Taking a Step Back: Teaching Critical Thinking by Distinguishing Appropriate Types of Evidence

Jennifer Fitzgerald, *University of Colorado, Boulder*
Vanessa A. Baird, *University of Colorado, Boulder*

ABSTRACT We propose that teaching critical thinking is the most important job of teachers in the political science profession. Yet political scientists rarely engage with one another about the specific assignments used to teach critical thinking. This article is the beginning of what we hope will become a dialogue on how to best teach students to think critically. We make a few recommendations for assignments that aim to make students think critically within the various political science methodologies: normative, interpretive, causal, and comparative analysis. We argue for a particular strategy in teaching critical thinking that reinforces students' abilities to recognize which kinds of arguments require which kinds of evidence.

Teaching students to think critically is essential for helping new generations become sophisticated processors and analyzers of information and equipping them to reflect on their own beliefs and values. In fulfilling these tasks, political scientists have their work cut out for them. When today's students leave the halls of our colleges and universities, they must fend for themselves in an information environment characterized by a fragmented media establishment, blurb-driven news coverage, and an increasingly polarized political system. Given the normative bias, questionable logic, and contorted facts that people face these days, it is essential that students learn to discern and evaluate different types of information. If they cannot do so, then they fail to become the informed and reflective citizens needed to fuel our democratic system.

Fortunately, teaching students to think critically is widely regarded as a top goal in university education. Faculty rate critical thinking among the most important pedagogical objectives (Bok 2006). The assessment of critical thinking has been the focus of various national grants and research endeavors, such as Project CAT (Critical Thinking Assessment Test; Stein, Haynes, and Redding 2007) and the California Critical Thinking Disposition Inventory (Facione, Sanchez, and Facione 1994). Yet in spite of educators' general consensus on the value of critical thinking, there is little agreement about how to teach this skill effectively. Among the leading practical suggestions are to require students to rewrite their own papers (Tsui 2002), take part in active problem solving in the classroom (Terenzini et al. 1995; Smith 1977), and engage in independent research (Tsui 1999). Another recommendation is to motivate students to *want* to think critically (Facione 2000). But although these prescribed strategies are helpful in guiding faculty teaching plans, concrete suggestions for particular assignments are rare (but see Brown and King 2000; Monk and Osborne 1997; Oros 2007).

We propose that when faculty instructors develop effective activities for their students, they make these plans widely available to their colleagues. K–12 educators demonstrate great willingness to share the details of specific assignments,[1] but a more proprietary mindset seems to exist at the higher levels of education. What a waste, we argue, if we share a common interest in promoting the cognitive development of new generations. Therefore, in the spirit of creating a discipline-wide set of critical thinking resources, we outline some specific strategies that have worked for us. We also present information on four activities and assignments that have served us well in the classroom over the last 10 years. As well, we offer documents that can be used by other educators with little to no modification in a separate online appendix.[2] This effort, we hope, will spur similar activities among our colleagues across the United States and from abroad. We also aim to promote a broader theoretical dialogue about what kinds of

Jennifer Fitzgerald *is an assistant professor of political science at the University of Colorado at Boulder. Her research focuses on comparative political behavior in advanced democracies. She teaches undergraduate courses on comparative politics, West European Politics, immigration and nationalism. She can be reached at jennifer.fitzgerald@colorado.edu.*

Vanessa Baird *is an associate professor of political science at the University of Colorado at Boulder. Her most recent book is* Answering the Call of the Court: How Justices and Litigants Set the Supreme Court's Agenda *(University of Virginia Press, 2007). Her research interests include understanding how courts acquire legitimacy and rely on extra-judicial resources to amass political power. Her newest research focuses on the effect of political violence on nonviolent political action in Russia, specifically with regard to ending the cycle of ethnically motivated violence. She can be reached at vanessa.baird@colorado.edu.*

doi:10.1017/S1049096511000710

instruction belong in the classroom, recognizing that our point of view is only one among many.

OUR APPROACH

To ground our discussion of critical thinking, we use Burbules and Berk's baseline statement that "to be 'critical' basically means to be more discerning in recognizing faulty arguments, hasty generalizations, assertions lacking evidence, truth claims based on unreliable authority, ambiguous or obscure concepts, and so forth" (1999, 46). These authors also identify a key component of crucial thinking as "to question the evidentiary base (or logic, or clarity, or coherence) of a particular claim, and to find it wanting" (47). In general, the educational emphasis on critical thinking stems from the desire for students to become more sophisticated consumers, processors, and analyzers of information of various types. In the educational arena, there is widespread recognition that effective education should not involve a great deal of fact-based memorization. Critical thinking educators have found that when students recall memorization being a large part of their college classes, they perform much more poorly on critical thinking evaluations ($r = -.34$) than their peers (Stein, Haynes, and Redding 2007). Thus, as we teach students to memorize, they become less able to think critically.

However, we do not recommend removing fact-based instruction from the classroom altogether. Instead, the challenge for educators is to teach students to use facts effectively in conjunction with other types of information and ideas. As such, we propose that students need to: (*a*) learn the difference between fact-based assertions and other types of claims or statements and (*b*) gain experience working with different types of information. In our teaching, we have found that although most students are aware that there is a difference between facts and opinions, many struggle with the task of identifying statements as either factual or opinion-based. Another challenge is that many students believe that facts are "better" than opinions. From our perspective, educators should encourage students to appreciate different types of arguments and understand how specific types of information fit together to generate knowledge.

We propose that students need to: (a) learn the difference between fact-based assertions and other types of claims or statements and (b) gain experience working with different types of information. In our teaching, we have found that although most students are aware that there is a difference between facts and opinions, many struggle with the task of identifying statements as either factual or opinion-based. Another challenge is that many students believe that facts are "better" than opinions. From our perspective, educators should encourage students to appreciate different types of arguments and understand how specific types of information fit together to generate knowledge.

As a starting point, we identify four types of informational statements found in the social sciences (as well as in the real world) and present our characterization of each.[3] First, *factual statements* make concrete assertions that are verifiable as being true or false. *Normative statements* stem from value-based ideas about what is good or bad. Students can be taught to evaluate normative arguments on the basis of their logical connection to first principles. *Interpretive statements* draw on textual materials to establish what an author means using his or her statements; arguments can be put forth and countered with evidence from within the same text or other writings by the same author. Finally, *causal statements* make an argument about cause and effect between two concepts and can be assessed observationally.

Students often require help in categorizing different kinds of statements and assessing them according to appropriate criteria. For instance, when presented with the opportunity to challenge an interpretive statement, many students make the mistake of using facts or values that contradict the text rather than using the text itself to make an argument about what the author meant. Similarly, students might use their own values to contradict a causal argument. We therefore propose that for students to make arguments and then view those arguments critically, they need to be able to distinguish the kinds of evidence that are appropriate for various kinds of arguments. We contend that unless we can teach students these skills, they will not be able to provide convincing evidence for their positions. And if the students cannot connect the appropriate logical dots for their own thoughts and assertions, how can they be expected to hold others—educators, reporters, politicians, even acquaintances—accountable for their arguments?

Here, we propose several kinds of assignments that can help students make the appropriate analytical distinctions and work with different types of information. In the following sections, we focus on assignments that involve four kinds of critical thinking activities: (1) identifying various types of statements; (2) making arguments about the interpretation of texts, such as legal or political theory texts; (3) making causal arguments; and (4) learning to work with normative analysis. Though we generally teach courses in the American and comparative politics subfields, these suggestions are also relevant to scholars in the political theory, public policy and international relations subfields.

DISTINGUISHING DIFFERENT KINDS OF INFORMATION

Quiz Activity

One of our first suggestions for fostering critical thinking skills is that instructors should engage students in distinguishing various statements from among the four types outlined previously: normative, interpretive, causal, and factual. We administer a quiz that presents a list of statements and ask students to accurately categorize them. Many items contain "tricks" that challenge students to think carefully. For example, we might use the word "cause" in normative statements that nevertheless divulge the

https://doi.org/10.1017/S1049096511000710 Published online by Cambridge University Press

author's values, such as "Land inequality is a major problem in transitional democracies; it causes people not to get what they deserve: a decent life." We want students to discern that because this sentence incorporates the writer's view about what people deserve and what a decent life is, the statement is normative rather than causal.

The quiz challenges the students to distinguish causal, interpretive, and normative statements from factual statements based on how verifiable they are. For example, after showing a graph displaying presidential approval ratings over the last 50 years, we offer the statement: "We can interpret that the highest approval rating in the last 10 years was in 2001, just after September 11." This is a factual statement that can be verified with the graph, even though it uses the word "interpret." Another example we use is: "James Madison said that 'if men were angels, no government would be necessary.'" This statement is also a fact, because it is a direct quotation. However, the statement "Though Madison seems to believe that man is corrupt, his suggestions rest on his belief in the goodness of mankind" would be an interpretation, because this statement could be wrong and evidence in his writing might support a different interpretation. Again, it is essential that students be able to distinguish arguments from factual statements that are used to provide evidence for arguments.

Other examples of quiz statements include:

- Young people tend to become more interested in politics when their parents have discussed politics in the household. (*Causal*)
- The Second Amendment prevents government from restricting any kind of firearm. (*Interpretive; should be given in the context of a class that has included discussion of the text of the Second Amendment*)
- Homework is stupid. (*Normative: for comic relief*)
- Weingast says "stable democracy does not simply arise because some countries happen to have the relevant shared set of values" and concludes that "the relationship between citizen values and democratic stability is not a causal one." (*Factual; from Weingast 1997*).

The last item is designed to be especially challenging, both because it includes the word "causal" and because a student could use the quotation to interpret Weingast. We advocate using slightly ambiguous and tricky sentences.

After administering the quiz, we allow students a class period to go over it, which invariably leads to a debate about why the statements could fall into several different categories. As an added incentive, we usually offer students extra credit when they argue effectively. This level of nuance has served us well in our teaching, but others adopting this activity might wish to use only the most straightforward items. Other faculty may choose to simplify the exercise if they are concerned that students will lose confidence and become frustrated if the quiz is too tricky. However, another part of the quiz asks students to come up with their own examples of the various kinds of statements, which might strengthen students' confidence by giving them more content control.

In our experience of administering this quiz in senior seminars, the average grade is an 80. The quiz is not easy, but we have found it to be extremely useful in helping students develop their instincts about different kinds of statements. Another result of this assignment has been to bring the lower half of the class up to speed with the more analytically advanced students. In other words, this quiz usually does not help excellent students become more excellent (although the teaching that surrounds it, we would argue, does). Instead, the greatest value of this particular test is that it helps the less advanced students develop their analytical skills.

Student Criticism of Their Own Papers

A slightly more involved adaptation of the statement quiz is an activity in which students evaluate and categorize every statement in a paper that they have written. For this exercise, we refine our four-part categorization of statements to draw a distinction between "relevant" and "irrelevant" factual points. In this assignment, students bring a double-spaced copy of their paper to class the day it is due. Without advance warning (although students can draw on the skills previously developed in the quiz), students are asked to categorize every sentence in their paper. Therefore, if the paper assignment is to make and support a causal claim, student submissions should propose causal arguments and use relevant facts and logic to provide supporting evidence. In our experience, students often mistakenly posit interpretive or normative arguments or supply irrelevant facts. If the assignment is to develop and support an interpretive argument of a particular text, students often err by marshaling as evidence normative assertions or factual points external to the text.

When grading such an assignment, we normally deduct points when students incorrectly combine different types of theses and evidence. However, for this activity, if students identify their own mistakes, then they lose far fewer points overall. This "points back" incentive typically helps motivate students to do well. We find that when students' interpretive arguments are backed up by evidence from outside the relevant text, then they are especially likely to catch their own mistakes. The advantage of this assignment is that students receive the benefits associated with rewriting and being critical of their own arguments. In our experience, students perform much better on papers after this assignment.

WORKING WITH DIFFERENT KINDS OF ARGUMENTS

Interpretive Arguments

Many political science assignments require interpretation of a particular text, such as classical texts in political theory courses or court opinion interpretations in judicial politics courses. We have found that students have great difficulty with such assignments. We often receive papers that either do not interpret but instead offer a critique based on the students' own normative values, or else offer an obvious summary with no argument. Students will often even make causal arguments about what caused the authors of the text to say what they do. For instance, students have written that "Rousseau was just following the norms of public opinion at the time," or "the justices were mostly nominated by Republican presidents, which is why they decided what they did." Some students seem unaware that they are making causal arguments—and what is more problematic, they seem unaware that such causal arguments require evidence.

One assignment that we have found prepares students for more sophisticated interpretive activities is a "baby step" in the formulation of interpretive argument. After completing a reading, students write two logically distinct but plausible interpretations of a particular quotation that they select from the text. During the

https://doi.org/10.1017/S1049096511000710 Published online by Cambridge University Press

class period, they spend time in small groups discussing their interpretations. This exercise allows students to provide valuable feedback to each other. The groups then present what they determine to be the best pair of competing interpretations to the class, which allows the students to learn from each other's mistakes. This assignment helps students move in the direction of making an argument but stops short of asking them to make a decision about which of the two interpretations is most plausible. The exercise prepares them to see the possibility of various interpretations of the same text, all of which require textual support, and encourages them to seek out plausible alternatives for the purpose of making counterarguments.[4]

Causal Arguments

It is also important to equip students to make and support causal arguments effectively. To do this, it is first necessary to encourage students to think about plausible alternative causal theories. This way of thinking is particularly confusing for students who have not taken a research design course to train them in creating concepts and variables and thinking clearly about units of analysis and variation. To help those students, it is necessary to provide a structure in which they can choose among alternative explanations. In our experience, it is effective to draw on existing theoretical debates within a particular subfield. In comparative politics, for instance, the framework of cultural, rational, and institutional explanation types (Lichbach and Zuckerman 1997) can be effectively leveraged. In the area of political economy, a set of approaches identified as ideas, interests, and institutions (Hall 1997) would be equally useful. And the paradigmatic terrain of international relations, which builds on realism, liberalism, and different versions of radicalism (Walt 1998), could also serve this purpose.

Here, we offer a specific example from a comparative politics course. Throughout the semester, students are introduced to various and competing explanations of different political outcomes (e.g., war, economic growth, democratic transition, electoral outcomes), with an emphasis on cultural, rational, and institutional theories of politics. Students are routinely encouraged to consider the most likely explanations for those outcomes, given the existing theoretical framework. Thus, they have a limited selection of explanations, which facilitates the organization of causal claims in their minds. For example, discussion might focus on the high propensity of French citizens to engage in public demonstration compared to citizens of other industrialized democracies. Students would be faced with different causal propositions derived from the three major theoretical approaches. A rational explanation could be that the French protest because this approach has proved to be an effective means toward desired political ends. An institutional explanation might argue that the centralized structure of the French state limits people's avenues for effective interest articulation. From a cultural perspective, it may be that demonstrating is simply viewed as normal, habitual behavior among French citizens (on all these points, see Mény 2002, 103–04). Although this list of explanatory propositions is not exhaustive, its theoretical structure helps students identify competing causal accounts and think about how to assess them using empirical evidence.

To encourage this critical thinking further and practice using these assessment skills, we assign a paper that tasks students with generating a specific "why" question that interests them. Ideally, this question is motivated by a current event so that students can develop the habit of questioning the roots of events as they unfold. Allowing students to identify their own question encourages them to study a subject that they find especially interesting. Examples might be: Why did Swiss voters in 2009 approve a ban on the construction of minarets? Why did Iceland's Best Party (which campaigned partly on the promise of free towels at public pools) fare so well in a recent local election? Why has the South African murder rate fallen so steeply in the past year? Why is prostitution legal in some countries and illegal in others? After identifying their question of interest, students then use the cultural-rational-institutional framework to propose alternative explanations. Finally, they engage in comparative analysis and seek out empirical evidence to support or challenge these various explanations. Ultimately, students draw conclusions about the most likely account(s) of their chosen outcome.

Normative Arguments

One of the greatest challenges an educator faces is getting students to critically evaluate their own normative values. While students are unlikely to take a particular interpretation of a Supreme Court opinion or piece of European Union legislation personally, their ability to dispassionately consider their own worldviews is limited. It can be threatening to have one's values criticized, whether we are asking students to engage in critical self-reflection or raising questions about their beliefs. Nevertheless, since two goals of teaching critical thinking are to help students become better citizens and to challenge their own and others' political viewpoints and decisions, the effort is worthwhile. Given the potential of this kind of exercise to evoke emotions that inhibit learning (Csíkszentmihályi 1990), we advocate an incremental approach.

To deal with the sensitive nature of this form of critical thinking instruction, we use assignments dealing with normative statements that steer away from political areas that are too emotionally involved. Another possible approach is to focus on the mechanics of evaluating assumptions and foundational principles of those normative arguments. Accordingly, we present two assignments that promote critical thinking along normative lines but do not tend to alienate or offend students.

The first exercise involves working through the first principles of fairness when evaluating electoral systems. Since students are not likely to hold ingrained views about which electoral system is best, the debate is not personally threatening to them. Moreover, outlining the first principles of fairness helps students focus on the mechanics of developing an argument rather than the argument itself. To set up this assignment, students are taught that there are various normative considerations that the designers of democratic electoral systems often have in mind. These considerations include the desire to create a system that is *highly representative*, yielding a legislature that closely mirrors the general population; *effective*, executing the powers of government in an efficient manner; *highly participatory*, encouraging a high rate of citizen participation; or *high in representative accountability* to constituents. Students are also taught that certain aspects of an electoral system will promote some of these desired outcomes. For instance, proportional representation generates a more representative system on average[5]; majoritarian systems can make parliaments more efficient; compulsory voting laws can boost participation; and in systems that select candidates rather than

https://doi.org/10.1017/S1049096511000710 Published online by Cambridge University Press

parties, individual representatives are likely more accountable to voters.

To engage with these dimensions of electoral system design and wrestle with the normative considerations involved, students are tasked with designing their own electoral system from scratch. This assignment can be adapted as a paper or an in-class exercise. In the classroom version, students work in small groups to select two normative priorities (e.g., representativeness and efficiency) that they want to pursue. They then create the framework for an electoral system that maximizes their desired normative goals. The assignment grade is not based on which goals they select, but rather whether the system actually maximizes those objectives. In this way, students can be evaluated not on their normative views, but on the basis of whether their suggestions are logically connected to the first principles that they have chosen.

Another strategy for familiarizing students with the logic of normative statements without directly confronting their own values is to structure the lesson around a contemporary controversy that is not likely to be directly salient in their minds. We then provide students with various principles that should serve as reasonable guideposts for decision making. Their grade depends on how well they are able to use those principles in their argument. For example, we might ask students to debate and ultimately make a recommendation about the entry of Turkey to the European Union. The main academic purposes of the exercise are to help students learn about the process of European enlargement and get them to think about the costs and benefits of a new EU member. Although students can and should consider what is best for aspiring member countries, the emphasis in this particular exercise is on making the best decision from the existing member states' points of view.

The issue of Turkey joining the European Union is hotly debated across Europe and is likely shaped to some extent by anti-Muslim biases, as Turkey is a predominantly Muslim society. Therefore, to approach the topic from a relatively neutral point of view, we first introduce students to the debate that occurred in the late 1990s over the entrance of several (Christian) Eastern European countries to the European Union. Students are then encouraged to consider Turkish membership within this framework, thereby minimizing the effects of Turkey's Muslim composition as a key consideration in the debate.

Students are prepared for this class by learning about the criteria formally established by the European Union in 1999 for judging the suitability of countries that apply for membership. These principles focus on economic, liberal democratic, and human rights qualifications, and we encourage students to engage in some basic interpretation of these rules.[6] We also assign a book chapter published before the 2004 eastern enlargement of the European Union that analyzes the costs and benefits of allowing these countries to join (Mayhew 1998). This reading assignment provides an analytical framework that identifies the economic, political, and security costs and benefits of admitting countries that are (*a*) not as wealthy as the existing member states, (*b*) have national minority groups that claim discrimination, and (*c*) have potentially threatening geopolitical locations. As a result, students are prepared to approach the issue of Turkish membership from a logical-legal point of view.

To wrestle with the membership issue themselves, students are divided into working groups of four or five and given condensed copies of the *CIA Factbook* report on Turkey (U.S. Central Intelligence Agency 2011). This report is written in bullet-point form and contains information on Turkey's economy, human rights, democracy, and security issues, in addition to other relevant facts for assessing its suitability for membership. The student groups are charged with formulating a normative argument with respect to Turkish membership—that is, the European Union should or should not accept Turkey. To make this judgment, they must use their knowledge of EU membership policies, the framework for assessing the costs and benefits of enlargement for existing EU countries, and the available facts about Turkey. When the groups have made their decisions, the class reassembles and each team presents both their normative recommendation and the factual points about Turkey that are most relevant for this recommendation.

This exercise has proved very successful in the classroom. It never fails that some groups make a pro-membership argument and others an anti-membership argument. This disagreement offers a learning opportunity in itself by demonstrating that even with the same criteria for judgment and the same facts, people can produce opposing normative recommendations. Furthermore, by pushing students to back up their argument with hard facts about Turkey, this exercise encourages them to use empirics and normative judgments to engage with new material. The assignment also allows them to argue the various points and weigh the costs and benefits explicitly in discussion groups.

A more general recommendation for encouraging students to think through normative arguments is to get them engaged in producing a normative research design. We have students read the first chapter of Tom Regan's (1980) *Matters of Life and Death*. In this introduction, Regan provides a list of practices to follow (and not to follow) when making normative arguments. He also provides a list of potential first principles that can be used in normative arguments, such as utilitarianism, consequentionalism, the morality of rights, and the value of life. We task the students with generating a normative argument and then identifying the first principle that best provides its foundation. In other words, rather than simply asking students to make an argument—for example, that human beings should not eat meat—they must identify the first principle that serves as the foundation for that argument. In this case, they might invoke a principle that relates to the immorality inherent in allowing the intentional and unnecessary suffering of an animal. They would then argue that the first principle is defensible and logically connected to their specific normative contention.

Having students defend the connection of their argument to first principles is technically a research proposal for normative arguments. When making normative arguments, research proposals must clearly establish the logic that connects a broad first principle to a specific normative argument. For example, students might choose the specific normative argument "War is defensible when attacked." Then, rather than making an argument based on the conditions under which war is defensible, they would identify a first principle, such as the right of self-defense, and make the case that the right of self-defense is logically linked to the argument that war is defensible when attacked. Their argument would center on the logical relationship between the first principle and the contention. In this way, we ask students to make an argument that is not as threatening to their own sense of right and wrong. Whether war is defensible is likely to be a sensitive topic to both doves and hawks, but the connection of the defensibility of war to

https://doi.org/10.1017/S1049096511000710 Published online by Cambridge University Press

the right of self-defense is likely to be less sensitive. Therefore, this assignment is especially likely to engage students in critical thinking and perhaps, on some level, challenge their own thinking. Moreover, because the grades on this assignment are based on the logical evidence that students provide for their argument, participants are unlikely to believe that their grades hinge on the instructor's own normative beliefs.

Each of these activities encourages students to engage with normative assessments and normative claims in various ways, yielding many educational benefits. However, these exercises also rely on intellectual material that encourages students to think about normative views in general without treading on ground that might be especially sensitive. Still, we expect that learning about normative claims in a relatively neutral way will ultimately urge students to think about the subjects on which they themselves hold normative views.

CONCLUSION

Most suggestions for critical thinking assignments offer vague advice: allow students to discuss matters, tell students they need to think critically, ask them to rewrite. However, specific lessons that have been tested in the classroom are not commonly made available. In this article, we offer advice in the form of specific assignments that help students develop critical thinking skills through hands-on experiences using different kinds of information and arguments. Through our proposed methods, students learn the difference between statements of fact and more debatable points of argumentation. They learn which kinds of evidence are appropriate for which kinds of assertions. Finally, they gain experience with making arguments and criticizing their own use of evidence to support their ideas. In general, we propose that by taking a step back and being explicit about such requirements, we help our students develop standards for assessing claims. In this way, we encourage them to develop fundamental critical thinking skills. ■

NOTES

1. For example, see http://www.lessonplanspage.com and http://www.readwritethink.org.
2. This appendix is available at http://socsci.colorado.edu/~bairdv/Critical_Thinking.html.
3. Our delineations among different types of information may not match the distinctions made by all other scholars. As such, we view our propositions as a starting point for a broader academic dialogue about different kinds of information in general.
4. The typical class size for all of the in-class activities we describe here ranges from 25 to 50 students.
5. This assertion opens the door to questions about what "representative" means, and we invite students to apply the term as they see fit. If the key to representativeness is linked to ideology, gender, age, or race, for instance, then proportional systems likely offer the most fitting solution. However, geographic representation might be more effectively pursued in a majoritarian system. Students are encouraged to consider different ideas about the version of representation that they value most.
6. We also highlight to students that the establishment of these legal criteria signal normative values on the part of EU nation-states—these are the agreed-upon standards for judging membership applications.

REFERENCES

Bok, Derek. 2006. *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More*. Princeton, NJ: Princeton University Press.

Brown, Scott W., and Frederick B. King. 2000. "Constructivist Pedagogy and How We Learn: Educational Psychology Meets International Studies." *International Studies Perspectives* 1 (3): 245–54.

Burbules, Nicholas C., and Rupert Berk. 1999. "Critical Thinking and Critical Pedagogy: Relations, Differences, and Limits." In *Critical Theories in Education: Changing Terrains of Knowledge and Politics*, ed. Thomas S. Popkewitz and Lynn Fendler, 45–66. New York: Routledge.

Csíkszentmihályi, Mihály. 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper-Row.

Facione, Peter A. 2000. "The Disposition toward Critical Thinking: Its Character, Measurement, and Relationship to Critical Thinking Skill." *Informal Logic* 20 (1): 61–84.

Facione, Peter A., Carol A. Sanchez, and Norren C. Facione. 1994. "Critical Thinking Disposition as a Measure of Competent Clinical Judgment: the Development of the California Critical Thinking Disposition Inventory." *Journal of Nursing Education* 33 (8): 345–50.

Hall, Peter A. 1997. "The Role of Interests, Institutions and Ideas in the Comparative Political Economy of the Industrialized Nations." In *Comparative Politics: Rationality, Culture, and Structure*, ed. Mark I. Lichbach and Alan S. Zuckerman, 174–207. New York: Cambridge University Press.

Lichbach, Mark I., and Alan S. Zuckerman, eds. 1997. *Comparative Politics: Rationality, Culture and Structure*. Cambridge, UK: Cambridge University Press.

Mayhew, Alan. 1998. *Recreating Europe*. Cambridge, UK: Cambridge University Press.

Mény, Yves. 2002. "France: The Institutionalization of Leadership." In *Political Institutions in Europe*, 2nd ed., ed. Josep M. Colomer, 95–132. London: Routledge.

Monk, Martin, and Jonathan Osborne. 1997. "Placing the History and Philosophy of Science on the Curriculum: A Model for the Development of Pedagogy." *Science Education* 81 (4): 405–24.

Oros, Andrew L. 2007. "Let's Debate: Active Learning Encourages Student Participation and Critical Thinking." *Journal of Political Science Education* 3 (3): 293–311.

Regan, Tom. 1980. "Introduction." In *Matters of Life and Death*, ed. Tom Regan, 3–34. New York: Random House.

Smith, Daryl G. 1977. "College Classroom Interactions and Critical Thinking." *Journal of Educational Psychology* 69 (2): 180–90.

Stein, Barry, Ada Haynes, and Michael Redding. 2007. "Assessing Critical Thinking in STEM and Beyond." In *Innovations in E-Learning, Instruction Technology, Assessment, and Engineering Education*, ed. Magued Iskander, 79–82. Dordrecht, The Netherlands: Springer.

Terenzini, Patrick T., Leonard Springer, Ernst T. Pascarella, and Alberto Nora. 1995. "Influence Affecting the Development of Students' Critical Thinking Skills." *Research in Higher Education* 36: 23–39.

Tsui, Lisa. 1999. "Courses and Instruction Affecting Critical Thinking." *Research in Higher Education* 40 (2): 185–200.

———. 2002. "Fostering Critical Thinking through Effective Pedagogy: Evidence from Four Institutional Case Studies." *Journal of Higher Education* 73 (6): 740–63.

U.S. Central Intelligence Agency. 2011. "Middle East: Turkey." *CIA World Factbook*. https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html.

Walt, Stephen M. 1998. "International Relations: One World, Many Theories." *Foreign Policy* 110 (1): 29–46.

Weingast, Barry R. 1997. "The Political Foundations of Democracy and Rule of Law." *American Political Science Review* 91 (2): 245–63.

https://doi.org/10.1017/S1049096511000710 Published online by Cambridge University Press