 11 percent through apprenticeship and 4 percent through formal training programs. Hamilton, supra note 100, at 39-40. “It seems typical of apprenticeship that apprentices learn mostly in relation with other apprentices. There is anecdotal evidence . . . that where the circulation of knowledge among peers and near-peers is possible, it spreads exceedingly rapidly and effectively.”

136 See, e.g., Gary A. Klein, Using Knowledge Engineering to Preserve Corporate Memory, in THE PSYCHOLOGY OF EXPERTISE: COGNITIVE RESEARCH AND EMPIRICAL AI 170, 180-81 (Robert Hoffman ed., 1992); Donald Schon, THE REFLECTIVE PRACTITIONER: DEVELOPMENT IN THE WORKPLACE 179, 195 (Jack Demick & Patrice M. Miller eds., 1993) (using the concept “learning organization” to connote “that learning and intelligence are possessed not only by individuals but also by teams and organizations”). Farber and Sherry describe an anthropological study of Xerox machine technicians who gained expertise not from formal top-down training programs as such but from “the stories tech-reps tell each other around the coffee pot, in the lunchroom, or while working together on a particularly difficult problem.”

Daniel A. Farber & Suzanna Sherry, Telling Stories Out of School: An Essay on Legal Narratives, 45 STAN. L. REV. 807, 822 (1993) (citation omitted). “By creating such stories and constantly refining them they have a conversation with each other. Tech-reps are creating a powerful ‘organizational memory’ that is a valuable resource for the company.”
the senior workforce, there is also a dynamic network of communication and shared problem-solving among peers.

IV. THE NATURE AND ECOLOGICAL REPPLICATION OF EXPERTISE

Law students enter the workplace in search of connection with a network of people who will assist them in their fledgling performances and their socialization; they also go to work hoping to gain a set of skills that will allow them to feel more competent and become more accomplished. In short, students seek the legal expertise that permeates the practice domain and is exemplified most convincingly by gifted practitioners. Although a full exploration of expertise is beyond the scope of this article, and unnecessary given Gary Blasi and Ian Weinstein’s recent articles, certain features of expertise are important to a theory of ecological learning as are the conditions of its replication. Once we cease to focus on education-centric, theory-centric, and talk-centric models of clinical supervision and even after

137 I use the term “replication” metaphorically in its biological sense. In biology, replication is a process whereby DNA reproduces itself within the a cell as step in cell division. To accomplish replication, DNA has to use of entire ecology of the cell, its organelles, RNA and DNA polymerases, and other complex enzymes and proteins. Through close physical association with its base products, DNA replicates itself and reproduces life. Sam Andrew Murray & Tim Hunt, The Cell Cycle: An Introduction 117-34 (1993).

Although this metaphor captures the complexity and interactivity I seek, it has two major shortcomings. First, law students are not “raw materials”—they are complex and separate persons in their own right already. Second, legal experts do not “clone” themselves nor is expertise “singular” as the DNA model suggests. Novices become new experts in the own way, not simply as clones, and their expertise is both individualistic and pluralistic rather a carbon copy. The value of the replication metaphor, however, is that DNA does not “transfer” “information” to its emerging partner. It interacts with the substrate of that partner in a much more complex way and does so functionally within the broader ecology of an entire cell, multiple parts of which contribute to the process.


we acknowledge the value of participation and the contributions of peers, we have to question how competent practitioners in clinics and other legal workplaces facilitate or impede the replication of expertise. If most workplace supervisors do not have “teaching” to offer, can they and their colleagues offer pathways to “expertise” instead? If so, are those pathways forged didactically through theory, dialogue, and reflection and through transmission of mental maps of the world or through facilitated co-participation, through guidance-in-action, and through display and review of expert performances? In contrast to clinical theory, a theory of ecological learning suggests that expertise can be reliably propagated through guided participation in apprentice-like work opportunities in the natural ecology of the workplace. Like learning from peers, this replication of expertise is largely lateral and tied to performance itself. The theory of ecological learning ultimately leads to a radically different set of suggestions about the forms, timing, and degree of expert/novice participatory interaction that helps maximize learning in the workplace.

A. Is There Something Worth Calling Expertise?

The first question about expertise is whether it really exists—is it a vanity of socially privileged specialists or is it a demonstrable ability to perform successfully in a unique practice domain? Despite some suspicion about grandiose claims of special knowledge and accompanying claims to privilege, the answer appears to be that there is something worth calling expertise that arises from two main sources: from the process of social specialization itself and then from the accumulation of a rich repertoire of experiences within a particular practice domain. Specialized social practice domains are mini-societies, each with its own unique blend of practice, discourse, and membership conventions. Through specialization of social task, practitioners

139 Some commentators critique the whole idea of specialized knowledge as mere justification for claiming special status and economic privilege. See, e.g., Burton Blustein, The Culture of Professionalism (1976). In positing some content to the meaning of expertise, however, I emphasize that novice and expert are artificial delineations of a continuum and that the most important inquiry concerns the continuing development of expertise rather than its acquisition as a commodity. See Robert L. Campbell, Norman R. Brown & Lia A. DiBello, The Programmer's Burden: Developing Expertise in Programming, in The Psychology of Expertise: Cognitive Research and Empirical AI 269, 270-73 (Robert Hoffman ed., 1992). Moreover, expertise within a domain is rarely unitary: like cognition in general, expertise is pluralistic. See id. at 275-76 (discussing expert Smalltalk programming and the possibility of many elegant approaches); Stephen T. Pavlov, Problems with Knowledge-Based Explanations of Memory and Development, 61 REV. EDUC. RES. 71, 77 (1991).

ers in social domains make specific kinds of inquiries, directed at a particular set of problems, considering certain kinds of evidence and applying robust heuristic skills and carefully crafted performance tools. As a further step in the process of specialization, expert practitioners employ canonical discourse strategies of argumentation, community building, and justification in support of their performances.

Within each such specialized domain, there are those who are true adepts, and those who are relative novices, as well as many others somewhere in between. The true adept has developed an idiosyncratic but highly effective set of cognitive resources, relational strategies, operational protocols, and practical competencies that permit him or her to perform complex tasks with simplicity and grace. Each expert domain ordinarily has special performances that seem the height of craft—firing a beautiful vase, conducting the Saturday night symphony, solving the elegant mathematical proof, and winning the NBA finals. The legal profession as well has its own unique blend of situational constraints and conventional approaches that structure the space within which one performs as an expert. The adept lawyer has gained his or her expertise by being accepted into a performance guild and by being afforded increasingly robust opportunities to participate in the meaningful social activities of the domain. Although at first legal experts too may have been at the fringes of the practice community, both in terms of membership ties and participation rights, over time practitioners forge stronger community bonds with mentors and peers at the same time they broaden and deepen their range of performance activities. With more opportunities to participate across the full spectrum of tasks and with the privilege of undertaking increasingly central and celebrated performances, the typical practitioner becomes increasingly adept in solving the riddles of the domain and develops an increasingly secure identity as a master practitioner.143

Unlike scientists and social theorists who tend to refer to expert domains or practice communities, writing specialists refer more commonly to the concept of interpretative or discourse communities. Compare, e.g., GARDNER, supra note 15, at 8; Thomas S. Kuhn, Second Thoughts on Paradigms, in THE STRUCTURE OF SCIENTIFIC THEORIES 459, 461 (F. Suppe ed., 1974); SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 32-33; with STANLEY Fish, Is There a Text in This Class? THE AUTHORITY OF INTERPRETATIVE COMMUNITIES (1980); Jill J. Rasmfeld, Is “Logic” Culturally Biased? A Con- trastive, International Approach to the U.S. Law Classroom, 47 J. LEGAL EDUC. 157, 165-67 (1997); Williams, supra note 91.


“A] deeper sense of the value of participation to the community and the learner lies in becoming part of the community . . . Moving toward full participation in practice involves not just a greater commitment of time, intensified effort, more and broader responsibilities within the community, and more difficult and risky tasks, but, more significantly, an increasing sense of identity as a master practitioner.” LAVE & WENGNER, supra note 8, at 111. One consequence of this participatory theory of expertise is that expertise is relational, distributed, and shared. “If masters don’t teach, they [nonetheless] embody practice at its fullest in the community of practice. Becoming a ‘member such as those’ is an embodied telos too complex to be discussed in the narrower and simpler language of goals, tasks, and knowledge acquisition.” Id. at 85. There are activities and identity, and from these components mastery arises. “To take a decentered view of master-apprentice rela- tions leads to an understanding that mastery resides not in the master but in the organization of the community of practice of which the master is part . . . .” Id. at 94.

145 Blasi, supra note 138, at 335-36, 343-44; Nancy J. Cooke, Modeling Human Expertise in Expert Systems, in THE PSYCHOLOGY OF EXPERTISE, supra note 140, at 29, 34-36 (noting that experts are efficient at both perceptual and conceptual chunking); Robert Glasser, Education and Thinking: The Role of Knowledge, 39 AM. PSYCHOL. 93, 98-99 (1984) (emphasizing organized knowledge structures acquired over a long period of education and experience); Sallie E. Gordon, Implications of Cognition Theory for Knowledge Acquisition, in THE PSYCHOLOGY OF EXPERTISE, supra note 140, at 99, 99-100; Robert M. Schumacher & Mary P. Czerwinski, Mental Models and the Acquisition of Expert Knowledge, in THE PSYCHOLOGY OF EXPERTISE, supra note 140, at 61 (discussing mental models). It is not clear that experts know how to think “better” than novices; it is much more likely that they have organized the “local” knowledge, language, practices, and historical disputes of their expert domain into a schematic coherence system. Glasser, supra at 98-99. See FABER, supra note 138, at 555; Palasota, supra note 91, at 604; Williams, supra note 91, at 11. “[W]e must [great] context-dependent know-how not as a residual artifact that can be progressively eliminated by the discovery of more sophisticated rules, but as, in fact, the very essence of creative cognition.” VARELA ET AL., supra note 128, at 148.
145 Blasi, supra note 138, at 343-44.
and paradigmatic approaches ordinarily coalesce from extensive experience in the domain, from the accretion of individual practice exemplars until a "pattern" is recognized, thereby structuring what becomes an accessible and paradigmatic exemplar of practice.146 The individual exemplars come both directly from personal experience and vicariously from the treasure-trove of past solutions recounted or demonstrated by other experts and peers. The original pattern recognition is an intuitive seeing;147 this intuition necessarily precedes the articulation of a more formal theoretical explanation of the coherence of the pattern,148 assuming for the moment that such explanations are descriptively accurate.149

Not only do experts naturally chunk material into larger units as an aid to encoding and decoding information,150 they also have better discretion and enhanced memory with respect to relevant information, information that makes a difference in the activities of the expert domain.151 The coherence of reinforced pathways in expert memory al-

146 Id. at 335-36. "[Experts] seemed not to engage in a guided search; rather they seemed to be able simply to 'recognize' in the problem a certain kind and to 'retrieve' a solution from a stored repertoire of solutions to similar problems." Id. at 335.


148 Margolis, supra note 147, at 76-84.

149 See discussion on the transparency of cognition and the probable inaccuracy of ad hoc reconstruction, Baker, Beyond MacCrute, supra note 1, at 338-40.

150 William G. Chase & Herbert A. Simon, Perception in Chess, 4 COGN. PSYCHOL. 55 (1973). In a classic set of experiments, Chase and Simon distinguished the perceptual abilities, memory, and problem-methods of novice chess players and chess masters. After being shown a slide of a chessboard, novices could only remember the position of five or six chess pieces compared to twenty by the master. However, masters' memory was better only if the position of the pieces reflected real game positions - the master's memory for random placement was no better than the novices'. Once the positions were realistic, however, the master recognized positions in strategically significant chunks or patterns. Moreover, as part of this recall, the chess master also recalled the tactics appropriate to the position from stored memories of past games, a huge resource not shared by novices.

151 Jill Larkin, Cognition of Learning Physics, 49 AM. J. PHYSICS 534, 539 (1981). "[R]easoning typically involves the ability to call up an appropriate scheme, or context-sensitive rule, derived from experience, in regularly occurring settings. These 'pragmatic reasoning schemes' may be abstracted from every day social experiences in culturally specific contexts." George Butterworth, Context and Cognition in Models of Cognitive Growth, in Context and Cognition: Ways of Learning and Knowing 1, 7 (Paul Light & George Butterworth eds., 1993). In a more mechanistic model, Hatano and Inagaki, propose that some cognitive skills are decontextualized and therefore transferable through the construction of mental models. Mental models consist of "comprehensive knowledge" about the "target object" and the procedures of the domain. Understanding the basic dynamics and goals of the domain, e.g., how to make a delicious meal, the "adaptive expert" can mentally run or simulate the mental model of the meal and thereby solve lower quicker reconstruction of larger units of knowledge that can then be used in attending to and diagnosing a new dilemma. These same coherences help explain the superior performance of experts in acquiring new information in their area of expertise.152

As would be predicted by contextualist and experientialist insights, expert memory is task-oriented and functional.153 Accordingly, the prevailing theory on the integration of expert ontologies is twofold: (1) expertise is embodied in thematically or functionally related scripts, exemplars, and stories154 and (2) experts tend "to organize concepts along a structure-function dimension."155 For example, expert computer programmers form categories based on the dilemmas of program function rather than the superficial syntax categories often used by novices.156 Likewise, expert medical diagnosticians use deep understanding of clinical symptoms rather than abstract bio-medical knowledge as the basis for their differential diagnosis of illnesses.157 These experimental findings on experts' free recall of their expertise confirm that expert knowledge is not stored free standing in memory; instead, "[k]nowledge becomes structured only in response to some specific problem to be solved or a set of complex information to be acted upon."158 novel problems with unanticipated constraints, e.g., cooking with different ingredients or implements. See Gyo Hatano & Kayoto Inagaki, Desituating Cognition Through the Construction of Conceptual Knowledge, in Context and Cognition: Ways of Learning and Knowing 115, 116-17 (Paul Light & George Butterworth eds., 1993).

152 Experts' superiority in learning new information is "explained by the mapping of new information onto an existing knowledge structure consisting of goals, states, and actions." Cooke, supra note 144, at 50.

153 See Baker, Beyond MacCrute, supra note 1, at 305-06 (reporting the contextualist claim that memory is reconstructed functionally in response to problematic events, unfamiliar dilemmas, and emergent strategies rather than resting static in mental filing systems).

154 Blasi, supra note 138, at 337-38; Klein, supra note 136, at 180-81. Research on expertise has found that they too store their information about rhetorical dilemmas in the form of "problem representatives," what I have been calling exemplars. Linda Flower & John R. Hayes, The Cognition of Discovery: Defining a Rhetorical Problem, in The Writing Teacher's Sourcebook 92, 96 (Gary Tate & Edward P. J. Corbett eds., 2d ed. 1988).

155 Cooke, supra note 144, at 39, 40. "An efficient and task-appropriate knowledge organization appears to underlie many expert processes such as chunking, elaboration, and preliminary classifications of a situation or problem." Id. at 41; see Kristian J. Hammond, Case-Based Planning: A Framework for Planning from Experience, 14 COGN. SCI. 385, 390-391 (1990) (finding that plan prototypes are indexed by the goals they satisfy). Cooke, supra note 144, at 39.

156 Cooke, supra note 144, at 39.


158 Francis S. Bellera, Mnemonics and Expert Knowledge: Mental Cuing, in The Psychology of Expertise, supra note 140, at 204, 216; Ford & Adams-Webber, supra note 147, at 133. This phenomenon explains why ecological problem-solving of non-routine case is one of the important and efficient investigatory protocols in artificial intelligence knowl-
2. Dilemmas, Problem Identification, and the Problem Space.

Expertise is not based solely on retrievability of well-associated, "chunky" information; it appears that experts also evaluate problem data more thoroughly and develop more sophisticated hypotheses concerning the dilemma presented and the problem to be solved. Unlike novices, experts are reluctant to accept problems as defined by others and are willing to explore multiple differential diagnoses in parallel processes in order to discover, even "create," the real problem to be solved. The reliability of their pattern recognition and the complexity of their global coherences allow them to access both related as analogous practice exemplars and deeper emergent or thematicized principles of the domain to frame even the most perplexing problems.159 This process of framing a problem creates a field of action within which the expert practitioner can explore solution methods and goals in an interactive dance of discovery, improvisation, resource deployment, and implementation.

Most true problems in the "swampland" of a disciplinary context are "messy, confusing problems [that] defy technical solution"160—exactly the kind of problems lawyers must frequently address. Because most real life problems are unique and cannot be solved according to a formula,161 there is uncertainty in problem definition and value conflict in problem resolution.162 Thus, the art of problem identification or problem framing, one of the highest attainments of cognition-in-practice,163 requires the expert to recognize unedge acquisition. See, e.g., Klein, supra note 136, at 177-81.

159 Blasi, supra note 138, at 335-44.

160 SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 3. "In the varied topography of professional practice, there is a high, hard ground where practitioners can make effective use of research-based theory and technique, and there is a swampy lowland where situations are confusing 'messes' incapable of technical solutions. . . . [I]n the swamp are the problems of greatest human concern." SCHON, THE REFLECTIVE PRACTITIONER, supra note 136, at 42.

161 If you are dealing with a unique situation, then by definition you cannot apply to it standard categories of analysis and action." SCHON, supra note 83, at 239.

162 LAVE, supra note 97, at 23-44 (emphasizing the construction of problems, goals, and gap-closing procedures in the everyday activities of a practice domain); SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 4-6. "The greatest ability of living cognition, however, consists in being able to pose, within broad constraints, the relevant issues that need to be addressed at each moment. These issues and concerns are not pre-given but are enacted from a background of action, where what counts as relevant is contextually determined by our common sense." VARELA ET AL., supra note 128, at 145.

163 Schön has referred to the concept of problem identification as problem setting. "The process by which we define the decision to be made, the ends to be achieved, and the means which may be chosen." SCHON, THE REFLECTIVE PRACTITIONER, supra note 136, at 40. "In real-world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the material of the problematic situations which are queness, under conditions of uncertainty, and to structure a problem in relation to one or more "fuzzy" problem exemplars from the past.164 To frame an under-defined problem, experts spend significant time investigating that dilemma and identifying a tentative problem formulation that they thereafter continue to explore and redefine. As a consequence, experts ordinarily spend more actual time on problem identification and constructing a problem space than do novices.165

Drawing on a sophisticated facility to construct a more coherent problem space, the expert also has a broader and deeper understanding of the atypical dilemma to which she is attending. Whereas novices attend to surface features of a problem,166 and only a few of those, the expert recognizes patterns in the dilemma, patterns significant within the catalogue of problem exemplars in her experience base.167 In addition to comparing the novel dilemma to past problem representations, the expert also diagnoses the dilemma in relation to "deeper principles" or more abstract understandings.168 However, despite their expertise in problem identification, experts are "more will-puzzling, troubling, and uncertain." Id.

164 Quite often, experts' categories are fuzzier than novices' because experts have more experience with non-prototype examples. Thus, expert categories boundaries are both more expansive and more permeable with other categories, e.g., expert clinical psychologists show both more depth and more overlap in their descriptions of childhood disorders than do novices. See Cooke, supra at 144 (reporting experiments by Murphy and Wright).


166 Farber, supra note 138, at 556. See Bellera, supra note 158, at 204, 210.

167 For an extended, even beautiful, metaphor of the difference between a novice's attention to the surface of a river and a river pilot's attention to the underlying features of safety and danger, see Paul D. Carrington, Of Law and the River, 34 J. LEGAL EDUC. 22 (1984) (discussing MARK TWAIN'S LIFE ON THE MISSISSIPPI).

168 For example, in the chess master experiments, researchers discovered that experts had hundreds of game patterns memorized based on thousands of hours of playing and studying past games. Chase & Simon, supra note 130.

169 See, Farber, supra note 138, at 556; Mitchell, supra note 138, at 279-80; Paloosa, supra note 138, at 604; Williams, supra note 91, at 11-12. For example, in a physics problem, the expert will analyze a problem in terms of force, whereas the novice might focus on the surface features of an incline. See Larkin, supra note 151.

The problem diagnosis and reasoning of experts attempts to maximize both vertical and horizontal coherence. The expert analogizes the new problem to past problem exemplars searching for salient similarities and differences and metaphorical extensions. In addition to using concrete features of the problem for a provisional diagnosis, the expert also uses underlying principles, described at a higher level abstraction, to verify the diagnosis. These principles or small "t" theories may come from formal education. They are also a consequence of intuitive pattern recognition at higher and higher levels of abstraction that the expert eventually "recognizes" and composes during periods of reflection. This description matches the common law deliberative practices and evolving jurisprudential insights of lawyers, judges, and law professors. They rely on past decisions—problems solved—as the basis for analogical reasoning and on policy—at a higher level of abstraction—as a additional ground of justification. See also Cass R. Sunstein, On Analogical Reasoning, 106 HARV. L. REV. 741 (1993).
ing than novices to discard their preliminary assessment in light of new information.”

Accordingly, they are more likely to test and revise their tentative diagnosis in light of ongoing experience. For example, in experiments dealing with knowledge of football and clothing, “experts were better than non-experts at recalling information related to the area of expertise, even if that information contradicted what they already knew.” In sum, experts are ordinarily highly capable and flexible diagnosticians in their field of expertise.


At the same time that their diagnostic resources emerge, experts retrieve additional knowledge about the “goal structure of the problem space” and about procedural, implementation methods for achieving those goals. Experts have well-developed “end-means thinking,” “a process by which one starts with a factual situation presenting a problem or an opportunity and figures out the ways in which the problem might be solved or the opportunity might be realized.” Schöns refers to this as the “art of implementation” whereas cognitivists refer to this domain-specific, solution-method knowledge as “procedural knowledge.” Using contextualist cognition, experts have packaged past problems and their methods of ex-

169 Farber, supra note 138, at 556.
170 Palasota, supra note 138, at 605. For a contrasting view discussing the decreased flexibility of experts, see Blasi, supra note 138, at 347-48.
171 Bella, supra note 158, at 210. “We speculate the context tags in memory are able to keep separate newly acquired knowledge in memory from past knowledge.” Id.
172 Palasota, supra note 138, at 606. Lave emphasizes that goals are not ordinarily given and that they are instead constructed and realized during the activity of problem definition/investigation/resolution. Lave, supra note 97, at 23-44. Likewise, resolution methods are not ordinarily recognized early on as a procedural protocol but rather are discovered and implemented in a series of gap-closing procedures. Id. at 142.
174 Schöns, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 13.
175 See, e.g., Blasi, supra note 138, at 345-46; Gordon, supra note 144. Although “procedural knowledge” may be an unfortunate choice of terms, it does help capture the idea that experts can view domain problems as very large events with nested arrays of subsidiary procedures necessary to investigate and resolve the problem. See Stephen Regoce, The Psychology of Expertise and Knowledge Acquisition: Comments on the Chapters in this Volume, in THE PSYCHOLOGY OF EXPERTISE, supra note 140, at 297; Schöns, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 109 (“Problem-solving may take the form of… learning to string together component actions.”). For example, expert lawyers do not merely think, “A client has walked in my door with an injury.” The tort specialist can immediately undertake a long chain of anticipatory analysis that recognizes the need for factual investigation, legal research, expert opinion, communication with insurance companies, filing suit, negotiating, mediating, arbitrating, or, if necessary, going to trial. A novice, on the other hand, may be stuck way back at the beginning: “This person has suffered a terrible accident; what can we do?”
176 Blasi, supra note 138, at 345-46 (discussing forward/back reasoning); Lave, supra note 97, at 23-44; Schöns, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 13.
178 Farber, supra note 138, at 556.
179 Palasota, supra note 138, at 606; Thomas J. Shuell, Phases of Meaningful Learning, 60 REV. EDUC. RES. 351, 343 (1990). To emphasize automaticity in expert knowledge is not to denigrate the overall predominance of subconscious processing over conscious processing in all cognitive activity. Baker, Beyond MacCrater, supra note 1, at 301-02. What the study of expertise emphasizes, however, is that one way that cognitive processes become subconscious is through repetition and familiarity. In essence, the expert goes on cruise control with respect to the cognitive procedures she has utilized countless times in specific contextual settings. The mental connection of perception and performance is so tight and so deeply grooved that conscious monitoring is unnecessary.

This automaticity also applies to our “expertise” about our relevant cultures. Through repetition and social priming, certain social constructs are transparently reproduced over and over again. John A. Bargh, Does Subliminal Matter to Social Psychology? Awareness of Stimuli versus Awareness of Its Influence, in PERCEPTION WITHOUT AWARENESS: COGNITIVE, CLINICAL, AND SOCIAL PERSPECTIVES 236 (Robert F. Bornstein & Thane Pittman eds., 1992); Alken, supra note 23, at 12-18 (discussing the transparency of social privilege).

180 Gordon, supra note 144, at 101.
monitor the actual functioning of the brain during discrete cognitive
tasks. One such methodology, positron-emission tomography or PET,
permits investigators to map blood flow which has "proved to be the
most reliable indicator of moment-to-moment brain function."¹¹¹ In
researching automaticity, one set of investigators has developed a se-
ries of experiments to identify the different areas of the brain involved
in noun recognition, noun pronunciation, and verb association with a
noun. As expected, the task of verb association involved more regions
of the brain because the verb association task required consciously
assessing word meaning and choosing an appropriate match-mate. In-
vestigators wondered what would happen if they "allowed subjects a
few minutes of practice on their task of generating verbs."¹¹² They
found that "[a]lthough subjects initially discover that forming verbs
rapidly is difficult . . . , they become more relaxed after fifteen minutes
of practice. An examination of the brain after training reveals that
practice completely changes the neural networks recruited."¹¹³ Re-
searchers concluded: "The circuits responsible for noun repetition
now generate the verbs. Thus, practice not only makes perfect . . . but
also changes the way our brain organizes itself . . . "¹¹⁴

However, what becomes automatic risks becoming unreviewable,
inarticulate,¹¹⁵ and inflexible through the narcotic of habituation.¹¹⁶
Sternberg and French partially confirmed this risk in a series of exper-
iments on bridge playing. Experts and novices were compared in their
ability to react flexibly to rules changes, both of surface-level rules,
e.g., changing the names of suits, and of deeper, more abstract, more
strategic rules, e.g., low card on last trick leads on the next trick. "Ex-
erts were generally more affected by the rule modifications than

¹¹¹ Marcus E. Raichle, Visualizing the Mind: Strategies of Cognitive Science and Tech-
niques of Modern Brain Imaging Open a Window to the Neural Systems Responsible
for Thought, 270 SCIL. AM. 58, 59 (April 1994). PET relies on radioactively labeled water. It
permits multiple snapshots that capture the additional blood flow correlated with brain activ-
ity. "Images of blood flow taken before a task is begun are compared with those
obtained when the brain is engaged in that task." Id. This differential permits investiga-
tors to identify which portions of the brain are active on what task and what change occurs
over time in task performance.

¹¹² Id. at 62.

¹¹³ Id.

¹¹⁴ Id.

¹¹⁵ Gordon, supra note 144, at 101.

¹¹⁶ Robert J. Sternberg & Peter A. French, On Being an Expert: A Cost-Benefit Analy-
sis, in THE PSYCHOLOGY OF EXPERTISE, supra note 140, at 194.

¹¹⁷ A frequent problem for experts is how to remain an expert in the face of a rapidly
changing world; . . . it is exceedingly difficult to break up and reorganize an automa-
tized local processing system to which one in all likelihood no longer even has con-
scious access. In other words, the expert's gain in automated information
processing may be at the expense of flexibility.

¹¹⁸ Palasota, supra note 138, at 607; Blasi, supra note 138, at 358-61. As recounted
above, however, these metaskills may not be as effective in double-checking the canonical
beliefs and practices of an area of expertise.

¹¹⁹ Id. at 64.

¹²₀ Id. at 66.

¹²¹ Schon refers to this midstream executive awareness and double-checking of assump-
tions as one part of "reflection-in-action."

A practitioner's reflection can serve as a corrective to overlearning. Through reflec-
tion, he can surface and criticize the tacit understandings that have grown up around
the repetitive experiences of a specialized practice, and can make new sense of the
situations of uncertainty or uniqueness which he may allow himself to experience.

We think critically about the thinking that got us into this fix or this opportunity; and we may, in the process, restructure strategies of actions, understandings of phenomena, or ways of framing problems. . . .

Reflection gives rise to on-the-spot experiment. We think up and try out new actions intended to explore the newly observed phenomena, test our tentative understandings of them, or affirm the moves we have invented to change things for the better.196 As a result of conscious self-regulation, experts are more self-correcting in their thinking than the typical novice.

C. The Challenge of Replicating Expertise: Questions About The Role of Theory and About Appropriate Forms, Timing, and Degree of Supervision in Expert/Novice Interactions

In a simpler world, experts would be accurately self-aware about their specialized cognitive processes and performance art and they would be able to verbalize and transmit their abstract understandings. Novices in turn could easily hear, retain, recall, adapt, and then apply those understandings and theories to their new task. This simpler world is most radically staged in the Academy where students listen to professors and read books and articles in pursuit of abstract knowledge that can be reliably accessed and employed in the real world at a later time. This simpler world is enacted to a lesser extent in the educator-centric theories of clinical supervision, which emphasize the necessity of explicating sophisticated theories of lawyering in training seminars that will be used thereafter in clinical practice. Yet, repeated studies have revealed that expert practitioners are frequently incapable of retrieving and accurately articulating many aspects of their thinking and acting.197 Instead of describing their actual processes, 198

196 SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 28. See id. at 32-36.
197 See, e.g., Cooke, supra note 144, at 30 ("People cannot always give complete or accurate reports on their mental processes . . . . [Self awareness is a complex, but carefully constructed illusion] and . . . only in the exception, not the rule, can one really speak of what one knows."); Gordon, supra note 144, at 101 ("[A]s procedures become composed and automatized, the ability to verbalize knowledge of the skills decreases. . . . [People] become competent in a given domain move away from the use of symbolic or declarative knowledge and toward a reliance on perceptual, nonverbalized, procedural knowledge.").
198 GERALD M. EDELMAN, BRIGHT AIR, BRILLIANT FIRE: ON THE MATTER OF THE MIND 145-46 (1992) ("[E]ven the existence of acts driven by the unconscious, conclusions reached by conscious introspection may be subject to grave errors.").

Of course, the inability of experts to accurately describe their thought processes is matched by the universal opaqueness of lay intuition. Baker, BEYOND MACE ROTE, supra note 1, at 338-41. ([T]he layperson's intuitive grasp of the meaning of social and human action is very incompletely described by either deliberative reasoning paradigms or static

experts are most likely to offer justificatory accounts of what they do—accounts that may sound good but are not necessarily accurate.198

Even if experts were capable of capturing the unwritten, unspoken rules of their domain and of their personal expertise, can they transmit that knowledge to novices in declarative form? Some commentators say "no," arguing that novices could not "hear" or comprehend the disciplinary rationale even if the expert were inclined or able to express it. Because novices have not been socialized to the new practice domain, because they do not yet speak its language, and because they are unfamiliar with the swampland of practice, novices cannot accurately interpret intended messages. According to this view, because the novice cannot understand abstract explanations, the novice would truly learn only when placed in a real practice setting, under the demonstrative tutelage of the expert, subject to multiple contextual forces, and facing the myriad inchoate choices of performance and interpretation she must make.199 For these skeptical commentators, the context calls forth the practice, which in turn increasingly embodies the latent demands of context.

WHAT ROLE FOR NON-CLINICAL SUPERVISORS? In touting the value of clinical education, there have been many assertions about the inability of non-educators to theorize, supervise, and reflect appropriately.200 Does theory- and education-centered supervision make a real

200 Compared to clinical supervision, critics argue that there is a fundamental flaw in the educational focus and quality of supervision in the typical practice setting including the ability to structure a supervisory relationship, to portray enviable lawyering behaviors, and to prioritize student learning and reflection. See, e.g., Caplow, supra note 11, at 30-32; Report on the Future of the Legal Education: In-House Clinic, supra note 32, at 511; Henry Rose, Legal Externships: Can They Be Valuable Clinical Experiences for Law Students, 12 NOVA L. REV. 95, 104-05 (1987); Nina W.
difference to the quality and quantity of learning? Even if practitioners are less adept at learning mode feedback than trained clinicians, can the feedback of practitioners be more “authentically” and appropriately task-oriented, and thus ultimately more useful than the wrongly timed feedback of educators?201 Certainly, these comparative questions about field supervisors and clinical educators are critical in planning the training of lawyers. But, in fact, there is a whole series of questions about the role of theory in the replication of expertise and about the appropriate forms, timing, and degree of supervision in work settings, whether enacted by a clinician or a workplace supervisor.

**What role for theory?** In a previous article discussing pragmatic uses of theory and reflection, I proposed modest roles for theory-in-action and reflective dialogue.202 Working silently with an inscrutable supervisor would certainly reduce prospects for synergy of perspective, for pluralistic exploration of lawyering dilemmas, for early exposure to the conventional wisdom of the domain, and for critical dialogue. Just as certainly, exhaustive after-the-fact dialogues and extended searches for grand theories of lawyering risk extending beyond the experience and interest of the novice. Assuming theory is not the end all and be all of learning in the workplace, what role does theory-talk play? Should we still lecture or otherwise teach our students about our abstract insights into the optimal deployment of lawyering skills? If not, how else might theory be usefully transmitted to or reproduced in students?

**What forms of supervision?** The next set of questions concerns other appropriate forms of supervision in addition to exploration of theory. What kinds of tasks, talk, and exposures really do facilitate learning from colleagues? Should we demonstrate performances, putting ourselves on the line, in the hope that eloquent action is preferable to incomprehensible speech?203 Should we engage in Socratic dialogue and rely on questions aimed at mutual reflection, exploration, and learning?204 How much should we worry about being too directive thereby increasing student servility and squelching student learning?205 How critical and how rigorous should we be? What tasks should we assign and in what sequence? What performance standards do we use: excellence, competence, or novice standards?206 Should we describe our hard-won understandings of the conventional methods and heuristics of our domain?207 Should we tell war-stories, deconstruct exemplars, reveal our inner conflicts, or trace mental maps?

**When is supervision most helpful?** Just as there are questions about the appropriate forms of workplace supervision, there are questions about its appropriate timing. Should supervision be focused on the planning stage to maximize the potential of student success in her initial performances? Or, as I have previously suggested about cognition/reflection itself, should supervision be primarily in-action, side-by-side with the student, in the trenches of the immediate dilemma?208 Conversely, is the most propitious time of supervision after-the-fact when the supervisor can engage the student in a learning mode dialogue209 and explore the contradictions of actual perform-

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201 See Kotkin, supra note 28.


203 See Neumann, supra note 30, at 756-58; Stark et al., supra note 29, at 4-45 (discussing non-directive supervisors who value student independence and autonomy, which plays out in decision-making, information-sharing, and task allocation and performance).

204 See Alexander & Smith, supra note 63, at 211-15.

205 Brook K. Baker, *Diagnosing Legal Writing Problems*, 47-48 (draft on file with author 1990) (urging that we share expertise with students).


207 Condlin, *Learning from Colleagues*, supra note 3.
ance at a more leisurely pace? Life is short, time is at a premium, and multiple people may lay claim to the attention of supervisors. When, then, are the optimal times for devoting scarce supervisory resources to the student?

What degree of “supervision”? Finally, despite the attention paid to supervision by clinical educators, there is little discussion and less evidence supporting their preference for “heavy,” relatively intensive supervision, even of the “non-directive” type. Is this vision of intensive supervision the correct one or is less intensive supervision preferable? Does appropriateness of heavy supervision differ from one novice to another according to learning style? Does the degree of appropriate supervision evolve over time? Who gets to decide the correct amount of supervision? Is effective supervision ultimately a question of quantity or of quality or neither?

D. The Ecological Replication of Expertise

Having explored the nature of expertise and raised questions about how to reproduce it, it is now time to see if there is any way to catalyze its replication in the novice. If not, we are left with the contradictory prescriptions for theory, and more theory, or experience, and more experience. Although I am intrigued by the seductive charms of theory and by the siren song of experience, I think that theory-alone and experience-alone are the wrong choices. The process of replication is not premised on the duplication and transmission of the expert’s more sophisticated mental world. It is not premised on injecting a treasure trove of understanding or elegant theories of practice. It is not even premised on mimicking the performance of more expert others. Nor, however, is the development of expertise depen-

dent on the tedious repetitions of practice nor on the self-assembly of solitary lessons from autonomous practice. Instead, replication is dependent on the master conferring, and the novice enacting, a sense of legitimacy and belonging and on the master and novice coordinating participation and activities in a way that provides for the growth of identity as well as of competence. As shown in the chart below, I believe that the many useful forms of expert/novice interaction are quite fluid and that theory has a place, but only one place among many, in the ecological replication of expertise.

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<td>STUDENT ROLE</td>
<td>PEDAGOGY OF EXPERTISE</td>
</tr>
<tr>
<td>1. Close association and</td>
<td>1. A limited role for theory,</td>
</tr>
<tr>
<td>co-participation with</td>
<td>with some exposure to expert’s</td>
</tr>
<tr>
<td>gifted practitioners</td>
<td>mental maps.</td>
</tr>
<tr>
<td>and opportunities to</td>
<td>2. Establishing participation.</td>
</tr>
<tr>
<td>observe and assist them.</td>
<td>3. Being reasonably directive</td>
</tr>
<tr>
<td>2. Robust opportunities to</td>
<td>but pluralistic with respect</td>
</tr>
<tr>
<td>perform authentic</td>
<td>to performance.</td>
</tr>
<tr>
<td>lawyering tasks.</td>
<td>4. Contextualizing performance</td>
</tr>
<tr>
<td></td>
<td>and being task- and</td>
</tr>
<tr>
<td></td>
<td>performance-centered.</td>
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<tr>
<td></td>
<td>5. Exposing novice to expert’s</td>
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<tr>
<td></td>
<td>performances and exploring</td>
</tr>
<tr>
<td></td>
<td>exemplars of practice.</td>
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<tr>
<td></td>
<td>7. No magic minimum degree</td>
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<td></td>
<td>of contact.</td>
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As outlined above, the battle-line about the uses of theory is clearly drawn - is theory a commodity, neatly packaged and transferable even to a novice, thereafter readily accessible and routinely applicable to the vast majority of problems in a professional practice? Is the standard view of the legal academy and growing consensus in clinical learning theory accurate? Alternatively, as certain post-modern commentators suggest, is theory the camouflaged code of a secret

210 See, e.g., Chavkin, supra note 21, at 11 (suggesting that “most students learn better from having to work their way initially through a problem without step-by-step guidance”); Ziegler, supra note 33.

211 Meltzer and his co-authors ask this same question using the metaphor of tour guide trying to figure out when to instruct novice bikers in the fine art of bicycle touring. Meltzer et al., supra note 32, at 404-07.

212 A full discussion of the implications of learning style theory on ecological learning is beyond the scope of this article. Nonetheless, it is possible to observe that of the four dominant learning styles, one of them is the get-your-hands-dirty and just-do-it kind of learner. This learner cannot listen to us in the classroom, or watch us in the mock courtroom, or rely on her relationship with her classmate as her dominant method of learning. On the other hand, according to Minna Kotkin, convergers and assimilators are seriously disadvantaged in many simulation and direct client representation settings because they would prefer to start with theory rather than immerse themselves immediately in practice. Diversers will be more successful, but the true beneficiary of the dominant clinical pedagogy is the accommodator for whom the teacher’s emphasis on reflection and abstraction will provide “missing link[s] for her to learn from experience.” Kotkin, supra note 28, at 196.

213 The apprentices’ ability to understand the master’s performance depends not on their possessing the same representation of it, or of the objects it entails, but rather on their engaging in the performance in congruent ways. Similarly, the master’s effectiveness at producing learning is not dependent on her ability to inculcate the student with her own conceptual representations. Rather it depends on her ability to manage effectively a division of participation that provides for growth on the part of the student.
society, invisible to all but the inner circle, and largely irrelevant even to them? Or, as a third option, since positing of bipolar opposites is rarely a useful way to resolve real problems, is there a more complicated and organic role for theory in the replication of expertise?214

According to anti-foundationalist polemic, novices can learn a new professional hermeneutics and hermeneutics only by immersion in the practice of an expert domain. Within a community of expertise, the descriptive theories of the mature practitioner, whose methods and strategies are both informed and constrained by the practice context in which she is situated, are unintelligible to the uninitiated.215

214 This discussion may seem to contradict my earlier article on the uses of theory. Baker, Beyond MacCrate, supra note 1, at 332-48. However, I was not arguing there that theory has no place. Nuanced, non-absolutist theory, derived from a particular historical context and interpreted from a situated perspective, may well have some relativistic and meaningful power to explain, empower, and justify events for people other than the author of the theory. Instead, I was arguing against the deification of Theory, not against its pragmatic utility as a practical resource for resolving many dilemmas. See Blasi, What's Theory For, supra note 31, at 1080-85 (reaching many of the same conclusions).

215 See, e.g., Fish, Fish v. Fiss, supra note 199. For Fish, it is enough to be in one's setting to construct meaning and to perform conventional practice. "To be, as I have put it, 'deeply' inside a context is to be already and always thinking (and perceiving) with and within the norms, standards, definitions, routines, and understood goals that both define and are defined by that context." Id. at 1327-28.

These assumptions and categories that have been internalized in the course of training, a process at the end of which the trainee is not only possessed of but possessed by a knowledge of the ropes, by a tacit knowledge that tell him not so much what to do, but already has him doing it as a condition of perception and even thought.

Id. at 1328 (emphasis in original). Fish loves the sports metaphors of basketball and baseball players who act out the implicit "rules" and knowledge of the how the game is played. These players scoff at the question "What is a good shot?" or "What is a good pitch?" See, e.g., Stanley Fish, Dennis Martinez and the Uses of Theory, 96 YALE L.J. 1773 (1987) reprinted in STANLEY FISH, DOING WHAT COMES NATURALLY, supra note 199, at 372. The answers to these questions, even detailed answers, are nearly unintelligible to the uninitiated and largely superfluous to the adept. A basketball player might understand the deeply nuanced and contextual instruction "Take a good shot" but only because she is so embedded in the practice of basketball that she tacitly knows what a good shot is. Fish v. Fiss, supra, at 1325. Fish acknowledges that fully socialized members of an interpretive community can communicate meaningfully with each other about the general principles which partially capture their collective practice, but doubts that those principles will be at all intelligible to the novice. Besides Fish, a social cognitivist from Duke has also lamented the limited utility of theory by means of a basketball metaphor.

Were a physical scientist to teach a Michael Jordan principles of arc, momentum, and gravity, would his game of basketball improve at all? Or, would deliberation in the effortless execution of unique skills and intuitions? Human social perceivers, like Michael Jordan, are wonders to watch and ponder. They know the social context from the inside-out and we [social scientists] only know it from the outside-in. Costanzo, supra note 197, at 130. Accordingly, theorists (including myself in this article) should proceed cautiously at best in their efforts to "instruct" and "convert" others with theory.

Steven Winter challenges Fish's claims of unreflectivity, the impossibility of theory, and futility of communication. See Steven Winter, Ball Durham and the Uses of Theory, 42

Even more so, the explanations from the Academy, describing instrumentalist skills in an acontextual manner, are bafflingly incomprehensible. Therefore, according to this view, except to learn the importance of creating "theory" for the purpose of explanatory or justificatory discourse, it is not obvious that early exposure to more sophisticated systems of knowledge results in direct transfer of the relevant understandings from the expert to the novice. If this view is correct, each novice can create her own internal systems of coherence, association, and world-building only by being socialized into a community of knowledge through participation in the activities of that community.216

Although this preference for contextual immersion in a practice is undoubtedly correct,217 the theories of others are interpretable resources that may be at least partially understood and employed by others, even by novices.218 Such theories may be part of the established, even canonical, deliberative, explanatory, and justificatory discourse of the domain. The novice will need to discover how to superimpose more expert understandings over her more naive heuristics and over the "theoretical" understandings she may have learned in other cultural or practice settings. Even though experts may not be able to articulate completely accurate descriptive and explanatory theories about how they do what they do, they may nonetheless be able to articulate reasonably reliable theoretical descriptions of what they do and why they do it. For example, when poverty lawyers talk about being client-centered and about eliciting client goals to enhance client

216 See SCHON, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 162; Williams, supra note 91, at 13 (both emphasizing socialization); cf. LAVINE, supra note 97, at 183 (emphasizing that social practice, not theory, informs one's competence in resolving dilemmas); LAVINE & WENGER, supra note 8, at 98.

217 Others have suggested how a contextual gestalt and an expert community of practice might support the socialization of a novice, even in the absence of formal instruction or articulation of rules of practice. See ROOFOFF, supra note 8, at 207 (stressing "guided participation" or "not instruction"). The interpersonal ecology of the workplace supports multiple forms of indirect transfer even in the absence of articulable theory. The most critical factor in the development of expertise appears to be contextualized activity itself. LAVINE, supra note 97, at 182-83. Nonetheless, the degree of our ability to share in the expertise of others, through emulation, collaboration, close supervision, theory building and otherwise, remains an important question in any theory of ecological learning.

218 This is not to say that the novice will not experience difficulty in "hearing" theory, especially if she has not yet had any direct experience of the context from which the theory arises. Of course, this argument supports a thesis that engaging in the authentic dilemmas of a domain is the best way to learn its theories.
empowerment, they are describing theories about what they do and why they want to do it. Despite the predominance of preconscious knowledge, clinical specialists have developed a performance convention of client empowerment, have thematized those patterned experiences, and have articulated some derivative theories that inform and reflect their practice.

In the process, clinicians have discussed their empowerment theories with peers until they share a family of understandings about the common conventions they enact. The articulation of these theories facilitates further communication, collaboration, and collegiality between clinicians; such articulation is also a dialogic resource for interaction with new community members.

Although I have previously argued that theory is overrated and that each of us must interpret and construct our own understanding of anyone else’s theory, this view does not mean that the theories of others are useless resources in confronting novel dilemmas. Expert theory can help novices in at least four ways: (1) it can map the cognitive and performative dimensions of the expert domain; (2) it can describe expert heuristics and metacognitive skills; (3) it can facilitate the transfer of otherwise context-bound skills from one setting or problem to another, and (4) it can introduce the discourse practices of the domain so that the novice may communicate meaningfully with others.

First, in order to jump start their initial performances and to accelerate their process of acculturation, novices need to map the contextual circumstances, cognitive terrain, and canonical conventions of an unfamiliar social practice domain as quickly as possible, especially in cross cultural contexts. The coherent, well-explained theories of the adept practitioner can assist the early “traces” of that map, though the novice’s mental map can in no way be as refined, comprehensive, and subtle as the experience-based neural network of the expert practitioner. Although the novice will still need repeat experience and plenty of it in order for expert theory to “stick,” multiple studies show that the addition of explicit theory does on occasion improve novice problem-solving in analogous circumstances at least in experimental settings.

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225 Blasi, supra note 138, at 378-80. To help contextualize performance, the expert can describe the broader situational context of the immediate problem. The expert can also describe the goal structure of the reasonable dispute-resolution or transaction alternatives for resolving the problem-type. This contextualizing helps the student “clump” the dilemma into a more meaningful and more elongated social practice “event.”

226 Ramsfield, supra note 140 (arguing that discourse and argumentation strategies are culturally specific and that both novices and cultural outsiders will benefit from pedagogies which both map the new domain’s analytical and discourse conventions and which recognize and validate the pre-existing cultural competencies of others). “We must articulate, evoke, and even create analytical paradigms that are accessible to the international and the U.S. student.” Id. at 177.

227 Blasi, supra note 138, at 378. In support of his argument that explicit theory can help novices accelerate their ability to learn from repeat experience, Blasi reports an experiment in chicken sexing. For generations, chicken sexers were taught by long apprenticeship to experienced chicken sexers and learned by comparing their judgments with those of the masters. It was believed that what chicken sexers knew could be learned only in this manner. Then, someone took the time to ask experienced chicken sexers to make explicit the basis of their judgments—what they attended to and what they ignored. It turned out that when this explicit “theory” was given to apprentices chicken sexers, they could become reasonably expert in a relatively short time.

Id. at 377-78. Although mental mapping is in my view mainly a function of pattern emergence and schematization based on repeated experiences, the insights of others can give a preliminary sense of familiarity to a setting that might otherwise be dismally unfamiliar. The theories and narratives of adepts can help to both contextualize and to cognitively what might otherwise be experienced as overwhelmingly chaotic. However, novices literally cannot “hear” detail about that which is too unfamiliar. Accordingly the early sketches of a practice domain should ordinarily be that—sketches—not a full-blown, overly complicated explanation of the deepest principles and most abiding contradictions of the domain.

228 Blasi describes an intriguing series of experiments on the role of explicit theory in what he calls analogue retrieval—the retrieval of useful problem-solving heuristics for the current dilemmas. R]esults demonstrated that providing the solution schema in the form of one prior analog yields results superior to providing an explicit description of the schema, either in prose or in diagrams. . . . When multiple-source analogs and an explanation of the principle were supplied, analogical transfer was significantly increased. Further, these results obtain whether the “theory” of the exemplar is provided by an experimenter or teacher or developed independently by the subjects. When subjects themselves are asked to extract into prose form the content of the source analog, those who decode the “moral” of the story at higher levels of abstraction are more likely to retrieve and apply the solution schema.
Second, the description of expert heuristics (mental rules of thumb) is all the more important when those hard-earned heuristics are vast improvements over more naive lay heuristics the novice might otherwise employ. In this instance, some kind of cognitive confrontation is necessary to enable genuine learning and competent performance. 229 Although the confrontation between lay and expert heuristics might occur implicitly in experience, there is no bar to their being explored explicitly as well. For example, Paul Brest and Linda Kreiger have recently catalogued a number of cognitive heuristics that result in poor professional judgment, e.g., satisfying the availability heuristic, anchoring and adjustment bias, the representativeness heuristic, stereotyping, selective confirmation of working theory, attribution errors, and others. 230 Through planning, metacognition, and exposure to other expert decision aids, e.g., decision-tree analysis, novice lawyers can learn strategies for countering some of these cognitive inefficiencies.

Third, some investigators are optimistic about the ability to train for transfer, subject to constraints. "[T]ransfer effects do not occur spontaneously, and are even difficult to obtain deliberately," given the importance of well-organized domain-specific knowledge and experience. 231 Nonetheless, transfer proponents cite growing evidence that the ability to transfer can be trained through the following methods: (1) increasing metacognitive, or self-monitoring skills; (2) mindful abstraction of skills to be transferred and purposeful reapplication of those same skills; (3) and partial decontextualization of the skills through framing and recontextualization through bridging. 232 Use of metacognitive skills should alert one to the possibility of transfer by making one mindful of its possibility and alert for opportunities. 233 Mindful abstraction of skills is aided when the heuristics of diagnosis, information search, and solution are used over and over again and thereafter reflected upon. 234 The prescription for framing or integration is related to the call for mindful abstraction and involves abstracting one heuristic behavior to a broader problem-solving framework, i.e., recognizing that ends-means thinking can be one form of planning alternative approaches based on a desired outcome. 235 Bridging, on the other hand, involves consciously drawing connections between processes used in a past contextual dilemma and similar processes adaptable to the present context. 236 Bridging may have the most universal application since it relies on the cognitive preference of looking for, creating, and employing analogies. 237

Fourth, novices also need to learn the communicative conventions and discourse practices used by fellow practitioners in order to ask the right questions, to communicate insights, to share experiences, and to solidify group membership. 238 Social experience and performance activity themselves are largely inert. Thus, it takes the involvement of more knowledgeable mentors, elders, and peers to give shared social meaning to otherwise inchoate experience. That involvement is frequently enacted through the medium of language, through "appropriation" of the suggestions, ideas, strategies, and even fully articulated theories of one's intellectual guides. 239 These com-

229 Gardner proposes that specialized, genuine understanding—expertise—can only be purchased through the conscious or unconscious battle between our childlike intuitive understanding and our historically, culturally, and scientifically derived improvements on those intuitions.

Understanding does not and cannot occur unless the relations among different notations and representations come to be appreciated, and unless these formal expressions can be mapped onto more intuitive forms of knowing. At least in most cases, a genuine understanding probably involves some kind of direct confrontation of those [earlier] habits of mind that tend to get in the way of a thoroughgoing understanding.

GARDNER, supra note 15, at 179.

Thomas Kuhn, in his larger-scale account of scientific revolution, uses the concept of anomaly to describe the confrontation between an inadequate paradigm or way of thinking and new experience. "[A]wareness of anomaly opens a period in which conceptual categories are adjusted . . . ." THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 64 (2d ed. 1970).


231 De Corte, supra note 96, at 101.

232 Id. at 102-104. The possibility of mindful abstraction and decontextualization is the most problematic feature of this theory.


234 Id. at 127, citing John Bransford et al., New Approaches to Instruction: Because Wisdom Can't be Told, in SIMILARITY AND ANALOGICAL REASONING 470 (S. Vosniadou & A. Ortony eds., 1989).

235 De Corte, supra note 96, at 104.

236 Id.; see Blasi, supra note 138, at 360-61.

237 Perkins, supra note 233, at 125; Blasi, supra note 138, at 355-61.

238 Drawing on the theory of John M. Swales, Jill Ramsfield emphasizes that members of an expert domain (what she calls a discourse community) have mechanisms of intercommunication between group members and that group members use participatory mechanisms primarily to provide information and feedback to other group members, new and old. Ramsfield, supra note 140, at 165. Lave and Wenger also emphasize the participatory dimensions of communicative practices. "Once we see discourse production as a social and cultural practice, and not as a second-order representation of practice, it becomes clear that it must be configured along with other kinds of work in the overall matrix of performance." LAVE & WENGER, supra note 8, at 22-23.

239 See Neil Mercer, Culture, Context, and Construction of Knowledge in the Classroom, in CONTEXT AND COGNITION: WAYS OF LEARNING AND KNOWING 28, 36-37 (Paul Light & George Butterworth eds., 1993). "The culturally based quality of most learning is represented in the concept of 'appropriation' . . . ." Id. at 36. According to the theory of appropriation, the meaning of an object, an event, an activity, or a context is culturally defined. Therefore, to learn the meaning of any of these, the learner must be assisted some way, by modeling or explanation, in deriving that meaning. Id. Language is a powerful tool to expand the range and depth of communication between social animals and to provide
municative practices may be primarily justificatory, but they still are \textit{the} means of social discourse by which practitioners in a particular field share, memorialize, canonize, and rationalize their field of action. Accordingly, when expert lawyers describe argumentation strategies that they have used in winning appellate arguments, not only are they tracing the elements of performance craft, they are also initiating a dialogue that builds and sustains a community of appellate advocates.

In support of the limited utility of theory (with both a large and small \textit{"it"}), I suggest we have all experienced the feeling when coherence emerges from our experience or when an articulated theory reverberates with our intuition, experience, or conscious understandings, even when we are exploring novel material.\textsuperscript{240} This intellectual resonance with someone else's theory has happened to me at many points in my current research, e.g.: (1) the theory of simplification and integration through multiplicity,\textsuperscript{241} (2) the theory of gestalt coherence and emergence,\textsuperscript{242} (3) the theory of enactivism,\textsuperscript{243} (4) the theory of implicit learning and subconscious efficiencies,\textsuperscript{244} and (5) the theory of authenticity and functionality.\textsuperscript{245} These theories of cognitive experts were important in the evolution and maturation of my understanding, even though I was a relative novice in the field of cognitive science. At the same time, I had fully grounded experience both as an experiential learner and as a clinical practitioner in a law school that maximizes experiential learning. The grounded membrane of my own experience was receptive to the resonant beat of well-articulated theory.

What is true about the use of theory in writing a cross-disciplinary

\begin{footnotesize}

\textsuperscript{240} Here I am arguing that one's own theory can emerge from experience and that someone else's theory may resonate deeply with and thematize our experience. In each instance, theory has a useful function in its own right, but only so long as it is understood to be provisional and constructed rather than fundamental and transcendent.

\textsuperscript{241} In our view, the most interesting relation between subsymbolic emergence and symbolic computation is one of \textit{inclusion}, in which we see symbols as a higher-level description of properties that are ultimately embedded in an underlying distributed system. It is clearly possible to treat such symbolic regularities in their own right, but their status and interpretation is quite different from when we simply take them at face value, as if they were independent of the substratum from which they emerge. VARELA ET AL., supra note 128, at 101.

\textsuperscript{242} Bakes, \textit{Beyond MacCrone}, supra note 1, at 314-16.

\textsuperscript{243} Id. at 295-99.

\textsuperscript{244} Id. at 301-02.

\textsuperscript{245} Id. at 305-06.

\end{footnotesize}

law review article is also true in other forms of practice. A good basketball coach can tell a novice not to let the ball obstruct her vision when she is shooting. A good sushi master can show a novice how to hold and shape the rice so that the grains point in the same direction. An expert biologist can tell a novice technician about theories of gel electrophoresis that will maximize the separation of cell proteins while still maintaining concentrated bands. In each of these examples, theory can be used to assist the novice in the performance of otherwise difficult tasks.\textsuperscript{246}

2. Other Forms of Expert/Novice Interaction.

Having established that expertise exists, that theory can be a helpful, interpretable resource, and that cognitive confrontation between expert and lay heuristics is important, we are now in a position to consider other questions about the optimal forms of scarce supervisory resources. The proposals below for expert/novice interaction are necessarily suggestive rather than prescriptive. Each relationship will be negotiated and renegotiated on its own terms, and the absence of one form of interaction may be more than compensated for by the presence of others. Nonetheless, several strategies for interactions seem particularly important in the replication of expertise: (1) enlisting fully engaged participation by the novice, (2) being directive, but pluralistically so, in offering interpretative guidelines and suggestions for performance, (3) contextualizing performance tasks and being relatively task-centered with respect to the novice's activities, and (4) demonstrating expert performance art and exploring exemplars of practice.

a. Enlisting Participation.

First and foremost, the expert must enlist the student's participation and help make the student feel like a valued member of a team. In order to participate meaningfully and successfully in the practice domain, the novice must have a sense that she fits in, that there is a place for her, that she is needed to perform important work, and that her efforts and products will be valued. People feel most like they fit it when they are treated as a trusted colleague, as a productive member of the community, with whom it is possible to share vital work. The opposite of enlistment is marginalization or alienation, when the practice community and the newcomer interact in such a way that intrapsychic, interpersonal, and institutional barriers prevent or circum-
scribe meaningful participation. Thus, a necessary condition for the effective replication of expertise is that the expert and the novice work side-to-side, in close proximity (metaphorically and psychologically at least), sharing pieces of the same small-scale or large-scale endeavor.247 By facilitating robust and successful participation in the activities of lawyering and by bringing the novice to her side, the expert practitioner creates the psychological, cognitive, and performative circumstances whereby her own expertise will reconfigure the raw resources within the novice and will catalyze identity and skill formation.

b. Directiveness with Pluralism.

Clinicians have frequently expressed the greatest concern over what they call directiveness in supervision, the crass imposition of the supervisor’s knowledge and judgments over the student’s.248 Oddly enough, clinicians use lots of theory—intellectual ordering—in their initial training and in their debriefings with students. Paradoxically, the time when clinicians become most worried about directiveness is during performance itself. Clearly, there are the dangers of what might be called dictatorial imposition, what Condlin has called the argumentative or persuasive mode, of forcing the teacher’s arguments and decisions on the student:249 (1) dictatorial imposition can constrict student’s autonomy, initiative, and sense of efficacy; (2) it can result in servility, alienation, or passivity;250 (3) it can risk imposing out-of-date or wrong-headed conventions and methods; and (4) it can destroy the collaborative relationship and motivation of the student to participate deeply in her own experience.

On the other hand, as discussed in the preceding subsection on theory, the expert has some real, hard-won expertise that is a valuable resource in navigating the problems of a practice domain. What exactly is the point of hiding that expertise and distorting those human resources from the student during her most active struggle

247 Research suggests that understanding between experts and novices is enhanced when the expert and novice establish “common ground” by having established some shared knowledge through working together. Ellen A. Isaacs & Herbert H. Clark, References in Conversation between Experts and Novices, 116 J. EXP. PSYCHOL. 26, 35-36 (1987) (experts and novices conversationally matching landmarks in New York City); see ROGOFF, supra note 8, at 17-18, 209 (emphasizing how children learn through collaboration with adults “facing the same direction”); LAVE & WENGERS, supra note 5, at 104 (To the extent that the community of practice routinely sequesters newcomers...these newcomers are prevented from peripheral participation” both in the sense of meaningful activity and a personal sense of legitimacy.)

248 “A persistent issue for clinicians is the degree to which they should be directive or non-directive in their supervision of clinic students.” Report on the Future of the In-House Clinic, supra note 32, at 564. See Stark et al., supra note 29. The issue of directiveness is intimately related to the issue of when a supervisor should intervene and exercise authority over a student’s mishandling of a case, though here ethical obligations to the actual client may tip the balance. See Campbell, supra note 32, at 677-84; Chavkin, supra note 21; George Critchlow, Professional Responsibility, Student Practice, and the Clinical Teacher’s Duty to Intervene, 26 GONZ. L. REV. 415 (1991). Clinicians’ concerns about being overly directive may be traceable in part to the influence of Carl Rogers’ theory of non-directive therapy. Other theorists of adult education, however, recognize the limits of non-directiveness.

[Despite the widespread and somewhat uncritical acceptance of Rogers’ ideas in adult education, the nondirective approach is not universally welcome, nor is it always appropriate. . . . The non-directive approach has come under challenge . . . where it has been shown to be inappropriate or unacceptable for some clients, especially when they [or autodidactic learners] are seeking direct guidance.]


There appears to be a widespread belief among legal clinicians that intervention by a legal supervisor in the course of client representation will interfere with pedagogical goals of student autonomy and role assumption. Campbell, supra note 32, at 654-55 (“The clinical teacher’s dual role as a teacher and an attorney representing clients...creates a potential conflict...[If] the clinician intervenes [to protect client interests], intervention may deprive the student of the learning associated with doing the work himself and may send the message that students do not need to be responsible and work hard.”); id. at 678.

249 (“According to some clinicians, the ideal situation occurs when the student is solely responsible for client representation...Because they view learning from mistakes and self-discovery as crucial, they believe that clinicians should intervene only when necessary to avoid irreparable harm to the client.”) Critchlow, supra at 416-17. Other clinicians, including Campbell, reject this over-privileging of student autonomy and recommend collaboration or, in the alternative, independent judgment about the forms and degrees of directiveness and intervention, judgments that ultimately depend on the case and the student. Campbell, supra at 679-80. Professor Campbell notes that many clinical supervisors feel they should be more interventionist and directive in response to student writing and during the planning stage of client representation than as to other performances. Id. at 680, 682. Campbell recommends that writing supervisors avoid “imposing their ‘ideal text’ on students.” Id. at 688, though professional discourse may in fact have preferred conventions that must be met and therefore must be communicated to the novice writer, id. at 689.

250 Condlin, Secrets’ New Clothes, supra note 71. Persuasion mode discourse tries to impose a self-interested and largely pre-determined meaning on communication, principally by arguing with others over the authorship of ideas. Using it, speakers conceal their ends and plans for achieving them, attribute meaning to others’ ambiguous statements before investigating those statements fully to determine if the attributions are correct, argue for preferences subliminally and indirectly, suppress strongly felt and hard to articulate but relevant feelings and ideas when raising them would not advance the speakers’ ends, protect others from difficult but necessary topics either by ignoring the topics altogether or by discussing them in euphemistic (i.e. misleading) terms, argue for beliefs in needlessly stylized and overstated ways, and feign agreement to produce illusory consensus when underlying beliefs are the opposite.

Condlin, Learning from Colleagues, supra note 3, at 354. Chavkin too is concerned about the effect of intervention on student autonomy and student learning. Chavkin, supra note 21.

with the dilemma of performance? Would we really want the student to reinvent the wheel on each and every element of practice simply to avoid the alleged risks of dictatorial imposition or to obtain the alleged benefits of "owned" experience? Can we not imagine a collaboration and a dialogue between an expert and a novice in which the expert shares information and expertise with the student in such a way that it empowers a student to act and intensifies the student's sense of engagement? We imagine that client empowerment is possible, even in circumstances of power and knowledge imbalance; moreover, we argue that clients have a right to the expert knowledge of their lawyers. Why would we hide that same expertise from a student who desperately wants to fit in by doing a good job and who wants to emulate and replicate expertise as quickly as possible? Do the goals of maximizing student "ownership" of their learning really require hiding the ball?

Two palliatives to the danger of over-directiveness, to the extent it exists, are to explore shared and disparate assumptions and to undertake pluralistic interpretations of lawyering performances. Any

251 "In those instances where there is a body of skill or knowledge to be mastered, and where the adult learner makes a request to be instructed as a legitimate introduction or shortcut, I can see no reason why the instructor should deny the learner's requests." CANDY, supra note 248, at 89. 252 For images and reports of a respectful, dialogic exchange between experts and a lay community in South Africa, see Lucie E. White, To Learn and Teach: Lessons from Driefontein on Lawyering and Power, 1988 Wisc. L. Rev. 699. Paulo Freire also imagines the possibility of a respectful, empowering dialogue between an expert and the oppressed. PAULO FREIRE, PEDAGOGY OF THE OPRESSED 202 (1970). 253 For alternative visions of clinicians for more subversive, more collaborative, or more empowering theories of lawyering, see e.g., Anthony Alfieri, Reconstructive Poverty Law Practice: Learning Lessons of Client Narrative, 100 Yale L.J. 2107 (1991) (urging poverty lawyers to recognize their clients as savvy, subversive individuals, battling to survive in a hostile world); Stephen Ellmann, Empathy and Approval, 43 Cath. L.J. 991 (1992) (focusing on two aspects of client-centeredness and advocating more use of approval); GERALD P. LOPES, REBELLIOUS LAWYERING (1992) (contrasting "regnant lawyering" with "rebelloius lawyering" wherein lawyers ally or collaborate with poor communities in a collective project which empowers all group members); Paul Tremblay, Rebellious Lawyering, Regnant Lawyering, and Street Level Bureaucracy, 43 Cath. L.J. 947 (1992) (identifying the tension between the triage rescue mission of a particular client and a community's long-term needs); Lucie E. White, Sunday Shoes, supra note 85 ( recounting a welfare hearing and the client reclaiming her story). 254 Robert Dinerstein, Client-Centered Counseling: Reappraisal and Refinement, 32 Ariz. L. Rev. 501, 566-68 (1990). 255 Condlin refers to this type of dialogue as learning mode discourse. Learning mode behavior, as an ideal type, is characterized by curiosity about whether and how others' views could be different, candor and honesty in expressing one's own beliefs, warts and all, and expansive sense of relevance in determining what additional topics might be worthy of investigation, and a refusal to accept personal conviction as a substitute for evidence and analysis in determining what to believe. Learning mode actors make the nature of their ends, their affective reac-

learner faces the problem of discovering her own blind spots and unwarranted assumptions. The problem with such assumptions is not so much that we have them—they are unavoidable given automaticity, subconscious processing, and the transparency of socialization. The problem is to remain ignorant of the effects of our assumptions and presuppositions. It is here that an expert who has struggled to overcome his or her own biases, assumptions, and lay heuristics can be a valuable resource for the novice through her questions, not only by probing her own expert assumptions but the novice's as well.

The expert supervisor is also in a position to help the learner explore pluralistic interpretations of unfolding events. Although the expert may have one perfectly plausible theory about what is happening and what works best, that does not mean that other interpretations, analogies, metaphors, themes, or theories might not be helpful. It is certainly possible, perhaps even likely, that the expert's pet theory is at least partially wrong because of the perceptual transparencies of his or her own subconscious efficiencies. Moreover, as Blasi has pointed out, there are multiple theories that have the power to explain; any particular theory is certain to be under-determinative when applied to a new and messy dilemma. Nonetheless, surveying a range of theories according to need and context is an integral part of expert problem solving. Accordingly, exploring multiple interpretations will generally be preferable to exploring only one. In addition, the supervisor/expert can enhance the learner's pluralistic thinking by

256 See Bargh, supra note 179. 257 Id.; HART, supra note 95, at 193; AIKEN, supra note 23, at 17-18. 258 I have previously emphasized that cognition is pluralistic and interpretive even though it searches for eventual coherence. See Baker, Beyond MacCrate, supra note 1, at 306-310. For a discussion of how to use pluralistic perspectives or "difference analysis" to attack biases, see Kimberly E. O'Leary, Using Difference Analysis to Teach Problem-Solving, 4 CLIN. L. REV. 65 (1997). Campbell distinguishes between directive feedback—telling the student to do it this way—and facilitative feedback that reports confusion as a reader but lets the student figure out appropriate solutions from a range of options. Campbell, supra note 32, at 687-92. 259 "As a general proposition, for any discrete set of phenomena, there may be an indefinitely large number of explanatory theories, answers to questions in the form, 'Why is X?'; Blasi, What's Theory For?, supra note 31, at 1072. 260 See id. 1069-80 (discussing theories of capital flight, bureaucratic disentlement, and postmodern critical theory in application to proposals for a model 'homelessness' camp in Los Angeles).
"reciprocally appropriating" the learner’s interpretations of an event by offering them back in a new form. In this way the novice/learner can expand her interpretative resources and perspectives about that which she already "knows."

c. Contextualizing Performance and Being Task-Centered.

The value of being appropriately directive is intimately connected with the value of contextualizing performance and being task-centered with respect to performance. Even before being directive with respect to performance activities, the expert can contextualize the student’s performance through several strategies. Initially, the expert can provide contextual information about salient features of the problem-space and of the dilemma the novice and expert face together and help draw connections between the present dilemma and the past experiences of the novice. Whereas the novice may be overwhelmed by both the foreground and the background of a novel situation, the expert is acutely aware of the most important features of the contextual landscape, is alert to hidden clues, and is attentive to deep structures that the novice might miss. Although the expert will not be able to telepathically transmit her patterned understanding to the novice, she will be able to direct the novice’s attention so as to intensify his or her perceptual and cognitive acuity. After contextualizing the problem space and after selecting an assigned activity, the expert can further contextualize the student’s performance by describing its place in the total representation of the client, by identifying ultimate goals, and thereafter by establishing the performance criteria to be employed in judging its competence.

260 Reciprocal appropriation occurs when "one person takes up another person's remarks [or performances] and offers it back, modified, into the discourse. . . . [This offers] a recontextualized version of their [the students'] own activities which implicitly carried with it new cultural meanings." Mercier, supra note 239, at 37.

262 In recent studies of children’s ability to perform certain computational tasks, performances of children from all social classes, and particularly the performance of working class children, improved dramatically as the contextual instructions were made explicit. Antonio Rouzzi & Peter Bryant, Social Class, Context and Cognitive Development, in CONTEXT AND COGNITION: WAYS OF LEARNING AND KNOWING 14, 25 (Paul Light & George Butterworth eds., 1993); Herbert H. Clark & Richard J. Gerrig, On the Pretext Theory of irony, 113 J. Exp. PSYCHOL. 121, 124 (1984) (establishing the more general proposition that establishing contextual common ground or a frame of reference is a prerequisite to effective communication).


264 See supra notes 144-77 and accompanying text.

265 Alexander & Smith, supra note 63, at 212-14. Generally, high standards are preferable to low standards. Cole, supra note 52, at 166 n.10.

In addition to contextualizing assignments, the expert can help replicate expertise by being explicitly task-centered in several senses. First, for the student to feel accepted in the workplace and to be treated as a valued colleague, the student should be kept busy and be given plenty of meaningful work to do. Second, while keeping the student busy, the workplace supervisor should assign work that is challenging but doable, work that is neither too simple nor too difficult, work that is at the fringe of the student’s comfort zone—in the “zone of proximal development”—where real learning is likely to take place. For most students, based on their first year of law school, their initial comfort zone is limited to research and writing, but it quickly expands to other less familiar and more complicated areas. Third, to assist the student in her effort to perform competently at the edge of her comfort zone, the supervisor should not “hide the ball.” The expert should be explicit about the goals and competencies of the task assigned and should also give explicit practice suggestions, including resources to explore and shortcuts to take. During this whole process of task supervision, the supervisor should provide multiple and collaborative forms of “scaffolding” that help support perform-
Although this advice blends with the advice to be directive, it emphasizes that helpful guidance and support comes in many forms some more directional than others. Fourth, assuming that it is rarely possible to anticipate the contours of a problem space nor to anticipate all the twists and turns performance might take, the supervisor should be available to clarify assignments and advice as needed. When a student does not know how to conduct necessary research or understand which additional provisions are necessary to protect a purchaser of real estate, she needs access to her supervisor or to other forms of workplace expertise to proceed efficiently with her task.

More than requiring focus on particular tasks, task centeredness also requires the supervisor to think about how to stage a series of assignments. Because the development of expertise is dependent on the accretion and cross-referencing of multiple similar experiences, students should be given several opportunities to complete similar tasks with increasing efficiency and competence. On the other hand, by posing an increasingly challenging sequence of tasks, tasks that require a bit of a stretch, the expert can help to expand the novice’s current abilities and to promote her to the next higher stage of performance. In addition to attending to a sequence that deepens and expands skills, however, the supervisor can think about a set of assignments that broadens exposure. To develop a rich sense of participation in the full spectrum of domain activities, the student should be given a variety of assignments and other kinds of exposures to the breadth of performance craft. By exposing the student to increasingly complex, increasingly broad, and increasingly central lawyering performances, the expert intensifies participation, identity, and competence. By being task-focused in all these ways, the supervisor

maximizes the possibilities of positive and successful engagement with each particular assignment and solidifies the novice’s membership in the community of practice.

d. Modeling Performance and Exploring Exemplars of Practice.

Clearly, exposition of expert theory in reified form, directly or non-directively, dogmatically or pragmatically, is not the only, or even the best, way to replicate expertise. Likewise, the novice’s task-centered performance, no matter how well guided, is too thin to catalyze replication by itself. Thus, rather than transmitting expertise through theory and propositional discourse or leaving the novice entirely to the lessons of her own tasks, the expert can display her own understandings and performances and explore her own exemplars of practice so as to guide the novice’s quest for competence. As clinical theory already suggests, the expert can model performances for the student so that the student might employ her emulation skills. Novice practitioners frequently gain expertise through exposure to the performances of others, to the concrete craft of a problem solved, where the paradigmatic methodologies of the domain are enacted. Accordingly, novices should observe experts in action and directly experience the strengths and weaknesses of their performance, thereby collecting a memorable schema base of craft. Therefore, whenever possible within the performance demands of assigned tasks, the expert should create opportunities for the novice to second chair a trial, to attend a deposition, to sit in on a settlement conference, or to watch a client counseling session. Afterwards, students can emulate or reject those performances as appropriate and begin to derive functional themes of performance art.

270 Aids to learning in a practice domain, by assignment, demonstration, or verbal instruction and suggestions are called scaffolds. The need for scaffolding and the type of scaffolding change over time in response to the learner's internalization of the relevant competencies of practice. See CANDY, supra note 248, at 359-60.

271 Having opportunities to receive clarification on work assignments was one of the two most significant workplace variables in our study of co-ops as learning experiences. Givelber et al., supra note 1, at 41-42.

272 “Apprenticeships of any length and complexity typically feature landmarks of growth. Explicit problems or assignments will be posed at various levels of competence, to make sure that the apprentice has learned the requisite skills and that he is ready to move on to the next, more advanced rung on that ladder.” GARDNER, supra note 15, at 122.

273 In general, “Complex skills are built up by complex activities.” CHIKSEZMTHALY, supra note 268, at 170.

274 To complete their socialization, novices should be exposed to increasingly robust, diverse, and central activities of a community of practice. “[T]here are multiple, varied, more- or less-engaged and -inclusive ways of being located in the fields of participation defined by a community. . . Changing locations and perspectives are part of actors’ learning trajectories, developing identities, and forms of memberships.” LAVE & WENGER.

275 See discussion of role-modeling, notes 40-44 and accompanying text, supra. “The apprentice’s ability to understand the master’s performance depends not on their possessing the same representation of it, or of the objects it entails, but rather on their engaging in the performance in congruent ways.” LAVE & WENGER, supra note 8, at 21. Working with data from Bryant Garth and Joanne Martin, Givelber and his co-authors, have reported that, after learning from repeat experience (26.2% of all learning), learning through emulation and guidance of one’s colleagues was the second most important source of learning (25.3%). The general law school curriculum was third at 14.3% and part-time work during law school was a close fourth at 11.9%. Givelber et al., supra note 1, at 17.

276 “Entering the world of practice as a participant affords the novice an observation lookout post . . . .” LAVE & WENGER, supra note 8, at 95.

277 See KUHN, supra note 229, at 23-42; ROGOFF, supra note 8, at 207.

278 Although Caplow acknowledged that she learned a lot from the feedback of colleagues and de facto supervisors, she also asserted that “I absorbed a lot from them mostly through osmosis and alert observational skills rather than any intentional teaching on their part.” Caplow, supra note 11, at 42.
Moreover, during such vicarious collaboration with novices, experts can discuss their own problem diagnoses and performance choices. While working on real problems, students can compare their impoverished diagnosis of the problem with the more mature diagnosis of their supervisors and co-workers. Fortunately for the novice, but within the limits of articulating theory discussed earlier, experts are ordinarily able to provide coherent if incomplete explanations for their unfolding diagnosis. Thus, not only will the student's naive diagnosis be implicitly challenged but there is a high probability that the supervisor will be able to explain her more sophisticated interpretations(s) of the problem. Finally, as part of her modeling, the expert can share her self-monitoring skills, her reflection-in-action. Although it is highly unlikely that exposure to expertise will directly accelerate familiarity and automaticity in legal novices, exposure to metacognitive skills can both provide guidance for the student on her particular assignments and model a process of self-awareness that the student might emulate.

Given the cognitive primacy of exemplar, even vicarious ones, the expert can also recount her exemplars, encapsulated theory, and stories of her craft as basic level sources of analogy and guidance in future problems. These exemplary performances, past and present, utilize easily comprehensible narrative structures that are meaningful for the novice in his or her analogical and metaphorical processes. Rather than consider practice exemplars as boring war-stories, the expert and the novice should consider them as a treasure-trove of insight. In order for the exemplar to yield its highest measure of meaning(s), however, the expert must continue to reflect plurally after-the-fact to seek evolving coherence. This very process of pluralizing and thematizing her experience will be an important model for the student about how to investigate the lessons latent in experience.

279 Farber, supra note 138, at 556, 558. Note that a coherent explanation does not necessarily mean that it is cognitively accurate or substantively correct.

280 SCHÖN, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 101-02, 163-64 (emphasizing the importance of reciprocal reflection-in-action).

281 Practice exemplars are basic level event categories, the directly experienced activities of a practice domain. Because they have functional significance for subsequent performances and because their narrative structures are easily remembered, they are the primary resources for future engagements. See Baker, Beyond MacCratie, supra note 1, at 312 n.98, 314 n.106, and 340-43.

282 Blasi, supra note 138, at 337; "[Stories] play a major role in decision making in apprenticeship." LAVE & WENGERT, supra note 8, at 108. "For apprenticeship learning is supported by conversations and stories about problematic and especially difficult cases."

ld. "These stories, then, are packages of situated knowledge. . . ." ld.


In the ecologist's view, unlike clinicians', the most important location of supervisory interaction is time-referenced, during performance itself when the elusive structure of the field of action and the engagement of a task to be performed most captivates the supervisee's intentions. Unfortunately, the time that clinicians choose to withhold their expertise and storehouse of practice theories is most frequently during the student's performance— exactly the wrong choice in my estimation. It is at this moment of action, that the broadest array of resources—exemplars, narratives, generative metaphors, theoretical themes, canonical rules, conventional approaches—are likely to be brought forth and, more importantly, most likely to be used on the dilemma as it actually occurs. Because the supervisor, clinical or practice-based, has an important set of specialized social-practice tools at her disposal, she should share with the novice at the most opportune time of talking-to-the-situation. Empirical research confirms that the ability to obtain clarification on assignments is positively corre-

283 "Students sometimes look to the teacher for the knowledge they feel they need at any moment. They view the teacher primarily as a repository of information to be tapped, an authority to be consulted, in the process of getting a task done." Shalleck, supra note 3, at 161. Although Shalleck and others lament this dependency, I interpret it as a message of reciprocity requiring a response. Some clinicians fear supervision-in-action as an affront to student's autonomy, as inherently coercive, or as a cause of mimicry and subservience. Certainly, this fear has some basis with some supervisors and some students. Nonetheless, the student who lacks self-confidence about a way of getting started is going to rely on some practice-referent as the basis for performance. Maybe it will be a practice formbook, or a prototype from a file, or a television image of Gregory Peck in TO KILL A MOCKINGBIRD. The point is that novices need scaffolding and will construct it out of sub-optimal materials if we do not authentically share our own expertise as one of the resources that they might utilize.

284 SCHÖN has developed a highly detailed theory of supervision-as-coaching where the supervisor uses a repertoire of questions, demonstrations, instructions, advice, and criticism to facilitate the learner's development. SCHÖN, EDUCATING THE REFLECTIVE PRACTITIONER, supra note 40, at 100-18, 163-66. Although I disagree with Schön's over-commitment to an educational dialogue, I do think he puts the dialogue and demonstration in the right place—in action. "Whatever the coach may choose to say, it is important that he say it, for the most part, in the context of the student's doing." ld. at 102. The student listens to the coach "with operative attention—that is, with a special readiness to translate what she hears into action. . . ." ld. at 103. "The clarification of intended meanings and the discovery and resolution of incongruities between instructor's intentions and students' understandings are best achieved through [immediate] action." ld. at 161.

In lawyering, performances frequently stretch over a considerable period of time so there may be multiple opportunities for supervisory interaction. In certain public performances, on the other hand, the moments of performance are brief and the opportunity for supervisory interaction nonexistent, e.g., a supervisor is not going to be able to collaborate, problem-solve, and theorize with a novice before each question in cross-examination. Accordingly, there are some practical constraints on the advice to supervise-in-action.
lated with learning on the job. Accordingly, guidance/supervision-in-action is the kind of supervision most likely to enhance ecological learning of practice skills.

This is not to say that supervisory dialogue, aimed at preparation, planning, and frame setting in advance, and at deconstruction, reconstruction, and justification after-the-fact, are not important. Both are natural and inevitable—they are part of the obligatory practice performances within most deliberative domains. Planning, and collaboration during planning, is vitally important in complex performances, in fact planning is in a very real sense a form of guidance-in-action and of reflection-before-the-fact. Such planning may involve: (1) indexing plans by the goals they satisfy; (2) using observed successful experiential effects rather than abstract rules to predict outcomes; (3) using observed experiential failures to warn about impending problems; and (4) using memories of past repairs to recalibrate present plans and their experimental implementation. Many practitioners share their planning with others as a way of gaining perspective and reactions to their approach and for exploration of alternatives.

Despite emphasizing the primacy of guidance/supervision-in-action, guidance-after-the-fact is important as well. The explanations that a student articulates after-the-fact can take on a life of their own and become "the real reasons for subsequent decisions." Therefore, it is imperative to treat the student's explanations seriously and to help the student compose explanations that will actually be useful in the future. For example, suppose a student leaves a jury trial and says, "Well, no more ditzy blondes on my juries." Not only is this view a gender biased one that one may have a moral obligation to address, it is also a theory about how the jury trial was lost—a theory of cause and effect. The time to confront the possible future application of this theory most seriously is immediately after its articulation.

4. Degree or Intensity of Guidance/Supervision.

At one extreme, supervision can be seen as ten percent performance and ninety percent guided reflection. Each moment of performance—each sentence in a brief—or each question to a client—becomes the moment of deconstruction of a lifetime of understanding. At the other extreme, guidance/supervision is an occasional word, a raised eyebrow, or the curt instruction "do it again." This feedback is minimalist and the student's appreciation of such stark signs may consist only of the unreflective absorption of the stories, performances, and way of life of the contextual system in which she is operating. Somehow we have to develop a homeostatic calibration of supervision so that the novice obtains the amount of guidance minimally necessary to support learning, a positive self-image, and competent performance.

However, in a theory of social learning, one of the most important principles to remember is the multiple environmental supports, personal relationships, and information resources that guide a novice in her fledgling performances. In addition to direct interaction with an expert supervisor, there are multiple environmental clues, implicit and explicit, which give the novice feedback about her performance. Thus, the novice is not reliant solely on direct supervision that flows from a single repository of expertise. Accordingly, depending on the appropriate degree of guidance/supervision take on a surreal quality to the extent they ignore all ecological interactions except those with the supervisor/expert.

Even so, in an ideal world, novices would probably have individual experts assigned to their acculturation, much as they have historically had parents, usually mothers, assigned to their earliest social participation. In that same ideal world, law students would have a full professor as a personal tutor during law school. The ideal is not going to happen; but fortunately the ideal is not necessary. There is frequently too much information and too much structural ambiguity for the novice to handle rather than too little. There is so much to learn from participation, experience, and observation that a highest-level reflective tutorial might well result in cognitive overload. This is not to denigrate the positive effects that appropriate reflective interactions with an expert can produce. But it is to say that authentic though limited forms of guidance in the workplace are probably sufficient for most students to get a great deal out of their work activities. Fortunately, this question is ultimately susceptible to empirical verifi-

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285 Givelber et al., supra note 1, at 41-42.
286 See Hammond, supra note 155, at 390-91.
288 For a description of a particularly, "heavy" form of supervision aimed towards self-reflection, see Ziegler, supra note 33. Ziegler describes frequent meetings, "constant interactions," open questions, Socratic dialogue, individual conferences, learning contracts, and case presentations. Id. at 583-90.
289 "Everything... is a microcosm or specimen to be examined..." Tarr, supra note 33, at 971.
290 "To take a decentered view of master-apprentice relations leads to an understanding that mastery resides not in the master but in the organization of the community of practice of which the master is a part." Lave & Wenger, supra note 8, at 94. Our previous empirical studies of students' coop experiences at Northeastern found that the quality and quantity of supervision were not statistically relevant in a multi-regression analysis of students' assessment of learning on the job. Givelber et al., supra note 1, at 41-42.
cation and preliminary studies suggest that students do learn robustly on the job.291

V. CONCLUSION

A. Implications of A Theory of Guided Participation For Clinicians’ Practice and Student Preparation

Although much of this article focuses on differences between a theory of guided participation and current clinical theory, in fact there is a great deal of overlap. Clinicians by and large do practice collaboratively with their students and work hard to establish a positive pedagogical and practice-based alliance with their students during which they nurture and mentor their development. In the course of that collaboration, clinicians role model various lawyering activities and offer their own personhood as models of professional identity. More often that not, clinicians give their advice and guidance when asked, although they might tease the student to be more self-reliant and to seek additional sources of information and expertise first. Clinicians also emphasize planning and offer expert heuristics and advanced theories of lawyering that confront students’ naive strategies for tackling legal tasks. Moreover, clinicians encourage their students to be deeply engaged with their practice, not only when they perform, but afterwards during exploratory dialogue, feedback, and guided reflection. My theory would be sorely misunderstood if it were interpreted as a strong criticism of current clinical practice or if it were interpreted to suggest that there is not value added by the tutelage of clinicians.

However, a theory of guided participation does suggest that there may be a certain imbalance in current clinical theory, even if that imbalance is less pronounced in clinical practice. The theory suggests that mainstream, in-house clinicians should be more tolerant about the learning potential in externship programs and in students’ ubiquitous experience of working part-time during law school. In addition, the theory has important implications for how clinicians might revise both their theory and their practice, at least at the margins.292 Thus, I offer my last two charts on implications of a theory of guided participation for the practice of clinicians and for the way they prepare students to participate in clinics and in externships. I will try to be as concrete as possible, based on the assumption that specific strategies might ultimately be more useful than grand abstractions.

CHART 5

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<tr>
<th>IMPLICATIONS OF A THEORY OF ECOLOGICAL LEARNING FOR CLINICIANS’ PRACTICE</th>
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<tbody>
<tr>
<td>1. Encourage students to join a practice not to enter a proving ground. The standard of solo representation and of self-reliance is not necessarily conducive to learning.</td>
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<tr>
<td>2. Be alert to barriers to participation: internal, interpersonal, and institutional. If the value of practice-based education rests primarily on intense commitment to one’s own participation, then self-doubt, passivity, and withdrawal must be challenged as must hierarchy and other systems of exclusion.</td>
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<tr>
<td>3. “Less talk, more action.” In general, when given a choice between assigning more work or engaging in more “education” talk, choose work. Because students feel valued when they are given important work to do, it is important to keep students busy. In general, full time placements and high credit-hour programs are preferable to part-time and low credit-hour programs.</td>
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<td>4. Create multiple opportunities for side-to-side collaboration. If it is true that interaction with peers is crucial to social learning, then clinicians should provide many opportunities for collaboration with peers, including “team assignments,” “grand rounds,” and other informal means of peer discussion and feedback.</td>
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<td>5. Create a co-participatory alliance with students. Clinicians should be perceived by students as fully engaged in practice: as being as much at risk as students are and as being senior collaborators. Although there is no ideal case type for clinical practice, there may be advantages to occasional work on more complex cases where the supervising and student share tasks and collaborate in total representation of a client.</td>
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<td>6. Put your own performance on the line. Both for purposes of role modeling and to create occasions to explore and theorize examples of practice, clinicians should expose students to their own performance both indirectly and directly.</td>
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<td>7. Contextualize performance. As experts with years of experience, clinicians are sensitive to contextual variables in a way that students are not. Accordingly, clinicians should point out landmarks and hidden features that structure the problem space, e.g., bureaucratic conventions, ethical dilemmas, and the like.</td>
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<td>8. Be task-focused. If students’ sense of engagement and opportunities for accreditation are largely dependent on opportunities for successful completion of lawyering tasks, then assign work in their zone of proximal development, provide easy avenues of clarification, and be attentive to the sequence of assignments.</td>
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<td>9. Don’t be shy, give advice and plenty of it. Rather than be non-directive at or near the time of performance, clinicians should offer multiple forms of guidance, support, and advice, so that it is more important when the student is in the throes of a dilemma. In particular, clinicians should offer their expert heuristics as a challenge to students’ native strategies, but should do so pluralistically.</td>
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<td>10. Broaden and deepen students’ exposure. Developing expertise requires intensive participation in particular lawyering contexts, but it also requires broad exposure to the wider dimensions of practice. Accordingly, it may be particularly valuable for students to have several opportunities for clinical placements and/or for legal work during law school.</td>
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<tr>
<td>11. Create explicit bridges for the transfer of skills. Given the situational “gape” of students’ practice experience and given the general difficulty in transferring skills and strategies from one context to another, clinicians should remain alert for opportunities to connect students’ experiences and to articulate heuristics which might help solve analogous dilemmas in practice.</td>
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291 Givelber et al., supra note 1, at 24-27 (reporting that 76.8% of students rated their learning experience as 6 or higher on a scale of 1-10, that 54.3% of students thought their skills improved, and 85% found that the work assigned was commensurate with their skills. |

292 Despite emphasizing participation and a broader spectrum of interpersonal and contextual resources for learning, I am not arguing that there is no added value in the things that clinical supervisors do. It may well be that supervisory dialogue, supervisory feedback, guided self-reflection, and critique of legal culture all contribute to intensifying student learning. However, to the extent that such focuses detract from opportunities for more practice, to the extent that they convince clinicians to take a less collaborative and less task-focused role, to the extent that they cause clinicians to devalue participatory, la-
CHART 6

IMPLICATIONS OF A THEORY OF ECOLOGICAL LEARNING ON PREPARING STUDENTS TO PARTICIPATE

1. Encourage students to participate in practice wholeheartedly. Students can not afford to be timid in their commitment to their practice opportunities. They must be motivated to participate enthusiastically and energetically.

2. Encourage students to be alert to internal and external barriers to participation. If the value of practical experience rests primarily on intense participation, then self-doubt, passivity, and withdrawal must be recognized and overcome. Similarly, interpersonal dynamics and institutional patterns that frustrate students' attempts to participate robustly in the practice setting should be resisted and confronted.

3. Encourage students to seek assignments. Students feel valued when they have important work to do and are kept busy. Students should take initiative in seeking work opportunities, particularly opportunities that challenge them and broaden their exposures.

4. Encourage students to seek clarification. Students must become comfortable seeking clarification on their tasks, rather than spending too much time spinning their wheels. It's okay not to know how to do something; it's not okay to avoid seeking guidance.

5. Encourage students to seek opportunities for side-to-side collaboration. Because interaction with peers is crucial to social learning, students should seek opportunities for collaboration with peers. Likewise, students should seek collaborative opportunities with senior practitioners.

6. Encourage students to seek opportunities to observe expert performances. To increase students' opportunities for emulation and exploration of vicarious practice experiences, students should try to observe the expert performances of senior colleagues.

7. Encourage students to question authority. If there are significant dangers of acculturation to unstandardized forms of practice, of habituation to unethical conduct, and of unquestioning acceptance of oppressive legal culture, then students should be encouraged to adopt a critical stance and to remain vigilant during their practice-based experiences. In addition to questioning authority and standard procedures at work, students should have opportunities to discuss these issues at school with peers and faculty.

Under the view of ecological learning presented in this article, there are certain affordances within a social practice setting that structure participation and enable successful performance. Recognition of and response to these situational opportunities and constraints permit the novice practitioner to navigate contextually and to employ interpersonal resources to accomplish identified tasks. Ultimately, it is the people in the workplace who facilitate the novice's growth in skills and identity, occasionally by their conscious instruction, but much more commonly by enabling broader and deeper forms of participation in the authentic activities of the domain. It is not supervisory theory, talk, and reflection but rather guided participation that is the great teacher. Under normal conditions that encourage increasing degrees of participation, the interpersonal ecology of practice is rich enough, diverse enough, and robust enough to support the learning of most, if not all, of our students. Accordingly, the clinician's main tasks are to intensify and guide participation as outlined above.

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29A See Baker, supra note 12.
29B See Mayer's extensive discussion of case supervised externship programs, supra note 32, at 540-55.
29C Robert F. Seibel & Linda H. Morton, Field Placement Programs: Practices, Problems, and Possibilities, 2 CLIN. L. REV. 413 (1995) (reporting that sixty-nine percent of externships currently have a classroom component and stating "We have no doubt that classroom components can enhance students' experience in externships." Id. at 429); Morton, supra note 128, at 28-36 (reporting ABA efforts to require and regulate the classroom components of externship programs); see Tarr, supra note 200, at 39 (commenting favorably on increased rigor in externship programs in the form of classroom components, site visits, learning contracts, etc.).
29D Cole, supra note 52, at 165-70 (focusing on law professors training supervisors).
29E Professor Stickgold completes his telling critique of externship methodologies with a set of prescriptions. First, he advocates that a highly involved "committee" consisting of academics and practitioners micro-manage the planning of the externship program and that faculty go on site visits and review student work. Stickgold, supra note 93, at 319-23. Second, he recommends a division of teaching and supervisory responsibilities between lawyer and professor. Id. at 323-26. Even within this division, however, he requires that field supervisors be involved in the classroom component. Finally, he urges "better preparation and training of supervisors in the 'art' of supervision." Id. at 324.
tions have been imposed on externships during a period of increasing regulatory pressure, an imposition explicitly ratified by The MacCracke Report.

In tandem with this regulatory context, the dominant ideology of clinical educators clearly favors in-house clinics over externships. This ideology valorizes supervisory alliances that clinicians forge with students as being educational, not merely instrumental. These alliances permit students to role-play, talk, theorize, and reflect, the harmonious mantras of clinical learning theory. Although Condlan and occasional others do not join in favoring in-house clinics over externship, even he recommends that clinicians play a heavy role in teaching students how to communicate better and how to reflect critically on their experiences.

If the regulators and skeptics are right, then law schools should discourage students from wasting their time and effort on raw experience, except in live-client clinics or heavily supervised externships where they receive exemplary supervision from and/or masterful dialogue with law-school educators. If the critics and regulators are wrong, however, if I and others are correct that contextual immersion and guided participation in the interpersonal ecology of a workplace can greatly facilitate a novice’s entry into a community of expertise, then the excessive control of school-based educators should be challenged.

Instead of focusing exclusively on classroom teaching and in-house supervision and instead of regulating ecological learning to death, legal educators should validate, even celebrate, the educational merits of the myriad, practice-based experiences currently undertaken by our law students. One can hope that a more fully articulated theory of ecological learning might reduce the long-standing concerns of skeptics and rehabilitate our appreciation of learning-on-the-job so that student experience in a practice setting can come to have a more legitimate role in learning the profession.

Real people go to law school—people with personal histories and aspirations to be lawyers and predispositions for active, engaged learning. Real people work as legal workers—people who have sought some measure of self-realization through a career in the legal system. Real people are legal experts—lawyers and judges who have acquired their expertise through a long process of immersion in and struggle with the authentic dilemmas of their domain. The real people who are students in law school are demonstrably eager to experience the role of a lawyer and to encounter the real people who have made a career of legal work—they flock to part-time work, summer internships, and externships. By all reports, they are particularly anxious to meet the senior members of their profession and to be exposed to their expertise. At present, students’ subsidiary goal that this work experience be validated is being compromised or rebuffed by negative pedagogical assumptions within the legal academy—admittedly, legal educators, drawing on The MacCracke Report, could continue to ignore, devalue, and ultimately discourage students’ practice-based learning opportunities during law school—to widen the gap—relying on the theory that if educators do not see or hear or control the learning then learning is not taking place. They could continue to see instruction, theory, educational dialogue, and reflection as the only true sources of learning and relegate context, experience, participation, and connection to the unclean category of mere practice.

I began this article with personal memories of learning to fish by fishing, side-by-side, with my father and brother. Those memories of being intensely engaged in a practice of fish, bait, and hook, aided by the expert hand of my father and the collegiality of my brother are
exemplars for my theory of ecological learning. The practice of fishing, like the practice of lawyering, is learned best in its natural ecology where the activities are authentic and where the support is spontaneous, usually well timed, and often well-matched to need. Through the cycles of ecological interchange, expertise is replicated from one generation to the next in the natural rhythms of everyday events. The ebb and flow of ecological learning, as steady as the tides, ultimately narrows the gap between learning and doing, between school and practice.

Rather than making law school an island from practice, legal educators and practitioners could construct an educational continuum that truly narrows the gap, where law school events and practice events flow together, even during law school. To do so, legal educators must have a more modest understanding of our influence and abilities and a more trusting understanding of the cognitive abilities and learning potential of our students under the practice-based guidance of expert practitioners and peers. If we learn to value other sources of learning, we might reach across the gap we have constructed and convince students to share their learning with us and thereby enrich our own practice as gatekeepers to a profession.