

# DELIBERATIVE PEDAGOGY

Teaching and Learning for Democratic Engagement

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# Deliberative Pedagogy as Critical Connective: Building Democratic Mind-Sets and Skill Sets for Addressing Wicked Problems

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Deliberative pedagogy is best understood as a teaching philosophy focused on equipping students with the mind-sets and skill sets necessary for high-quality participatory decisionmaking in the face of "wicked" problems. Most complex social and public policy issues are wicked problems (Rittel & Webber, 1973)—that is, problems that have no technical solution, but that call for ongoing communicative processes of broad engagement to address underlying competing values and tensions. Such engagement helps communities and organizations develop mutual understanding across perspectives, negotiate the underlying competing values, and invent, support, and constantly adapt collaborative actions (Carcasson & Sprain, 2016).

Deliberative pedagogy is designed to prepare students to participate effectively in these critical conversations. It focuses on decision-making at the community level, but the skills it develops are often transferable to many other organizational and business contexts. Due to a wide variety of factors, however, our colleges and universities often do not sufficiently equip students with these deliberative skills. Some may argue that such civic skills are secondary to the workforce focus of modern students, but in reality deliberative skills have very broad application. Indeed, the ability to address complex problems in the face of uncertain information and competing underlying values is highly prized by employers (Hart Research Associates, 2013), so there is no need to pit democratic education against education for the workforce.

Unfortunately, although our campuses certainly have all the necessary resources for deliberative pedagogy, their use is too often episodic, disconnected, underfunded, less prestigious, and/or voluntary. This chapter provides a model for deliberative pedagogy at the college level that attempts to respond to the needs of our diverse communities and the limitations of higher education, as well as to students' needs and the needs of employers. The model adapts Sam Kaner's (2014) diamond model of participatory decision-making as a basis for outlining the arguments for and key aspects of deliberative pedagogy. The model involves three distinct yet connected stages: divergent thinking, working through, and convergent thinking leading to a decision point. As such, it provides a useful mechanism for conceptualizing how the broad skill sets critical to addressing wicked problems are interconnected and helps highlight ways to overcome current limitations and weaknesses of both human nature and dominant pedagogical perspectives on campus.

#### The Need for a Deliberative Mind-Set

Our communities are awash with wicked problems. Almost all issues facing our communities can be understood through a wicked-problem lens that focuses on the competing underlying values that make simple solutions impossible. These competing values create tensions, paradoxes, and tough choices that cannot be resolved, although they can certainly be managed better (or worse). Whether *community* is interpreted as applying to the global, national, regional, local, or campus level, it is clear that we are struggling with how to respond effectively to myriad issues.

In several of my past writings (Carcasson, 2013a, 2013b; Carcasson & Sprain, 2016), I have argued for the need to increase deliberative engagement in our communities in order to improve how we manage wicked problems. The basis of the argument is that wicked problems are inherent to diverse democracies and complex organizations and require ongoing, high-quality communication and collaboration in order to address them. For example, the inherent tensions between and within dominant American values such as freedom, security, equality, and justice will always be with us, as will the critical tension between individual rights and the common good. Management scholars similarly argue that organizations are constantly addressing a variety of tensions-for example, short term versus long term, cooperation versus competition, flexibility versus efficiency, and tradition/ stability versus innovation/change (Quinn, 1988; Cameron & Quinn, 1988; Senge, 2006; Smith & Lewis, 2011; Johnson, 1996). The two currently dominant problem-solving models—adversarial and expert—are ill equipped to address such wicked problems and are often subject to perverse incentives that actually make it harder to tackle them productively. Adversarial processes incentivize simplistic and manipulative strategic frames that create polarization and cynicism, whereas expert processes are often too narrow and technical. Both are overly focused on certainty, and both clearly avoid the necessary engagement with values and value dilemmas.

The deliberative mind-set, on the other hand, focuses precisely on the hard work of addressing wicked problems, particularly the need to engage the natural tensions, trade-offs, tough choices, dilemmas, and paradoxes embedded within issues. Taking a wicked-problem perspective essentially shifts the focus away from the adversarial emphasis on wicked people (i.e., people with bad values who are often seen as the primary cause of problems) and the expert "quest for certainty" (Dewey, 1929; Kadlec, 2007), and toward the ongoing collaborative management of the wicked problem. The deliberative mind-set starts with the question, "What should we do about X?" Particular emphasis is placed on the "we," and since it is assumed that no technical or final solution exists, the answer should spark an ongoing conversation predominantly focused on negotiating tensions while periodically moving toward action (Carcasson & Sprain, 2016). This approach avoids the pitfalls and problematic shortcuts of the other methods while creating possibilities for innovation, creativity, and collaboration. Because addressing wicked problems requires constant communication and collaboration, ideally deliberative engagement becomes an ongoing community habit supported by significant embedded local capacity, especially at educational institutions (Carcasson, 2010). The deliberative mind-set also works to address key issues related to human nature (Carcasson, 2016). This is a broader argument that can be summarized only briefly here. Essentially, the adversarial and expert mind-sets tend to take advantage of and intensify critical flaws in human nature (such as egoism, confirmation bias, the need for simplicity and certainty, and the overcompartmentalization of information), whereas the deliberative mind-set actively works to avoid or mitigate such flaws and alternatively activate or strengthen key positive attributes of human nature (such as creativity, empathy, and social connectivity).

The primary weakness of the deliberative mind-set is that it requires a distinct set of skills and resources that are in short supply. Currently, it is significantly countercultural; because the adversarial and expert models of problem-solving tend to dominate, the skills tied to those approaches are more highly valued. Colleges and universities have the potential to change this balance by becoming critical hubs and capacity builders for deliberative mind-sets and skill sets (Carcasson, 2010). To realize that potential, they must focus on adapting their pedagogical methods, reimagining the campus as a vibrant, deliberative community and reconsidering the impact they can make on their local communities.

The deliberative mind-set highlights five key assumptions about twenty-first-century living that are critical to changing the conversation about problem-solving and recalibrating how we think about education.

- 1. Wicked problems are inherent, prevalent, and unsolvable, which underscores the importance of understanding tensions and paradoxes and focusing on how to manage them, rather than resolve them.
- 2. The current dominant problem-solving models (adversarial and expert) are often counterproductive in the face of wicked problems, creating numerous obstacles and distractions.
- 3. Human nature has clear flaws and strengths, and we need to find ways to mitigate the former and activate the latter in order to address wicked problems effectively.
- 4. The ability to negotiate among different perspectives is critical for addressing wicked problems, which in turn requires particular communication skills.
- 5. In the end, deliberative pedagogy supports the development and cultivation of wisdom and judgment in individuals and publics.

The model of deliberative pedagogy presented in this essay builds from these premises. It imagines what would happen if they were utilized as overarching premises for higher education.

#### Kaner's Model of Participatory Decision-Making

Introduced in *Facilitator's Guide to Participatory Decision-Making*, Sam Kaner's (2014) Diamond of Participatory Decision-Making is a useful concept to think about a wide range of issues relevant to deliberative pedagogy. Kaner developed the diamond for organizational decision-making, but it can also inform broader community contexts, particularly Daniel Yankelovich's (1991) ideas of "working through" while moving from public opinion to public judgment and David Mathews's (1999) focus on work related to choice and trade-offs. Kaner's model essentially has three stages,

with the third culminating in a decision point. Each stage requires a different set of processes, skill sets, and forms of communication. The stages are closely connected, however, as successfully navigating one stage essentially creates the central challenge of the subsequent stage. The model is therefore particularly useful because it recognizes both the distinct challenges of each stage and the natural interconnectivity of the stages.

In this section, I walk through each stage, first describing the stage, then examining some of its obstacles, and finally reviewing the processes and skills that can help overcome those obstacles. I explain the model from the perspective of a deliberative practitioner who has utilized the model to organize his work. In the next section, I shift roles to that of a teacher to consider how to apply the lessons learned to the campus setting.

#### Stage 1: Divergent Thinking

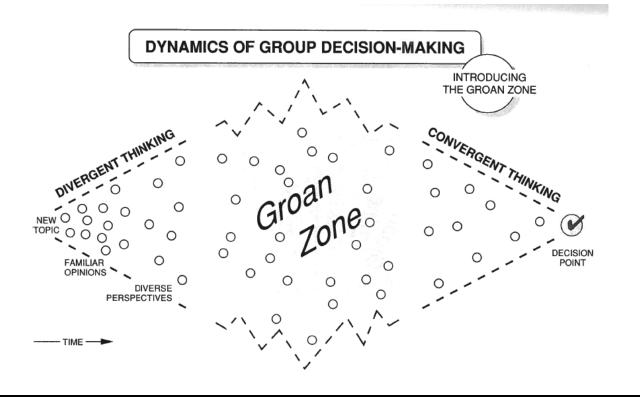
The first step in addressing wicked problems is to work to open up the conversation to make sure multiple perspectives are considered. Kaner connected divergent thinking to actions such as brainstorming, generating alternatives, holding free-flowing and open discussions, gathering diverse points of view, and suspending judgment. This openness is a key aspect of critical thinking and a main concern of many educators, who see the importance both of broad research and of engaging multiple voices and perspectives in making sound decisions. Many decisions are made without consideration of sufficient divergent opinion, however, as leaders, experts, or powerful groups make the decision themselves without seeking input or as status quo, ideology, or tradition simply dominates. Without sufficient divergent opinions, individuals and groups run into the obstacle of *false certainty*. They assume they made the right decision because their perspective was never challenged.

Three forces work against divergent thinking and fuel false certainty. The first is at the individual level. We are subject to psychological forces such as egoism, confirmation bias, selective listening, and cognitive dissonance that have wired us to seek out confirmation of our existing opinions and to avoid or dismiss challenges to our way of thinking (Kahneman, 2013; Cialdini, 2009; DiSalvo, 2011). Simply put, our minds are wired to avoid divergent thinking.

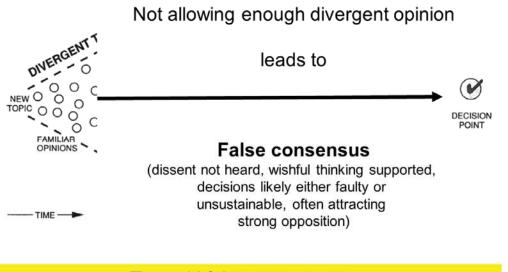
The second major force is tied to group behavior. Sparked by our individual psychology, there is a natural tendency for groups to think simplistically and to polarize. These natural tendencies have become even more problematic with the growth of the Internet, which makes it even easier for us to expose ourselves only to familiar opinions, gather with like-minded choirs, and avoid those that may challenge our views.

The third force is more structural. Many of our current avenues for public discourse and expression are primarily, though unintentionally, geared toward more individualized, entrenched voices. Consider which types of people are likely to approach a microphone and speak at a city council meeting, public hearing, or town hall meeting, or to send a letter to the editor, make a Facebook post, or create or join an interest group. With most issues, the dominant voices are those that are organized and likely focused on narrow aspects of the problem (i.e., they center on one particular value rather than attempting to negotiate multiple competing values). As a result, those who are not so assured of their infallibility are often silent, resulting in deficient divergent thinking. As

## **Kaner Model of Participatory Decision Making**



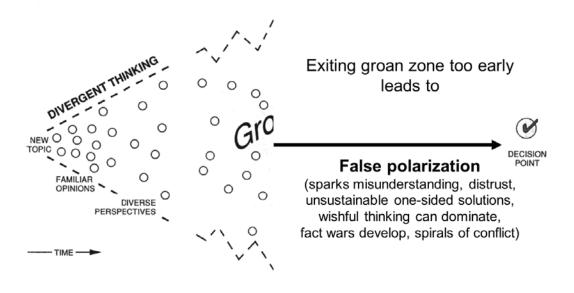
### Stage one: Divergent Thinking



To avoid false consensus: Communities need better processes to insure adequate divergent thinking and that voices are heard.

Note: These graphics are not a part of the published chapter. They are graphics used by the author when presenitng these concepts.

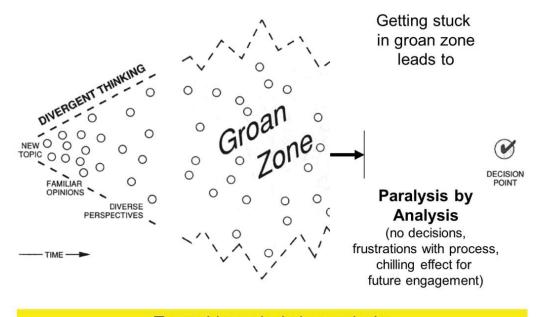
#### Stage Two: Working through the Groan Zone



To avoid false polarization:

Communities need better processes to help them interact and work through tough issues. Key elements include trusted conveners, high quality issues framing, and opportunities for genuine interaction.

#### **Stage Three: Convergent Thinking**



To avoid paralysis by analysis: Communities need better processes for convergent thinking and moving from talk to action

Note: These graphics are not a part of the published chapter. They are graphics used by the author when presenting these concepts. Kaner argues, far too often, only the articulate, confident, or powerful are heard or taken seriously; alternative voices are shut down too early as powerful norms that squelch dissent dominate. Many good ideas die or are never heard simply because the people who hold them are absent, quiet, silenced, intimidated, introverted, inarticulate, or dismissed.

Similarly, the voices of many groups (e.g., low-income groups, busy business owners, rural residents, those with limited transportation options, parents with young children, people with language issues) may not be heard because these groups have less access to or a lower comfort level with the available means of communication. In summary, public discourse often suffers from overexposure of the usual suspects and underexposure of many others.

When decisions are made without sufficient voices to inform them, those decisions suffer in multiple ways. They suffer from not having enough input on the front end (therefore better ideas and broader values may have never been considered), as well as from frustration and lack of ownership or understanding on the back end. Even if the decision is a good one, lack of understanding or support for it can undermine implementation. As facilitation pioneer Michael Doyle wrote, one of the "lasting lessons of the last 25 years of concerted action research in this field of organizational development and change" is that "if people don't participate in and 'own' the solution to the problems or agree to the decision, implementation will be half-hearted at best, probably misunderstood, and, more likely than not, will fail" (2007, p. xi).

Two types of process and communication practices can be utilized to increase divergent thinking. First, individuals can equip themselves to become better critical thinkers on their own. This may involve simply determining to challenge one's initial assumptions (something that should become more and more automatic with the adoption of a wicked-problem perspective on tough issues). Second, group, organizational, and community processes can be improved to seek out alternative voices, encourage dissent, and challenge dominant perspectives.

#### Stage 2: Working through the Groan Zone

If the decision-making process avoids or overcomes the obstacle of false certainty and supports sufficient divergent thinking, a new problem arises: dealing with the messiness of multiple competing positions Kaner described as the "groan zone." This is why processes that focus solely on divergent opinion and providing opportunities for voice, access, and free speech ultimately fall short. Multiple viewpoints can be very difficult to handle. All of the individual, group, and structural forces that limit divergent thinking come back into play. Social psychology research shows that mere exposure to alternative voices is insufficient and can actually spark further polarization (Nyhan & Reifler, 2010). In the face of expressed opposition, groups will strategically work to push their opinions and undermine opposing views. The structural limitations that favor strong voices exacerbate these natural tendencies. Thus, divergent thinking without a good process to handle it often results in frustration, which in turn leads to increased polarization or cynicism—both of which are counterproductive to democratic decision-making.

Typical public processes tend to bring forth collections of individual opinions rather than interaction among these opinions. For example, offering a microphone to one person at a time for three minutes leads to a steady stream of speakers on any controversial issue but likely results in precious little actual understanding or learning. Letters to the editor, Facebook threads, online message boards responding to newspaper articles, and online petitions all provide similar outlets for voice sans learning. As Michael Briand argues in *Practical Politics*, democracy requires interaction with others and their values:

Because the things human beings consider good are various and qualitatively distinct; because conflicts between such good things have no absolute, predetermined solution; and because to know what is best requires considering the views of others, we need to engage each other in the sort of exchange that will enable us to form sound personal and public judgments. This process of coming to a public judgment and choosing—together, as a public—is the essence of democratic politics. (1999, p. 42)

Overall, I would argue that due in part to strong support for freedom of speech in the United States and increasing access to the Internet, lack of divergent thinking is often not as much of a problem as the need to deal appropriately with all the noise. We often have plenty of opinions (if you look for them). We simply lack the ability to make sense of them all, develop mutual understanding across these perspectives, surface and work through tensions, and ultimately develop productive responses. As Yankelovich and Friedman (2010) argue, we have a great deal of institutional capacity for introducing new issues and for arguing for our perspective, but little corresponding capacity to work through the issues with fellow citizens. Thus, we may have passed the barrier of false certainty but now fall into *false polarization*.

I label this obstacle false polarization because the lack of understanding across perspectives often exaggerates the conflict on issues. When we focus on providing voice without listening or interacting, natural psychological and group processes lead to situations where people become polarized in their views because they focus on the positives of their own side while processing opposing perspectives through a negative lens that assumes bad motives. False polarization is especially problematic when processes allow a broad range of voices but then move quickly to a decision. Organizers often feel they have done their duty because they have allowed all sides to speak, but when the decision is made, those who disagree are highly dissatisfied. Through their simplistic lens, the point of view they espouse—which was heard but not well addressed—remains clearly superior. At this point, frustration and misinformed rage can erupt, creating more distrust for the decision makers and future processes.

Working through the groan zone therefore involves a set of processes to help transform the cacophony of voices resulting from divergent thinking into mutual understanding, refined opinions, and, ultimately, improved judgment. Kaner explains:

A period of confusion and frustration is a natural part of group decision-making. Once a group crosses the line from airing familiar opinions to exploring diverse perspectives, *group members have to struggle in order to integrate new and different ways of thinking with their own*. Struggling to understand a wide range of foreign or opposing ideas is not a pleasant experience. Group members can be repetitious, insensitive, defensive, short-tempered—and more! At such times most people don't have the slightest notion of what's happening. Sometimes the mere act of acknowledging the existence of the *Groan Zone* can be a significant step for a group to take. (2014, pp. 18–19) Working through involves considering all the potential consequences to actions, whether they are positive or negative, intended or unintended. Deliberative practitioners often develop issue maps or frameworks to assist audiences in engaging the tensions among various perspectives. Yankelovich (1991) notes that the working-through process requires genuine interaction and discussion across perspectives, which can be difficult and certainly takes time. Kaner recognizes the need to accept this struggle and the importance of face-to-face interaction to work through it:

One of the great insights of the 20th century is this: sitting down to work in a small face-to-face group is potentially transformative. . . . We can call it participatory decision-making. We can call it social innovation. We can call it dialogue and deliberation. We can call it cross-functional teams, or multi-stakeholder collaboration. We can call it collective impact. Whatever we call it, we are talking about unleashing the transformative power of face-to-face groups. (2014, pp. xv, xxxvi)

Specific mechanisms to support working through vary widely. Certainly, much deliberative practice is tied to such processes, as are many dialogue and conflict-transformation techniques (National Coalition for Dialogue and Deliberation, 2010).

It is important to point out that working through is not simply about finding ways to negotiate differences and ways to compromise. Wicked problems involve inherent tensions both within and between various perspectives. The between tensions are the primary focus of adversarial processes, but the within tensions are critical to understanding wicked problems. Deliberation is thus a key tool for communities because it recognizes that in the face of wicked problems, we cannot simply focus on negotiating between competing interests or picking winners and losers; rather, we often need to find ways to refine those interests. Fishkin's (2009) work is particularly important here, as he argues that deliberation is critical precisely because it prompts people to transform their opinions in the face of well-framed materials and productive interaction with alternative perspectives. This process helps people recognize and respond to the reality of the situation (i.e., the inherent wickedness of the problem).

Many of our friends in economics and political science tend to assume that politics is best understood as a pitched battle among fixed interests, but deliberative practitioners, informed by their experiences, believe something very different. People may be primarily self-interested, and their interests may be rather steady, but time and again deliberative practitioners have seen interests transform as a result of quality conversations that help participants overcome either false certainty or false polarization and realize that their opponents share many of their values. In general, so many of our conversations are so bad that it doesn't take much in the way of improvement to bring about the common welcome partner to the groan zone: the "aha moment." This is the moment when you might hear, "Oh, *that's* why you think that way. I never understood where you were coming from. That actually makes sense. Hmmm." As many years of Kettering Foundation research has shown, participants may not change their wiews about competing perspectives. Essentially, they shift from assuming that those who disagree with them have negative values (or reject positive values) to recognizing that they simply prioritize alternative positive values. Such a shift—humorously captured in the famous "I disagree with you but I'm pretty sure you're not Hitler" sign from Jon Stewart's 2010 rally—is a critical one for democratic capacity and quality decision-making. Once participants recognize that it's the problem that's wicked (tensions within perspectives) rather than assuming that people with opposing views are the wicked ones (tensions between perspectives), they can begin the process of finding creative ways to integrate their perspectives and address the real wickedness.

Processes that facilitate working through and overcoming false polarization have two key components. The first involves mapping or framing issues deliberatively in order to put key tensions on the table. Essentially, deliberative practitioners often take the raw data (the individual collection of opinions and arguments from various sources) created by the adversarial and expert modes of problem-solving and process it to support the deliberative mode. Good deliberative framing that fairly explains broad views and lays out trade-offs and tensions can help spark mutual understanding and sustain working through. The second component is simply the time and space to deliberate with others. Good facilitation and process design can help encourage shared understanding and integration of new ideas that get people past the frustration. While our communities certainly struggle with finding the time and place for such conversations, one would hope our college campuses would not. Ideally, campuses will model deliberative communities, as well as serving as key resources for the broader community. Too often they do neither.

#### Stage 3: Convergent Thinking

Once again, however, success breeds a major obstacle. If you have done a good job with divergent thinking and followed that up with overcoming false polarization by working through the group zone (the combination of which is admittedly rare), then you need processes that help the group begin to move toward some sort of decision. That means clarifying, consolidating, refining, innovating, prioritizing, judging, and choosing among options. In a word, it calls for wisdom—the ability to make good decisions regarding difficult situations under conditions of uncertainty and incomplete information. Wisdom, understood as good judgment, thus comes into play as the most important skill for quality convergent thinking. Without it, groups often get stuck in the groan zone and never actually make a decision.

I call the primary obstacle tied to the lack of sufficient convergent thinking *paralysis by analysis*. This obstacle can arise from many factors, but three are particularly notable. First, once participants realize that an issue is wicked, much of their motivation, passion, and urgency may dissipate. The advantage of adversarial frameworks is that they can be very motivating. A good-versus-evil framework is powerful because people want to see themselves as heroes who defeat evil and ride off into the sunset. The adversarial narrative is intoxicating; once the wishful thinking that dominates it is exposed and the reality sinks in that those with opposing views are motivated by values that you also hold dear, staying involved in the issue and making a decision is much more difficult.

Paralysis by analysis also occurs if the process focuses so much on the importance of openmindedness—which is critical during divergent thinking—that the necessary closed-mindedness of convergent thinking becomes difficult or seemingly inappropriate. Addressing wicked problems involves accepting the inherent value of all opinions, but not the equal validity or quality of all opinions. The process of convergent thinking, decision-making, and moving to action requires judgment and therefore recognizes the ultimate inequality of ideas and potential actions. The point, after all, is to identify and implement better ideas.

A final cause of paralysis by analysis is tied to an oversaturation of expert perspectives, often combined with the assumption that a technical answer should emerge from research. Many assume that clarity will arise from research and expert consultation, and when it does not, paralysis ensues. The typical reaction is to throw even more research and expertise at the problem, which often escalates the paralysis. An equally damaging reaction is to go in the opposite direction, denigrating expert perspectives and data. An important goal of deliberative practice is to find the right balance in terms of relying on data and experts, recognizing and adapting to the strengths and weaknesses they offer (Carcasson, 2013a). When dealing with wicked problems, data cannot provide a simple solution, but used well it can be a critical tool to support good judgment. Learning more about how to use data well is a critical skill set that warrants more attention.

To avoid or overcome paralysis by analysis and improve convergent thinking, once again better processes and skill sets are critical. As mentioned before, simply acknowledging the difficulty of the work and the inherent nature of the groan zone is an important first step to helping groups manage paralysis by analysis. Adopting the key assumptions regarding wicked problems—that competing underlying values are inherent to all difficult issues, and that at some point tough choices will need to be made between competing ideas—can also work to prepare groups for quality convergent thinking. The bottom line is that if groups and communities have an understanding of the Kaner model, they can be prepared for the obstacles that are likely to arise and therefore somewhat inoculated to them.

In general, moving from the groan zone to a decision point involves two broad steps: discussion of how best to address the wicked problem (what to do) and the move to action (how to do it). The discussion of what to do brings forth a number of important skill sets. Building from the first two stages of the model, it focuses on exploring ways to negotiate tensions as effectively as possible. Creativity and innovation are critical at this stage; the wicked-problem frame helps bring these features out in a way that neither the adversarial nor the expert frame is able to do. Processes that help support, enable, or improve good judgment are also essential. Kaner's (2014) book includes many process design ideas and specific facilitator tactics for this stage. The transition from working through to convergent thinking also connects well with academic scholarship on judgment, practical wisdom, and argumentation (Beiner, 1983; Booth, 2004; Garver, 2004; Fischer & Gottweis, 2012; Willard, 1996). The goal, after all, is to base decisions and the move to action on quality arguments and good judgment that are relevant to broad audiences, rather than on factors such as tradition or the popularity, eloquence, manipulative skill, money, or power of the participants involved.

The focus on quality judgment means that convergent thinking inherently requires consideration of relevant data and evidence, another hallmark of the argumentation perspective. Whereas divergent opinion emphasizes a broad range of voices and expression and working through focuses on developing mutual understanding across perspectives (both of which involve some degree of suspending judgment), convergent thinking must invoke quality controls and therefore a stronger focus on data. Data should not be considered an automatic trump, but as groups review competing perspectives, data can help with the distinctions and choices that need to be made. As a result, conducting research (i.e., finding or producing relevant data) and understanding what distinguishes quality data are two additional critical skill sets. As noted earlier, however, data must be viewed as a useful tool for contributing to the ongoing conversation and managing wicked problems, rather than as an end in itself or a means of finding a technical solution.

The second step of convergent thinking—the move to action (how to do it)—focuses on considering the broad range of actors and actions designed to address the wicked problem. Collaborative skills are paramount, and at the community level, interaction across public, private, and nonprofit lines is critical. Action here is defined broadly, ranging from changes in individual behavior to official legislation, with many levels in between. At this stage, the concepts of collaborative and democratic governance become exceedingly relevant (Boyte, 2005; Bingham, Nabatchi & O'Leary, 2005).

Based on these ideas, two adjustments to the Kaner model regarding convergent thinking are necessary to better fit the reality of wicked problems. One concerns the narrowing of convergent thinking to a single decision point. That may occur in an organizational setting, but in a broader community setting, the decision point or the move to action may take many different forms. Yes, in some cases one decision may be made, either by vote or by some sort of authority, but rarely would such a decision be based on consensus. With community decision-making, deliberative processes often result in multiple decisions and actions.

The second adjustment is recognizing that tackling wicked problems is not a linear process and will always be ongoing. The Kaner model shows time proceeding from left to right, but in certain situations the flow will not necessarily be one way. So at the end of the diamond, the decision point is more of a milestone than a conclusion. In many ways, the process begins anew as soon as it ends; gathering divergent reactions to the decisions or actions is necessary for implementation, evaluation, and assessment, and eventually groups will need to gather again to work through the issue and make another set of adjustments. This notion connects with both the cycle of deliberative inquiry (Carcasson & Sprain, 2016) and with John Dewey's (1929) construct of democracy as an ongoing conversation and a way of life rather than simply a mechanism for decision-making.

#### Application to Deliberative Pedagogy in Higher Education

Many current pedagogies are focused on or effective at individual stages within the model, but pedagogies that see the big picture and link the stages are unfortunately uncommon. As a result, students are often left to their own devices to build connections among the skill sets they are developing, and generally it simply doesn't happen. Students may pick up valuable individual skills and be motivated to complete certain actions, but too often they leave campus unequipped for the wicked problems they will face in their organizations and their communities.

It is worth noting that while the Kaner model is clearly a group model, it nonetheless provides insights regarding individual skills that are relevant to the overall process. Individuals can certainly learn to seek out divergent opinions and develop skills to complement the working-through and convergent-thinking processes. That said, although some individuals with significant research and other skills can essentially work through and make quality judgments on their own, addressing wicked problems well must generally be considered a group process.

Table 1 shows an initial foray into outlining how a wide variety of concepts and skills can be mapped onto the three main stages of the Kaner model. Building from the analysis of the obstacles

	DIVERGENT THINKING	WORKING THROUGH	CONVERGENT THINKING
KEY TERMS/CONCEPTS	Voice, discovery, analysis, inclusion, open-mindedness, ability to look beyond the usual suspects, diversity, deconstruction, criticism	Listening, dialogue, mutual understanding, identifying and addressing tensions/ trade-offs/ tough choices/paradoxes, issue framing/mapping	Judgment, prioritization, evaluating arguments, criticism, action planning with a broad range of stakeholders, creativity/innovation, balancing/transcending tensions, making choices
INDIVIDUAL SKILLS	Speaking, writing, self-expression, research, interviewing, perspective taking, curiosity	Listening, empathy, dialogue, asking questions	Judgment, decision-making, prioritization, discernment, action planning, collaboration, project management, argument evaluation
NECESSARY COMMUNITY/ Organizational-level Capacities	Culture of freedom of speech and dissent, inclusion of diverse voices in the public conversation, ready access to means of communication by all	Safe places for gathering of non-like-minded people, time to work through properly, quality facilitators to support smaller groups, quality framing and process design	Collaborative capacity, legitimate conveners, mediating institutions/ backbone organizations, data evaluation

Table 1. Key Concepts and Skills Mapped onto the Kaner Model

inherent to each stage, it's clear that many of the most critical skills are those required to overcome obstacles and avoid faulty thinking. Inoculating our students against common pitfalls is therefore a big part of the work of supporting deliberative pedagogy. This concept is derived in particular from the work of Charles Lindblom, who argued in *Inquiry and Change*:

Improving the quality of inquiry by citizens and functionaries does not rest on improbable or improbably successful positive efforts to promote better probing. . . . It rests on what might be called negative reforms—reducing impairment, getting the monkey of impairment off the citizen's back. Societies do not need to urge citizens to probe; they need only to permit them to do so. They need only to reduce the disincentives to probe, the diversions and obfuscations that muddle or dampen probing, the misinformation and indoctrinations that misdirect it, and the intimidations and coercions that block it. (1990, p. 230)

In order to lay out my analysis clearly, I will walk back through the stages to consider how they relate to pedagogy, and then examine how the model can help us identify and overcome some of the common problems of current practice.

#### **Divergent Thinking on Campus**

In many ways we are already doing a nice job of providing opportunities for divergent thinking on our campuses. In general, campuses tend to be places where varied opinions abound, freedom of speech receives widespread support, and students have their initial beliefs and assumptions challenged. That is not to say that we don't face challenges in this regard. Students have certainly been known to defer too much to their professors, fail to think for themselves, or feel uncomfortable dissenting. What Paulo Freire (1970) calls the "banking" model of education—which he criticizes for overemphasizing teachers' authority and relegating students to passively receiving knowledge—may be less pervasive today, but it has not disappeared. Professors have more power than most discussion leaders to discourage dissent, given that they control grading, which is often a primary student motivation. In addition, some majors (e.g., in the hard sciences, some of the more rigorous social sciences, and the more professionally oriented majors) may not support sufficient divergence. And if campuses continue to professionalize, with students increasingly focusing on specific vocational majors while core curriculum classes fade away, the capacity for divergent thinking will decline. (The full-fledged university can be a bastion of divergent thinking; the university as a job-training mecca, not so much.)

As a rule, however, one of the inherent benefits of the college years is exposure to a broad range of opinions. In other words, we often successfully negotiate the first obstacle of false certainty on our campuses to get through the divergent thinking stage of Kaner's model. Many of the concepts and skills connected to divergent thinking on Table 1 are common on campus. Students are provided opportunities learn about other perspectives, and classrooms often support multiple viewpoints. Campuses typically boast students and faculty from diverse backgrounds and offer ample chances to make connections across cultures and perspectives. Where we struggle more is taking true advantage of the latent diversity on campus, which implicates the later stages of Kaner's model.

#### Working Through on Campus

Whereas our campuses seem to do a decent job of providing access to divergent thinking, lack of working through is a major flaw in our campus pedagogies. I see two particular causes for this deficiency. Foremost, the dominant epistemological perspectives on campus favor the search for certainty through scientific methods. Most major universities are still dominated by the hard sciences and the social sciences that strive to emulate the scientific model. As Gerald Hauser (2004) has noted, in the early twentieth century, American higher education shifted its focus to the German model of education, with its emphasis on discovering new knowledge, and away from the engaged and civic-minded model that came from Athens. The German model privileges empiricism, narrowly defined subject areas, and the banking model of pedagogy, all three of which are a poor fit for wicked problems, systemic thinking, and deliberative pedagogy. Essentially, such a perspective responds to divergent opinions through specialization and focus. A particularly damaging consequence of such a model is the overcompartmentalization of knowledge, with disciplines often operating as silos with their own majors, buildings, vocabulary, and specialized journals. The model also tends to favor pure research over applied research. For most faculty, publishing in the top journals in their field (meaning narrow journals focused on their specific subdiscipline) is their most incentivized responsibility, dwarfing both teaching and service to their community. Students thrust into that world typically are given few opportunities to actively work through tough issues and explore the intersections among disciplines and ideologies.

The liberal arts can serve as one counterbalance to the empirical, knowledge-focused epistemology. Yet liberal arts programs often fall into their own problematic patterns that limit their impact on deliberative pedagogy, and in particular their support for the working through stage. While liberal arts programs seek to take on the critical questions of values and ethics that empirical programs tend to avoid, the degree to which they truly equip students for judgment and deliberative decision-making is unclear. Too often, students are exposed to numerous perspectives and ideologies through their liberal arts education without learning how to address the conflicts and tensions between them (Graff, 1992). Divergent perspectives certainly exist, but the problem is that the divergence is often between classes rather than within them, leaving students disconnected and ill equipped. As Lanham quipped, students are often asked to "change intellectual worlds every hour on the hour" (1993, p. 159). They may be exposed to Marxism by one professor, feminism by another, and free-market ideology by a third without ever seeing those various perspectives in relationship to each other.

Consider, for example, the types of assignments students are asked to complete in many liberal arts classes. We often focus on teaching students to express their opinions or make an argument without necessarily asking for or equipping them to complete sufficient divergent thinking or working through. Students will give multiple presentations and write numerous papers over their college careers. Too often papers and presentations are much more in the adversarial model, starting with a conclusion and then cherry picking evidence and arguments to support that conclusion. Such an assignment is similar to a process with minimal divergent thinking that jumps to a decision point. Students need to learn how to make a persuasive case, but with the current information overload, supporting a preset opinion with strategically narrow research is not particularly skillful. As a response, Graff (1992) calls for universities to focus more on "teaching the conflicts." This can essentially be interpreted as the need to put students in the groan zone and have them work through the differences among various perspectives rather than simply exposing them to those perspectives separately.

Students may also take part in various opportunities on campus to engage or serve, but those opportunities are similarly often tied to particular perspectives and causes rather than struggling with the tensions among different viewpoints. Most campus political groups and service-learning opportunities, for example, begin with entrenched opinions or offer opportunities to engage and organize only with others who are like-minded. Oddly, even though the dominant scientific epistemology and the liberal arts counterpush are opposites in many ways, they both lead to disconnected perspectives and therefore undermine or limit deliberative pedagogy.

So the question remains, to what extent do our campuses both provide opportunities to experience groan zones and help students develop the skill sets needed to work through them? Some professors are very skilled at creating a deliberative environment in their classrooms, asking good questions and serving as facilitators for having students explore different sides of an issue, challenge their assumptions, and develop mutual understanding across perspectives. (The smaller the class size, the better such experiences can be—it's questionable whether a 150-student class can be truly deliberative.) Both K-12 and higher education offer students multiple opportunities to hone their skills in writing and public speaking, but to what degree do they build competence in listening and asking good questions, two critical deliberative skills? Projects, paper assignments, and even essay questions on exams can ask students to work through a tough issue and struggle with tough choices that don't have clear answers. But such experiences are generally individual, limiting their deliberative potential. Classes in dialogue, conflict management, and deliberation may be increasing in popularity, but they are not quite common yet and certainly not required. These are essential skills for any sort of collaborative problem-solving process, but they rarely seem to be an official part of any curriculum.

#### **Convergent Thinking on Campus**

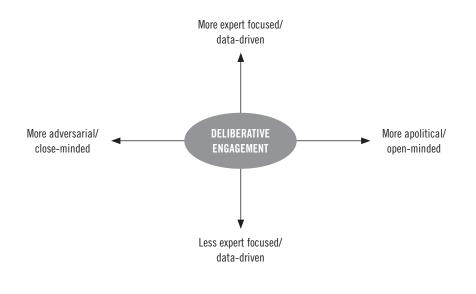
The need for convergent thinking on campus is somewhat limited because classroom instruction inherently focuses on education rather than action. Thus, the first step of convergent thinking (what to do) is more relevant than the second (how to do it). Groups tend not to have to make decisions or move to action in an educational setting; conversation for the sake of conversation and improved understanding is often sufficient, and grading is often individual. Herein lies the importance of applied learning, considering the campus as a community in itself, and strengthening campus connections to the local community so students have more exposure to all the relevant skill sets. Students may get some exposure to more individual convergent thinking as they complete projects and papers, and some of those may be group projects, but rarely do they involve larger groups or community-level decisions.

The exciting potential is for college students to work on projects, influenced by the deliberative mind-set, that focus on turning the broader noise in the community about tough issues into clearer issue maps and frameworks. This is a clear win-win situation in which communities likely lack the capacity for completing this hard work on their own and college students desperately need the practice.

Several additional concerns arise when considering the extent of convergent thinking on campus. First, the dominant positivistic epistemology tends to assume that convergent thinking is driven by rigorous analysis and research. As explained earlier, such epistemological views remain disconnected from the notion of wicked problems and their competing underlying values, and thus do not recognize the importance of working through or convergent thinking. The assumption is that there is one right answer, and convergence will occur naturally. Such an assumption may work with scientific questions, but not with wicked problems.

Similarly, the strongly entrenched ideological perspectives that can at times emanate from liberal arts perspectives can be problematic for convergent thinking. This problem can be better described as a lack of divergent thinking, which often occurs within a specific class, that then precludes the need for working through and convergent thinking. Narrow perspectives limit the need for judgment, therefore undermining the need for teaching such skills. Considered a different way, the liberal arts on our campuses often tend to be either overly ideological (supporting one particular way of thinking) or overly open-minded (supporting all ways of thinking indiscriminately). The problems with narrow ideological views are clear, but the perils of unfettered open-mindedness are often less understood. Open-mindedness is certainly important for divergent thinking, but extreme open-mindedness can be as problematic as closed-mindedness for judgment and deliberative decision-making.

Overall, these concerns call for the need for deliberative engagement that can negotiate tensions on two separate axes, as seen in a model that I introduced in an earlier Kettering report (figure 1) (Carcasson, 2013a). Wicked problems call for convergent thinking to negotiate among perspectives that focus too much on data and expertise and those that focus too little on them (the vertical axis), as well as among perspectives that are too close-minded and those that are too open-minded (the horizontal axis). Campuses have plenty of examples of pedagogy from all over the map; deliberative pedagogies should be designed to explore how these pedagogies relate to each other.



Carcasson, 2013a.

#### **Conclusion: Improving Deliberative Pedagogy**

Each of the three stages of the Kaner model—divergent thinking, working through the groan zone, and convergent thinking—calls for highly developed mind-sets and skill sets in order to avoid or overcome the key obstacles of false certainty, false polarization, and paralysis by analysis. Perhaps most important, the Kaner model brings all these diverse skills in connection with each other and highlights the paradox of how success at one stage sparks the challenge of the next.

The Kaner model also provides a number of insights regarding the limits and possibilities of pedagogy in higher education. My analysis points in particular to the problematic disconnects evident on our campuses, while also recognizing that all the necessary components of a robust deliberative pedagogy are typically present. The problem is that examples of those components coming together are often episodic, disconnected, underfunded, less prestigious, and/or voluntary. Following are suggestions for improving the quality of deliberative pedagogy on our campuses as well as further steps for analysis.

Perhaps the simplest and most effective change that could improve deliberative pedagogy is to give students a clear introduction to wicked problems and the deliberative mind-set. I imagine here a freshman course based on wicked problems and the Kaner model that would, from the beginning, provide students with an overarching epistemological framework for putting many of their other classes into a broader context. It would essentially provide students with a map on which to situate all the experiences they have on campus, whether curricular, cocurricular, or extracurricular. Such a framework would also offer a broader view of the relevant skill sets for complex decision-making in the communities and organizations they will be involved with moving forward.

A broader potential move is to focus more on the campus as a community in itself. Colleges and universities have real issues that require difficult conversations every day. The interactions between administration, faculty, staff, students, and the local community can and should be more deliberative. To what degree is the faculty senate or student government a model of deliberative excellence? Reimagined as a deliberative community, the campus can ideally become a model of participatory decision-making, while at the same time helping students build the skill sets needed to address wicked problems.

Colleges and universities should also create and support campus centers that focus on deliberative pedagogy and practice. Such centers can serve not only as important "hubs of democracy" for the community (Carcasson, 2010) but also as critical on-campus hubs of deliberative pedagogy. Similar to writing centers and speech centers, deliberation centers can support "deliberation across the curriculum" initiatives by offering resources, providing training and consulting services to help faculty incorporate deliberative projects and concepts into their courses, training student facilitators for in-class deliberations, and supporting specialized deliberation classes of their own. Teacher training is particularly important, since most faculty receive sparse instruction in this area in graduate school, and the training they do have most likely comes from a narrow epistemological perspective. The argument here is not that all teaching needs to be deliberative, but rather that enough of a deliberative frame needs to exist for students to be more likely to make necessary connections.

Ideally, in the coming years more faculty positions will be developed with a focus on deliberation, whether they are housed in communication studies, political science, sociology, environmental studies, education, or related fields. The more faculty working on deliberative theory and practice on our campuses, the more the latent resources for a robust deliberative pedagogy may be ignited. With dedicated faculty will come dedicated courses, another critical step forward.

From a theoretical perspective, two issues raised in this chapter warrant deeper analysis moving forward. The first is improving how we understand, engage, and ultimately respond to tensions during the working-through and convergent-thinking stages of participatory decision-making. In the end, deliberative pedagogy can perhaps be best understood as pedagogy whose focus is to help students negotiate the important tensions and polarities that are inherent to democratic living and creative problem-solving. Some key tensions are those that exist between these factors:

- Complexity and simplicity (i.e., unconstrained divergence versus abrupt convergence).
- Individual rights and community good (also conceptualized as the tension between freedom and other key American values such as security and equality).
- Closed-mindedness and open-mindedness (see figure 1).
- Data-dominated focus and data-deficient focus (see figure 1).

Each of these pairs represents polarities in which each pole has positive values but holds an inherent tension with the opposing pole. As Barry Johnson (1996) argues in *Polarity Management*, difficulties arise when we focus too much on one pole and dismiss the opposing pole. These polarities are not problems to solve but rather relationships to manage. Doing so is a key feature of deliberative pedagogy that is often not directly addressed on our campuses.

The second theoretical issue that warrants further examination is a familiar one: the need to understand more fully the connections between deliberation and decision-making/moving to

action. The Kaner model provides a new way of thinking about these connections in terms of how deliberative processes can encourage convergent thinking and judgment. As mentioned earlier, the goal is to ensure that decisions and the move to action are based on quality arguments and good judgment that are relevant to broad audiences, rather than on tradition or on the popularity, eloquence, manipulative skill, money, or power of the individuals involved. To do so, however, we need to develop a better understanding of what good arguments are and how to sharpen judgment, two topics that do not receive enough attention on our campuses. Ultimately, processes will tend to revert to some combination of those less deliberative options, but deliberative practitioners will continue to strive toward that noble, though likely unattainable, ideal. If we can elevate deliberative pedagogy and improve how we equip students for all three of the stages of Kaner's model, campuses will be able to provide strong support for that ongoing quest.

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