COMING OF AGE: RECOGNIZING THE IMPORTANCE OF INTERDISCIPLINARY EDUCATION IN LAW PRACTICE

Janet Weinstein*

Abstract: This Article proposes that lawyers need to be creative problem solvers if they are truly to serve the needs of their clients. The ability to collaborate with professionals from other disciplines is an important aspect of creative problem solving. The Article examines the skills required for creative problem solving and law students' and attorneys' facility with these skills. The Article further discusses the barriers to providing interdisciplinary training in law schools and suggests ways to incorporate such training.

"A profession, like an individual, has come of age when it has developed capacity for interdependent relationships, notable qualities of which are readiness to give and take without anxiety and without need to dominate or to suffer loss of identity."1

I. INTRODUCTION

In an increasingly complex world, lawyers will need to expand their traditional approaches to problem solving if they are to be of real service to their clients. The role of law schools will be to train new lawyers to be creative problem solvers.2 This Article examines the role of interdisciplinary education in that training.

Courses in client counseling and mediation have long recognized that people are not one-dimensional and neither are their problems. When

* Professor of Law, California Western School of Law.


2. One example of the recognition of the need for law schools to broaden their training is reflected in California Western School of Law's mission statement, which reads, in part:

California Western School of Law is committed to using the law to solve human and societal problems. Our mission is to train ethical, competent and compassionate lawyers, representative of our diverse society, who can use the law effectively and creatively. We recognize that, in the twenty-first century, the rapid rate of change will accelerate and create further problems. We also recognize the pervasive perception, and partial reality, that the legal system and lawyers have helped to create, rather than solve, the problems our evolving society confronts.

While continuing to graduate lawyers well-equipped to practice law, we also seek to graduate creative problem solvers committed to the improvement of our legal system and society. Our graduates will not merely react to problems, but will anticipate them and be ready to devise innovative and responsible solutions to serve the needs of their clients and the broader community.

teaching these courses, law professors emphasize non-legal concerns that clients may have. We hope to convey to our students that all aspects of a problem influence each other and that attempting to deal solely with the “legal” aspect is a “band-aid” approach to problem solving. This lesson is often difficult for students to absorb in the context of an education that is otherwise one-dimensional. We tend to view clients’ problems from a traditional “rights” focus. We may be blinded to the other dimensions of the situation or other approaches for resolution.

Society cannot expect lawyers to have the knowledge or skills that would allow them to identify each aspect of, and certainly not solve, problems from a multi-dimensional perspective. However, it can expect lawyers to know how to work with people who together have the knowledge and skills required to assist a client in this way. This Article is about what that entails, the barriers to achieving it, and some possible solutions.

The first task is to define or describe creative problem solving. The second task is to answer the question: What is the role of a lawyer in creative problem solving? Should lawyers solve only what would traditionally be called “legal” problems? Or, can and should the lawyer’s role be something more? 3

Following a discussion of the lawyer’s role and the role of interdisciplinary work in creative problem solving, this Article looks at barriers that currently inhibit effective interdisciplinary work and training. These include the cultural differences between professions, the lack of training in essential skills, the ecological effects of legal education and practice, and possible personality issues that may contradict the skills required for interdisciplinary work. This Article then explains what interdisciplinary education is, describes one model developed in California Western’s Interdisciplinary Training Program in Child Abuse and Neglect, 4 and discusses deterrents to providing this kind

3. See, e.g., Thomas D. Barton, Creative Problem Solving: Purpose, Meaning, and Values, 34 Cal. W. L. Rev. 273, 274 (1998). (“Conceiving the lawyer as creative problem solver is an attempt to expand and refine the repertoire of procedures and skills for resolving legal problems, so that those problems will be resolved more efficaciously and respectfully of human relationships.”) (emphasis added).

4. In 1988, California Western School of Law joined with the School of Social Work and the Graduate Psychology Program, San Diego State University; the Center for Child Protection, Children’s Hospital; and the School of Medicine, University of California at San Diego, in a program to train graduate students for interdisciplinary work in child maltreatment in response to a call for proposals by the National Center on Child Abuse and Neglect. The discussion in Part IV of
of training. This Article concludes with some suggestions for providing interdisciplinary training in law school as part of a creative problem solving curriculum.

II. CREATIVE PROBLEM SOLVING: THE ROLE OF THE LAWYER AND INTERDISCIPLINARY WORK

A. What Is Creative Problem Solving?

It may be that attempts to define creative problem solving must paradoxically fail—that once confined to a definition, the concept no longer permits creativity. It conveys a sense of doing something new, fresh, original, “out of the box.” For lawyers, creative problem solving might mean looking at problems in new ways—different from the traditional classification of problems into legal categories such as torts and contracts—and looking for new solutions that might stretch beyond the traditional boundaries of what lawyers do.

One way to talk about creative problem solving is to consider its possible components, or see it as a process that involves certain steps. Models taking this approach may be linear or non-linear, but few have focused on the work lawyers do. Such models provide useful categories of consideration for undertaking problem solving. Just how much they can lend to creativity is questionable.

Others offer more philosophical conceptualizations of creative problem solving, particularly in their focus on the state of mind required...
for creativity. These approaches also tend to come from outside the legal profession and legal scholarship. In fact, as this Article discusses, the concepts stand in direct contrast/conflict with the way law schools currently teach legal problem solving.

One aspect of creative problem solving that almost all approaches have in common is its interdisciplinary nature.\(^9\) The unified call for a more expanded problem solving approach is an appropriate response to contemporary criticism of "attorneys' narrowness of vision."\(^10\) Yet, as a profession we, as attorneys, must be wary that this need for an expanded approach is not interpreted as a call for lawyers single-handedly to incorporate the wisdom of other disciplines in solving problems. As this Article discusses, an expanded approach requires interdisciplinary collaboration among professionals, not solitary and amateurish forays into fields that are not our area of expertise.

Another approach to creative problem solving focuses on results: what we hope to gain from doing something different. In this regard, when we think of doing something new or different, we imply that the same old way is not as effective as we think it ought to be—a change is needed. Given the ample critique of law practice from both within and without the profession, the call for change is loud and clear.\(^11\)

suggests other qualities important to creative problem solving: "(1) if at first you don't succeed, surrender; (2) destroy judgment, create curiosity; (3) pay attention; and (4) ask dumb questions." \(\text{id. at 366.}\)


Creative problem solving is an evolving approach to law. It combines law, sociology, social anthropology, and behavioral sciences (particularly cognitive psychology, group dynamics, and decision-making) in a holistic fashion. It also includes the assessment of the impact of business and economics. Moreover, sciences and applied sciences have diagnostic and planning skills to lend to the study and practice of law.

In creative problem solving, problems are thought of as multidimensional, often requiring non-legal or multidisciplinary solutions. Most conflicts have interconnected causes, and their effects often impinge on competing jurisdictions and disciplines.

\(\text{id.}\) Cooper suggests that an essential dimension of creative problem solving is the ability to maneuver through various disciplines to draw from each the strengths that will assist in understanding and assisting the client.

10. \(\text{id. at 314 n.78.}\)


Creative problem solving is important for at least three reasons, one of which is obvious and the other two more subtle. The obvious reason is that creative problem solving is dedicated to generating new mentalities and skills to be applied to problems. In turn, problems are likely to be solved better—more reliably, more durably, more respectfully and with fewer side effects—
Interdisciplinary Education

Combining all of these perspectives on creative problem solving provides a "feel" for the ephemeral nature of the topic. While offering steps or specific factors for consideration provides an apparent concreteness that might be deceiving, it also provides a focus for engaging in problem solving in a way that is different from traditional legal practice. The precise contents of that activity are left to the creative process, but interdisciplinary models guide us, as attorneys and educators, as to what kinds of things we should be considering. The more philosophical reminder that we must change our state of mind in approaching problem solving, and the caution that we must work with other disciplines throughout the process, are important overlays to specific models. Finally, we can respond to the call for new processes and new results if we stay true to the goal of being service providers, or "helpers" in a more holistic sense of the word.

B. The Role of the Lawyer in Creative Problem Solving

Does creative problem solving take lawyers beyond traditional boundaries of the profession? Professional education necessitates training that narrows and specializes. Medical students learn to see patients' problems as medical in nature, psychology students to see their where a diversity of alternative procedures is available to approach the problem. Each new procedure offers a slightly different perspective on a problem from which some nuance or facet of the problem may be uniquely visible. The more dimensions of a problem have been considered in advance of applying a solution, the more comprehensive and better the solution is likely to be.

Id. at 269. Barton suggests that creative problem solving should provide lawyers with an expanded repertoire of skills and methods that will allow them to serve their clients better.

12. In examining this topic, I faced the ambivalence of, on one hand, believing that legal training provides a solid foundation for leadership, organizational skills, and the ability to gather forces to help clients solve problems. On the other hand, I have previously criticized the legal profession for its arrogance in assuming that it has the answers to solve all problems. See Janet Weinstein, And Never the Twain Shall Meet: The Best Interests of Children and the Adversary System, 52 U. Miami L. Rev. 79, 156 (1997) ("[P]rofessional arrogance... leads us to think we can ply our trade in any subject... without specialized training."); see also Jules L. Coleman, Legal Theory and Practice, 83 Geo. L.J. 2579 (1995) (discussing the "amateurism" of law professors attempting to teach material from other disciplines). Coleman finds that "[t]he great mistake of the legal academic is her confusion of the 'mile wide/foot deep' understanding of an enormous range of materials with genuine knowledge of a field." Id. at 2586. As this Article notes, I continue to hold that same criticism of lawyers who disregard the training and expertise of other professions. This has left me in a quandary. I would like to advocate a new kind of legal education that would help to train men and women who would be active and collaborative problem solvers. At the same time, I am wary of promoting any kind of arrogance that would assume that legal training, in contrast to other professional training, holds some magical answer to creative problem solving.
patients' problems as psychological, social workers to see their clients' problems in the context of relationships and environment. Likewise, law students learn to see their clients' problems as legal problems. In real life, however, these problems are not so easily separated or distinguishable.

One of the fundamental shortcomings of traditional lawyering, at least as taught in law school, is an inability to define problems in their broad and multidisciplinary respects. If lawyers should solve only legal problems, it is crucial to ask first who will be defining the problem. If a lawyer defines the problem, he or she will probably define it as a legal problem. If lawyers are to do something new, "out of the box," we need to be able to define problems in more expansive ways, as creative problem solvers, and not be confined to solving merely what are traditionally defined as "legal" problems. The extent of "problem coverage" becomes less problematic when viewed in the context of interdisciplinary teamwork and collaboration. Only by working with professionals from other disciplines can we actually begin to see all the puzzle pieces that make up the complex picture of a problem.\(^\text{13}\)

The law is a "helping" profession. Along with social work, medicine and other professions, the focus of the lawyer's role is to help the client achieve a result that is directly related to the client's quality of life and something that the client most likely cannot do on his or her own. Legal education does a good job focusing student attention on the goal of using the law to help people. This focus is achieved by training that is oriented toward the rights of individuals. The traditional approach of the adversary system, which sees the legal system as a medium for the battle between two parties, is the background for this training.

Much attention has been given to the shortcomings of the adversarial system because of its drain on the financial and emotional resources of clients. Many have acclaimed the growing trend toward alternative approaches to dispute resolution, such as mediation, and law school training in alternative dispute resolution has grown significantly. While this approach is a positive step toward teaching lawyers to be creative problem solvers, it is not a complete solution.

13. See, e.g., Cooper, supra note 9, at 298 ("Law alone can no longer address the problems which the world, our nation, or our local community face."). Cooper also remarks that "[l]awyers are looking for ways to develop their skills in traditional roles as counselors and problems solvers. Law, along with medicine and the clergy, should be considered and practiced as the healing professions." Id. at 306. "Law can no longer be practiced in a vacuum." Id. at 307.
C. The Role of Interdisciplinary Work in Creative Problem Solving

One element of creative problem solving that all the authors of the California Western Law Review symposium on creative problem solving shared is the interdisciplinary aspect of this work. To accomplish the best results for clients, lawyers need to have access to resources and solutions beyond those they traditionally use. One important resource is the ability to collaborate with professionals from other disciplines so that their approaches to a particular problem can assist in creating a solution for the client. Lawyers will need to learn to be professionals at organizing, leading, coordinating, inspiring, participating in, and facilitating teams of helpers trained to approach clients' problems from a variety of disciplinary perspectives. The solutions might not be traditional legal measures if non-traditional measures are in the client's best interest; the lawyer's role is to ensure that the team of professionals serves the client's interest in the least damaging and most helpful way possible.

Working with professionals from other disciplines is not a new task for lawyers. Traditionally, lawyers use other disciplines as resources for solving what they view as legal problems. Lawyers have relied upon the expertise of other professionals to "make the case" for clients in the litigation context. This might include the use of experts as consultants or witnesses to develop the evidence, or the use of consultants to select juries and observe jurors' reactions to a case in progress. Similarly, lawyers in transactional settings work with professionals such as accountants, planners, and scientists in determining their clients' needs.

The legal profession needs to do something more, particularly in these times when we should have a better understanding of the inevitable blurring of disciplinary lines. The lawyer cannot best serve the client by

14. See, e.g., Morton, supra note 6. In describing the six facets that differentiate creative problem solving from other approaches to problem solving, Morton states that the third facet is "the exhaustive and continuing investigation into disciplines and resources other than the law." Id. at 378; see also Cooper, supra note 9.

15. A significant issue arises in considering the meaning of creative problem solving as part of the mission statement at California Western School of Law. See Faculty Handbook, supra note 2. A traditional legal approach focuses solely on the interest of the client. If a client's problem can be solved by transferring it so that it becomes the burden of another, then so be it. The inherent amorality or immorality of this approach, from the lay person's perspective, seems inconsistent with what we, as a faculty, had in mind when we selected our mission. Something more idealistic is envisioned. Exactly what that would entail is beyond the scope of this Article. I discuss it in reference to the field of child maltreatment in Weinstein, supra note 12.

16. "To address these trying times, a synthesis of many social sciences, hard sciences, the humanities, and other disciplines has begun. Edward Wilson has referred to this phenomenon as
assuming that the problem is only, or even primarily, a legal problem. This is true even though the client may perceive it as a legal problem and consult an attorney rather than another professional. While a criminal defense attorney has an admirable goal in protecting the rights of the accused, the long-term well-being of the client may also encompass keeping that client out of future trouble and moving him or her into a productive and law-abiding lifestyle. A personal injury client may have an interest in receiving maximum compensation for losses, but will not necessarily recover fully without counseling from a mental health specialist. Similarly, business transactions may involve long-term relationships with others that require tending to by more than the terms of a written contract. People going through marital dissolutions or planning their estates are dealing with far more than legal issues. Scientists who engage attorneys for patent drafting and registration or hospital administrators who employ attorneys to review policies may have ethical, moral, economic, and other issues to consider in addition to their legal needs. Finally, lawmakers frequently base law and public policy upon assumptions about human behavior that are correctly within the province of psychology or sociology.17

Creative problem solving will often require the assistance of two or more professionals who must work together as a team in order to help their clients. Collaboration, commonly referred to as “teamwork,” is a skill. Entire professional journals are devoted to examining the intricacies of group dynamics with the aim of being able to provide training that will enhance group efforts.18 The professionals contributing to such journals generally recognize that collaborative work is increasingly important in our complex society for a number of reasons, such as “(1) acceleration of professional specialization, (2) fragmentation of services, (3) a growing demand to treat the client as a whole person, etc."

17. However, such assumptions are rarely examined or supported by empirical study. In fact, there is a general judicial resistance to relying upon such scientific data. See, e.g., J. Alexander Tanford, The Limits of a Scientific Jurisprudence: The Supreme Court and Psychology, 66 Ind. L.J. 137, 144–50 (1990) (stating that Supreme Court justices continually base their decisions on intuition rather than empirical data regarding jurors’ behavior).

18. See, for example, journals such as Small Group Research and Human Relations.
and (4) the emergence of complex social and ethical problems beyond the scope of one profession or discipline to solve.\(^9\)

The synergistic effect of collaborative work is not fully realized in traditional legal problem solving. The typical scenario is that the lawyer, having defined the client’s situation as a “legal” problem, calls upon other professionals to assist as the lawyer determines to be necessary, viewing the problem through a law lens. The lawyer thus sees the client’s needs as legal needs and then draws upon the expertise of others to the extent required to achieve the legal goal. Even in personal injury cases, lawyers may call upon medical and mental health experts not necessarily with the goal of healing the client, but with the goal of amassing special damages. This is not collaborative problem solving.

“Unfortunately... simply bringing together a group of professionals does not necessarily ensure that they will function effectively as a team or make appropriate decisions. Effective teamwork does not occur automatically.”\(^2\) Collaborative work involves more, including communication skills; knowledge about other disciplines, including their range of coverage and limitations; understanding of group process and team-building; self- and other-awareness, including the effects of one’s behaviors on others; and leadership skills.\(^2\) The difference between what

---

19. Inger P. Davis et al., *Interdisciplinary Collaboration and Education in Child Welfare Practice* 2 (1997) (unpublished manuscript, on file with author) (citations omitted); see also James O. Billups, *Interprofessional Team Process*, 26 Theory Into Prac. 146 (1987). Billups finds that “[i]n both interprofessional practice and in teaching of interprofessional process there is a synergistic quality in which the outcomes of a well-functioning inter-professional team effort can be considerably greater in scope and value than the cumulative effects of the performance of individual practitioners or educators working separately.” Id. at 147.


21. See, e.g., Davis et al., supra note 19, at 3–4. Davis notes that factors frequently mentioned as contributors to team process and outcome include:

1. **Organizational context of the team.**

2. **Status of disciplines represented on the team.** Ideally the team process should be collegial and the input from team members should be considered on the basis of what each profession has to offer of expert knowledge, skills and insights that bear on the task at hand.

3. **Personal characteristics of team members.** The interprofessional team member needs to:

   a. feel comfortable about his/her own professional competence, limitations and responsibilities;  
   b. respect and be open to insights and contributions by others;  
   c. be committed to a collaborative approach;  
   d. be knowledgeable about group process and be a skilled group participant;  
   e. enjoy mutual learning;  
   f. be skilled in communication and interaction with professionals possessing knowledge, language and values distinctively different from one’s own;  
   g. be sensitive to confidentiality issues;  
   h. feel comfortable about being accountable to the team as a whole as well as to one’s own profession.
frequently occurs now under the name of collaboration and collaboration as viewed by experts on group process is the teamwork spirit—it is the understanding that no one discipline has the knowledge or skills to provide single-handedly the most effective assistance to the client. The following Part examines the barriers to interdisciplinary collaboration including lawyers’ competencies in the above-mentioned skills as well as the cultural differences between professions and ecological and personality concerns.

III. BARRIERS TO INTERDISCIPLINARY WORK

Assuming that effective interdisciplinary work is a component of creative problem solving, what is it that keeps lawyers from performing well in interdisciplinary collaborative settings? This Part discusses four possible explanations: (1) the fact that disciplines are akin to cultures and that cultural ignorance and misunderstandings abound between disciplines, much as they do between cultural groups; (2) the lack of explicit training in communication and other collaboration skills; (3) the competitive and narrow nature of law school and law practice environments; and (4) personality issues among lawyers and law students that may impede acquisition of collaborative skills.

(4) Team structure and operation. Strongly emphasized is ongoing simultaneous monitoring of the team’s substantive tasks and its maintenance functions, i.e. conscious attention to how the group interacts and abides by contracted rules about group composition, attendance, leadership, decision making and responsibilities. The maintenance function includes resolution of conflict which invariably will occur in interdisciplinary teams. If not dealt with, conflict is likely to prevent the team from achieving its substantive tasks. Thus, effective maintenance functions are necessary if substantive tasks are to be accomplished.

Id.

22. Note that although the therapeutic jurisprudence movement recognizes that clients need a broader range of attention paid to their “non-legal” issues, it appears to suggest that the lawyer can handle these concerns on his or her own by being sensitive to the fact that they exist. See, e.g., Dennis P. Stolle et al., Integrating Preventive Law and Therapeutic Jurisprudence: A Law and Psychology Based Approach to Lawyering, 34 Cal. W. L. Rev. 15 (1997). I commend the idea behind this approach; lawyers must be more attentive to the human side of their clients’ problems. By suggesting that lawyers can do it on their own, however, this approach reflects the arrogance I believe is typical of the profession.

23. Commentators have recognized additional barriers. See, e.g., Edward W. Sites, Central, Neutral and Pivotal: Thoughts on a Few Factors in Successful Interdisciplinary Programs, Partnership Newsletter (Institute on Children & Families at Risk, Florida Int’l Univ., Miami, Fla.), Feb. 1994, at 2 (“The literature is replete with references to the challenges facing interdisciplinary efforts. Mentioned are disincentives, internal conflicts, organizational and administrative barriers, and disciplinary and professional differences in values, nomenclature, culture, practice models, auspices, management styles, role definitions and even status.”) (citations omitted).

328
A. Professions Are Mini-Cultures

The expansion of multi-cultural understanding and sensitivity has become an important goal of modern education. Americans have moved from their naive egocentrism toward an understanding of the need to meet the cultural expectations of others to promote international business and diplomatic affairs. The shrinking globe has emphasized the need to work more effectively with other peoples toward common goals. When the “others” literally speak another language or when their customs are foreign to American ways, the need for understanding and language skills is apparent.

Professions are mini-cultures. Webster’s Dictionary defines “culture” as “the concepts, habits, skills, art, instruments, institutions, etc. of a given people in a given period.” Professionals in any particular discipline have their own values, language, skills, and institutions that set them apart from other professions and people as a whole. However, professionals do not necessarily recognize these differences to the degree that would give rise to concerns about effective collaboration. In part, this is because the professionals of any particular discipline do not look or even sound different from each other. In spite of the apparent lack of differences other than in knowledge and skills, the distinctions between professionals are great. English-speaking members of a particular profession may in fact communicate more clearly with non-English-speaking members of their profession from other cultures than they do with English-speaking persons who are not part of the profession.

C.P. Snow warned of the perils of the transformation from an integrated approach of education to one of narrow specialization. The realization of the perils forecasted by Snow has resulted in inhibited professional collaboration and creative problem solving by creating the kinds of mistrust and professional arrogance that are the

26. C.P. Snow, The Two Cultures: And a Second Look (1964) (describing two cultures that would arise from distinct fields of literature and sciences).
result of professional isolation. All of this means poor service delivery to the client.27

The cultural differences that impede collaboration between disciplines fall into the categories of knowledge, language, skills, methods, attitudes and values, and institutions.28 Each culture has its own definable characteristics in each of these categories. Further, because professional training requires narrow focus and specialization within the discipline, the professional cultures are isolated from one another with little understanding of the others’ cultures. The process of professional training serves to indoctrinate students in these characteristics, often with no explicit attention to this process; practice after professional school continues the indoctrination process as professionals work within institutions that reflect the professional culture.

1. Knowledge

Knowledge is perhaps the most obvious category of professional difference. Professional training clearly provides a unique knowledge base to its disciples. Within a discipline, its members may be more or less secure about that knowledge base. For example, law students soon learn that the law is not “black and white,” as it may appear to be from the lay person’s point of view. Yet, to the outside world lawyers appear to know a lot about “the law.” We know the elements of a cause of action and how the justice system operates. We expect physicians to know about disease and the human body, mental health professionals to know about the mind, physicists to know the workings of the physical world,

27. See, e.g., Davis et al., supra note 19, at 2–4; Donald H. Wallace, Training in Law and Behavioral Sciences: Issues from the Criminal Justice Perspective, 8 Behav. Sci. & L. 249, 257 (1990) (noting that conflicting assumptions and values between behavioral sciences and criminal justice compete in distribution of scarce resources).

28. Other differences between professional cultures may include “source of income and prestige and even differences in gender.” Katherine van Wormer, No Wonder Social Workers Feel Uncomfortable in Court, 9 Child & Adolescent Soc. Work J. 117, 122 (1992). Professional cultures may also differ in “(1) the central values to which members of the culture subscribe; (2) the incentive structures that animate the culture’s members and the decision techniques that they typically employ; and (3) the characteristic biases and orientations of the culture.” Schuck, supra note 25, at 14. For discussions of cultural differences between specific professional cultures, see also Joseph E. Schumacher & Stanley L. Brodsky, The Mock Trial: An Exploration of Applications and Dynamics in Interdisciplinary Training, 12 Law & Psych. Rev. 79, 91 (1988) (law and psychology); Hans Toch, Toward an Interdisciplinary Approach to Criminal Violence, 71 J. Crim. L. & Criminology 646, 646–47 (1980) (sociology and clinical psychology); and Wallace, supra note 27, at 254–57 (behavioral sciences and criminal justice).
engineers to know about how things must be designed in order to work, and so on. Within our own discipline, we are aware of how much we do not know. We usually do not share those uncertainties with the population at large. We often do not know what the knowledge base is for other disciplines. We may be unclear about what it means to be an engineer or a physicist, which means we are also unclear about what knowledge we might expect to acquire from such professionals in a collaborative setting.

2. Language

Assuming for purposes of this discussion that the professionals with whom lawyers will be working speak English, language may be where the commonality among the professions ends. Specialized jargon is one of the characteristics of a professional culture. The jargon may not consist of words that sound strange to outsiders, but the meanings may be very different from the common vernacular. People who work together speaking different languages, particularly when they are not aware that their languages are different, cannot effectively communicate, and thus cannot collaborate or engage in meaningful creative problem solving. "Interdisciplinary work, then, is always translation from one specialized discourse into another."

3. Skills

Along with knowledge, skills is an obvious category of professional culture; in fact, skills and knowledge are sometimes difficult to separate. For example, a lawyer understands how to read an appellate decision or make an argument to a court. These are skills based upon an underlying

29. This Article focuses on the work and training of American lawyers for interdisciplinary work within this country.
30. See, e.g., Cooley, supra note 20, at 8 (explaining that group members misunderstand each others' jargon).
31. Terri Reynolds, 1996 Lingua Franca at 62, 62 (commenting on Mystery Science Theater: Sokal vs. Social Text, Part Two). The difficulty of communicating between disciplines is reflected in the different writing formats and "rules" used by various disciplines. For the most part, the social sciences journal literature is published in American Psychological Association format. Legal journal articles are published according to the Bluebook citation format. The two styles are quite distinct. Attempts to publish interdisciplinary work can result in disputes over which style to use. No one all-encompassing style satisfies both schools. Is this a creative problem solving solution waiting to happen?
knowledge of the law. Similarly, a therapist may assist a client in making behavioral changes, but the therapeutic techniques are based upon an underlying knowledge of the functioning of the mind. The skills that each professional brings to an interdisciplinary team are distinct and valuable.

4. Methods

Methods are the procedures used for synthesizing information and exercising professional skills. An important aspect of method is the gathering of information that will allow the professional to assess the nature of the problem. Each discipline has its own methodology for approaching problems. Method reflects the collective knowledge, language, and skills of a professional culture as well as the culture's attitudes and values.

Legal method focuses on a problem as an individual's external conflict with the interest of another. It relies upon rules set forth in constitutions, legislation, and case law to interpret legal rights and obligations. In undertaking this exercise, lawyers selectively perceive the "facts" as they deem them either relevant or irrelevant to the client's "legal" problem.32

Traditional medical method operates from the underlying assumption that a physical problem can be diagnosed, sometimes with the use of sophisticated "fact finding" technology, from knowledge about the human body and then treated with medication or some other procedure.

As each professional culture approaches a problem with a different method, each will produce different factual interpretations of the nature of the problem. While any one profession might believe its interpretation to be grounded in external truth, this is not the case.33 All facts must be viewed in context. The professional methodology, knowledge, skills, attitudes, and values provide the context for analyzing the problem—basically, a matter of selective perception.34

32. "This reduction of humanity ignores the psychological, relational, and social contexts of their problems." Barton, supra note 3, at 286.

33. Schuck, supra note 25, at 5 (concluding that values and methodological differences between science, law and politics result in each profession having "a distinctive conception of truth or, less grandly, of how to achieve the good"). The result is that the competition between the three cultures may result in great social cost when not managed creatively.

Professional training programs reflect method. The so-called Socratic method in law school reflects the legal method of application of old rules to new facts, the de-personalizing of problems, and the abstraction of principles from sets of rules. Training for social work involves opportunities for focus on self-awareness and the concepts of self and other.

5. **Attitudes and Values**

Professional cultures have distinct attitudes and values that their approaches to problem solving reflect.\(^5\) These attitudes and values are often transmitted implicitly, and perhaps unconsciously, during professional training. Professional education provides little explicit value training;\(^3\) rather, students acquire the attitudes and values of the profession in an "acculturation" process.\(^3\) Because the transmission is implicit, some are unaware of its occurrence. Additionally, because those responsible for professional training endured the same indoctrination process, there is little occasion for challenging or questioning the values and attitudes being transmitted.\(^3\) The subconscious inculcation of normative values that differ from other professional cultures and society at large impedes interdisciplinary collaboration.\(^3\)

therapeutic and legal professionals assemble facts in different ways or have different sense of what facts are in given situation).


36. The exception to this might be courses in professional responsibility.


38. Critical legal studies, feminist jurisprudence, and gender and race studies are exceptions to this generalization. While they do focus on a critique of the traditional jurisprudential paradigm, each is limited to a narrow focus in contrast to the prevailing value system and students can easily go through law school without exposure to any of these offerings. Even when students do study this material, the rest of the curriculum usually outweighs the specialized nature and limited contact with it.

39. One commentator has remarked:

[Students in medical school, nursing, social work, law...public administration, and the graduate departments of the social sciences and humanities are being inculcated each with a different conception of human nature, of human conduct, with different beliefs, assumptions, expectations about people... These students are going out to practice...with what Veblen once called the "trained incapacity of specialists" unable to communicate or collaborate in their practice or even to recognize what other specialists see and do. Billups, supra note 19, at 146 (quoting L.K. Frank, *The Interdisciplinary Frontiers in Human Relations Studies*, 2 J. Hum. Rel. 84 (1954)).]
6. Institutions

Each of the professions operates primarily within institutions that reinforce the professional culture. Attorneys operate within the justice system, physicians in hospitals and other medical centers, social scientists within research facilities, social workers in agencies providing human services, and so on. These institutions use the language, methods, values, and attitudes of the respective cultures. When an outsider enters the territory of a professional discipline it can be similar to attempting to maneuver in a foreign country, including having to deal with people who may feel threatened or invaded by the intrusion.

As a result of these cultural boundaries, jurisdictional disputes may arise over ownership of the problem at issue. One commentator has described the dispute as follows:

Disagreements between interacting occupational groups about who should be legitimately performing which tasks can generate heated conflicts that can carry over into other aspects of the relationship between the two groups. These types of disagreements are referred to in sociological literature as jurisdictional disputes and are not uncommon because it is rarely possible for a professional group to delineate a neat territory. Yet, these jurisdictional disputes can have negative implications for interoccupational relationships. It is a common sociological observation that when rival claims issue in conflict, each side is likely to develop stereotypes and misconceptions about the other, especially in formal contexts.40

In collaborative efforts, blurred boundaries require an understanding of the distinct contribution of each discipline.41 In some ways, this becomes more difficult to achieve as the borders of each discipline extend, seemingly invading the territory of others.42

40. Robin Russel, Role Perceptions of Attorneys and Caseworkers in Child Abuse Cases in Juvenile Court, 67 Child Welfare 205, 213 (1988) (citations and internal quotations omitted). “A number of studies have observed that frequently social workers and attorneys dealing with similar types of cases feel that members of the other occupation are overstepping their professional boundaries and performing tasks that would be better and more appropriately performed by their own occupational group.” Id. at 206 (citations omitted).


42. Some would argue that we should carefully protect the borders of our profession, as the special expertise of each profession is what gives it its claim to importance and the right to demand a
Another difficulty that arises from the boundaries confusion is the use of "borrowed knowledge." This refers to the situation where a member of one profession applies knowledge from another profession to the task at hand. The professional may have acquired this knowledge as the result of previous work with members of the other profession or from some other source. The problem is that it is not accompanied by the depth of understanding that allows the skilled professional to use it appropriately.

B. Lack of Training

Interdisciplinary work requires a number of skills if collaboration is to be effective. In its traditionally narrow approach, legal education has focused primarily upon training students to "think like lawyers," requiring them to memorize a core of foundational legal principles, and preparing them for work in the adversarial context of litigation. Other skills are essential to creative problem solving. Teamwork must be taught. It does not come naturally, especially to many individuals who self-select for the legal profession. If it is to work, it needs to be a conscious process in which communication and awareness of group dynamics are attended to. Additionally, the lawyer must have knowledge of the resources available for the problem solving endeavor and how to use them. Finally, if lawyers are to play a special role in creative problem solving, they must receive training in leadership skills, which will enable them to organize and motivate group efforts.

1. Communication Skills

In the context of interdisciplinary work, there are at least two different ways to think of communication skills, the first being the ability to speak and understand a shared language. This skill is often lacking in

---


43. Davis and her co-authors opine:

Inappropriate use of borrowed knowledge may result in missing important facts of a case because of the blindness that often results from lacking full exposure to a particular discipline's storehouse of knowledge (a little knowledge can be worse than none). A lawyer spots legal procedural pitfalls that other professionals are unlikely to notice; the social worker sees the complex interplay between environmental and personal stress factors, and the psychologist notices developmental markers easily overlooked by others. They may all be fact-finders, and opinion givers, but "not all facts are for them to find," nor are all opinions for them to give. 

Davis et al., supra note 19, at 6 (citation omitted).
interdisciplinary situations. The second aspect of communication skills is the ability to engage in dialogue with another, so that the participants actually exchange ideas. This involves both the delivery and the reception of language.

Because the legal profession relies primarily on communication, one would assume that lawyers would be skilled communicators. Unfortunately, this is far from true. Law school does attend to the ability to express oneself in writing and orally; these skills are taught primarily within the adversarial context, where the purpose of expressing oneself is to make a persuasive point for a client. Effectively communicating a thought in a nonadversarial context is not part of this training. The other half of dialogue—active, empathic listening—is rarely attended to. It is taught as an integral component of classes in client counseling and mediation—one or two courses in a curriculum dominated by the adversarial mind-set. Even attempts to teach listening during a course such as trial practice, for example, to train students to listen to the responses of their witnesses, is often an uphill battle, as students are generally much more focused on what they are going to say next. And, when we do teach listening, the teaching is necessarily limited because of time constraints and the need to cover other material.  

Communication skills are just as important in group work as they are in individual client work. "[C]ommunication may be the single most important factor influencing the group process." In failing to teach communication skills, legal educators send a message that such skills are unimportant. Students, future lawyers, may be unaware that their communication comes from much more than mere words. Being unaware of the effects of their use of language, tone, body language, and inattentiveness, lawyers cannot be effective team members in any creative problem solving effort. Furthermore, communication difficulties may result in mistrust among team members.

44. Shaffer and Redmount maintain that the following psychological principles are often overlooked in law school education: (1) determining the client's feelings and attitudes, including formulation of the client's problem in nonlegal terms, (2) discovery and use of social science data and other nonlaw data, and (3) determining the likely personal or social effect of a legal intervention.

Schumacher & Brodsky, supra note 28, at 80 (citing T. Shaffer & R. Redmount, Lawyers, Law Students, and People (1977)).

2. **Knowledge of Non-Legal Resources**

If we recognize that law and the traditional legal approach to solving problems do not hold the key to creative problem solving, we must conclude that other disciplines also have a significant role to play. Lawyers are handicapped in their ability to make use of the skills and knowledge of other disciplines because of their narrow concepts of problem solving indoctrinated as part of their professional education and because they usually know very little about other disciplines. Even in traditional adversarial work, lawyers fail to use information from other disciplines effectively. It is not uncommon for lawyers to fail to consult with professionals from other disciplines who could provide important insight or evidence or fail to examine an expert witness effectively because of lack of understanding of the expert’s profession.46

What must we know about other disciplines? We need a basic understanding of the following: (1) the training involved, both content and process; (2) licensing requirements; (3) the kinds of work professionals in this discipline do; (4) the underlying values of the profession; and (5) the limitations of the discipline’s expertise. We must also be able to communicate with members of these disciplines, which means being willing to ask questions when something is unclear and avoiding the use of jargon. The usual law school curriculum covers neither the content nor the process of working with these disciplines.

We need to acquaint ourselves with other disciplines for several reasons. The traditional law practice, with a focus on resolving disputes through the adversarial process of litigation, requires the use of experts for assessing damages, causation, and explaining complex matters. A transactional practice, likewise, relies upon the expertise of other professionals who have the skills and knowledge to assist the client in realizing his or her goals. A practice that aims at doing more creative problem solving, including mediation, must call upon other professionals for their expertise, bringing together a team to cover the range of the client’s concerns. In each case, it is important for the lawyer to know enough about other disciplines to know when his or her expertise will be useful, to work with other professionals in a cooperative and communicative manner, and to have reasonable expectations about what

46. "The absence of interdisciplinary education can also result in the judges, clerks and lawyers involved in a case failing to recognize that a psychological issue is implicated." Tanford, *supra* note 17, at 144.
can and cannot be delivered by professionals from other disciplines. A
danger lies in the lawyer who must rely upon other professionals without
knowledge of what they are doing and without the ability to engage in
conversation with them to make sure that the work is moving in the
direction it should, according to the client's broader needs. The state of
"aporia" mentioned by Kerper is most useful in this situation. A
professional needs to be able to ask other professionals what might
appear to be "dumb" questions. By doing so, we can clarify whether
others are relying upon inappropriate assumptions and move all
professionals involved to a more creative level of interaction.

A tangential consequence of lacking sufficient knowledge and
understanding of resources is that ignorance breeds ignorance. In other
words, knowing too little or nothing about another profession may cause
a lawyer to ignore or disregard what someone from that discipline has to
say, thus leaving the lawyer further in the dark about something relevant
to the client's problem. Also, the lawyer may resort to stereotyping
members of a profession pejoratively so that interactions are conducted
through a net of prejudice. No creative problem solving can occur in
such an environment.

3. Awareness of Self and Others

Participation in a team effort requires some awareness of one's
personal and professional values and how these might influence one's
work with the team. This includes some personal insight about prejudices
and behavior that will affect others on the team and how others' behaviors will affect oneself. While such training may be usual in a
school of social work, it does not happen in law school. This is
understandable given the culture of the law, which includes a world view
that basically denies the significance of personal experience. A law
student may have great success in law school without this insight; in
practice, however, the lawyer's values and behaviors will have
repercussions. It is no matter of coincidence that the legal profession, in
general, is disliked. The fault lies not only in the fact that lawyers take

47. See supra note 8.
48. "Having little direct contact with each other, operating from widely divergent conceptual and
operational perspectives, the resulting high level of interdisciplinary ignorance can, quite naturally,
give rise to harsh and distinctly pejorative stereotypes of professionals in other disciplines." Benjamin, supra note 35, at 136.
49. See Barton, supra note 3.

338
unpopular positions by defending criminals, supporting unpopular or controversial causes, charging high fees, and engaging in other disfavored activities. It also lies in the fact that many lawyers do not have good interational skills.\textsuperscript{50}

4. \textit{An Understanding of and Appreciation for Group Process}

"Group process is a central determinant of the quality of group decisions."\textsuperscript{51} While the legal system and lawyers are very process oriented, the kind of "due process" that is the focus of the law is very different from the process that occurs in group dynamics. Lawyers seem to take for granted that working in a group is as natural a process as working alone and requires no special training or skills. This attitude, when accompanied by a professional blindness to issues of self and other awareness, is not conducive to effective collaboration.

In most groups where important problems need to be solved there will be disagreement and the potential for conflict. This is especially true of interdisciplinary groups whose members are each representing a separate culture. Disagreement has the possibility of destroying the group. On the other hand, lack of disagreement can also stifle the creative process. When groups do not disagree it is usually because either the members of the group are afraid to speak up because the leader has not created an environment conducive to disagreement and frank sharing of ideas, or because the group is engaged in a process called "groupthink." Groupthink occurs when a group works together over time and settles

---

\textsuperscript{50} This Article discusses how law school exacerbates these tendencies. \textit{See infra Part III.C.} One commentator has noted:

Jeffrey Steinback, of Genson, Steinback & Gillespie, a prominent Chicago criminal defense firm, says that the most effective attorneys are able to relate to clients on both an emotional and a legal level. Steinback estimates that 80 percent of his firm's clients come with psychological and emotional concerns, fearful of losing their money, property, respect, and reputation in the community. Appointments may be spent quelling anxiety, rather than explaining the subtleties of the law as it applies to the case at hand. "Lawyers need to understand something about the human condition. None of it comes out of textbook," he says. "Law schools don't teach it, they don't discuss it, they don't address it."

Lynn Welsberg, \textit{Law Students Need Training in More Than Just Legal Matters}, Student Law., Oct. 1992, at 8, 9. "The profession preserves this separatism through specialized procedural, ethical, and disciplinary rules and distinctive language, not to mention a plethora of six-digit salaries. Without training in interpersonal skills to bridge this gap, the negative image of lawyers is perpetuated, much to the detriment of the profession." \textit{Id.} at 10.

into a pattern of agreement as the easiest road to accomplishing tasks.\textsuperscript{52} Effective creative problem solving requires training in teamwork.\textsuperscript{53}

5. \textit{Leadership Skills}

Although society often expects attorneys to take leadership positions, law school does not provide leadership training, except as far as one assumes that learning to "think like a lawyer" somehow equips a person to be a leader. Leadership skills include the various dimensions of training mentioned above and other skills more specific to task performance. Thus, the skills that lawyers need to learn include communication and group dynamics as well as techniques for brainstorming, distributing and delegating work, motivating others, long-range planning, and scheduling. Leaders must convey a sense of authority and yet be sensitive to group needs. They must know how to convey respect to group members that will encourage high standards of performance and effective collaboration.

C. \textit{The Competitive and Narrow Nature of Law School and Practice}

Unfortunately, the training law students receive often diminishes, explicitly or implicitly, the importance of other professions in the perceptions of the students. Once students see every problem as a legal problem, the work of other professionals becomes tangential—important only to the extent it is helpful to solving the legal problem. Lack of exposure to other disciplines during the training process gives the implicit message that these disciplines are unimportant to the solving of legal problems. The orchestration of the solution must be in the hands of the lawyer. Other professionals are merely tools to be used for specific ends.

Legal education, with its mission to train students to "think like lawyers," indoctrinates the narrow focus and confined boundaries of linear thinking that define traditional law practice. Furthermore, the process of indoctrination reinforces behavioral characteristics such as the apparent lack of empathy for the human aspects of the client's problems.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{53} Faye F. Untalan \& Crystal S. Mills, \textit{Methods for Application}, in \textit{Interdisciplinary Perspectives in Child Abuse \& Neglect} 159 (Faye F. Untalan \& Crystal S. Mills eds., 1992).
\end{itemize}
\end{footnotesize}
An attitude of "don't know," or "aporia," is inapposite to the attitude that is instilled in law school: "Even if you don't know, take a position and make a good argument." Law professors often lament the lack of dialogue with their students in class, but there is little tolerance, especially among students' peers, for asking "dumb" questions.5

Once in practice, there is little to alter the mindset created during law school. While lawyers usually learn that they must work with professionals from other disciplines, the approach is not necessarily teamwork; often, the lawyer hires these professionals as consultants or experts to provide information necessary to the legal case within the adversarial context. Additionally, in their interactions with other professionals, the non-lawyers' lack of logical reasoning skills or apparent focus on "irrelevant" ideas may frustrate lawyers.

This Part discusses three characteristics of training and practice that particularly detract from the ability to engage in effective interdisciplinary work. First, law school is a solitary experience with little opportunity for teamwork. Second, it is a very competitive environment, focusing on individual achievement at the cost of others. The adversarial context of practice, indoctrinated in law school, is not conducive to collaboration. Third, the focus on the values of law to the exclusion of other disciplines creates an impression of law as the predominant problem solver and an arrogance about the profession that has ramifications regarding status and hierarchy in working with others.

I. Solitary, Individual Experience

Legal training is a solitary learning experience, focusing on the individual efforts of the student. Legal educators pay little attention to the skills involved in working together. Even when we assign collaborative work, we rarely provide training for how this might be done effectively. Considerations of how people feel, what is fair, and similar concerns are not usually thought of as part of a useful discussion.55

The value placed upon individual work gives a strong message that it is the kind of work that really matters. Students see collaborative work as

54. See Kerper, supra note 8, at 367.
55. "[B]ecause legal education does not assist or encourage students to acquire interpersonal skills and often concentrates exclusively on the development of analytic skills, students may ignore the social and emotional consequences of decision-making." Daicoff, supra note 25, at 1381.
unimportant and a distraction from building the skills necessary to law practice. When asked to work with others, many students experience control issues, particularly if students will receive a group grade, and find themselves without the skills to work together effectively.  

Effective teamwork requires, among other things, mutual, non-judgmental respect for differences, awareness of what each member brings, open and frank discussion without forced consensus, and awareness of group process.  

Having no exposure to the resources of other disciplines, law students and lawyers cannot know what strengths and limitations other professionals bring to the task. Stereotyping, which comes from ignorance about other disciplines, results in judgmental labeling. Interpersonal relationships may or may not develop in a helpful way depending upon the individual personality of the lawyer, but not because, and perhaps in spite of, any training received in law school. Lack of training in leadership and group process create the danger of ineffective group discussion that is either stifled or alienating to others because of

56. One commentator has remarked:
A fourth element [of team functioning] concerns the attitude of various professionals towards group versus individual action. Doctors, for example, are trained within the context of individual action, taught to be independent and self-reliant, and exposed to patients the overwhelming majority of whom have only the most rudimentary knowledge of modern medicine. It is little wonder, then, that such professionals experience some difficulty in adapting to the team approach and tend to be somewhat reluctant to share confidential information. It also helps to explain why they might have less than the highest regard for other professionals many of whom do not share their academic background, their specialized knowledge and their long years of rigorous training.
Benjamin, supra note 35, at 135. Something similar could certainly be said about lawyers.

57. See Perlman & Whitworth, supra note 45, at 303–04 (discussing “the characteristics of a mature group that can be both effective and efficient”). Perlman and Whitworth find that in effective groups:
1. Members are aware of their own and each other’s assets and liabilities vis-à-vis the group’s task.
2. These individual differences are accepted without being labeled as good or bad.
3. The group has developed authority and interpersonal relationships that are recognized and accepted by the members.
4. Group decisions are made through rational discussion. Minority opinions and/or dissension are recognized and encouraged. Attempts are not made to force decisions or a false unanimity.
5. Conflict is over substantive group issues such as group goals and the effectiveness and efficiency of various means for achieving those goals. Conflict over emotional issues regarding group structure, process or interpersonal relationships is at a minimum.
6. Members are aware of the group’s processes and their own roles in them.

Id.
the adversarial mindset and tone adopted by lawyers. Law students and lawyers may not voice conflicts about group process and interpersonal relationships because of the inability to deal with group process issues. This will affect the content of the problem solving.

2. **Competitiveness and the Adversarial Context of Practice**

Competitiveness is the antithesis of teamwork. A team does not work effectively if its members are working against each other. Law students are constantly competing. Even in extracurricular activities such as moot court, the process is a competition. Law schools have even extended this spirit to competitions in client counseling and negotiation. The competitiveness required in law school by the grading system and competition for the best jobs continues in practice with competition for clients and billable hours. The legal system, which declares a winner and a loser in any conflict, affirms the perception that problem solving is a competitive sport.  

The adversary process upon which our justice system is based requires skills that are antithetical to collaboration and teamwork. Having been trained in a solitary and competitive manner, lawyers easily adjust to a professional environment of mistrust and secrecy. Once a lawyer has labeled a problem a “legal problem,” he or she needs to control the problem solving process, using others to strengthen the client’s case. Little room is available for interdisciplinary collaboration in this context.

3. **Focus on Values of Law to the Exclusion of Other Disciplines**

We create for law students a reality that is based upon the values and methods of the legal system. Within that reality the lawyer analyzes a situation, comprehends a “truth,” and develops solutions in a way no one

---

58. See Weinstein, *supra* note 12, at 86.

59. Daicoff, *supra* note 25, at 1418 (citing Amiram Elwork, *Stress Management for Lawyers* 17 (1995)). Elwork concluded “that the paranoia [a “justifiable” personality trait of lawyers] is caused by the adversarial legal system in which lawyers work, which causes them to suspect everyone of ulterior motives, and encourages secretiveness, manipulativeness, and selfishness.” *Id.*

60. Katherine van Wormer believes that the adversary system, more than the particular professional training differences, is the cause for most of the inability to collaborate effectively. She calls for alternative systems and procedures to circumvent the adversary system, although she believes that social workers must have knowledge of the principles of legal advocacy. Van Wormer, *supra* note 28, at 127.
untrained in the law can do. The skill is special and unique; it may seem to be a superior way of solving problems, setting lawyers apart from others, regardless of their training. Society has acknowledged this specialness by affording members of the legal profession high status.

One factor that affects group process is the status of its members. The more equal the perceived status of members are, the more equal exchange one might expect in conversation. However, professional isolation and acculturation tend to result in stereotyped characterizations

61. See Lilly, supra note 16, at 1429 ("The doctrinal method embraces the policies or values that underlie the law, including the contributions of the social and behavioral sciences. But these latter contributions are secondary, and are taken seriously only if they are accompanied by analytical precision or at least seem to comport with experience and common sense.").

62. Weisberg, supra note 50, at 9. Weisberg finds:

[The predominant emphasis on mechanical skills isolates lawyers as both people and as a profession. In the educational setting, law, for the most part, is taught in a vacuum. It does not draw on other disciplines, such as psychology, sociology, or feminism, nor does it incorporate past experiences or training. "Legal education has developed separately from other disciplines, as if thinking like a lawyer makes what you've learned prior to law school irrelevant," says Dinerstein. This self-contained form of education breeds a certain professional elitism among law students that often bleeds into their perception of themselves as lawyers.]

Id. (quoting Robert Dinerstein, Director, Clinical Program, American University); see also Billups, supra note 19. Billups writes:

An openness to understanding the contributions of other professionals on the team may be impaired by a professional autonomy and specialization learned too well. Professional education with overemphasis on autonomy and specialization may support an impetus to act alone without reference to others and encourage a professional ethnocentrism that can stultify interactive processes of the team. Thus, team members may not only arrive on the team with an overestimation of the value of their own professional perspectives, they may also compound the problem by finding "it easiest to respond to professional stereotypes rather than to learn what other professionals actually do."

Id. at 149 (citations omitted); see also van Wormer, supra note 28. Van Wormer notes:

Lau (1983) offers the most original and compelling explanation for professional misunderstandings. Lawyers pride themselves on having a "legal mind." Due to the discipline of law school, the mind is somehow transformed into a marvelous instrument. Lau, however, sees the patterns of legal thinking as having started far earlier than law school. In pondering the stereotypes of the lawyer as "rigid and compulsive" and the social worker as "flighty and illogical," Lau proposes the characteristics may have a basis in dominant thought processes. "It might be suggested," she writes, "that instead of intending to think and act in certain ways, each is a product of hemisphericity—left in the case of most attorneys and right for most social workers. Lau indicates the distinction may be biological, that certain types of [sic] may be attracted to certain types of professions. Lau does not mention male/female patterns but recent studies would indicate that males are more apt to be left-dominant (logical, rational) and females right-dominant (holistic, intuitive). . . ."

Id. at 124 (citing J.A. Lau, Lawyers vs. Social Workers: Is Cerebral Hemisphericity the Culprit?, 62 Child Welfare 21 (1983)).
between the professions. Thus, perceived status differences result in a hierarchy of perceived importance of the members of the team.63

Status and hierarchy issues pose real barriers to effective interdisciplinary work and creative problem solving. In an interdisciplinary team, "higher status professionals will tend to dominate and lower status practitioners will be committed to silence and submission."64 These roles have no relationship to the actual skill, knowledge, or contribution the team members might have. This kind of hierarchical behavior reflects the arrogance instilled by teaching in a way that purports to provide "the answer" to every problem. The way courts have treated social science research information demonstrates that this arrogance is pervasive throughout the legal system and the work of lawyers.65


"[T]he pattern of influence and activity in a group is likely to be heavily determined from the start by stereotypical beliefs rather than by direct evidence of ability. In accordance with self-fulfilling prophecy, when group members have formed their expectations about each other based on status cues, subsequent group interaction is likely to provide behavioral confirmation of these expectations as the group members act in a fashion consistent with their expectations.

Id.; see also A. Paul Hare, Roles and Relationships, in Small Group Research, supra, at 141 ("[T]he status that a person has in a larger system often carries over into a small group, even though it may not be especially relevant for the functioning of that group.").

64. Untalan & Mills, supra note 53, at 159.

65. See Tanford, supra note 17, at 145–52. Tanford, discussing the Supreme Court's use of social sciences information about juries, remarks:

An examination of the written opinions in these cases reveals that the Justices ignored, misused, distorted and misinterpreted psychological literature about trials to justify decisions at odds with empirical data. This pattern is consistent with evidence that lower court judges tend to be hostile to social science, that lawyers tend to be hostile toward scientists and misunderstand or ignore social science and that people generally undervalue social science and overvalue vivid anecdotes when making important decisions.

Id. at 145 (footnotes omitted). Tanford continues:

In Ballew v. Georgia, Justice Powell stated that he had strong reservations about the wisdom of basing Supreme Court decisions on empirical research even when it supported his position, derisively referring to reliance on statistical language as "numerology." He even doubted the reliability of scientific research and the peer-review publication process, questioning the psychological research because "neither the validity nor the methodology employed by the studies cited was subjected to the traditional testing mechanism of the adversary process...[but] merely represent unexamined findings of persons interested in the jury system."

To the extent that the Justices acknowledge the existence of empirical research on juror behavior at all, they seem to consider it no more reliable than their own intuition and experience. Most of the Justices do not appear to believe that psychologists' training and expertise are of any particular value. Moreover, they do not distinguish science from nonscience, and are dubious of statistics.
This parochial rejection of nonlegal resources inhibits creative problem solving. No true team effort can be made when there is no respect between members and the disciplines they represent.

Another effect of legal education's sole focus on "thinking like a lawyer" is that it paints an unrealistic concept of who clients are and how we can best assist them in solving their problems. Because the law subtracts "irrelevant" facts when it defines and analyzes a problem, lawyers, too, tend to reduce their clients to causes of action. One commentator has remarked:

The common-law tends to approach human problems with a flattened vision of humanity.... Finding no harmonious fit between legal rules and human circumstance, the law may rely too heavily on power to conform the problem forcibly to the requirements of the procedures designed to resolve disputes. The legal system does this by defining problems as exclusively involving adversarial contests of rights.

The MacCrate report on the status of skills training in legal education reflects the traditional narrow legal approach. "[T]he processes offered by Nathanson and the MacCrate report do not provide enough attention to the more humanistic roles of values, interests, problem

... If precedent and psychology conflict, they will choose precedent as the preferred basis for a decision. Id. at 147–49. Tanford concludes:

The question on which no consensus has been reached is why courts are reluctant to rely on empirical research. Theories that have been propounded offer a variety of possible explanations: (1) the political disjunction theory says judges are conservative and perceive social scientists to be liberal, (2) the conceit theory holds judges are conceited and do not believe they need any assistance from non-lawyers, (3) the human nature theory says judges are human, and it is human nature to be unscientific, (4) the ignorance hypothesis is that judges are ignorant of, inexperienced with, or do not understand empirical social science, (5) the threat theory holds judges perceive science as a threat to their power and prestige and (6) the rival-systems theory argues that law and social science are rival systems with competing logics.

Id. at 152.

66. See Cooper, supra note 9, at 314 n.78. Cooper observes that "[a] major target of this school of thought is the law school curriculum. 'Training a student to think like a lawyer now has a negative connotation.... It indicates someone who can talk glibly about "rights" and about this decision or that decision but lacks the ability to see the system in a broader perspective.'" Id. (citation omitted).

67. Barton, supra note 3, at 283.

68. Section on Legal Educ. & Admissions to the Bar, American Bar Ass'n, Legal Education and Professional Development—An Educational Continuum (Report of the ABA Task Force on Law Schools and the Profession: Narrowing the Gap (1992)).
prevention, interdisciplinary analysis, creative thinking and self-
reflection—essential elements of professionalism for practicing lawyers
which law students ought to be taught.»69

4. Lawyer Personality Issues

Personality clearly affects the way a person behaves in a group
situation. If there are personality traits common to lawyers that differ
from the population as a whole, we must consider whether the kinds of
people who become lawyers are well-suited to interdisciplinary
collaboration and creative problem solving. This Part examines the
personality characteristics of lawyers to determine compatibility with the
skills, attitudes, and behaviors required in creative problem solving.

Studies indicate that there has been a tendency for certain personality
types to attend law school and enjoy the practice of law.70 If creative
problem solving requires effective interdisciplinary collaboration, then
tension is inevitable between these personality characteristics and the
traits required for effective problem solving. As one study has

Being an expert in one’s field in no way assures successful
communication of the knowledge that person possesses, or a
harmonious and positive impact on the group as a whole. Examples
of this phenomenon are common. In general, people who are
aggressive, critical, highly competitive, dogmatic and narrow,
pedantic, domineering, and control-oriented will usually make
dysfunctional group members. Group members with these
characteristics tend to waste great amounts of time and energy, set
up distractions and discord within the group, adversely affect the
morale of other members, and negatively affect
productivity.71

Susan Daicoff presents an extensive and relevant examination of the
literature dealing with law student and lawyer personality that is useful in
comparing personality traits with the requirements for creative problem
solving.72 Daicoff finds that the empirical evidence shows that lawyers

69. Morton, supra note 6, at 377.
70. See, e.g., Daicoff, supra note 25.
71. Perlman & Whitworth, supra note 45, at 304.
72. Daicoff addresses the following questions:
(1) whether attorneys' characteristics, goals, values, ideals, ethics, or morals actually differ from
those of the general American adult population; (2) whether these differences, if any, are
differ significantly and in consistent ways from the general adult population, particularly in their decisionmaking approaches, personality characteristics, and values, and that while law school does have a dramatic effect on some individuals, some consistent, pre-existing traits are characteristic of those who choose to pursue legal careers. \(^7\) She concludes that many of the problems facing the profession are unlikely to change because proposed solutions do not consider the need for personality changes. \(^7\)

Individuals who choose to enter law school "are highly focused on academics, have greater needs for dominance, leadership, and attention, and prefer initiating activity. ... They may have had good social skills but a low interest in emotions or others' feelings." \(^7\) Daicoff traces these traits back to pre-law students who "demonstrated definite needs to be leaders" and were "less humble" than others. "Law students, however, differed from undergraduates in that they became less philosophical and introspective, less interested in abstractions, ideas, and the scientific method, less dominant, confident, and sociable, and more anxious and internally conflicted." \(^7\) In law school students who ranked lowest academically "tended to obtain higher humanitarian scores.... [T]he mission of the profession and lawyer dissatisfaction and dysfunction]; (3) whether the offending attributes are pre-existing in those who choose to come to law school or are developed in law school; and (4) whether and how those attributes can be changed in attorneys.

\(^7\) Daicoff, supra note 25, at 1341.

\(^7\) Id. (footnote omitted).

\(^7\) Id. at 1342 n.6.

\(^7\) Id. at 1349-50 (footnotes omitted).

\(^7\) Id. at 1388 (footnote omitted).

\(^7\) Id. at 1364-65 (footnotes omitted).

\(^7\) Id. at 1366 n.144 (citing Lawrence R. Richard, Psychological Type and Job Satisfaction Among Practicing Lawyers in the United States 22 (1994) (unpublished Ph.D. dissertation, on file with Temple University). According to Richard's study, 57% of lawyers prefer "Intuiting" over "Sensing." Id. at 1393, n.349. "Intuitors are likely to enjoy 'solving complex problems, learning
Studies have found lawyers to be fairly consistent with popular stereotypes of them: "more achievement-oriented, more aggressive, and more competitive than other professionals and people in general." They also "tend to be more logical, unemotional, rational, and objective in making decisions and perhaps less interpersonally oriented than the general population." In terms of moral development, attorneys may "ignore... broad social principles which may override the law." They tend not to apply their personal values to problems nor do they usually consider interpersonal harmony or humanistic concerns in making decisions.

Daicoff cites a study by Beck, Burns, and Elwork, examining the psychiatric distress of lawyers, stating that lawyers frequently possess traits such as "aggressiveness, competitiveness, need for achievement and dominance, low self-esteem, fear expressed through awkwardness, paranoia, and insecurity, ways of coping with anxiety, inflexibility and intolerance for change expressed through authoritarianism." Other research concludes that lawyers are "workaholics" as a result of "justifiable paranoia, perfectionism, and an insatiable desire for success." Daicoff believes that the declining public confidence in the legal profession may, at least in part, be attributable to these real personality differences between lawyers and the general population. The perception of lawyers as cold and uncaring people, reflecting about new things, paying attention to global themes, abstractions, and big picture thinking."
their personality preferences and other traits, compounds the misunderstandings arising from the analytical and impersonal way in which lawyers approach problems.

There are some strengths in this picture that, if properly developed, could assist lawyers in their roles as creative problem solvers. Unfortunately, more factors weigh in on the negative side. If creative problem solving incorporates the idea of seeing the client as a whole person, then the lawyer's preferences for analytical thinking and low interest in the emotions are counterproductive. Likewise, not viewing others' feelings as relevant is not conducive to effective work in groups. The law school emphasis on solitary work and the implicit message that group process is unimportant reflect these traits in legal education. The fact that those with higher humanitarian scores tend to drop out of law school or be dissatisfied with the practice of law bodes poorly for the future of lawyers in creatively solving problems, where the welfare of others is more important than the billable hours.

In general, people who are "interpersonally challenged" will have a difficult time in groups. Being defensive, unwilling to admit mistakes or change attitudes, or aggressive towards others are characteristics clearly incompatible with collaborative work. Likewise, being competitive, discourteous, or uncivil with teammates does not further the team effort. While the need for leadership can be positive, it can threaten group efforts if it is authoritarian, done without skill, or a prerequisite for group participation. Inflexibility and intolerance for change, perfectionism, and paranoia, justifiable or not, are also traits that do not lend themselves to group work.

One important process in creative problem solving is "brainstorming." Engaging in brainstorming requires nonjudgmental listening, coping with nonlinear thinking, and an appreciation for the creative process. Law

---

86. See infra Part IV.
87. See, e.g., Barton, supra note 3, at 288. ("Creative problem solving has a stronger concern for the actual effects of law on individual human subjects than do those who support the traditional law-as-machine metaphor."). Unfortunately, this is not the interest or concern of the personality type that Daicoff describes.
88. While many lawyers perform pro bono work, the need for services for indigent clients is unmet, forcing some states to impose pro bono requirements. See Hope Viner Samborn, Court Weighs Required Pro Bono, 81 A.B.A. J. at 24, 24 (Feb. 1995); Robert Stein, Leader of the Pro Bono Pack, 83 A.B.A. J. at 108, 108 (Oct. 1997).
89. See Kerper, supra note 8, at 369. The brainstorming process is implicit throughout the model presented by Morton, supra note 6.
students and lawyers who prefer facts and completion may feel frustrated during this process. Also, their preference for analytical thinking will make it difficult for them to respect the creative input of others who may not present it in clear, logical terms.

The personality type of law students that inhibits them from seeking help for their stress and other psychiatric problems is reflective of the general tendency in legal education and the law to ignore the feeling side of human problems. Being unable to recognize, tolerate, or admit such "weaknesses" in themselves, law students and lawyers would have little tolerance for exploring those aspects of their clients' problems or dealing with the stress of group dynamics.

Given these personality traits, what is troublesome in imagining the lawyer's role in creative problem solving is that "[t]hese characteristics, some of which appear to exist before law school, are likely to be resistant to change and may be helpful in the practice of law. Law school appears to intensify them."

IV. INTERDISCIPLINARY EDUCATION

Many authors have argued for the importance of interdisciplinary education for a number of different reasons, all of which are related to creative problem solving. Some advocates have expressed the need for training lawyers who can understand the development of legal policy from an interdisciplinary perspective. This approach is analogous to asking that lawyers receive training in a broad liberal arts tradition, in a

---

90. Daicoff, supra note 25, at 1413.

91. See, e.g., Eleanor K. Bratton, The Eye of the Beholder: An Interdisciplinary Examination of Law and Social Research on Sexual Harassment, 17 N.M. L. Rev. 91, 113–14 (1987) (discussing need for sociological, economic, and psychological research to determine real consequences of sexual harassment to better inform judges, legislators, and lawyers of problem); J.W. Looney, Serving the Agricultural Clients of Tomorrow, 2 Drake J. Agric. L. 225 (1997) (discussing need for lawyers to understand basic economic concepts, statistics, and enough social science to be able to analyze empirical effects of lawmaking and law-enforcement and moral and political philosophy); Kathleen A. McDonald, Battered Wives, Religion, and Law: An Interdisciplinary Approach, 2 Yale J.L. & Feminism 251, 289–97 (1990) (discussing need for understanding relationship between religion, domestic violence, and legal and religious response to domestic violence, for restructuring legal response to domestic violence); Wallace, supra note 27, at 258–60 (concluding that interdisciplinary training should be required because criminal justice graduates often become policymakers); James Boyd White, Doctrine in a Vacuum: Reflections on What a Law School Ought (and Ought Not) to Be, 36 J. Legal Educ. 155, 165 (1986) (finding that interdisciplinary education would allow students to study and criticize "the assumptions underlying the culture of law and of our larger culture; this in turn might enable us better to perform our lawyers' functions of cultural criticism and transformation").
kind of renaissance style, to be able to understand the breadth of the origins and consequences of law. In some ways this is similar to the more recent schools of holistic lawyering, therapeutic jurisprudence, and preventive law, which propose that lawyers should provide broader and more encompassing services to their clients, focusing on the more “human” side of the clients’ problems.\textsuperscript{92} Certainly it is important for lawyers to be more responsive to their clients’ needs, mindful of the emotional side of legal problems, and aware of the consequences of legal policies. However, attempting to make the lawyer into the renaissance man or woman raises some concerns. There is too much knowledge within the various disciplines to expect any one person to be the master of all fields.\textsuperscript{93} Thus, training lawyers to work with professionals from other disciplines in creative problem solving is a more appropriate and practical solution.

A. What Is Interdisciplinary Education?

Commentators have used the terms “interdisciplinary” and “multidisciplinary” interchangeably, without distinction, to refer to the consideration or inclusion of more than one discipline. Typical multidisciplinary work is really nothing more than an effort by professionals from a number of disciplines to piece together their individual contributions regarding a common problem. It does not necessarily require that the members of the group understand the cultures of the other disciplines. For the most part, it requires only that the members of the group have an understanding of their own roles in the task at hand. The group may or may not succeed at its task, depending upon the ability of the various parts to reach a compatible conclusion. To the degree that this can be done with little need for the exchange of information and cooperation, the group may appear to function well. As the need for cooperation and dialogue increases, differences in value systems, attitudes, behaviors, and language may lead to conflict and ineffectual teamwork.


\textsuperscript{93} This is not to say that training in more than one discipline should not be done. In fact, I have argued for mandatory dual degree programs for lawyers working in the field of child maltreatment and family law. See Weinstein, \textit{supra} note 12, at 156. Such dual training programs are appropriate for lawyers who will specialize in rather narrow areas of law where having the complete understanding, attitudes, knowledge, and skills of another profession is necessary for effective service to the clients. While the lawyer may not perform the work of the other discipline, the lawyer will be in a position to work closely and collaborate with those professionals.
True interdisciplinary work involves communication and understanding among the team members. Rather than merely contribute a piece of the puzzle that is single-discipline focused, a member of an interdisciplinary team engages in problem solving dialogue with other team members in attempting to arrive at solutions that encompass and build upon the values and knowledge of the array of disciplines represented for the benefit of the client. This requires knowledge, skills, and attitudes that ordinarily are not included in professional training.

What has been referred to as interdisciplinary education may often be merely a form of single discipline education or a multi-disciplinary approach that does not help students move beyond their particular professional cultural understanding. For effective collaborative work, team members must be able to communicate, exchange ideas, and build new solutions. As in any exchange among members of different cultures, real communication only occurs if there is an understanding of one’s own culture and other participating cultures; language, attitudes, and behaviors will affect both the sending and receiving ends of the communication. Thus, interdisciplinary education must include attention to this communication process, transmission of cultural understandings, and training in group process.

The most basic level of interdisciplinary communication involves the exchange of knowledge. Educators may convey professional knowledge through reading and lecture, as long as they take some care to avoid language problems. In other words, we must convey specialized language with profession-specific meanings to members of other professions in a clear, understandable way.

Further, as part of the communication process, students and lawyers must learn to ask questions. Even special terminology, usually medical or

94. Davis et al., supra note 19, at 3. Davis and her co-authors provide:

Interdisciplinary practice has been defined as “professional activity by two or more practitioners in an interdependent work relationship, within a common work system and spanning two or more fields of learning and professional activity.” The nature of the work relationship varies according to the extent the collaborating practitioners yield their professional authority and engage in joint decisionmaking and action. Several terms have been used to reflect these variations in degree of collaboration, each of which obviously requires different conditions and commitment and skills of the participants. Andrews (1990), for example, states that at the service delivery level “collaboration is multidisciplinary when collaborators practice their independent disciplines and share information about a common case; interdisciplinary when collaborators mutually decide who will perform particular case functions, trading responsibilities that are similar for various disciplines and substituting for one another . . . .”

Id. (citations omitted).
scientific, which one would expect to be unfamiliar to lawyers, will not always give rise to a request for an explanation. This might be because the lawyer, who will selectively determine which material is relevant to the legal problem, assumes the specific material to be unimportant. It could also be because lawyers, or law students, are not good at admitting that they do not understand or know something, and choose, instead, to remain ignorant rather than ask the question that will demonstrate this lack of knowledge.

More problematic is the use of ordinary words that are loaded with special meaning within a profession's vernacular. The lawyer will assume that he or she understands what the other professional is saying when, in fact, he or she does not. Lawyers also deliver this kind of miscommunication to other professionals. When a lawyer speaks of a client's "interest," the lawyer most likely means something very different from what a physician or mental health professional means. Yet, these miscommunications occur without anyone's awareness. Only later, when the professionals collide in disagreement over a course of action, or when a client's needs are frustrated by professionals working at inconsistent ends, is a problem known to exist. Its root may remain undiscovered. We can most effectively provide this kind of training in a setting where members of different professional cultures have the opportunity to interact.

Effective interdisciplinary collaboration requires an attitude of respect and openness. If it is true that professional education necessarily narrows the outlook of students, then something must be done to expand it if students are to learn to work with others. One of the first requirements for this expansion is a respect for what other disciplines have to offer. Because legal training creates an unspoken but strong prejudice about the relative value of professions, with law being on top, creating respect for other professions and openness about what they have to offer must be an explicit task.

B. One Model for Interdisciplinary Education

The interdisciplinary training model presented here has been used by the San Diego Interdisciplinary Training Program in Child Abuse and Neglect. This program includes a two semester course for law students and graduate students in social work and psychology. Professors from all three disciplines, as well as visitors from other disciplines such as

95. See supra note 4.
Interdisciplinary Education

medicine and law enforcement, teach this course. The model used in this program distinguishes between four levels of instruction regarding the functioning and content of other disciplines.

*Level I* exposes students to interdisciplinary content. For example, an instructor from a single discipline teaches students from the same discipline information about another discipline.

*Level II* exposes students to individuals from another discipline. For example, instructors from multiple disciplines teach students from a single discipline—the typical “guest speaker” scenario.

*Level III* provides students with opportunities to interact with individuals from other disciplines. For example, instructors or professionals from multiple disciplines teach students from multiple disciplines.

*Level IV* provides students with opportunities to engage in problem solving with individuals from various disciplines working together. For example, students can do this in a class with simulated problem materials or in a directed field work setting where the problems cross disciplines and the professionals represent various disciplines. The latter situation would require a classroom component that would address the dynamics of interdisciplinary work.

In regard to content, this interdisciplinary model focuses on *knowledge* of one’s own and other disciplines; *attitudes* toward interdisciplinary practice, including respect for and awareness of what each discipline has to offer; and *skills* in interdisciplinary communication and collaboration. Students may acquire knowledge and attitude development at all four levels of interdisciplinary training, while skill development is likely to occur only at Level IV’s active and planned problem solving with members from disciplines other than one’s own.

Orienting students to other disciplines is a fundamental aspect of this training. It includes information about the training, methodology, values, language, and roles of the various disciplines. In other words, the training is about the discipline’s culture. Role clarification is an essential element of this process.

As can be seen from this model, a combination of explicit attention to knowledge about other disciplines and opportunities to interact in problem solving situations with members of other professions is vital. In addition, one of the prerequisites for being an effective member of an

---

96. See Russel, *supra* note 40, at 213.
97. *Id.* at 212.
interdisciplinary team is being well-grounded in one’s profession. It is significant to recognize that a substantial amount of interdisciplinary education, as provided in this model, can occur in the ordinary law school curriculum.

Level I transmission of knowledge can occur throughout the law school curriculum in a purposeful way. A discussion of the human dimension of the problems and challenges posed by the law and legal procedure would enhance almost all courses, both substantive and skills. Professors can present material on mental health issues, economics, and other relevant topics when addressing legal subject matter.

Guest lecturers can transmit Level II knowledge. For example, presentations by mental health professionals could provide useful information about the various disciplines that deal with these mental health issues in the context of the particular subject matter of the course, and could inform students about how experts in mental health might be used in law practice. In criminal procedure classes, discussions by social science researchers could enlighten law students about issues regarding witness identification and jury process. In international business courses, presentations by business professionals on their concerns in dealing with lawyers would be helpful.

Interdisciplinary courses where the students and professors come from a variety of disciplines and work on simulated problems related to a specialized area of practice create the opportunity to work with professionals from other disciplines. This is the format used in the San Diego Interdisciplinary Training Program in Child Abuse and Neglect.

---

98. See Davis et al., supra note 19, at 3. Davis and her co-authors opine:

Very few students, if any, can skip lightly over Levels I–III and successfully complete Level IV of interdisciplinary education. Most students appear to have a natural need to first grasp and integrate the roles and responsibilities of their own discipline/profession in a particular field before they are ready to fully consider and understand the roles, responsibilities and mind-sets of other professions with whom they must collaborate in order to serve their clients appropriately. Thus the four levels of interdisciplinary instruction need to be synchronized with the student’s progression in becoming grounded in, and identified with, his/her own profession.

Id.
C. Barriers to Interdisciplinary Education

1. Grounding in the Profession

A number of barriers hinder the ability to effectuate true interdisciplinary training. One significant barrier is the need for students to be grounded in their own profession. Even by the third year of law school students are not well-grounded; this takes years of experience in practice. First, the professional must have a good understanding of his or her own discipline, both in theory and in practice. Second, and partially as a result of the first requirement, the professional must understand the strengths and weaknesses of the profession and be able to engage with others from a position that is not defensive about his or her personal professional skills or the merits of the profession as a whole. There must be some "relaxing into" the profession. The participant must understand that working with others does not diminish his or her professional role. Law students cannot have achieved this posture due to their limited time and exposure to the law and practice. The anxiety of law school continues at least through the first two years of practice. Only after this high level of anxiety has dissipated and the professional feels some ease performing professional tasks and interacting with others within his or her discipline can he or she be well-grounded. Until that time, that person may have relatively little to offer an interdisciplinary team engaged in creative problem solving.

99. Graduate students in social work and psychology must spend significant time in field work throughout their graduate education. By the time they participate in the interdisciplinary course, they have had the much needed exposure and experience in their field of practice.

100. See Billups, supra note 19, at 148. Billups discusses "subprocesses" frequently found in interprofessional team work:

How well one can develop his or her role on an interprofessional team depends heavily on one's intellectual preparedness and emotional readiness for team practice. This in turn depends on the quality of one's professional education, experience, and maturity if, indeed, "interprofessional collaboration is an extension of professional expertise and no substitute for it."

Thompson (1983) points out the importance of a solid professional identity, proficiency, and confidence in working with a team:

To be challenged about an idea or a professional position can be threatening and can initiate a defensive stance, particularly if one's own professional identity has not been fully achieved. When that identity is secure, the same challenge, question, or disagreement is welcomed as a stimulating part of interprofessional dialogue.

Id. (citations omitted).

If interdisciplinary training is to occur in law school, legal education must compensate for this lack of grounding in some way. Exposure to professionals or students from other disciplines within a creative problem setting would be useful. Students could begin purposeful exposure to practice during the first year by a requirement of limited pro bono work or field observation. Law schools could expand this requirement during the second year, which could culminate in an internship experience during the third year.

2. Developmental and Personality Issues

Law students' personality characteristics and the developmental level at which many law students enter school limit measures schools can take to help students learn the skills, behaviors, values, and attitudes they need to be creative problem solvers. Although they cannot participate at an optimal level in interdisciplinary collaboration, can students learn skills that will enhance later performance in group work? Our experience with our Interdisciplinary Training Program in Child Abuse and Neglect indicates that this can be done. However, developmental considerations detract from this training.

Although students cover a range of developmental levels when they enter law school, many come directly from their undergraduate experience, having never spent a substantial amount of time in the "real world" or had a full-time job or responsibilities for the welfare of other people. Developmental theories applying psychological and sociological principles indicate that law students are still moving through early adult developmental stages in which they are seeking certainty, right answers, and clarity, and thus have trouble dealing with complex dilemmas. In the young adulthood stages, one would expect to find less self-reflection and disinterest the kind of personal awareness of self and others that lends itself to effective group participation. This is also a time, from the psychological perspective, when students may externalize blame, readily adopt stereotypes, and adhere to rules over broader principles. None of these traits conforms to the requirements of creative problem solving.

Additionally, the inner persona of law students may differ from their external portrayals. Daicoff discusses a study by Reich, who concluded that "on an intrapersonal and inner level, law students are insecure,

defensive, distant, and lacking in maturity and socialization." Daicoff cites a study on psychiatric distress that found that symptoms, primarily obsessive-compulsiveness and paranoia, increase throughout law school and the first two years of practice and "concluded that distress may be related to legal education's overemphasis on thinking and its under-emphasis on the development of interpersonal skills."

3. Other Barriers to Interdisciplinary Education

Other considerations also detract from attempts to teach interdisciplinary skills. First, students have come to law school because they want to be lawyers. Hence, they often view efforts to teach them about other disciplines, as well as topics they perceive as irrelevant to practice, as a waste of time. Thus, discussions about group process, self awareness, and the emotional aspects of problems can be out of bounds in terms of students' interest and motivation, which, in great part, their personality and developmental characteristics determine. The looming bar examination, which will test on the traditional skill of "thinking like a lawyer," and the concern for getting a job, which will require a demonstration of basic lawyering skills, reinforce this focus.

Second, the law school curriculum is so single-discipline-focused that students see tangential efforts to teach other ways of thinking and acting as aberrational. This is particularly true when other professors seem uninterested in interdisciplinary work and provide no support for such activities.

Third, having invested a great deal of time and money in their legal education, students are often defensive about the profession and blind to its limitations. Interdisciplinary work that necessarily challenges the

103. Daicoff, supra note 25, at 1374 (quoting Stephen Reich, California Psychological Inventory: Profile of a Sample of First-Year Law Students, 39 Psychol. Rep. 871, 873 (1976)). Reich suggested that the external persona of law students might be a "reaction formation to their inner feelings of inadequacy and uncertainty." Reich, supra, at 873–74; see also Daicoff, supra note 25, at 1423 (stating that conflict between inner and outer selves "may be inadequately resolved, and as a consequence express itself in defensiveness, unwillingness to admit mistakes or change attitudes, or aggression towards others to compensate for their inner insecurity. These characteristics may lead to discourteous, uncivil behavior and be linked in this way to the decline in professionalism.").

104. Daicoff, supra note 25, at 1376 (citing Marilyn Heins et al., Law Students and Medical Students: A Comparison of Perceived Stress, 33 J. Legal Educ. 511, 520–21 (1983)).

105. Id. at 1378 (citing Benjamin et al., supra note 101, at 246).
position that the law is the sole or the best mechanism for solving problems, and that requires a mind open to the attitudes and values of other disciplines, can arouse defensiveness. The stultifying process of legal education, which "focuses on intimidation and passive learning," may exaggerate this factor. "For many students, the process can be demoralizing, extremely stress-producing, and damaging to self-esteem."\textsuperscript{106} In this condition, students are not easily able to put things in proper perspective and see the broader picture required for problem solving. Engaging with professionals from other disciplines, who may enter the group situation with negative stereotypes about lawyers, would be extremely difficult for these students.

One of the biggest barriers to providing interdisciplinary training to law students is law professors' own lack of such training and experience in our own professional lives as lawyers and educators. Working with professionals and educators from other disciplines raises the same problems for law professors as it does for practicing lawyers. Our education, specialized and focused on the value of the law as the ultimate medium for solving problems, provides us with the context for our own teaching. We tend to mimic what has been modeled for us. We have neither the training nor experience to understand the need for a change, nor the knowledge or skills to execute such change. Furthermore, we have no pressure from our constituents to change. Students come to law school with pre-conceived notions and biases about what legal education should be. They are generally not demanding reforms that would in any perceived way diminish their transformation into aggressive adversarial lawyers. Competition for applicants places pressure on schools to respond to student interest.

Another barrier to interdisciplinary education is lack of resources. While a large classroom setting may accommodate Levels I and II of the model, Level III, in which students have the opportunity to interact with students from other disciplines, may require a smaller class size. It also requires the willingness to coordinate class scheduling and cross-approve classes from other disciplines. Someone must take the responsibility for making these things happen; this may require a commitment of time and effort that most professors may be reluctant to make. Level IV, in which professors and students from a variety of disciplines come together to engage in problem solving, necessarily requires a small class that is of a practicum nature, and additionally requires participation by professors of

\textsuperscript{106} Morton et al., \textit{supra} note 102 (manuscript at 62, on file with author).
more than one discipline. Unfortunately, the resulting small student to teacher ratio is prohibitive for most academic budgets.

D. Suggestions

Having set forth the barriers to effective interdisciplinary work and education, this Article now hopes to bring a more positive light to this subject. This Part discusses some ideas about how interdisciplinary training can be integrated into a creative problem solving curriculum for law schools.

Whatever steps legal educators take, we must keep in mind the personality and developmental hurdles. Interdisciplinary education should begin in law school, introduced in the first year as an important aspect to the work of a lawyer. Law schools have access to representatives of other disciplines. Professors may be engaged in community service and research with professionals from other disciplines. Serving as role models for their students, professors could demonstrate an interest in relevant disciplines' approaches to solving problems which would ordinarily be addressed solely as legal issues.\footnote{Billups, supra note 19, at 146.}

Law professors, even those who lack interdisciplinary training and exposure, can do a number of things that will help prepare students for interdisciplinary work. In regard to the need to know how to ask questions, professors are in the position to model questioning behavior. This would be a different kind of questioning than the kind for which law professors are famous. The questions would truly be information seeking rather than a form of "testing." Professors can model the "don't know" mind, particularly for clarifying language usage with other professionals. Professors could effectively accomplish these demonstrations during guest presentations by professionals from other disciplines.

Professors can also model the important attitude of respect for other professions, discussing the contributions of other disciplines as they are relevant to classroom work and inviting professionals from other disciplines to address the class.

Legal educators can expand group process and awareness. Most courses lend themselves to some kind of group work. Assigned reading about group process would be useful. Explicit discussion of typical group process problems would be even more helpful, as would appropriate
group behavior modeling by professors. Schools can offer courses in communication, group dynamics, and leadership skills.\(^\text{108}\)

We must do something to remind ourselves and our students that the law is but one approach to solving problems. We must keep in mind the cultural biases we have as a result of our indoctrination into the law, and attempt to bring other perspectives to our work with students\(^\text{109}\) and our scholarship.\(^\text{110}\)

If we understand the developmental levels at which many of our students enter school, we should make efforts to expose them to law practice as early in their education as possible. An increase in role playing and a requirement of pro bono work beginning in the first year of school would accelerate maturation from both sociocultural and psychological perspectives.\(^\text{111}\) This exposure, continued and expanded as students progress through law school, should also help to provide the professional grounding that is currently lacking, making students more available for interdisciplinary training and work.\(^\text{112}\) All of these actions would encourage the development of "a critical consciousness about their professional role."\(^\text{113}\)

Assuming it would be appropriate for lawyers to play a leading role in this new pursuit called creative problem solving, we must consider what

\(^{108}\) California Western School of Law is in the process of creating a series of core skill courses that would provide students some exposure to these components of creative problem solving.


\(^{111}\) See Morton et al., supra note 102. Sociocultural development is related to life experiences. Thus, exposing students to the working experience of a lawyer should accelerate maturity beyond what can occur in a classroom environment. From the psychological developmental perspective, explicit attention to behaviors and attitudes can encourage development so that field experience, which requires professional behaviors, could promote personal growth.

\(^{112}\) "An educational model that concentrates most interdisciplinary work in the last year of law school offers a sensible, if tentative, beginning." Lilly, supra note 16, at 1469 (footnotes omitted). Lilly suggests that law schools should integrate some interdisciplinary content into the first and second years, but that it should not take over basic substantive class coverage. Id. at 1468–70.

\(^{113}\) Kerper, supra note 8, at 373 (citing Peggy Cooper Davis & Elizabeth Ehrenfest Steinglass, A Dialogue About Teaching Socratic Method, 23 N.Y.U. Rev. L. & Soc. Change 249, 251–52 (1997)).
special training lawyers have to suit them for that role and build upon that strength. One of the traditional roles lawyers have played is that of policy makers. While policy might be in the form of law, its underlying basis, support, and effects reside in other domains: frequently in the areas of human behavior, sociology, psychology, and economics. Legal matters are rarely about the law in itself. They are about the underlying behavior that gave rise to the law and what the results of that behavior should be, as translated into policy by lawyers, judges, and politicians. Thus, the craft of law is naturally interdisciplinary. Lawyers need to know how to look at problems that arise in other domains and translate them into the legal scenarios with which they are familiar. This all encompassing aspect of the law and its ability to deal with the complete array of subject matters is perhaps one credential for leadership roles for those trained in the law.

Additionally, some valuable aspects of legal training are conducive to leadership roles if combined with specific training in interdisciplinary communication as well as leadership skills. First, lawyers learn logical thinking and organization of thoughts. These skills can be useful in working with a group as long as they do not result in the exclusion of nonlinear or nonlogical thinking. Second, the professional status of lawyers naturally puts them into leadership positions; people in general have that expectation. Third, lawyers' training in the adversarial process and the Socratic method makes them well-suited to play the role of


Freedman states:

From the earliest days of the Republic, lawyers have played an influential role in the determination of public policy. As members of the American aristocracy to which Tocqueville refers, lawyers have joined their professional skill with their sense of social responsibility to provide policymaking leadership at the national, state, and community levels.

The conviction that lawyers have a responsibility to be policymakers was perhaps put with greatest force by Harold Lasswell and Myres McDougal in their important essay arguing that "the proper function of our law schools is... to contribute to the training of policy-makers for the ever more complete achievement of the democratic values that constitute the professed ends of American polity." This conviction has been reinforced by the widespread assumption that a legal education, by inculcating that mysterious art called "thinking like a lawyer," prepared persons trained primarily as generalists to take on policymaking responsibilities in the most substantively demanding areas of public concern.

Thus, lawyers have regularly ventured beyond their technical preparation in the making of public policy.

_id. at 741-42 (footnotes omitted) (quoting Harold Lasswell & Myres McDougal, Legal Education and Public Policy: Professional Training in the Public Interest, in Studies in World Public Order 46 (M. McDougal & Assocs. eds., 1960)).
devil's advocate, an essential role in avoiding "groupthink." However, lawyers must temper the devil's advocate role with awareness of self and others as well as an understanding of group process.

Educators can build on the strengths of the kind of people that legal education and practice currently attracts. If lawyers are to become leaders in the field of creative problem solving and take leadership roles in collaborative efforts, then their natural need for leadership can be an asset, assuming that they can balance it with good leadership skills and a willingness not to be leader when appropriate. Lawyers' preferences for "Thinking" over "Feeling" and their tendency to be unemotional can provide important input to a group discussion, helping to maintain a balance between logic and emotions, provided that the preference can be tempered with an understanding of the role of feelings in problem solving. Similarly, the preference for "Judging" over "Perceiving" can be a positive influence by encouraging groups to stay focused on their tasks and complete their work, if they can balance the preference with a tolerance for the nonlinear progression of group dynamics and the creative process. Although relatively small, the preference for "Intuition" over "Sensing" can also be helpful to creative problem solving. 115 Intuitors are likely to enjoy "solving complex problems, learning about new things, paying attention to global themes, abstractions, and 'big picture' thinking." 116

Law schools might also take a new look at what kind of students they would like to attract. If the concept of what it means to be a lawyer becomes transformed by an emphasis on creative problem solving, perhaps legal careers will interest people who have the characteristics more akin to those required for interdisciplinary work. Of course, this would also require some transformation of legal curriculum and teaching methods so as not to discourage those who have these traits.

We should also engage in more interdisciplinary scholarship and involve our students in that work. One way of learning about other disciplines is performing research outside of the law library.

115. Daicoff, supra note 25, at 1393 n.349 (citing Larry Richard, How Your Personality Type Affects Your Practice—The Lawyer Types, 79 A.B.A. J., at 74, 76 (July 1993) (showing that about 57% of lawyers prefer "Intuiting" over "Sensing," compared with 30% of general population's preference for "Intuiting").

116. Id. at 1392 n.339 (quoting Richard, supra note 78, at 232, and citing S.K. Hirsch & J.M. Kummerow, Introduction to Type in Organizational Settings (1987)).
Interdisciplinary Education

While interdisciplinary work and education are not new, legal educators have paid little attention to creating models and methods for providing training. Those who have conducted studies of interdisciplinary training programs have found them to be effective. More conscious study of interdisciplinary work and use of pilot programs for testing models would add to our understanding of how to provide this education.

V. CONCLUSION

The theme of this Article is that interdisciplinary practice is a requisite to creative problem solving; but, there are significant barriers to training future lawyers for such practice. Lawyers usually understand that their clients may have psychological, economic, and other concerns associated with their “legal” problems. They may not, however, effectively address these concerns for a number of reasons. Further, lawyers often are not skilled at working with professionals from other disciplines in a collaborative effort to meet clients’ needs.

Professions are cultures of their own with their specific languages, knowledge bases, skills, methods, attitudes, and institutions. Cross-cultural communication and collaboration require an understanding of one’s own culture as well as a willingness to reach across cultural boundaries to share ideas. Legal training does not include education about these cultural differences; nor does it explicitly attend to the acculturation process that law students undergo.

117. See Davis et al., supra note 19, at 7–8. Davis and co-authors write:

The positive impact of interdisciplinary training on professional practice is documented in a 1985 study in which 196 students and professionals from eight disciplines identified training benefits as (1) an easier transition from professional school to practice, (2) greater use of interdisciplinary treatment approaches, (3) more effective client care and (4) greater use of referral sources. Other studies cite increased cooperation between agencies and greater participation in interprofessional activities as benefits of interprofessional education.

... Similarly, Kolbo and Strong (1977) in their national survey of the use of multidisciplinary teams, found initial and ongoing training of new members and teams as the most frequently mentioned strategy for “overcoming turfism, language barriers, role confusion, misconceptions about the function and value of other disciplines, and other obstacles to successful implementation of MDTs.”

Id. (citations omitted).

Informal pre- and post-testing of our own students in the Interdisciplinary Training Program in Child Abuse and Neglect has also reflected changes in attitudes and knowledge among the students, which, hopefully, will carry over into practice. See Beth Reynolds, An Interdisciplinary Approach to Child Welfare: A Look at Attitudes, Knowledge and Opinions Across Disciplines (1995) (unpublished manuscript, on file with author).
Personality and developmental considerations also influence law students' reaction to interdisciplinary material. This Article has discussed how these issues create resistance to nontraditional curricular offerings. It has presented one model for interdisciplinary education that includes four possible levels for exposing students to the work of other disciplines. The Article has suggested that the most inclusive interdisciplinary teaching requires opportunities for collaborative problem solving with the guidance of professors from the relevant disciplines and made additional suggestions for incorporating interdisciplinary materials and professionals into the traditional curriculum.

Ultimately, what we might hope for is that lawyers who have been trained in creative problem solving, including special training in interdisciplinary work, will have the knowledge, skills, and attitudes to participate effectively in interdisciplinary teams in order to achieve better results for clients. That is the mission of legal education.