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Main Article:



Learning Not to Think Like an Economist

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Abstract

This essay describes my progress bringing the core ideas of economics into conversations with noneconomists about important public policy issues within my faith community, through local politics, and through interdisciplinary conversations in academia. Thinking like an economist is essential to conducting research and performing careful analysis of public policy issues. However, it can reduce the economists' effectiveness in teaching and interacting with neighbors and political leaders. Effective pedagogy requires that faculty be present as good economists to their neighbors, their fellow citizens, in daily conversations and public policy debates. Our continuing education as teachers of economics requires that we enter those conversations as committed students as well--committed to learning how our neighbors process economic facts and principles and how their insights into public policy debates might alter our own understanding.

Keywords: economics; pedagogy; local politics; listening; learning

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1. On the Economic Way of Thinking

Pick up any syllabus of an introductory economics course or read the preface to any introductory economics text and you will almost certainly find the phrase "students will learn to think like an economist." Understanding market behavior and the consequences of attempting to influence market outcomes is hard work. It requires mastering a way of thinking every bit as rigorous as the chemist's experimental method or the nuances of Mandarin Chinese. It is a way of thinking

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that does not stick, in the sense that it tends to dissipate without regular use. Unless one pursues a career in economics, the economic literacy of college graduates 10 to 15 years after graduation, economics majors included, is not much greater than that of individuals never exposed to formal economic reasoning.

A second challenge for the discipline is the recognition that no economist ever lives exclusively in a world inhabited solely by economists. Learning to think like an economist has little value unless it is accompanied by learning how to share the fruits of that analytical approach and enrich its insights through conversation with others. Learning to see the world entirely through the prism of economics makes it nearly impossible to listen to others. So, economists live divided lives and noneconomists allow the lessons of their undergraduate courses to fade away.

Economists, as social scientists, seek first to observe and explain economic phenomena. But what if proselytizing for the economic way of knowing changes the world around us? And what effect does mastering the economic way of knowing have on who we are? I am not so much concerned here with the worry that faculty who teach economics are transformed as people (i.e., more likely to become college administrators, less altruistic, less likely to vote, and so forth) as the recognition that learning to think like an economist makes us less effective teachers of economics, less effective professors of policy alternatives, and less effective advisors in the world outside academia.

This essay describes a very personal work program to bring the core ideas of economics into conversation with noneconomists, vis-à-vis important public policy issues. For those around me, sharing basic economic principles has provided focus, direction, and a sense of optimism in coping with otherwise overwhelming problems. It can bring understanding. Equally important, seeing economics through noneconomists' eyes reveals fundamental limitations in the economic way of knowing. Learning *not* to think like an economist is making me a better teacher: I am better able to meet my students' needs. Coming out of the economist's cave is making my knowledge and my talents more useful to my neighbors. For colleagues in economics, I hope that this description will prompt reflection on the limitations of an exclusive focus on the economic way of knowing. For all teachers, this essay reinforces the recognition that an important element of transdisciplinary thinking is *reciprocal pedagogy*, in which teaching is no more important than learning how others process what we have to share into their analytical frames of reference.

2. What's Wrong With Teaching Economics?

In many ways, not much. Economics is the most structured or sequential of the social science majors (see Hansen, 1986, 2001; Kasper, 1991). The curriculum is more like that encountered in the natural sciences. As in chemistry or physics, the ability to grapple with the results of cutting-edge research requires mastery of a portfolio of analytical tools. In economics, these include the manipulation and interpretation of graphs, algebra, calculus, and the logic of game theory.

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Students start with a wide survey of the major analytical approaches, receive more focused exposure to how economists go about defining and solving problems, pass through several core intermediate theory courses, and then specialize in one or two subfields. The best students are able to conduct their own applied research as college seniors and have the option of pursuing careers as academic or professional economists. The rest at least end up being able to summarize the basis for the major conclusions of published research.

Economists might quibble about exactly what should be on the list, but the economic way of thinking surely would start with the recognition that the cost of a product or service is not the purchase price but the lost opportunity to enjoy the next best alternative acquisition. People who think like economists ignore sunk costs ("no use crying over spilt milk") and focus on the margin, balancing the incremental benefit of a choice against its incremental cost. We keep track of who wins and who loses from changing events; we see market outcomes as largely a function of past choices, and we are dismayed at the prospect of inefficiencies in market outcomes that might reduce the value of goods and services available to all.

There is substantial debate over whether the lecture approach that dominates pedagogy in economics is particularly effective in helping students master our analytical tools (e.g., Becker & Watts 2001 and the references therein) or whether mastering those tools is the same as learning to think like an economist. Empirical evidence is usually couched in terms of grades or performance on standardized tests. Economics pedagogy is successful in the sense that students leave each course and complete their majors more proficient in the manipulation of the economist's toolbox and better able to understand economic arguments than they were when they began. However, the evidence is also clear that students retain little of what they learn in the economics classroom (Allgood, Bosshardt, Klaauw, & Watts, 2004; Hansen, Salemi, & Siegfried, 2002; National Council on Economic Education, 2003; Walstad & Allgood, 1999). Students' limited retention of content from one economics course to the next is hardly out of line with their experience in other disciplines. It should not surprise us that postsecondary economics degree holders, 10-15 years after graduation, are no more likely to remember the "quasiconcavity of production functions" than former chemistry students are to remember the "valence structure of molecules." Use it or lose it. But it should bother us as teachers that the basic economic literacy (the North Central Regional Educational Laboratory offers one definition for the United States) of senior economics majors (and alumni who were majors) is so little improved over that of citizens at large (Dahl, 1998; Stigler, 1970; Walstad, 1998).

On average, even fairly intense exposure to college economics has little lasting effect on a person's ability to see, for example, the gains from labor market specialization, links between the minimum wage and employment levels, and the broad impact of fiscal and monetary policy on inflation. This is disheartening to organizations like the Minneapolis Federal Reserve Bank, the National Council on Economic Education, and other groups in the United States and elsewhere that have been organizing campaigns to increase student and adult exposure to

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instruction in economic fundamentals.

Experience suggests that teaching the standard economics curriculum reinforces the mental habits that constitute thinking like an economist. We see this in undergraduate teaching assistants as well as faculty. Similarly, the rhythms of mainstream scholarship in economics-literature review, model building, and statistical analysis--define a disciplinary mode of discourse. That is, teaching economics, conducting economic research, and discussing research with other economists reinforces the economic way of knowing.

But herein may lie the trap: The more we know, the harder it is to imagine what it is like to not know something. This is what Heath and Heath (2007) call the *curse of knowledge* and it colors our interactions with students and with our neighbors. Economists have a hard time understanding folks who, for example, do not see that choosing alternative A necessarily means there are fewer resources available for pursuing alternative B. Like the "ugly American" who responds to visitors struggling with the English language by talking louder and more slowly, economists often end up just repeating their "truths" when interacting with neighbors and other participants in policy debates.

People who think like economists see poverty and income inequality as a consequence of inadequate investment in education, health, and nutrition which, if corrected, would enrich us all. Noneconomists see the distribution of income as a win-lose game between the haves (the powerful and politically connected) and have-nots.

People who think like economists cannot understand why we are still arguing about the benefits of free trade. In free trade, my neighbors see lost jobs and a lost sense of personal autonomy.

People who think like economists see a 50-cent or one-dollar increase in the gas tax as an obvious response to the ills of the internal combustion engine and over-reliance on oil from the Middle East. My neighbors here in the United States cannot see why they should accept this tax increase when it would not alter their buying habits one iota.

People who think like economists cannot understand how laws can be passed that demand that all carcinogens be eliminated from the food supply regardless of the costs imposed on buyers and sellers. My neighbors cannot understand why I would ever consider using dollars and cents when talking about people's lives.

People who think like economists label the people who would not accept economists' policy prescriptions as economically illiterate. Therefore, the economist's solution to any resistance to these policy prescriptions is to introduce instruction in the economic way of knowing into the primary and secondary curriculum, into continuing education for adults, and into the popular media.

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We, the people who think like economists, ought to ask ourselves whether it really is a good use of our time and accumulated expertise to teach material that does not stick, write papers that have no audience, and see so little of our advice being accepted.

3. The Journey so far

A few years ago, I started asking myself these and similar questions. I wondered why so many people I loved and admired in my family, my religious community, and my town would scoff at lines of reasoning that seemed self-evident to me or lobby for policies that seemed unlikely to achieve their desired ends. Why do college faculties and administrations make decisions that seemed obviously counterproductive, when they have economists and other social and decision scientists on board? I decided, with less clarity than hindsight implies, to shift a large component of the time and energy I allow for research to exploring ways of better interacting with noneconomists as we jointly grapple with public policy issues.

3.1. Interdisciplinary Conversations

Before facing the challenge of interacting with people not socialized by immersion in the customs and mores of academia, it probably makes sense for an economist to first interact with other academics--at least, that was the strategy I followed. Economists at small liberal arts colleges have an advantage over their colleagues at large research universities in that they most commonly present their research in departmental or transdisciplinary rather than field-specific colloquia. For example, the economics departments of my tri-college community, consisting of Bryn Mawr, Haverford, and Swarthmore Colleges, jointly sponsor a summer workshop for faculty to present work in progress for comment. We cannot fall back on the established conventions and assumptions of our subfields, but rather must place our work in context for colleagues who, while knowledgeable economists, nonetheless lack familiarity with the particular literatures to which we are contributing.

During the 2003-2004 academic year, I participated in a weekly series of lunch-time discussions sponsored by Bryn Mawr College's Center for Science in Society, drawing together faculty, staff, and graduate students across the curriculum. The theme for the fall term, "What Counts? Measuring Ourselves and the World," focused conversations around how measurement influences our experiences and thinking in a host of disciplines including geology, physics, education, economics, classics, and English. I had contributed a session on "Bucks, Values, and Happiness: When Counting Changes What we are Counting." It is one thing to make predictions based on the assumption of self-interested behavior; it is quite another if teaching economics encourages students to make that self-interest a personal norm. Similar conversations continued the following spring term too.

I struggled at first to find my legs in this setting, to figure out how to think systematically about the ideas being shared without the organizing template of my discipline. Was this collective Ross Page 6 of 16

discernment or multidisciplinary cacophony? And, I chafed at the time I was devoting to it--time taken away from my course work and departmental responsibilities. It was liberating to label this time exploratory research. My identity as a Quaker (a member of my faith community, the Religious Society of Friends), in contrast to my training as an economist, instructed me to remain open to truth revealed in unexpected places. Gradually, I began to perceive the benefits of being part of a community of colleagues who, at least in this setting, have not learned what questions not to ask. I also found it both challenging and liberating (albeit more the former) to justify the questions and answers of my discipline to folks with little or no background in the field, but who nevertheless accept the academic paradigm--colleagues comfortable with the interplay of assumptions, conjectures, and extrapolation from simplified models. In retrospect, this colloquium was a halfway house for me between economics and the real world.

3.2. Quakers, Economics, and the Environment

It is perhaps inevitable that a certain degree of compartmentalization creeps into our lives. Reflection can reveal many contradictions among the roles we take on. One example for faculty is the tension that can arise between our spiritual life--our Sabbath-day identity--and our professional lives--our identity as teacher, researcher, and administrator. Few of us feel a sense of union in our academic and spiritual identities. Church (or in my case meeting house) and classroom have their own rituals, their own unexamined customs, and patterns and traditions. How we act in each setting is a combination of conscious choice and patterns of behavior we have picked up by socialization. Quakers avoid honorifics, yet I do not correct students or staff who address me as Professor. The coercive power faculty as evaluators have over students cautions us to avoid any appearance of favoring or advocating for our own religious traditions. In doing so, we risk cutting ourselves off from spiritual support in our vocations.

One avenue I have pursued to better integrate my spiritual and professional identities has been through participation in Friends Association for Higher Education (FAHE), whose institutional members are the historically Quaker colleges and postgraduate study centers. FAHE welcomes as individual members all who share the Quaker commitment to integrating spirituality, academic excellence, and social responsibility in higher education, whether on Quaker or non-Quaker campuses. As with the interdisciplinary conversations hosted on my campus, workshops at the FAHE annual conference have forced me to think about and discuss teaching and research without falling back on the jargon of economics. The process of writing "Differentiated Learning in the Statistics Classroom" (Ross, 2004d) was greatly improved by my participation in a writing support group formed with FAHE colleagues, none of whom was an economist or statistician.

When Quaker Meetings (congregations) discuss environmental concerns, the conversation frequently devolves into a guilt trip about how large an ecological footprint each of us creates, how poorly the Meeting recycles, why we are not using more compact fluorescent bulbs, and so on. Altering our behavior so as to walk more lightly upon the Earth honors Quaker testimonies

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and may convince others to follow this form of prophetic witness. But there are barely 100,000 members of the Religious Society of Friends in North America (Quaker Information Center, n.d.)--perhaps twice that number if one counts folks who worship in the manner of Friends without joining a Meeting. Time spent "eldering" one another to alter consumption patterns is unlikely to have any meaningful effect on environmental degradation.

Recognizing this, 29 individuals from a range of Quaker meetings across North America (most of whom are or have been involved in such organizations as the American Friends Service Committee, Friends Association for Higher Education, Quaker Earth Care Witness, and Friends Committee on National Legislation) agreed on a work program to enable Quakers to take a more active role in pushing for public policies designed (among other things) to reverse the ongoing environmental degradation around us (Alexander et al., 2003). The biggest obstacle to doing so was the sense that "Friends do not agree on economics" (Dreby, 2006), since there is no obvious inconsistency between libertarian or interventionist public policy orientations and Quaker testimonies.

I have been involved in two responses to this perception of disunity, both organized by the Friends Testimonies and Economics Project (FTE). The first (Friends Testimonies and Economics, 2006) is a collection of readings and activities that individuals and gatherings of Quakers can use to reflect on economics "in an ecological context." The second (Quaker Earthcare Witness, 2006) was an experimental day-long "policy consultation" to see if Quakers engaged in public policy in a variety of contexts could agree on next steps to facilitate the Friends Committee on National Legislation (a political lobbying and educational organization) in pursuing legislative goals related to seeking "a society with equity and justice for all" and "an earth restored." I have also made presentations or led workshops for Quakers on these themes in other contexts (e.g., Ross 2004b, 2004c).

The potential contradictions that arise from being a Quaker economist go beyond simplistic references to spiritual and material. Many Quakers would readily endorse the bumper sticker "Live Simply that Others Might Simply Live." But my training as an economist teaches that this may lead to a *fallacy of composition* whereby reduced economic activity by wealthy countries leads to a lower standard of living for residents of lower income countries. Thinking like an economist sometimes prevents me from uniting with messages that arise in public Quaker worship or that spark general agreement in discussions among other Quakers.

Economic theory assumes that individual preferences are immutable (or at least determined by factors outside the system being analyzed). Yet Quakers believe in continuing revelation of Truth. Certainly early Quakers believed in human perfectibility (or corruptibility) in this life. My research has led me to conclude that by spending what some might consider too much time in market exchange; by living and working in communities and institutions grown so large that arms length transactions necessarily replace mutual caring and a common sense of mission; and

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by heeding the advice of goal oriented consultants (from economics, psychology and management), we experience what David George (2001) has called "preference pollution." As a result, our actions and desires may no longer be consistent with the values of our spiritual identity.

Academic and religious disciplines offer different lenses for viewing the world. The latter yields legitimate questions that undoubtedly arise for my undergraduate students. Few would have the temerity to raise such questions in class or office hours. Participating in discussions of economic issues with other Quakers has helped me understand where misconceptions about economic processes can complicate understanding. Approaching economic questions from a religious perspective has given me a perspective on how the economic way of knowing can fail to connect with others seeking solutions.

3.3. Writing for the Popular Press

One does not have to fully buy the economic way of thinking to recognize that economic analysis has many useful things to say about proposed policies or other collective responses to market and governmental failures. The challenge is to find a way to convey those insights without causing eyes to glaze over or disregarding and devaluing the experiences and insights of others. Equally challenging is inducing academic economists to enter into this arena. The analytical insights needed to evaluate most proposed policies draw on relatively basic and empirically well established theoretical results. I would not get a publication in a major scholarly journal out of thinking through the implications for my community of property tax reform proposals wending their way through the state legislature here in Pennsylvania (Ross 2003a). Yet, the need to understand those implications is great if the citizenry is to make informed judgments.

As with my conversations about economics with other Quakers, my more limited conversations with neighbors in my Oxford, Pennsylvania community revealed substantial misunderstandings about the causes and likely consequences of a variety of political economic developments. How does one respond when a passing remark in a check-out line or train platform or restaurant clashes with ones understanding? "You're wrong and I'm right and I have a PhD to prove it" is no answer. Neither is a lengthy retreat into jargon or an excerpt from lecture 11 of Introductory Macroeconomics.

Between April 2003 (Ross, 2003a) and April 2004 (Ross, 2004a), I submitted a number of opinion-page articles to our local weekly newspaper, *Oxford Tribune*. Although they all had distinct points of view, usually pushing for a particular policy response, I tried to make the analytical points as clear and objective as possible. (For that reason, I stopped submitting the articles when I was drawn into local partisan politics.) I was challenged to figure out how to make my points self-contained, that is without the need to refer to a set of conclusions reached in

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some "previous lesson." I was also challenged to make my points without appealing to the economic way of knowing.

3.4. In Local Government

One of the benefits of holding an academic appointment with tenure is the opportunity to put down roots in a community for the long haul--the norm for most families only a few generations ago, but increasingly rare in a society where workers--even academics--change jobs and hence must pull up stakes multiple times in a career. In September 2005, a local political party asked me to run for the governing Board of Supervisors of our small, rural community--the Township.

I have welcomed my time as Supervisor as an opportunity to observe differences between the ways political economists model public choice and the way decisions play out in local government. Few residents show up for Township meetings unless they are unhappy about something or need Township permission (e.g., to subdivide or otherwise alter their property). Coase (1960) argued that neighbors should be able to resolve the disputes that arise when the behavior of one injures another so long as property rights are well established. For example, if Mary's early morning chain saw work annoys neighbor Bob, then, in Coase's world, Bob might pay Mary to delay chain sawing until later in the day. Alternatively, if there were a law limiting noise during early morning hours, Mary might pay Bob to refrain from complaining to the government. If a new resident is annoyed by the odors coming from a neighboring farm, he would (depending on the language of local ordinances on nuisances) either take comfort in the fact that he was able to buy his house for less, compel the farmer to clean up his stinks, or receive compensation from the farmer for his annoyance. Ronald Coase never lived in our Township. Neighbors who annoy each other do not talk with one another, let alone work out economically efficient ("Pareto improving" in the jargon of economics) exchanges. Instead, they show up at public Supervisors meetings demanding that the Township do something. They are not mollified by an explanation that "altering property rights in this case will raise transactions costs for the resolution of future disputes"--perhaps a good textbook response, but not one that would satisfy either party.

Federal and state laws regularly require Supervisors to take action in areas about which they have very little training or information. The paperwork that crosses our desks tends to be poorly written with little effort to put the task at hand in context. An example is the state law that requires local government to devise a Sewage Facilities Plan--a plan to "protect the health, safety, and welfare of the citizens" by "correcting malfunctioning on-lot septic systems, overloaded treatment plants or sewer lines, and wildcat sewers" (Department of Environmental Protection, 2003). When improperly treated sewage reaches the surface, enters streams, or contaminates groundwater, disease is spread through drinking water, swimming, or contact with animals and insects. This ought to be an occasion for the community to come together to devise mutually beneficial solutions, right? Economic theory teaches that the responsibility for

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correcting environmental pollution should be allocated to equate incremental costs of sewage treatment across all households and businesses, and that government should bear primary responsibility where most of the benefits are collective or where benefits and costs are difficult to assign.

The actual focus of sewage planning for the region where our Township is located has more to do with what tasks must be completed to comply with state regulations that many of the participants view contemptuously. The most actively involved stakeholders (municipal government, the local sewer authority, residents with failing on-lot septic systems, subdivision developers, and the county health department) interact to minimize potential entanglement in legal disputes (with unpredictable costs) and shift responsibility for coping with sewage to other stakeholders. These stakeholders and others (e.g., advocates for more rapid land development, advocates for preserving open space, and tax reformers) view sewage planning through the lens of other public and private challenges--hoping to use the sewage planning process to achieve other ends. Moreover, conversations tend to be played out in an adversarial setting--public hearings or meetings in which stakeholders advocate for a particular subset of elements that might be part of the final plan. There are incentives to withhold or distort information. In this setting anything I say is viewed not as the advice of an economist, but as self-serving advocacy.

I am certainly not immune to wanting to advocate for positions I believe in or positions that enhance the well-being of my constituents. It is easy for the objective analytical mind to shut down in the face of personal attacks and political passions. I seek (with varying degrees of success) to avoid this. Losing myself in an adversarial role denies me and my community the benefits of the information and analytical tools available to me as an economist. It is not so much that the "truth will set us free," as that economics can offer a powerful means of cutting through the noisy, often pointless rhetoric that emerges when communities attempt to address such complex issues. Identifying who stands to gain and lose can reveal the self-pleading nature of certain arguments. Distinguishing sunk from controllable costs can tighten the focus of the debate. A quick mental accounting of costs and benefits can reveal missing information that needs to be gathered before a sensible conversation can move forward. I have found the economic way of thinking useful in pulling myself back from the passions of debate. I have found my awareness of and appreciation for those passions to be useful in formulating how best to inject the insights of economic analysis into that debate.

4. Lessons Learned

Consider this an interim report on a work program that started with conversations involving a number of the contributors to this special issue; the program has led me to a pedagogy directed outside of academia. The journey has been quite stimulating--perhaps because of how much I have been learning along the way.

I have learned that economic literacy really is remarkably low in the general population, among

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my neighbors and among the individuals I encounter in local government. Few, if any, of these people have much interest in mastering the economic way of thinking. Therefore, if citizens are to have the benefit of economic principles, and information and analysis in public debates, economists must take a more aggressive role in sharing these accumulated insights. This must be a shared pedagogy, in which economists who enter these conversations enter as students and observers seeking to learn from those with whom they converse about how economics can move the conversation forward usefully.

The economic way of thinking provides a powerful analytical frame for making sense of many aspects of human behavior and encouraging productive collaborations within the discipline of economics. However, disciplinary frames greatly complicate the task of conversation and collaboration among individuals drawn from different disciplines or who hold different world views. The personal discomfort and frustration that can arise in conversations in which frames collide make it tempting to retreat to our disciplinary comfort zones and criticize from afar. But doing so denies us our say in public choice and denies the community the benefits of the insights we have to offer.

While doing the hard work of analyzing and understanding a problem, it is easy to fall short of ensuring that we understand the positions of others in the conversation. We need to work as hard if not harder to ensure that others recognize that we have heard them. This is an important conversational skill for all settings and one I am trying to bring with me back into the classroom. I find it too tempting--thinking like an economist--to answer a student's question without clarifying that I understand the question. I too often forget to model respectful responses to comments and facilitate discussions so as to strengthen student mastery of this skill.

While my credentials as an economist may gain my ideas a little respect--a willingness to listenthe ultimate effect of what I say has more to do with how I say it, where my self-interest is believed to lie, and how what I say fits with the needs, desires, and analytical frame of reference of the listener. Each of us moves among environments and contexts (academia, family, church, the political arena) whose traditions and cues work to compartmentalize our ways of thinking and relating to one another. Sharing my insights as an economist in contexts outside of the classroom, colloquium, research paper, or consultancy requires a conscious decision to alter the way I respond to the stimuli around me.

Coming out of the economist's cave, but sharing the fruits of economic thinking when time and context are ripe, has enhanced the quality of my interactions with my neighbors, members of my faith community, and others in local government. Through this process, I have come to realize a few things about bringing economic insights to noneconomists. For example:

(a) when properly explained, core economic concepts can find a welcome audience among noneconomists;

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(b) noneconomists resonate with the notion of grieving but moving beyond sunk costs and can appreciate that it is opportunity costs rather than dollar outlays that matter;

- (c) identifying winners and losers is a useful way of understanding and addressing objections to a proposal; and
- (d) finding and eliminating inefficiencies can free up resources that make palatable otherwise costly activities.

I have learned much about writing for an audience of noneconomists, even as a seemingly simple question still can tongue-tie me as I try to free myself from the complexity of the explanations I have been trained to provide. I have come to see the dangers (for me and my students) of an undergraduate economics curriculum that is far more concerned with giving majors the option of pursuing careers as academic or professional economists than of enhancing economic literacy for the long-run or the ability to collaborate with students of other disciplines.

Finally, this journey beyond academia has reinforced the lesson that I have much to learn about the economic way of thinking and how to share the fruits of economic thought with others. Our pedagogy needs to be focused not only on the young acolytes we hope will join our discipline, but on the vastly larger number of individuals whose deliberations determine the way society responds to the challenges facing us.

5. Summary

Thinking like an economist is essential to conducting research and performing careful analysis of public policy issues. However, it can reduce economists' effectiveness in teaching and in interacting with neighbors and political leaders in conversations about public policy. The greater our expertise, the harder it is to imagine what it was like not to know. We economists risk falling into the trap of just repeating our "truths" as self-evident.

This essay has described my progress in bringing the core ideas of economics into conversation with noneconomists about important public policy issues. I think of my project as an exercise in reciprocal pedagogy through which I am learning how noneconomists process economic principles and facts into their analytical frames of reference; I hope they are gaining from me the economic understanding they need when they need it.

I started my journey out of the economist's cave through conversations with colleagues in other disciplines that illuminated our various ways of knowing and that helped me see my own discipline through others' eyes. This led me to seek ways to attack the artificial barriers each of us creates among our professional, spiritual, family, and community lives. Thinking about economics while wearing my Quaker (spiritual) hat raised legitimate questions that undoubtedly arise for my undergraduate students, but which they rarely would have the temerity to raise in class or office hours. Holding on to my identity as an economist in conversations with other members of my faith community has helped me understand where misconceptions about

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economic processes can complicate understanding. Holding on to my identity as a member of a faith community has provided a perspective on how the economic way of knowing can fail to connect with others seeking solutions to community problems.

Writing newspaper opinion articles has been a stimulating exercise in separating wheat from chaff in the economic way of knowing so as to pull out the kernels of understanding essential to the issue at hand. It was a useful test of whether I had learned anything about how noneconomists receive economic information and argument. Participation in local government has enhanced that exercise. It can be deeply challenging to pull back from the immediate cut and thrust of political debate and focus on how my understanding of economics might most effectively inform that debate. I have found few tools in my discipline for coping with the nuts and bolts of political decision-making or with resolving conflicts in practice. Perhaps I need my colleagues in political science and philosophy to join in this quest.

Because citizens retain so little of the economic way of knowing beyond their formal schooling, effective pedagogy requires that faculty be present as economists to their neighbors and their fellow citizens in daily conversation and public policy debates. Our continuing education as teachers requires that we enter those conversations as committed students as well--students committed to learning how our neighbors process economic facts and principles and how their insights into public policy debates might alter our own understanding.

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References

- Allgood, S., Bosshardt, W., Klaauw, W. van der, & Watts, M. (2004). What students remember and say about college economics years later. *The American Economic Review*, 94(2), 259-265.
- Becker, W. E., & Watts, M. (2001). Teaching economics at the start of the 21st century: Still chalk-and-talk. *The American Economic Review*, *91*(2), 446-451.
- Coase, R. (1960). The problem of social cost. Journal of Law and Economics, 3, 1-44.
- Dahl, D. S. (1998, December). Why Johnny can't choose. *The Region* (Magazine published by Federal Reserve Bank of Minneapolis, USA). Retrieved March 15, 2007 from http://www.minneapolisfed.org/pubs/region/98-12/dahl.cfm
- Department of Community and Economic Development. (2005, August). *Pennsylvania local fact sheet*. Available from http://www.newPA.com (Community > Local Government

- Information > Municipal Statistics)
- Delaware Valley Regional Planning Commission. (2001, May). *Twenty years of change: 2000 census* (Analytical Data Report, No. 6). Retrieved March 13, 2007 from http://www.dvrpc.org/data/databull/adr/adr6.htm
- Alexander, W., Berryman, A., Brown, P. G., Carlyle, K., Ciscel, D., Connor, A., et al. (2003, June). *Epistle from original Pendle Hill gathering*. Retrieved March 16, 2007 from http://quakerinstitute.org/2003GatheringMessage.htm
- Dreby, E. (2006, January-February). About the Friends Testimonies and Economics (FTE) project. *Quaker Eco-Bulletin*, 6(1), 1 & 3. Retrieved March 16, 2007 from http://www.quakerearthcare.org/Publications/QuakerEco-bulletin/QEB_Archive/QEB6-1-TestimoniesandEconomics.pdf
- Quaker Earthcare Witness. (2006, January-February). Friends Testimonies and Economic project summary. *Quaker Eco-Bulletin*, 6(1), 1-3. Retrieved March 16, 2007 from http://www.quakerearthcare.org/Publications/QuakerEco-bulletin/QEB_Archive/QEB6-1-TestimoniesandEconomics.pdf
- Friends Testimonies and Economics. (2006). *Seeds of violence, seeds of hope: Exploring economics in an ecological context*. Retrieved March 16, 2007 from http://www.fgcquaker.org/library/economics/seeds/seeds.pdf
- George, D. (2001). *Preference pollution: How markets create the desires we dislike*. Ann Arbor, MI: University of Michigan Press.
- Hansen, W. L. (1986). What knowledge is most worth knowing for economics majors? *American Economic Review*, 76(2), 149–53.
- Hansen, W. L. (2001). Expected proficiencies for undergraduate economics majors. *The Journal of Economic Education*, 32(3), 231-242.
- Hansen, W. L., Salemi, M. K., & Siegfried, J. J. (2002). Use it or lose it: Teaching literacy in the economics principles course. *The American Economic Review*, 92(2), 463-472.
- Heath, C., & Heath, D. (2007). Made to stick. NY: Random House
- Kasper, H. (1991). The education of economists: From undergraduate to graduate study. *Journal of Economic Literature*, 29, 1088-1109.
- National Council on Economic Education. (2003). *NCEE standards in economics: Survey of students and the public*. Retrieved March 16, 2007 from

http://www.ncee.net/cel/results.php

- Department of Environmental Protection. (2003). Sewage facilities planning: A guide for preparing Act 537 Update Revisions (Document ID: 362-0300-003). Available from http://www.depweb.state.pa.us/watersupply/site/default.asp (Wastewater Information > Sewage and Sewage Disposal > Act 537 Sewage Facilities Planning > A Guide for Preparing a Municipal Act 537 Plan Update Revisions)
- Quaker Information Center. (n.d.). Distribution of Quakers in the world. Retrieved March 16, 2007, from http://www.quakerinfo.org/resources/worldstats.html
- Ross, D. R. (2003a, April 15). Where's the dividend for Oxford? Oxford Tribune.
- Ross, D. R. (2003b, September 18). Making sense of property tax cut proposals. *Oxford Tribune*.
- Ross, D. R. (2004a, April 4). Gambling away our self respect. Oxford Tribune.
- Ross, D. R. (2004b, July 20). *Simplicity is not enough: Friends and the economy*. Workshop prepared for Baltimore Yearly Meeting of the Religious Society of Friends Annual Sessions, James Madison University, Harrisonburg, VA.
- Ross, D. R. (2004c, November 4). *Economics and the environment*. Presentation to Valley Friends Meeting, Wayne, PA.
- Ross, D. R. (2004d, December). *Differentiated learning in the statistics classroom*. Unpublished manuscript.
- Stigler, G. J. (1970). The case, if any, for economic literacy. *The Journal of Economic Education*, 1(2), 77-84.
- Walstad, W. (1998, December). Why it's important to understand economics. *The Region* (Magazine published by Federal Reserve Bank of Minneapolis, USA). Retrieved March 15, 2007 from http://www.minneapolisfed.org/pubs/region/98-12/walstad.cfm
- Walstad, W., & Allgood, S. (1999). What do college seniors know about economics? *American Economic Review*, 89(2), 350-354.

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