Cooperation-Competition and Constructive Controversy in Developing Professional Ethics in Law School Classes

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I. INTRODUCTION: PROFESSIONAL SOCIALIZATION

A central aspect of socialization into a profession is the inculcation of professional ethics and moral character. Professional ethics, morals, and character are inherently social. They do not occur in a social vacuum. They are learned in the interactions between faculty and students, including among law school students as they are socialized into the community of legal practice. Ethics, morals, and values are by definition rules of "right" conduct, reflecting the cherished ideals that guide behavior in the law profession and in other professional interpersonal relationships. Professional ethics, morals, and values are, therefore, learned, internalized, and expressed in the relationships experienced in law school and within the larger law community.

There are a number of overlapping strategies for inculcating professional ethics and moral character. One is direct: professors tell students what the students’ professional ethics should be. Another is inspirational: exemplary professors modeling professional ethics. Students then identify with the professor and internalize the professional ethics, or at the very least imitate what the professor has done. Perhaps most effective, however, is a process approach in which the law school experience is structured so that students engage in ethical behavior moment-to-moment during law school. Students internalize repeated behaviors that become habit patterns in students’ interactions with others. By controlling the way students interact...
with each other and the faculty, the faculty controls the students’ development of professional ethics and moral character. Thus two of the most powerful tools law school professors have for teaching students professional ethics are cooperative learning and constructive controversy.

The purpose of this article is to present evidence concerning the impact of cooperative and competitive learning as well as constructive controversy on the development of professional ethics by law students. Cooperative learning and constructive controversy increase student achievement, build better relationships among students, and improve student psychological health. The theory underlying these practices and the research documenting their effectiveness will be covered. Finally, the problems with using competitive learning in both prelaw and law school classes are discussed.

II. CHANGING PARADIGM OF TEACHING

There is a changing paradigm in college teaching. The old paradigm of teaching is based on John Locke’s assumption that the untrained student mind is like a blank sheet of paper waiting for the instructor to write on it. Student minds are empty vessels into which instructors pour their wisdom. Because of this and other assumptions, instructors think of teaching as transferring knowledge from the instructor to the student, sorting students into categories, keeping student-instructor relationships impersonal, and motivating students through extrinsic rewards and created competition. The new paradigm of teaching involves creating the conditions under which students can actively discover and construct their own knowledge, having students work together cooperatively because learning is a social (not an individual) process, creating personal relationships among students and between students and faculty, developing the competencies and talents of all students, and motivating students through intrinsic goals.

The old paradigm of teaching is adult-centric in that it assumes that the instructor-student interaction is most crucial for learning. The research, however, disconfirms such a notion. McKeachie and his associates reviewed the research on methods of college teaching and found that students were more likely to acquire critical thinking skills and meta-cognitive learning strategies, such as self-monitoring and learning-how-to-learn skills,
from discussions with classmates. Bligh\(^3\) reviewed close to one hundred studies of college teaching conducted over fifty years. He found that students who participated in active discussions of their ideas with classmates had fewer irrelevant or distracting thoughts and spent more time synthesizing and integrating concepts than students who listened to lectures. Bligh concluded that during discussion students tended to be more attentive, active, and thoughtful than during lectures. Kulik and Kulik\(^4\) concluded from a review of research on college teaching that student discussion groups were more effective than lectures in promoting students’ problem-solving abilities. Smith\(^5\) conducted an observation study of college classes in a variety of academic subjects and found student-student interaction to be related to critical thinking outcomes as well as study habits characterized by more active thinking and less rote memorization. Johnson and Johnson\(^6\) concluded from a review that cooperative learning results in more creative and divergent thinking so that new ideas, solutions, and procedures are generated and conceptual frameworks constructed (i.e., process gain). Taken together, the research indicates that student-student interaction within cooperative learning groups may be a more powerful influence on student learning than instructor-student interaction.

In order to explore the importance of the new paradigm of learning for law schools, it is necessary to review the nature of social interdependence theory, the nature of cooperative and competitive learning, the relative impact of cooperative and competitive learning on instructional outcomes (including values), and the dangers of using competitive learning in both prelaw and law school classes. Constructive controversy, which is a critical component of well-functioning cooperative groups, is then discussed.

III. SOCIAL INTERDEPENDENCE THEORY

Social interdependence theory was first formulated by Morton Deutsch in 1949, extending Kurt Lewin’s notions of interdependence among group members. Lewin\(^7\) proposed that the essence of a group is the interdependence among members created by common goals. It results in the group being a “dynamic whole”; a change in the state of any member or subgroup

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7. See KURT LEWIN, FIELD THEORY IN SOCIAL SCIENCE, in RESOLVING SOCIAL CONFLICTS & FIELD THEORY IN SOCIAL SCIENCE 155, 303–04 (1997).
changes the state of any other member or subgroup. As members perceive their common goals, a state of tension arises, motivating members to accomplish goals. Deutsch examined how the tension systems of different people may be interrelated. He conceptualized two types of social interdependence—positive and negative. Positive interdependence exists when there is a positive correlation among individuals’ goal attainments; individuals perceive that they can attain their goals only if the other individuals with whom they are cooperatively linked attain their goals. Negative interdependence exists when there is a negative correlation among individuals’ goal achievements; individuals perceive that they can obtain their goals only if the other individuals with whom they are competitively linked fail to obtain their goals. No interdependence exists when there is no correlation among individuals’ goal achievements; individuals perceive that the achievement of their goals is unrelated to the goal achievement of others.

Deutsch specified three psychological processes resulting from interdependence: substitutability (the degree to which actions of one person substitute for the actions of another person), cathexis (the investment of psychological energy in objects outside of oneself, such as friends, family, and work), and inducibility (the openness to being influenced and to influencing others). When goals are negatively interdependent, the interaction is characterized by nonsubstitutability, negative cathexis, and resistance to influence. When no interdependence exists, there is an absence of the three processes.

A. Mediating Variables for Effective Cooperation

Cooperation is most effective when five elements are structured into the situation. The five critical elements of effective cooperation are:

1. Positive interdependence: the perception that you are linked with others in such a way that you cannot succeed unless they do (and vice versa) and that groupmates’ work benefits you and your work benefits them. While Lewin and Deutsch emphasized goal interdependence, teachers create positive interdependence in the classroom by structuring it through such things as joint rewards (if all members of your group score ninety percent correct or better on the test, each will receive five bonus points), divided resources (each group member receives a part of the total information required to complete an assignment), complementary roles (e.g., reader, checker, en-

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9. See Cooperation and Competition, supra note 6, at 57–76.
courager, elaborator), and a shared identity (e.g., group name, motto, flag, and symbol).

2. Individual accountability: the effort and performance of each group member is assessed, and the results are given back to the group and the individual. Since schools impose goals on students, more attention must be paid to making group members accountable for doing their fair share of the work.

3. Promotive interaction: group members promote each other’s success by helping, assisting, supporting, encouraging, and praising each other’s efforts to learn. In strict lectures, where students passively listen, this does not typically happen; but when there are group assignments, this interaction can happen outside the classroom.

4. Appropriate use of social skills: group members are taught the leadership, decision-making, trust-building, communication, and conflict-management skills that they need to work together effectively. Asking unskilled individuals to cooperate is somewhat futile.

5. Group processing: examining the process members use to maximize their own and each other’s learning so that ways to improve the process may be identified. To continuously improve the quality of this process, group members may be asked to (a) describe which member actions are helpful and unhelpful in ensuring that all group members are learning and that effective working relationships are being maintained, and (b) make decisions about what behaviors to continue or change.

B. Interaction Patterns

Social interdependence theory’s basic premise is that how participants’ goals are structured determines how they interact, and the interaction pattern determines the outcomes of the situation.11 Positive interdependence tends to result in promotive interaction while negative interdependence tends to result in oppositional or contrient interaction. Promotive interaction occurs when individuals encourage and facilitate each other’s efforts to complete tasks in order to reach the group’s goals, help and assist each other, exchange resources, give and receive feedback, challenge each other’s reasoning, and encourage increased effort. Two important aspects of promotive interaction are the appropriate use of individual and small group skills and group processing (reflecting on group efforts to describe what member actions were helpful and unhelpful in achieving the group’s goals,

maintaining effective working relationships among members, and making decisions about what actions to continue or change). Oppositional interaction occurs as individuals discourage and obstruct each other’s efforts to complete tasks in order to reach their goals. Individuals focus both on increasing their own success and on preventing any one else from being more successful than they are. No interaction exists when individuals work independently, without any interaction or interchange with each other. In other words, individuals focus only on increasing their own success and ignore as irrelevant the efforts of others. Each of these interaction patterns creates different outcomes. The interaction patterns resulting from the way in which goals are structured determine the resulting outcomes.

C. Outcomes

1. Amount and Characteristics of Research

The study of cooperative, competitive, and individualistic efforts is commonly recognized as the oldest field of research in US social psychology. In the late 1800s, Triplett (1898) conducted a study on the factors associated with competitive performance. Since then, more than 1,200 studies have been conducted on the relative merits of cooperative, competitive, and individualistic efforts and the conditions under which each is appropriate. Many of the research studies yielded findings with high internal validity and were carefully conducted by skilled investigators under highly controlled laboratory (31%) and field (65%) settings. When rated on the variables of random assignment to conditions, clarity of control conditions, control of the experimenter effect, control of the curriculum effect (same materials used in all conditions), and verification of the successful implementation of the independent variable, 51% of the studies met these criteria. These studies make up one of the largest bodies of research within psychology and provide sufficient empirical research to test social interdependence theory’s propositions.

Findings from the research on social interdependence have an external validity and generalizability rarely found in the social sciences. The more variations in places, people, and procedures the research can withstand and still yield the same findings, the more externally valid the conclusions. The

12. See generally An Educational Psychology Success Story, supra note 11, at 371–72 (sections 1–5 of this article are largely duplicated from An Educational Psychology Success Story).

13. Id. at 371. A review of the social psychological foundations of cooperative learning is also available in Cooperation and Competition, supra note 6, at 7–8, 77–78.

14. An Educational Psychology Success Story, supra note 11, at 371.

15. Id. A meta-analysis refers to a method in which the researcher statistically analyzes the results of other researchers’ studies. Because the studies vary in terms of the methodologies and research designs, there is also a range of quality. The researcher categorizes the studies as a means of conveying the general level of ability to trust that the results are valid and meaningful.

16. Id.
research has been conducted over eleven decades by many different researchers with markedly different theoretical and practical orientations working in different settings. Participants in the studies varied in age from three years old throughout the lifespan and came from different economic classes and cultural backgrounds. The studies employed widely different research tasks, ways of structuring social interdependence, and measures of the dependent variables. Duration ranged from one session to more than one hundred sessions. The research has been conducted in numerous cultures in North America (white, black, Native American, and Hispanic populations) and in countries from North, Central, and South America, Europe, the Middle East, Africa, Asia, and the Pacific Rim. The research on social interdependence includes both theoretical and demonstration studies conducted in educational, business, and social service organizations. The diversity of the research gives social interdependence theory wide generalizability and considerable external validity.

The many diverse, dependent variables examined in studies on social interdependence over the past 110 years may be subsumed within three broad categories: effort to achieve, positive interpersonal relationships, and psychological health (see Figure 1 and Table 2).

**Figure 1: Outcomes of Cooperative Learning**

![Diagram of outcomes of cooperative learning]


TABLE 1: COMPARISON OF OLD AND NEW PARADIGMS OF TEACHING

<table>
<thead>
<tr>
<th>Factor</th>
<th>Old Paradigm Of Teaching</th>
<th>New Paradigm Of Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Transferred From Faculty To Students</td>
<td>Jointly Constructed By Students And Faculty</td>
</tr>
<tr>
<td>Students</td>
<td>Passive Vessel To Be Filled By Faculty’s Knowledge</td>
<td>Active Constructor, Discoverer, Transformer Of Own Knowledge</td>
</tr>
<tr>
<td>Nature Of Learning</td>
<td>Learning Is Fundamentally Individual; Requires Extrinsic</td>
<td>Learning Is Fundamentally Social; Requires Supportive</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td>Environment/Community To Unleash Intrinsic Motivation</td>
</tr>
<tr>
<td>Faculty Purpose</td>
<td>Classify And Sort Students</td>
<td>Develop Students’ Competencies And Talents</td>
</tr>
<tr>
<td>Relationships</td>
<td>Impersonal Relationships Among Students And Between Faculty</td>
<td>Personal Transactions Among Students And Between Faculty</td>
</tr>
<tr>
<td></td>
<td>And Students</td>
<td>And Students</td>
</tr>
<tr>
<td>Context</td>
<td>Competitive/Individualistic</td>
<td>Cooperative Learning In Classroom And Cooperative Teams Among</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty</td>
</tr>
<tr>
<td>Assumption</td>
<td>Any Expert Can Teach</td>
<td>Teaching Is Complex And Requires Considerable Training</td>
</tr>
</tbody>
</table>


TABLE 2: META-ANALYSIS OF SOCIAL INTERDEPENDENCE STUDIES: MEAN EFFECT SIZES

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Cooperative Vs. Competitive</th>
<th>Cooperative Vs. Individualistic</th>
<th>Competitive Vs. Individualistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>0.67</td>
<td>0.64</td>
<td>0.30</td>
</tr>
<tr>
<td>Interpersonal Attraction</td>
<td>0.67</td>
<td>0.60</td>
<td>0.08</td>
</tr>
<tr>
<td>Social Support</td>
<td>0.62</td>
<td>0.70</td>
<td>-0.13</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.58</td>
<td>0.44</td>
<td>-0.23</td>
</tr>
<tr>
<td>Time On Task</td>
<td>0.76</td>
<td>1.17</td>
<td>0.64</td>
</tr>
<tr>
<td>Attitudes Toward Task</td>
<td>0.57</td>
<td>0.42</td>
<td>0.15</td>
</tr>
<tr>
<td>Quality Of Reasoning</td>
<td>0.93</td>
<td>0.97</td>
<td>0.13</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>0.61</td>
<td>0.44</td>
<td>-0.13</td>
</tr>
</tbody>
</table>


2. Effort to Achieve

The average person cooperating was found to achieve at about two-thirds of a standard deviation above the average person performing within a competitive (effect size = 0.67) or individualistic situation (effect size = 0.64).\(^{18}\) All effect sizes were computed using Cohen’s \(d\) and adjusted for

\(^{18}\) COOPERATION AND COMPETITION, supra note 6, at 19–20. The term “effect size” refers to a convention in educational research that is used instead of reporting statistical significance. Statisticians point out that results may be statistically significant, but that the typical convention of reporting does not convey the magnitude of the effect. Results may also be non-significant, but even a small effect can represent an important difference in an educational or therapeutic context.
sample size utilizing the procedure recommended by Hedges and Olkin.\textsuperscript{19} When only studies yielding findings with high internal validity were included in the analysis, the effect sizes were 0.88 and 0.61, respectively. Cooperative experiences promote more frequent insight into and use of higher-level cognitive and moral reasoning strategies than do competitive (effect size = 0.93) or individualistic efforts (effect size = 0.97). Cooperators tend to spend more time on task than do competitors (effect size = 0.76) or participants working individualistically (effect size = 1.17). Competitors tend to spend more time on task than participants working individualistically (effect size = 0.64). Cooperation, when compared with competitive and individualistic efforts, tends to promote greater long-term retention, higher intrinsic motivation and expectations for success, more creative thinking (i.e., process gain), greater transfer of learning, and more positive attitudes toward the task and school.

3. Positive Relationships and Social Support

More than 180 studies have compared the impact of cooperative, competitive, and individualistic efforts on interpersonal attraction. Cooperative efforts, when compared with competitive (effect size = 0.67) and individualistic (effect size = 0.60) experiences, promote considerably greater interpersonal attraction among individuals.\textsuperscript{20} This remains true when only the methodologically high-quality studies are examined (effect sizes = 0.82 and 0.62 respectively) and when the studies focusing on relationships between white and minority participants (effect sizes = 0.52 and 0.44 respectively) and relationships between participants who were disabled and nondisabled (effect sizes = 0.70 and 0.64 respectively) are examined. These results validate social judgment theory,\textsuperscript{21} an extension of social interdependence theory. The social judgments individuals make about each other result in either a process of acceptance, resulting in mutual liking and respect, or a process of rejection, resulting in mutual dislike and lack of respect. Since the 1940s, furthermore, more than 106 studies comparing the relative impact of cooperative, competitive, and individualistic efforts on social support have been conducted. Cooperative experiences promoted greater task-oriented and personal social support than did competitive (effect size = 0.62) or individualistic (effect size = 0.70) experiences. This remained true when only the methodologically high-quality studies are examined (effect sizes = 0.83 and 0.72 respectively).

\textsuperscript{19} LARRY V. HEDGES & INGRAM OLKIN, STATISTICAL METHODS FOR META-ANALYSIS 114–31 (1985).

\textsuperscript{20} COOPERATION AND COMPETITION, supra note 6, at 122.

\textsuperscript{21} Id. at 121, 124–25.
An important question is whether the quality of interpersonal relationships among students is related to academic achievement. Roseth, D. W. Johnson and R. Johnson\textsuperscript{22} conducted a meta-analysis of 148 studies involving more than 17,000 early adolescents. The studies were conducted in eleven different countries. They found that positive peer relationships explained 33\% of the variation in academic achievement, and when only the moderate- and high-quality studies were included, positive peer relationships explained 40\% of the variation in achievement. It seems that if teachers want to increase early adolescents’ achievement, they should facilitate the development of friendships.

Another question is whether there is a relationship among cooperative experiences, social interdependence dispositions, and harm-intended aggression, victimization, and prosocial behavior. Two hundred seventeen students from third to fifth grade completed a series of questionnaires.\textsuperscript{23} A path analysis was conducted among the variables. The results indicate that cooperative experiences predicted cooperative predispositions, absence of individualistic predispositions, and engagement in prosocial behavior. Cooperative predispositions predicted the engagement in prosocial behavior and the absence of engagement in harm-intended aggression. Competitive predispositions predicted engagement in harm-intended aggression. Individualistic predispositions predicted none of the measured behaviors. The use of cooperative learning and other cooperation-promoting strategies may therefore prove an important tactic for schools in the prevention of bullying.

4. Psychological Health and Self-Esteem

We have conducted eight studies directly measuring the relationship between social interdependence and psychological health.\textsuperscript{24} The samples studied included university individuals, older adults, suburban high-school seniors, juvenile and adult prisoners, step-couples, Olympic hockey players, and Chinese business managers. The results indicate that working cooperatively with peers and valuing cooperation result in greater psychological health than does competing with peers or working independently. Cooperative attitudes were highly correlated with a wide variety of psychological health indices. More specifically, cooperativeness is positively related to emotional maturity, well-adjusted social relations, strong personal identity, ability to cope with adversity, social competencies, basic trust and optimism.


\textsuperscript{24} See \textit{COOPERATION AND COMPETITION}, supra note 6, at 14; \textit{New Developments}, supra note 17, at 310–12.
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about people, self-confidence, independence and autonomy, higher self-esteem, and increased perspective-taking skills.

Competitiveness related in some cases positively and in some cases negatively to psychological health including conditional self-esteem and egocentrism. Individualistic attitudes related negatively to a wide variety of psychological health indices; this indicates a relationship with psychological pathology, basic self-rejection, and egocentrism.

An important aspect of psychological health is self-esteem. There have been more than eighty studies comparing the relative impact of cooperative, competitive, and individualistic experiences on self-esteem. Cooperative experiences promote higher self-esteem than do competitive (effect size = 0.58) or individualistic (effect size = 0.44) experiences, even when only the methodologically high-quality studies are examined (effect sizes = 0.67 and 0.45 respectively). Norem-Hebeisen and D. W. Johnson studied 821 white, middle-class, high school seniors in a Midwestern suburban community. They found that cooperative experiences tend to relate to beliefs that one is intrinsically worthwhile, others see one in positive ways, one’s attributes compare favorably with those of one’s peers, and one is a capable, competent, and successful person. Competitive experiences tend to relate to conditional self-esteem based on whether one wins or loses. Individualistic experiences tend to be related to basic self-rejection.

5. Values

A distinction arises between conventions and values. While conventions are shared but arbitrary behavior specified by the social system (such as driving on the right side of the street or shaking hands when meeting someone), values are determined by factors inherent in social relationships and tend to be perceived as more universal and unchangeable (such as “one should not steal”). Both social conventions and values may be more effectively taught in cooperative rather than competitive or individualistic situations, as individuals tend to adopt the conventions, values, attitudes, perspectives, and behavioral patterns of the groups to which they belong or aspire to belong. Conventions and values are inculcated not by focusing on each individual separately, but rather by emphasizing membership in a group (or community) that holds the desired values. Lewin, for example, recommended that if the goal is to change the values of an individual, the

25. See Table 2, supra p. 324.
focus should be on changing the values of the groups to which the individual belongs.

6. Moral Orientations

Cooperative, competitive, and individualistic efforts have inherent value systems that are taught by the flow of day-to-day life within schools30 (see Table 2). The moral orientation in a cooperative situation focuses on self-respect, mutual respect, and equality31 (see Table 3). All group members are viewed as having equal value and as being equally deserving of respect, justice, and equality (even though there may be differences in authority and status). This egalitarianism implies a definition of injustice as inequalities that are not to the benefit of all.32 Participants have a mutual responsibility to work for their own success and the success of all groupmates. Success results from joint efforts. Not only are members pleased about their own success, but they take pride and pleasure in groupmates’ success and well-being. Fellow group members are viewed as potential allies and facilitators of one’s success. Since collaborators “sink or swim together,” an “all for one and one for all” mentality is promoted. One’s efforts contribute not only to one’s own well-being but also to the success and well-being of collaborators and the general welfare. One’s personal identity includes a group identity that fosters loyalty. The worth of all members (including oneself) is based upon their membership in the human community; there is a basic and unconditional self-acceptance and acceptance of others. Members respect each other and themselves as unique individuals and appreciate the diverse resources each contributes to the group’s efforts. Because completing the task contributes to other’s well-being and the general welfare, the task is intrinsically motivating. Members feel a sense of responsibility to do their fair share of the work to complete the group’s task and persevere in doing so, even when it is difficult to do so. Perspective taking is ongoing and accurate, resulting in empathy and compassion for other members. Aggression toward other group members is seen as inappropriate. Members are viewed as being equally deserving of benefits (even though differences in authority and status may exist) and feel an obligation to respond with help, support, and encouragement when a


groupmate is in need. Members are committed to the long-term well-being of the group (i.e., the common good) and view promoting the success of others as a natural way of life. In his book, *One-Hundred Ways to Enhance Values and Morality in Schools and Youth Settings*, Howard Kirschenbaum notes that cooperative learning may be the most important and most powerful influence on socialization and value and moral education.

The moral orientation in competitive situations is based on inequality and the win-lose struggle to determine who will have superior and who will have inferior outcomes. Competition teaches the necessity of prevailing over others to get more of something than anyone else. Success depends on outperforming the other participants and preventing anyone else from outperforming oneself. Other participants are viewed as rivals and threats to one’s success. Engaging in competitive efforts inherently teaches one that the natural way of life involves depriving others from the fruits of winning and opposing and obstructing the success of others. A person’s value is contingent upon the relative success of his or her efforts; winners have value, losers do not. Thus, winners are envied and losers are disdained. One’s own worth is also contingent, going up when one wins and going down when one loses. The task, such as learning, is just a means to winning and of no value in and of itself (e.g., highly competitive students when placed in a cooperative learning group have been quoted as saying, “If no one wins or loses, what is the point?”). Competitors either do not take the perspectives of others or do so in a strategic way to plan how to defeat them. Aggressing against others in order to win is viewed as appropriate, often necessary, and often admirable. An equity view of justice prevails—those who perform the highest should get the most rewards (i.e., losers are undeserving of rewards). Thus competition is associated with less generosity, less willingness to take other people’s perspectives, less inclination to trust others, greater aggression toward others, and less willingness to communicate accurately.

34. This concept appears as a theme in the Carnegie Foundation studies, referred to as using constructive-developmental pedagogies that foster professional formation. For a review of research on these pedagogies in relation to professional formation in legal education, see Hamilton & Monson, supra note 1, at 340–78.
TABLE 3: VALUES PROMOTED BY POSITIVE AND NEGATIVE INTERDEPENDENCE

<table>
<thead>
<tr>
<th></th>
<th>Oppositional Interaction</th>
<th>Promotive Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>Outperforming Others</td>
<td>Shared, Joint Efforts</td>
</tr>
<tr>
<td>Other People</td>
<td>Rivals, Threats To Own Success</td>
<td>Allies, Potential Facilitators</td>
</tr>
<tr>
<td>Own Efforts</td>
<td>Deprive Others, Cause Their Failure</td>
<td>Facilitate, Contribute To Other’s Success &amp; Well Being</td>
</tr>
<tr>
<td>Worth</td>
<td>Contingent On Winning</td>
<td>Basic Acceptance Of Self &amp; Others</td>
</tr>
<tr>
<td>Task</td>
<td>Extrinsic, Means To Winning</td>
<td>Intrinsic</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>None Or Strategic</td>
<td>Empathy, Compassion</td>
</tr>
<tr>
<td>Aggression</td>
<td>Appropriate</td>
<td>Inappropriate</td>
</tr>
<tr>
<td>Justice</td>
<td>Equity</td>
<td>Equality, Need</td>
</tr>
</tbody>
</table>

The moral orientation in individualistic situations is based on strict self-interest.\textsuperscript{37} In individualistic situations everyone is a separate individual whose success results from one’s own efforts only. Interacting with others, either in a caring or an aggressive way, is inappropriate. The plight of others is to be ignored. One’s own success is viewed as important; it is unimportant whether others are successful or unsuccessful. A person’s worth depends on meeting criteria set by authority figures (such as teachers). The task is a means for achieving rewards. Thus engaging in individualistic efforts inherently teaches individuals to focus on their own goals and view other peoples’ success or failure as irrelevant and something to be ignored.

7. Prosocial Behavior

Prosocial behaviors are actions that benefit other people by helping, supporting, or encouraging their goal accomplishment or well-being.\textsuperscript{38} There are benefits to being prosocial. Prosocial children tend to build positive relationships with peers\textsuperscript{39} and, compared with schoolmates, are intrinsically motivated to build relationships with classmates, believe they are involved in positive relationships, value relationships, and enjoy positive well-being.\textsuperscript{40} Cooperative experiences tend to increase the frequency with

\textsuperscript{37} The Cooperative Link, supra note 30, at 3; Cooperative Learning and Traditional American Values, supra note 30, at 64; Cooperative Learning, Values, and Culturally Plural Classrooms, supra note 30, at 17.

\textsuperscript{38} David R. Shaffer, Social & Personality Development 306–07 (2000).


\textsuperscript{40} Patricia H. Hawley, Todd D. Little & Monisha Pasupathi, Winning Friends and Influencing Peers: Strategies of Peer Influence in Late Childhood, 26 INT’L J. BEHAV. DEV. 466, 470–72 (2002).
which participants engage in prosocial behaviors. In a study involving 217 fourth and fifth grade students, Choi, Johnson, and Johnson found that both cooperative learning experiences and cooperative predispositions predicted the frequency with which the students engaged in prosocial behavior. Competitiveness and individualism, on the other hand, did not predict prosocial behavior. The mutual responsiveness and shared positive effect typically found in cooperative situations, furthermore, seem to be key elements in the development of prosocial behavior.

The opposite of prosocial behavior is antisocial behavior. One form of antisocial behavior is harm-intended aggression (i.e., bullying). Choi, Johnson, and Johnson found that the more cooperative a student is, the less likely the student is to engage in harm-intended aggression. The negative relationship between cooperativeness and harm-intended aggression is consistent with previous evidence. The more competitive the student, the more frequently the student engaged in harm-intended aggression. Bullies tend to alienate their peers, experience diminished well-being, and feel


42. Choi, Johnson & Johnson, supra note 23, at 985–95.


45. For a review of this evidence, see generally April K. Bay-Hinitz, Robert F. Peterson & H. Robert Quilitich, Cooperative Games: A Way to Modify Aggressive and Cooperative Behaviors in Young Children, 27 J. Applied Behav. Analysis 435, 435–46 (1994) (“Results showed that cooperative behavior increased and aggression decreased during cooperative games.”); Leonard Berkowitz, Frustration-Aggression Hypothesis: Examination and Reformulation, 106 Psychol. Bull. 59, 59–73 (1989) (competitive encounters can engender hostility between the competitors in the form of disparaging remarks and attempts to hurt each other); Erv Napier, Competition in the Classroom, 18 KAPPA DELTA PI REC. 18, 18–19, 23 (1981) (arguing that competitive classroom activities best prepare students for competitive careers); Janice D. Nelson, Donna M. Gel- fand & Donald P. Hartmann, Children’s Aggression Following Competition and Exposure to an Aggressive Model, 40 Child Dev. 1085, 1085–97 (1969) (the study’s results showed that competitive games increased aggression); Dean Tjosvold & Lai Cheng Chia, Conflict Between Managers and Workers: The Role of Cooperation and Competition, 129 J. Soc. Psychol. 235, 235–247 (1989) (the study found that in a workplace setting, cooperative goals were associated with productive outcomes and positive interaction whereas competitive goals reflected the opposite).

more loneliness, sadness, and anxiety than most students.\textsuperscript{47} Just as there are benefits for engaging in prosocial behavior, there are costs for engaging in antisocial behaviors.

8. Perspective Taking

Frequent and accurate perspective taking appears more often in cooperative than in competitive (effect size = 0.61) or individualistic (effect size = 0.44) situations.\textsuperscript{48} The opposite of perspective taking is egocentrism. While perspective-taking ability tends to be indicative of psychological health, egocentrism tends to be a sign of psychological pathology (e.g., extreme forms of depression and anxiety result in a self-focus and self-centeredness). In competitive situations, a person’s perceptions and comprehension of others’ viewpoints and positions tends to be inaccurate and biased. Accurate perspective taking in cooperative situations enhances members’ abilities to respond to others’ needs with empathy, compassion, and support.

9. Level of Cognitive and Moral Reasoning

Frequent use of higher level cognitive and moral reasoning strategies appears more often in cooperative than in competitive (effect size = 0.93) or individualistic (effect size = 0.97) situations\textsuperscript{49} (see Table 1). A number of studies demonstrate that when participants are placed in a cooperative group with peers who use a higher stage of moral reasoning, and the group is required to make a decision as to how a moral dilemma should be resolved, advances in the students’ level of moral reasoning result.\textsuperscript{50}

10. Task Engagement

Positive attitudes toward the task and the experience of working on the task appear more frequently in cooperative rather than competitive (effect size = 0.57) or individualistic (effect size = 0.42) situations\textsuperscript{51} (see Table 1). Students working cooperatively (compared to those working competitively or individually) tend to be more involved in activities and tasks, attach greater importance to success, and engage in less apathetic, off-task, and disruptive behaviors. Cooperators spent more time on task than compet-

\begin{footnotesize}
\textsuperscript{47} Hawley, Little & Pasupathi, \textit{supra} note 40, at 471.
\textsuperscript{48} \textit{Cooperation and Competition, supra} note 6, at 67.
\textsuperscript{49} \textit{Id.} at 48–49; \textit{New Developments, supra} note 17, at 306.
\textsuperscript{51} \textit{See Cooperation and Competition, supra} note 6, at 90–92; \textit{New Developments, supra} note 17, at 307.
\end{footnotesize}
itors (effect size = 0.76) or participants working individualistically (effect size = 1.17). 52

11. Moral Identity

Promotive and oppositional patterns of interaction may have considerable impact on a person’s moral identity. 53 A person’s identity is a consistent set of attitudes that defines “who I am.” 54 One aspect of identity is the view of oneself as a moral person with character and who acts with integrity. A moral orientation adds an “ought to,” or obligatory, quality to identity. The social context in which individuals function largely determines their moral identities. Identity in a cooperative context defines the person as part of a community that shares a joint identity. Their promotive interaction tends to reflect egalitarianism (i.e., a belief in the equal worth of all members even though there may be differences in authority and status) and is characterized by mutual respect. Identity in a competitive context, on the other hand, defines a person as a separate individual striving to win either by outperforming others or preventing them from outperforming him or her. A competitor may thus have a moral identity involving the virtues of inequality, being a winner, and disdaining losers.

Promotive interaction includes engaging in prosocial behavior by helping and assisting other group members. Doing so influences how a person thinks of him- or herself (i.e., moral-identity). Midlarsky and Nemeroff, 55 for example, found that the self-esteem and self-view of people who had rescued Jews during the Holocaust were still being elevated fifty years later by the help they provided. Elementary school students who privately agreed to give up their recess time to work for hospitalized children saw them-

52. Cooperation and Competition, supra note 6, at 90–92; New Developments, supra note 17, at 307.


selves as more altruistic immediately and a month later. Prosocial behavior tends both to enhance and verify individuals’ self-definitions.

12. Moral Inclusion and Scope of Justice

Engaging in promotive or oppositional interaction inherently influences moral inclusion and the scope of justice. Each person has a psychological boundary for his or her moral community (or scope of justice) that defines who his or her moral rules apply to. The scope of justice is the extent to which a person’s concepts of justice apply to others. Moral considerations guide our behavior with those individuals and groups who are inside our scope of justice. Moral inclusion, therefore, is applying considerations of fairness and justice to others, seeing them as entitled to a share of the community’s resources, and seeing them as entitled to help, even at a cost to oneself. Moral exclusion occurs when a person excludes groups or individuals from his or her scope of justice, a share of the community’s resources, and the right to be helped. When moral exclusion exists moral values and rules that apply in relations with insiders are not applicable. Moral exclusion permits and justifies derogating and mistreating outsiders. It is perpetuated primarily through denying that it has harmful effects. The denial includes minimizing the duration of the effects of the mistreatment and others’ entitlement to better outcomes, and seeing one’s contribution to violence as negligible. Those outside the scope of justice can be viewed as nonentities who can be exploited (for example, illegal immigrants and slaves) or enemies who deserve brutal treatment and death. The former country of Yugoslavia is an example. Prior to its breakup, the Serbs, Muslims, and Croats in Bosnia more or less considered themselves to be part of one moral community and therefore treated one another with some degree of civility. After the country divided and vilification of other ethnic

62. Keith Doubt, Bosnia, BLACKWELL ENCYCLOPEDIA OF SOCIOLOGY (Jan. 15, 2009), http://blackwellreference.com/subscribertocnode.html?did=9781405124331_chunk_g97814051243318_s1-60; Boris Kanzleiter, Anti-war Activism, Yugoslavia, 1990s, BLACKWELL ENCYCLOPEDIA OF
groups became a political tool, Serbs, Muslims, and Croats committed atrocities against one another.

In competitive and individualistic situations, the boundaries between ingroups (in which moral inclusion exists) and outgroups (which are morally excluded) are quite strong and well marked. Cooperative situations, on the other hand, promote a much wider range of moral inclusion and a broader scope of justice. Moral inclusion is especially broadened when members of diverse backgrounds and cultures participate in the same cooperative group. With moral inclusion come related values of fairness, equality, and humanitarianism. Cooperators tend to see all of humanity as being entitled to fair treatment, justice, and help; they may even extend moral inclusion and the scope of justice to other species and life forms. Albert Schweitzer, for example, included all living creatures in his moral community, and some Buddhists include all of nature.

13. Justice and Fairness

An important aspect of moral socialization is to value justice. Valuing justice means ensuring that all benefits of membership in one’s groups, organizations, and society are distributed justly (i.e., distributive justice). The same procedures are applied fairly to all members (procedural justice), and everyone is perceived to be part of the same moral community (moral inclusion). Deutsch defined distributive justice as the method used to grant benefits (and sometimes costs and harms) to group or organizational members. There are three major ways in which benefits may be distributed. The equity or merit view is that a person’s rewards should be in proportion to his or her contributions to the group’s effort. This view is inherent in competitive situations. The equality view is all group members should benefit equally. It is inherent in cooperative situations. The need view is group members’ benefits should be awarded in proportion to their need. Cooperators typically ensure that all participants receive the social minimum needed for their well-being. Whatever system is used, it has to be perceived as “just.” When rewards are distributed unjustly, the group may be characterized by low morale, high conflict, and low productivity.
There is evidence that a child’s view of distributive justice develops over time. Children age four or younger, for example, were found to believe that whoever wants something the most should get it. After four, this belief tends to be replaced by the view that benefits should be based on strict equality or reciprocity (i.e., everyone should get the same amount). This strict reciprocity tends to be given up for the view that justice is more complex and may be seen from multiple perspectives, including the idea that the person with the greatest need (such as the handicapped or the poor) deserves special consideration.

Procedural justice involves fairness of the procedures that determine the outcomes a person receives. Fair procedures involve both that the same procedure is applied equally to everyone and that the procedure is implemented with polite, dignified, and respectful behavior. Typically, fairness of procedures and treatment are a more pervasive concern to most people than fair outcomes.

Finally, justice involves being included in the moral community. As discussed above, individuals and groups who are outside the boundary in which considerations of fairness apply may be treated in ways that would be considered immoral if people within the moral community were so treated.

Research indicates that the more students participated in cooperative learning experiences and the more cooperatively they perceived their classes, the more they believed that everyone who tried had an equal chance to succeed in class, that students got the grades they deserved, and that the grading system was fair. Even when their task performances were markedly discrepant, members of cooperative groups viewed themselves and their groupmates as being similar in overall ability and deservingness of reward.

14. The Common Good

The more cooperative the situation and the greater the person’s cooperativeness, the more the person will put the long-term well-being of the group over immediate self-interest. Valuing the common good of the group is inherent in every cooperative lesson.


71. Deutsch, supra note 64, at 12–13.

72. Cooperation and Competition, supra note 6, at 52.

73. Id. at 26, 142.
15. Valuing Self

Participants in cooperative situations tend to see themselves as being of more value and worth than do participants in competitive (effect size = 0.58) or individualistic (effect size = 0.44) situations.74 While contingent self-esteem dominates competitive situations, basic self-acceptance tends to dominate cooperative situations.

16. Automaticity in Moral Responding

When students spend most of class time in cooperative learning groups, they receive repetition in moral responding needed for developing automaticity.75 Every time a learning group meets, some members may need help and assistance of some sort. When members respond over and over again to each other’s requests for help, a pattern of moral responding may become an automatic habit pattern.

17. Expanding Self-Interest to Mutual Interest

One of the most important aspects of moral socialization and education is the expansion of self-interest to mutual interest (i.e., goal transformation). It is within cooperative endeavors to achieve meaningful goals that a person’s self-interests expand to include mutual interests.76 Most individuals are intrinsically interested in the well-being of their self. Subordinating one’s own interests to the interests of the group, community, or other individuals, however, is just as intrinsic to humans and as powerful as acting on self-interests.77 Selfishness (the total focus on self-benefit while ignoring the well-being of others) has a low survival value because in a society each individual is dependent on others for even the most basic resources such as food, water, shelter, clothes, transportation, and communication (not to mention belonging and caring). In order to meet such basic needs each individual must cooperate with others, working to achieve mutual goals that benefit others and the community as a whole as well as oneself. If the other group members are unable to do their share of the work, the person suffers. It is therefore essential for one’s own well-being to work to enhance the well-being of other members. A person’s success, happiness, and well-be-
ing thus become intertwined with the happiness and well-being of others, and one’s self-interests thereby include the interests of others and the community as a whole. The requirement for cooperation and community results in the emergence of new social needs and goals, which include the well-being of others and the common good.

IV. DISADVANTAGES OF COMPETITIVE LEARNING

A. Norm-Referenced Evaluation

Competition is primarily structured within classes through norm-referenced evaluation. Norm-referenced evaluation uses the achievement of other students as a frame of reference for judging the performance of an individual. The general procedure is to administer a test to a large sample of people like those for whom the measure is designed. This group, known as the norm group, provides a distribution of scores against which the score of any single person can be compared. Classroom teachers usually use norm-referenced evaluation procedures by grading on a curve. Grading on a curve was one of many proposals for educational reform in the 1930s; it represented an attempt to adopt in the classroom the same procedures used by publishers of standardized tests. To grade on a curve, teachers define the norm group as all students in the class for which the grades are to be assigned and assume that the distribution of test scores follows the form known as the normal curve. A normal distribution in a class means that 15 percent of the students would receive “As,” 20 percent “Bs,” 30 percent “Cs,” 20 percent “Ds,” and 15 percent “Fs.” Teacher-made assessment measures, however, are rarely designed to give normal distributions, and class sizes are typically too small to expect a normal distribution (it takes several hundred scores to potentially have a normal distribution). Terwilliger concludes that these defects are so serious and so common that it is impossible to justify the practice of grading on a curve.

There are numerous disadvantages to using norm-referenced evaluation procedures. Norm-referenced evaluation tends to:

1. **Increase student anxiety.** This interferes with learning on complex tasks and of new information. High anxiety especially interferes with adaptive problem-solving.
2. **Motivate individuals to exert minimal effort.** In competitions, chronic winners exert only enough effort to win and chronic losers exert little or no effort at all.

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3. *Create extrinsic motivation.* Winning tends to become more important than learning.

4. *Reduce intrinsic motivation to learn for interest in or enjoyment of an activity for its own sake.*

5. *Increase the frequency with which students cheat.* Students tend to become more committed to winning at any cost.

6. *Create a situation in which students may internalize the values of “bettering others” and “taking joy in others’ mistakes.”* Students tend to become less committed to values of fairness and justice, and more self-oriented.


8. *Result in overgeneralization of results to all aspects of a person’s being.* Winning in one arena tends to result in a feeling of superiority in all arenas. Losing in one arena tends to result in a feeling of inferiority in all arenas.

9. *Create anger and promote hostility towards and dislike of those who win.* Losing tends to promote depression and aggression towards winners and judges.

10. *Promote a view of life as a “dog-eat-dog” “rat-race” in which “only the strongest survive.”*

**B. Psychological Health**

Besides the studies comparing the relative effects of cooperative, competitive, and individualistic efforts on psychological health, a number of others have looked at only competition. Franken and Brown\(^80\) found that people with a strong need to win have poor coping skills, tend to engage in denial as well as behavioral and mental disengagement, fail to show good self-acceptance, tend to see the world as hostile (e.g., it is a “dog-eat-dog” world), are inclined to lack hope, and have an entity view of intelligence (e.g., intelligence is fixed). A strong need to win is related to denial, behavioral and mental disengagement, poor self-acceptance, a view of the world as threatening and hostile, and self-image concerns. The need to win is also negatively related to the need to perform well,\(^81\) that is, the stronger the need to win the lower the need to perform well.

When working towards competitive goals, individuals tend to engage in self-protective strategies such as self-worth protection, self-handicapping, and defensive pessimism. *Self-worth protection* involves withholding effort so that failure can be attributed to not trying rather than incompe-

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Self-handicapping involves creating an impediment to one’s performance (e.g., procrastination and unrealistically high expectations) so that an excuse is ready if one fails. Defensive pessimism involves unrealistically low (a) expectations for succeeding and (b) valuing of the task, so that anxiety about succeeding is minimized. These strategies tend to lower achievement in competitive situations.

C. Career Success

Robert L. Helmreich and his colleagues found, in a series of investigations, that competitiveness was negatively related to career success and productive membership in a variety of organizations. Competitiveness seems to relate to believing that one is good at one’s job and empowered to do it well, but it also relates to a lack of commitment to organizational goals, commitment to doing a good job, involvement in task social support systems, commitment to please others, commitment to values that facilitate productivity, and respect for superiors. The reason why competitors may not be successful is that they are focused on their own winning and not on the productivity of the organization.

D. University Life

Barsky found that competition was a pervasive theme in the university experience. He found that competition was perceived to lead to stress and disillusionment rather than motivation to work harder. With faculty, for example, the systems for annual appraisals, tenure, and promotion were specific.


cifically blamed for inciting jealousy, alienation, tension, and verbal abuse. These findings corroborate Baldridge’s conclusion that a faculty fragmented into interest groups and engaged in power struggles results in conflict.

It is not only the faculty who suffer from competition. Students often suffer as well. In competition participants profit from each other’s errors. Because individuals who are competing with each other can succeed only if others fail, students may even sabotage others’ work, criticize it, and withhold information and materials that others might need. Deutsch found that college students who were being graded competitively in a psychology class reported less desire to win the respect of others and greater interpersonal animosity. Competitive situations tend to be viewed as unfriendly, non-intimate, and uninvolving. When others fail in a competition, furthermore, the winners may view them with contempt. Contempt is elicited in situations in which a person needs to feel stronger, more intelligent, more civilized, or in some way better than another. At the elementary school level, there is evidence that (a) most students perceive school as being competitive, (b) American children are more competitive than children from other countries, (c) American children become more competitive the longer they are in school or the older they become, (d) white children are more competitive than black children, (e) urban children are more competitive than rural children, and (f) students compete irrationally in situations (for example, they are willing to lower their gains just to keep peers from gaining more).

Compared with competitive and individualistic efforts, cooperation has powerful positive effects on a wide variety of outcomes, including the inculcation of values. The development of a practice procedure for instructors to implement cooperation in classrooms would therefore serve students well.

88. See Franken & Brown, supra note 80, at 807–08; Franken & Prpich, supra note 81, at 705–06.
90. Gillian A. King & Richard M. Sorrentino, Psychological Dimensions of Goal-Oriented Interpersonal Situations, 44 J. PERSONALITY & SOC. PSYCHOL. 140, 158 (1983); see also William G. Graziano et al., Competitiveness Mediates the Link Between Personality and Group Performance, 73 J. PERSONALITY & SOC. PSYCHOL. 1394, 1406 (1997) (presenting research suggesting “individual differences in agreeableness are related to competitive behavior during group interaction.”).
V. NATURE OF COOPERATIVE LEARNING

In order to achieve these outcomes in educational organizations, cooperative learning must be used the majority of the time. Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other’s learning.93 Any assignment in any curriculum for any age student can be done cooperatively. There are three types of cooperative learning—formal, informal, and base groups.

Formal cooperative learning consists of students working together, for one class period to several weeks, to achieve shared learning goals and complete jointly specific tasks and assignments.94 In formal cooperative learning groups, teachers:

1. Make a number of pre-instructional decisions. Teachers specify the academic and social skills objectives for the lesson and decide on the size of groups, the method of assigning students to groups, the roles students will be assigned, the materials needed to conduct the lesson, and the way the room will be arranged.

2. Explain the task and the positive interdependence. A teacher clearly defines the assignment, teaches the required concepts and strategies, specifies the positive interdependence and individual accountability, gives the criteria for success, and explains the expected social skills to be used.

3. Monitor and intervene. Teachers monitor students’ learning and intervene within the groups to provide task assistance or to increase students’ interpersonal and group skills.

4. Assess and process. Teachers assess students’ learning and structure students’ processing of how well their groups functioned.

Informal cooperative learning consists of having students work together to achieve a joint learning goal in temporary, ad-hoc groups that last from a few minutes to one class period.95 During a lecture, demonstration, or film, informal cooperative learning can be used to focus student attention on the material to be learned, set a mood conducive to learning, help set expectations as to what will be covered in a class session, ensure that students cognitively process and rehearse the material being taught, summarize what was learned and precue the next session, and provide closure to an instructional session. The procedure involves three- to five-minute focused discussions before and after the lecture or demonstration (to set expectations and provide closure) and two- to three-minute pair discussions interspersed every fifteen minutes or so throughout the lecture or demonstration (to ensure active cognitive processing of the material being presented).

94. Id.
95. Id.
Cooperative base groups are long-term, heterogeneous cooperative learning groups with stable membership. Members’ primary responsibilities are to provide support, encouragement, and assistance to each other to make academic progress, to develop cognitively and socially in healthy ways, and to hold each other accountable for striving to learn.96 Typically cooperative base groups are (a) heterogeneous in membership, (b) meet regularly (for example, daily or biweekly), and (c) last for the duration of the semester, year, or until all members are graduated. Base groups typically consist of three to four members. They meet at the beginning and end of each class session or week to complete academic tasks such as checking each members’ homework, routine tasks such as taking attendance, and personal support tasks such as listening sympathetically to personal problems or providing guidance for writing a paper.

Formal cooperative learning, informal cooperative learning, and cooperative base groups may be used together. A typical class session may begin with a base group meeting followed by a short lecture in which informal cooperative learning is used. A formal cooperative learning lesson is then conducted and near the end of the class session another short lecture may be delivered with the use of informal cooperative learning. The class ends with a base group meeting.

One of the central aspects of promotive interaction is disagreement and argumentation (i.e., constructive controversy) among members of cooperative groups when they have to solve a problem, make a decision, or come to an agreement.

VI. CONSTRUCTIVE CONTROVERSY

Socialization into professional ethics and moral character tends not to happen in situations where everyone agrees with each other. Piaget97 especially believed that the movement to higher levels of cognitive and moral reasoning only resulted when intellectual conflict occurred. In the disagreements and arguments over the solutions to problems, individuals gain the creative insights necessary for higher-level reasoning. Thus, once positive interdependence is firmly established, constructively managed disagreements should be encouraged. Such intellectual conflicts are known as controversies. A controversy exists when one person’s ideas, opinions, information, theories, or conclusions are incompatible with those of another, and the two seek to reach an agreement.98 Controversies are resolved by engaging in what Aristotle called deliberate discourse (i.e., the discus-

96. Id.
sion of the advantages and disadvantages of proposed actions) aimed at synthesizing novel solutions (i.e., creative problem-solving).

A. Process of Controversy

“Difference of opinion leads to inquiry, and inquiry to truth.”
—Thomas Jefferson

The way in which disagreement, argumentation, and dissent are structured in cooperative groups determines the process of problem-solving and decision-making; this determines the nature and quality of the decision and other outcomes. The process by which controversy sparks high-quality decision-making, productivity, positive relationships, psychological health, and other positive outcomes is outlined in Figure 2. During a constructive controversy, decision-makers proceed through the following process:

1. When individuals are presented with a problem or decision, they form an initial conclusion based on categorizing and organizing their current (but usually limited) information, experience, and perspectives. They tend to have a high degree of confidence in their initial conclusion (they freeze the epistemic process).

2. When individuals present their conclusion and its rationale to others, they engage in cognitive rehearsal and higher-level reasoning strategies, thereby deepening their understanding of the problem or decision.

3. Individuals are confronted by other people with different conclusions based on other people’s information, experiences, and perspectives. They tend to become uncertain as to the correctness of their own conclusion, which arouses a state of conceptual conflict or disequilibrium. They unfreeze their epistemic process.

4. Individuals become uncertain as to the correctness of their views. A state of conceptual conflict or disequilibrium is aroused.

5. Uncertainty, conceptual conflict, or disequilibrium tends to motivate epistemic curiosity. The result is an active search for (a) more information and new experiences (increased specific content) and (b) a more adequate cognitive perspective and reasoning process (increased validity) in the hope of


resolving the uncertainty. Divergent attention and thought are stimulated.

6. By adapting their cognitive perspective and reasoning through understanding and accommodating the perspectives and reasoning of others, individuals derive a new, re-conceptualized and reorganized conclusion. They detect novel solutions and decisions that are, on balance, qualitatively better.

Each of these premises is discussed below.

Depending on the conditions under which controversy occurs and the way in which it is managed, controversy may result in positive or negative consequences. These conditions include the cooperative context within which the constructive controversy takes place, the level of group members’ social skills, and the ability of group members to engage in rational argument.101

B. Controversy Instructional Procedure

Teaching students how to engage in the controversy process begins with randomly assigning students to heterogeneous cooperative learning groups of four members.102 The groups are given an issue on which to write a report and pass a test. Each cooperative group is divided into two pairs. One pair is given the “con” position on the issue and the other pair is given the “pro” position. Each pair is given the instructional materials needed to define their position and point them towards supporting information. The cooperative goal of reaching a consensus on the issue (by synthesizing the best reasoning from both sides) and writing a quality group report is highlighted. Students then:

1. Research, learn, and prepare position. Students prepare the best case possible for their assigned position by researching the assigned position, organizing the information into a persuasive argument, and planning how to advocate the assigned position effectively to ensure it receives a fair and complete hearing.

2. Present and advocate position. Students present the best case for their assigned position to ensure it gets a fair and complete hearing.

3. Engage in an open discussion in which there is spirited disagreement. Students freely exchange information and ideas while (a) arguing forcefully and persuasively for their position, (b) critically analyzing the opposing position, (c) refuting the opposing position by pointing out the inadequacies in

101. Conflict in the Classroom, supra note 99, at 58–62; Cooperation and Competition, supra note 6, at 102; Civil Political Discourse, supra note 99, at 301–03; Creative Controversy, supra note 98, at 3:16–3:19; Energizing Learning, supra note 99, at 42–43.

102. Conflict in the Classroom, supra note 99, at 62; Energizing Learning, supra note 99, at 48.
the information and reasoning, and (d) rebutting attacks on their position and presenting counter arguments.

4. **Reverse perspectives.** Students reverse perspectives and present the best case for the opposing position.

5. **Synthesize.** Students drop their roles as advocates and find a synthesis or integration on which all members can agree. Students summarize the best evidence and reasoning from both sides and integrate it into a joint position that is new and unique. Students write a group report on the group’s synthesis with the supporting evidence and rationale and take a test on both positions. Groups then process how well the group functioned and celebrate the group’s success and hard work.

C. **Impact of Controversy on Professional Ethics and Moral Character**

The research indicates overall that constructive controversies create higher achievement, greater retention, more creative problem-solving, more frequent use of higher-level reasoning and metacognitive thought, more perspective taking, greater continuing motivation to learn, more positive attitudes toward learning, more positive interpersonal relationships, greater social support, and higher self-esteem.\(^{103}\) Engaging in a controversy can also be fun, enjoyable, and exciting (see Table 4). In this section the outcomes of constructive controversy relevant to socialization into professional ethics and moral character will be discussed.

<table>
<thead>
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<th>Dependent Variable</th>
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<th>Controversy / Individualistic Efforts</th>
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</table>


1. **Values**

Participating in the controversy process teaches the student values such as (a) you have both the right and the responsibility to advocate your conclusions, theories, and beliefs, (b) “truth” is derived from the clash of opposing ideas and positions, (c) insight and understanding come from a “disputed passage” where one’s ideas and conclusions are advocated and subjected to intellectual challenge, (d) issues must be viewed from all perspectives, and (e) synthesis can subsume seemingly opposed positions. In addition, it teaches hope and confidence in the value of deliberation, respect for the canons of civility, mutual respect, the importance of arguing on the basis of factual information, and the importance of the common purpose of reaching a joint reasoned judgment. It also affirms democratic political discourse, even if it results in outcomes that are contrary to one’s own preferences.

2. **Perspective Taking**

Students in academic controversies (also known as “constructive controversies”) more accurately take the other’s perspective than do students participating in concurrence seeking (effect size = 0.91), debate (effect size = 0.22), or individualistic efforts (effect size = 0.86). Tjosvold and Johnson\textsuperscript{104} conducted experiments where participants discussed a moral dilemma taken from the *Defining Issues Test* with a confederate\textsuperscript{105} who always used social order (Kohlberg State 4) reasoning.\textsuperscript{106} The confederate either agreed or disagreed with the participant’s point of view. Participants in the controversy condition were more accurate in taking the cognitive perspective of the confederate on another (nondiscussed) moral issue from the *Defining Issues Test* than were participants in the no-controversy condition. Controversy resulted in more accurate understanding of the confederate’s reasoning structure than did no-controversy.

3. **Level of Cognitive and Moral Reasoning**

Cognitive development theorists such as Piaget, Flavell, and Kohlberg have posited that it is repeated interpersonal controversies, in which individuals are forced again and again to take cognizance of the perspective of


\textsuperscript{105} The term “confederate” refers to a research assistant employed by the scientist who plays a specific role within a social experiment in order to carefully control the variables of interest in the study.

\textsuperscript{106} Contemporary moral psychology introduced the notion that instead of moral thinking occurring predominantly in one stage, that individuals use reasoning reflective of a broader variety of stages. See, e.g., James Rest et al., *Postconventional Moral Thinking* 32 (1999).
others, that promote cognitive and moral development, the ability to think logically, and the reduction of egocentric reasoning. Such interpersonal conflicts are posited to create disequilibrium within individuals’ cognitive structures, which motivates a search for a more adequate and mature process of reasoning. The impact of controversy on cognitive and moral reasoning has been found in varied size groups and among markedly diverse student populations.107

Students who participate in academic controversies (see Table 4) end up using higher-level reasoning and metacognitive thought more frequently than students participating in concurrence-seeking (effect size = 0.62), debate (effect size = 1.35), or individualistic efforts (effect size = 0.90). Several studies demonstrate that pairing a conserver with a nonconserver, giving the pair conservation problems to solve, and instructing them to argue until there is agreement or stalemate resulted in the conserver’s answer prevailing on the great majority of conservation trials and in the nonconserver learning how to conserve. Change tended to be unidirectional and nonreversible. Children who understood conservation did not adopt erroneous strategies, and nonconservers tended to advance toward a greater understanding of conservation. Even two immature children who argued erroneous positions about the answer tended to make modest but significant gains toward an understanding of conservation. The discussion of the task per se did not produce the effects. There had to be conflict among individuals’ explanations for the effects to appear.108

The same thing seems to happen with level of moral reasoning. There are a number of studies that demonstrate that when subjects are placed in a group with peers who use a higher stage of moral reasoning and the group is required to make a decision as to how a moral dilemma should be resolved, advances in the students’ level of moral reasoning result.109 In a recent study, Tichy, Johnson, and Johnson110 examined the impact of controversy compared with individualistic learning on the four components of moral development.111 Although they did not find a consistent effect on moral sensitivity, they did find that controversy tended to result in significantly higher levels of moral motivation, moral judgment, and moral character.

107. See supra notes 98–99.
108. See Table 4, supra p. 346.
109. Cooperation and Competition, supra note 6, at 102.
4. Open-Mindedness

Individuals participating in controversies in a cooperative context tend to be more open-minded than individuals participating in controversies in a competitive context. In deciding how to resolve a moral dilemma, they listened with open minds more frequently when the context was cooperative. When the context was competitive, there was a closed-minded orientation in which participants felt comparatively unwilling to make concessions to the opponent’s viewpoint and closed-mindedly refused to incorporate any of it into their own position. Within a competitive context the increased understanding resulting from constructive controversy tended to be ignored for a defensive adherence to one’s own position.

5. Continuing Motivation To Learn

Individuals participating in constructive controversies tend to have greater continuing motivation to learn than did individuals participating in concurrence-seeking (effect size = 0.75), debate (effect size = 0.45), or individualistic efforts (effect size = 0.71).

6. Positive Relationships Among Disputants

Participants in controversies developed more positive interpersonal relationships than did participants in concurrence-seeking (effect size = 0.24), debate (effect size = 0.72), or individualistic efforts (effect size = 0.81). In addition, participants in controversies experienced greater social support than did participants in concurrence-seeking (effect size = 0.32), debate (effect size = 0.92), or individualistic efforts (effect size = 1.52). The more individuals manage their disagreements through the controversy procedure, the more caring and supportive their relationships, which increases the likelihood of identification with each other (thus adopting each other’s values) and group cohesion (thus increasing the commitment to group norms and values).

7. Valuing Learning

Participants in controversies developed more positive attitudes toward learning than did participants in concurrence-seeking (effect size = 0.58), debate (effect size = 0.81), or individualistic efforts (effect size = 0.64).

8. Valuing Self

Participants in controversies developed higher self-esteem than did participants in concurrence-seeking (effect size = 0.39), debate (effect size = 0.51), or individualistic efforts (effect size = 0.85).

D. Application to Law Schools

There has been some interest in the use of constructive controversy in law school classes for about fifteen years.113 The use of constructive controversy provides law students an alternative to the use of competitive win-lose adversarial debates. Together with cooperative learning, constructive controversy provides the essential day-to-day experiences that socialize students into the professional ethics and moral character needed to be a successful and effective lawyer.

CONCLUSIONS AND SUMMARY

The process of teaching and learning in law schools influences the development of professional ethics and moral character of law students. The two essential instructional procedures for effective socialization into the community of practice of lawyers are cooperative learning, in which students work together to achieve mutual goals, and constructive controversy, in which students argue and disagree with each other to increase the creativity and quality of their decisions and conclusions. Throughout law school competition should be minimized.

More specifically, social interdependence theory posits that the interdependence among individuals’ goals may be positive or negative. Positive goal interdependence tends to result in promotive interaction while negative goal interdependence tends to result in oppositional or contrient interaction. Interaction patterns determine the outcomes of the situation. Positive goal interdependence and the resulting promotive interaction tend to result in greater effort to achieve, more positive relationships, and greater psychological health than do negative goal (oppositional interaction) or no goal interdependence (no interaction). In addition, each process of interaction implicitly teaches a set of values. Competitive experiences teach values of wanting to outperform others, viewing others as threats to one’s success, and feeling good about depriving others from achieving their goals; individualistic experiences teach values of self-interest and indifference to others; while cooperative experiences teach values of behaving prosocially, engaging in accurate perspective-taking, using higher levels of cognitive and moral reasoning, including everyone within the moral community, and contributing to the well-being of others and to the common good.

Finally, the greater the cooperation the more frequent and intense the intellectual conflicts. Constructive controversy occurs when individuals disagree. It is managed constructively when everyone researches and presents

his or her position, challenges the information and logic contained in opposing positions, sees the issue from all perspectives, and seeks a synthesis that all participants can agree on. Doing so results in higher-quality problem-solving and decision-making, greater creativity, more frequent use of higher-level reasoning and metacognitive thought, more perspective-taking, greater continuing motivation to learn, more positive attitudes toward learning, more positive interpersonal relationships, greater social support, and higher self-esteem. Engaging in a controversy can also be fun, enjoyable, and exciting.

Law schools have a great deal to gain by encouraging their instructors to use cooperative learning and constructive controversy the majority of class time, and to avoid the use of competition. Doing so is the heart of instilling into future lawyers desirable professional ethics and moral character.