The Routledge International Handbook of Research on Teaching Thinking

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Teaching for thinking

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Section I

Theory, history and context of teaching thinking
A precautionary tale

The beginning of the end, it is generally agreed, was in 1962 (“Centralia, Pennsylvania: Truth is Stranger than Fiction,” 2009). Someone burned trash in the pit of an abandoned strip mine in Centralia, Pennsylvania, USA. It was illegal; it was unethical; but people do this kind of thing all the time. An exposed vein of coal caught fire. The fire was doused with water and town officials thought the fire was extinguished. But it wasn’t, and the fire erupted again, unexpectedly, in the same pit just a few days later. More water was applied and town officials thought that was the end of it. But again, it wasn’t.

The fire spread underground. People debated long and hard as to what to do about it. As they debated, life went on. People attended to the problems that confronted them in their daily lives—making ends meet, raising their kids, marrying and divorcing—meanwhile relegating the fire to the backs of their minds. Every once in a while, though, the fire or its byproducts would emerge from the ground. Toxic gases would start to come up out of the ground. A basement would become very hot and eventually people would realize that the fire had reached under their home. Roads would start to buckle from the heat. Half-hearted efforts would be made to extinguish the fire, but the longer people waited, the more the fire spread, and the more expensive it would be to extinguish it. The government started to pay people to relocate. They had little other choice.

Today, Centralia, Pennsylvania, is a ghost town. All but the steadfast few have abandoned the town. It no longer appears on some maps. Relatively few people even remember the fire that still burns under the ruins of Centralia. Among those who do are the residents of Ashland, Pennsylvania, because the fire is making its way in their direction. They fear they are next.

The need to teach ethical reasoning

The story of Centralia is a precautionary tale for our society as a whole. The whole thing started with one clearly unethical act. Local, state, and government officials had a chance to do something about it, but they failed adequately to recognize the looming crisis. And so the crisis spread underground, erupting here and there, until it became unmanageable. The financial costs were staggering. But what about the ethics of making only a half-hearted attempt to control a fire that eventually would destroy the entire town, including the homes both of innocent victims and of those who did nothing?
One can argue that lapses such as occurred in Centralia are exceptions, scarcely the rule. But the ethical challenges of Centralia are writ large in many societies. Ethical lapses in government occur on a much larger scale. While genocide was being committed in Rwanda, governments around the world did little or nothing. Currently there are leaders who have been indicted for crimes against humanity by the International Criminal Court in the Hague who are nonetheless embraced and feted by heads of other countries, when it is in their self-interest to do so.

Ethical bankruptcy extends to the financial realm, where the term “bankruptcy” originates. In October 2008, the United States economy was close to total collapse. This led to worldwide recession, notably, in the UK. There were multiple causes but the main ones were from the kind of unabated greed that conquers ethics. Bankers at one of the most respected banks in the world were recommending securities to clients and then betting against their own clients: The more money the suckers invested, the more money the bank could make betting against them. Bankers in some other banks were putting together bundled mortgage securities that were not worth the paper they were printed on. When the markets collapse as a result of the greed and lack of ethics, the same bankers then looked for ways to make money off the losses they caused to others.

Of course, ethical blindness is not limited to bankers. A. H. Robins went bankrupt in 1985. The company could not afford settlements for the more than 300,000 lawsuits filed against them as a result of their production and marketing of an unsafe intrauterine device for birth control, the Dalkon Shield. In 2001, Enron collapsed after Fortune magazine had named it America’s most innovative company for six years in a row. It was a house of cards, built on phony books and fraudulent shell companies. Worldcom’s bankruptcy came a year later, in 2002. It had incorrectly accounted for $3.8 billion in operating expenses. More recently, we have seen the end of Bear Stearns, Lehman Brothers, Merrill Lynch, and numerous other financial enterprises.

One cannot just blame bankers. In 2013, a man, Uhuru Kenyatta, was elected as president of Kenya despite the fact that he is facing charges of crimes against humanity in the International Court of Justice. His vice-president also faces such charges. Come to think of it, some states in the United States have elected senators, congressmen, and governors with serious records of corruption. Some of them, like Huey Long and Edwin Edwards in Louisiana, even became famous. Lack of ethical reasoning seems to be a problem all over.

Few people reached the depths of Bernard Madoff, the epitome of unethical behavior on Wall Street, who sits in a prison cell. And relatively speaking, there are few so-called “mini-Madoffs,” who committed financial fraud on a smaller scale. Most people show much smaller ethical lapses, but the lapses add up. The fire is burning, people douse it with water, and they hope that it will somehow go out. But perhaps such behavior is a byproduct of the Baby Boom generation and a thing of the past. Is ethical behavior really a problem in today’s youth, especially in elite colleges and universities, or is it something found just outside the academy in Baby Boomers?

The examples in this chapter suggest that ethical reasoning doesn’t just “happen.” Students need to develop ethical-reasoning skills and schools, from elementary school onward, need to help in this development. Their goal should not be to teach students how to behave in specific situations. There is no way to predict just what situations students will encounter in their lives. I think that schools should challenge students with ethical-reasoning problems, and help them develop the skills they will need to cope with these problems.

Teaching ethical reasoning

When we think about teaching for thinking, we usually mean teaching for critical-thinking skills (Paul & Elder, 2005; Sternberg, 1987). In my own work, I originally expanded this to include
creative and practical as well as critical or analytical thinking skills (Sternberg, 2002; Sternberg & Grigorenko, 2007; Sternberg & Spear-Swerling, 1996; Sternberg & Williams, 1996). Recently, though, I have concluded that the greatest problems in our society derive not from a lack of critical, or creative, or even practical thinking, but from a lack of wisdom-based and ethical reasoning (Sternberg, 2012a, 2012b, 2013; Sternberg, Reznitskaya, & Jarvin, 2007). But can ethical reasoning be taught? We can teach children to think, but if we do not teach them how to think ethically, our teaching them to think may benefit society not at all.

Ethical reasoning can be taught

Schools should teach ethical reasoning; they should not necessarily teach ethics. There is a difference. Ethics is a set of principles for what constitutes right and wrong behavior. These principles are generally taught in the home or through religious training in a special school or through learning in the course of one’s life. It would be challenging to teach ethics in a secular school, because different religious groups have somewhat different ideas about what is right and wrong. There are core values that are common to almost all these religions and ethical systems that schools do teach and reinforce—reciprocity (the golden rule), honesty, sincerity, compassion in the face of human suffering. But beyond those core values, it is difficult for a secular school to teach ethics because people differ on their application: Should abortion ever be allowed? Is capital punishment ever justifiable? Is it ever ok to lie? It is not the place of the secular school to attempt to teach answers to these questions, because there are no clear answers upon which the society that the school represents agrees.

Ethical reasoning is how to think about issues of right or wrong. Processes of reasoning can be taught, and the school is an appropriate place to teach these. The reason is that although parents and religious schools may teach ethics, they do not always teach ethical reasoning, or at least, do so with great success. They may see their job as teaching right and wrong, but not how to reason with ethical principles. Moreover, they may not do as good a job of it as we would hope for.

Ethical reasoning has been studied in various forms by multiple scholars. Greene, for example (Greene et al., 2009) has suggested that people think about ethical problems in terms of a dual-process model. Judgments associated with rights and duties (deontological judgments) are processes automatically whereas utilitarian and consequentialist judgments (those concerned with achieving a common good) are processed in a controlled and more reflective way. Hauser (2006) has argued that people have a universal moral grammar, in the same sense Chomsky argued for a universal grammar of language. (Ironically, Hauser resigned his professorship at Harvard apparently over a serious breach of ethics.) This grammar is largely instinctive and beneath consciousness. For example, the typical person might not be able to say why incest is morally repugnant, but will nevertheless feel the moral repugnance toward it without being able clearly to articulate the reasons. Haidt (2006), investigating happiness and its relations to ethics, suggests that the mind is analogous to an elephant of automatic desires atop which rides our conscious intentions. Needless to say, the elephant is far more in control than the hapless rider. In the end, Haidt claims, people make their decisions with their guts and then use their minds to rationalize these decisions. Haidt values religion not for its theistic implications, but rather for its promotion of ethical behavior and people’s happiness. Sandal (2010) has provided a rationale as well as case studies for thinking about justice in a variety of situations.

Is there any evidence that ethical reasoning can be taught with success? There have been successful endeavors with students of various ages. Paul (Paul & Elder, 2005) of the Foundation for Critical Thinking has shown how principles of critical thinking can be applied specifically to
ethical reasoning in young people. DeHaan and his colleagues at Emory University have shown that it is successfully possible to teach ethical reasoning to high school students (DeHaan & Narayan, 2007). Myser and colleagues (1995) of the University of Newcastle have shown ways specifically of teaching ethics to medical students. Weber (1993) of Marquette University found that teaching ethical awareness and reasoning to business-school students can improve from courses aimed at these topics, although the improvements are often short term. But Poneman (“First Center to Study Accounting Ethics Opens,” 2010) and Jordan (2007) both found that as leaders ascend the hierarchy in their businesses, their tendency to define situations in ethical terms actually seems to decrease.

Perhaps students just learn ethical reasoning on their own and do not need to be taught ethical reasoning in the schools. Given the ethical challenges in the world today, this seems unlikely.

How does one actually teach ethical reasoning? In my view, the best way to teach ethical reasoning is through the case-study method. Students learn how to reason about and apply ethical principles by being confronted with ethical problems, and being challenged to solve them. They also need to be inoculated against the pressures to behave unethically, such as occurs when there is retaliation for whistle blowing.

Problems for teaching ethical reasoning

One of the most famous, perhaps now classical, problems for teaching ethical reasoning is the following, which has been presented in many variants (Foot, 2003):

A trolley is going out of control and hurtling down the tracks toward four people who are strangers. You are unable to call out to the people or get them off the tracks. However, it is in your power to press a button that will divert the trolley. But there is a problem, namely, that there is a person on the tracks onto which you would divert the trolley. This person will be killed if you divert the trolley. Thus you can touch the controls and divert the trolley, resulting in the death of one person, or you can choose not to touch the controls, in which case four people will die. What should you do?

Consider other perhaps more realistic problems:

1 A university in New York City has run out of room. It is confined on all sides in a crowded city and cannot fulfill its expanding academic mission with the real estate currently available to it. Its solution in the past was to buy up as much neighboring land as it could. But it has run out of willing sellers. The university now is attempting to use the law of eminent domain to take over land by having the city kick out landowners. In order to do so, it has claimed that some of the areas into which it wishes to move are blighted. Landowners of these adjacent properties point out that the university has no right to their land and that if the adjacent areas are blighted, it is because the university itself has failed properly to maintain properties it has bought and thus has been a major contributor to the blight. What should be done?

2 Doctors sometimes write notes on pads furnished them by pharmaceutical companies with pens also furnished by such companies. Some doctors also may accept free meals, club memberships, subsidized travel, and research funds from such companies. With regard to gifts and subsidies from pharmaceutical companies to doctors, what kinds of guidelines do you think ought to be in place, and why? Is there an ethical failure here, and if so, is it in the pharmaceutical companies, the doctors, or both?
3 Mr. Smith, a close friend of yours with whom you have worked closely in your company for 40 years, is clearly dying. There is no hope. On his deathbed, he tells you that he has been burdened for many years by the fact that, between the ages of 35 and 42, he had a mistress whom he saw frequently and subsidized financially. He asks you to tell his wife what he has told you and to tell her that he begs her forgiveness. 

Mr. Smith has now died. What should you do about his request?

4 Your friend is the CEO of a powerful company in your town. You follow the local news and know that there have been some rumblings about his performance because as CEO, he has just awarded a large no-bid contract to manage the construction of a new research center owned by the company. In other words, the winning contractor did not have to compete against any other companies for the contract. At a dinner party, you ask your friend the CEO how his vacation was, and he mentions that it was really nice. He and his family went on a weeklong free skiing vacation at the mountain house of Mr. X. You realize that Mr. X is none other than the owner of the company that received the contract to manage construction of the new building. What should you do?

If students are not explicitly given a chance to confront ethical dilemmas, how are they going to learn to solve them? In evaluating students’ solutions, the conclusions students come to matter less than their reasoning processes in coming to those conclusions.

There are no easy answers to any of these problems, but that is the point: Teaching ethical reasoning is not about teaching what one should do in particular circumstances—perhaps that is the role of religious training. Teaching ethical reasoning is about teaching students how wisely to make very difficult decisions involving ethical considerations where the answers are anything but clear-cut.

A model of ethical reasoning and its translation into behavior

Not all ethical problems are as difficult as these. Yet people act unethically in many situations. Why? Sometimes, it is because ethics mean little or nothing to them. But more often, it is because it is hard to translate theory into practice. Consider an example.

In 1970, Bibb Latané and John Darley opened up a new field of research on bystander intervention. They showed that, contrary to expectations, bystanders intervene when someone is in trouble only in very limited circumstances. For example, if they think that someone else might intervene, the bystanders tend to stay out of the situation. Latané and Darley even showed that divinity students who were about to lecture on the parable of The Good Samaritan were no more likely than other bystanders to help a person in distress who was in need of—a good Samaritan! Drawing in part upon their model of bystander intervention, I have constructed a model of ethical behavior that would seem to apply to a variety of ethical problems. The model specifies the specific skills students need to reason and then behave ethically. The skills are taught by active learning—by having students solve ethical-reasoning problems, employing the skills they need.

The basic premise of the model is that ethical behavior is far harder to display than one would expect simply on the basis of what we learn from our parents, from school, and from our religious training (Sternberg, 2009a, 2009b). To intervene, individuals must go through a series of steps, and unless all of the steps are completed, they are not likely to behave in an ethical way, regardless of the amount of training they have received in ethics, and regardless of their levels of other types of skills.

Consider the skills in the model and how they apply in an ethical dilemma—whether a student, John, should turn in a fellow student, Bill, whom he saw cheating on an examination:
1. **Recognize that there is an event to which to react.**

John has to observe the cheating and decided that it is a situation in which he potentially can do something. In the much more extreme case of leaders like Adolf Hitler, people may not recognize that there is even anything to be done until much of the damage has been done. Or they actively may seek to avoid confronting the situation that is staring them in the face.

2. **Define the event as having an ethical dimension.**

John has to define the cheating as unethical. Many students do so; but some others see it as a utilitarian matter—it’s ok if Bill gets away with it. In the political arena, even today, a contemporary leader in Austria complimented Hitler on his economic policies. He defined Hitler’s leadership in economic terms, just as did many people the leadership of Augusto Pinochet in Chile.

3. **Decide that the ethical dimension is significant.**

John has to decide that Bill’s cheating on the examination is a big enough deal that it is worth paying attention to. Some students may see it as an ethical issue, but not as a significant one. In a related vein, some people have looked at the disaster Robert Mugabe has created in Zimbabwe, and decided that even if Mugabe’s ethics have been questionable, their violations of accepted principles have not risen to the point where any intervention is required or even desirable.

4. **Take personal responsibility for generating an ethical solution to the problem.**

There are ethical problems that are serious but that are not necessarily your ethical problems. John may decide that there is an ethical problem here, even a big one, but that it is none of his business. For example, John may look at it as the teacher’s responsibility, not his, to turn in Bill. In general, there are ethical problems that are serious but are not necessarily your ethical problems. For example, we may learn that a colleague has acted unethically. Is it our problem? Do we have a responsibility to report the colleague, or should we stay out of the affair? How about if the person acting unethically is a politician in whose actions many others have a stake as well? Is it our personal responsibility to watch out for his or her ethics? In cases of genocide, people of other nations often feel that the killings are someone else’s problem, but not theirs. Much of the evil in the world only can happen because people decide that ethical problems belong to someone else.

5. **Figure out what abstract ethical rule(s) might apply to the problem.**

What rule applies? If there is no honor code, is there a rule by which John should turn in Bill? Perhaps John believes, on the contrary, that the rule is to mind his own business, or to avoid cheating himself, but not to turn in Bill. Especially in new kinds of situations with which one has little familiarity, it may not be clear what constitutes ethical behavior. What does one do when a leader goes to war and lies about the causes, later saying that the war was justified in any case, even if the original justification was wrong? What ethical rules apply?

6. **Decide how these abstract ethical rules actually apply to the problem so as to suggest a concrete solution.**

Perhaps John believes that one should turn in cheaters, but cannot apply the rule in this situation, realizing that he could not prove that Bill cheated. Many people who oppose corrupt governments today know that something must be done, but they don’t know what. It often is difficult to translate principles into concrete actions.
7 Prepare to counteract contextual forces that might lead one not to act in an ethical manner.

John may be reluctant to turn in Bill because he believes that other students, including but not limited to Bill, will shun him or retaliate against him for being a “snitch.” In the Latané and Darley work, the more bystanders there were, the less likely one was to take action to intervene. Why? Because one figured that, if something is really wrong, then someone among all the others witnessing the event will take responsibility. You are better off having a breakdown on a somewhat lonely country road than on a busy highway, because a driver passing by on the country road may feel that he or she is your only hope.

One may hesitate to act because of possible repercussions. In genocides, opposing the perpetrators may make one a victim. Or one may look foolish acting in an ethical way when others are taking advantage of a situation in a way to foster their personal good. Even before one acts, one may be hesitant because of the aftermath one anticipates, whether real or merely imagined. In some countries, people who have spoken out against the government have had an unfortunate tendency to end up dead.

8 Act.

In the end, the question becomes one not of how one thinks, but of what one does. It can be very difficult to go from thought to action. But the ultimate test of ethical reasoning is not just in how one thinks, but also in how one acts. John may believe he should turn in Bill but just not get up the guts actually to do so.

Effective teaching of ethical reasoning involves presenting case studies, but it is important that students as well generate their own case studies from their own experience, and then apply the steps of the model to their own problems. They need to be actively involved in seeing how the steps of the model apply to their own individual problems.

In conclusion

Figuratively speaking, we are all living in Centralia. But should we do anything to stop the fire, and if so, what? Is it worth the cost? Or should we just deal with the consequences of the fire as they erupt, as we have been doing? Deciding what to do is one of the most challenging ethical problems of all. And if we do nothing, what will happen to our metaphorical Ashland—the next generation for whom we bear responsibility as we do for our own? We need to take responsibility for teaching students to reason ethically. Otherwise, we risk the fire burning further out of control, with catastrophic results for our nation and the world.

Teaching for critical thinking is not enough. People can be good critical thinkers and at the same time be unwise and unethical. Do we need more people to use their critical thinking to figure out how to maximize their own gains at the expense of everyone else’s? Some people may be skeptical of teaching ethical reasoning in secular schools. But the goal is not to teach students one set of values or another, but rather, to help them think about their own values and how they can apply these values in an ethical way. Few leaders fail for lack of critical thinking. A whole lot fail for lack of ethics.

References

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