University of Massachusetts Boston

ScholarWorks at UMass Boston

Economics Faculty Publication Series

Economics

December 2011

Broader questions and a bigger toolbox: A problem-centered and student-centered approach to teaching pluralist economics

Julie A. Nelson *University of Massachusetts Boston*, julie.nelson@umb.edu

Follow this and additional works at: https://scholarworks.umb.edu/econ_faculty_pubs

Part of the Behavioral Economics Commons, Communication Commons, Sociology of Culture Commons, and the Work, Economy and Organizations Commons

Recommended Citation

Nelson, Julie A., "Broader questions and a bigger toolbox: A problem-centered and student-centered approach to teaching pluralist economics" (2011). *Economics Faculty Publication Series*. 31. https://scholarworks.umb.edu/econ_faculty_pubs/31

This is brought to you for free and open access by the Economics at ScholarWorks at UMass Boston. It has been accepted for inclusion in Economics Faculty Publication Series by an authorized administrator of ScholarWorks at UMass Boston. For more information, please contact scholarworks@umb.edu.

Broader questions and a bigger toolbox:

A problem-centered and student-centered approach to teaching pluralist economics¹

Julie A. Nelson [University of Massachusetts Boston, USA]

Copyright: Julie A Nelson, 2011 You may post comments on this paper at http://rwer.wordpress.com/2011/12/12/rwer-issue-58-julie-nelson/

Abstract:

This essay discusses a "broader questions and bigger toolbox" approach to teaching pluralist economics. This approach has three central characteristics. First, economics is defined so as to encompass a broad set of (provisioning) concerns. Second, emphasis is placed on contemporary real-world issues, institutions, and current events, rather than on debates in the history of economic thought. Third, a variety of concepts and theories are introduced, all of which are treated as partial and fallible--useful in some (perhaps very limited) situations while not so useful in others. Possible reasons an instructor might want to adopt this approach, and examples of use in practice, are discussed.

Possible approaches

Imagine an elephant surrounded by a number of blind people, who each explore a different part of it—some of them, perhaps, more ably than others. Suppose that this elephant is both a source of abundant life and potentially a source of great distress. Which is the more interesting thing to focus on: One of the blind people? Conversations and debates going on among the blind people? Or, perhaps, the large and dangerous elephant?

The instructor who wants to go beyond standard mainstream teaching of economics to a present a pluralist approach has to carefully consider questions of curricular demands and student receptivity. Two popular approaches, historically, have been the "single alternative" approach, in which economics is presented from the point of view of a single heterodox school, and the "competing paradigms" approach, in which orthodox and one or more heterodox approaches are explicitly compared and contrasted, within the context of a discussion of philosophies and the history of economic thought.

The single alternative approach—e.g., teaching an "Institutionalist Principles of Economics" or an upper-level "Ecological Economics" or "Feminist Economics" class and skipping the usual neoclassical approach--may be the most appealing from the point of view of an instructor who strongly identifies with a particular heterodox school. But because curriculum constraints often require coverage of at least some mainstream material in "core" courses such as introductory or intermediate theory or statistics, the luxury of teaching a single alternative school tends to be limited to elective courses. While this may give those students who take the heterodox elective a rich understanding of the particular view discussed, this approach runs the danger of ghettoizing alternative views, and leaving most students only exposed to the more mainstream ones dominant in the rest of the curriculum.

One way of solving the problem of how to introduce alternative perspectives within a course that must also include neoclassical content is to adopt what I call a competing paradigms approach. Knoedler and Underwood (Knoedler and Underwood 2003) refer to this

¹ This paper draws—and expands—on previous articles I have written about university economics teaching (Nelson and Goodwin 2009) and (Nelson 2009), as well as my work in university textbook and teaching module design (Goodwin, Nelson et al. 2008; Goodwin, Nelson et al. 2008; Goodwin, Nelson et al. 2008), high school economics pedagogy (Maier and Nelson 2007), and classroom experience. While I worked on a number of curriculum materials and guides while employed by the Global Development and Environment Institute (GDAE), I do not have any financial interest in promoting these materials since all royalties go to GDAE, and the affiliation I now maintain with the Institute is unpaid.

sort of idea when they suggest that alternative views as might be presented as "counterpoints" to neoclassical principles. The "parallel perspectives" approach described by Mearman (Mearman 2007) likewise involves presenting arguments from one or more different schools, and then engaging in critique and rebuttal, and there are other proponents. Such courses may use a standard theory or field textbook and then supplement it with instructor-selected readings that reflect views from one or more non-neoclassical paradigms, or use specially-prepared volumes of readings, or use complete textbooks built around a competing paradigms approach.

While designs for implementing the competing paradigms approach vary widely in their particulars, they all generally recommend some up-front and explicit discussion of one or more alternative paradigms by name (e.g., "political economy," "radical economics," "Institutionalism," "socio-economics," "Austrian economics"). Decrying the lack of attention given in mainstream courses to leaders in the history of alternative economic thought, they often call attention to historical figures such as Marx or Veblen. Substantial emphasis is often put on demonstrating the shortcomings of neoclassical approaches. Metaphors of war—or at least of a race—seem to underlies the approach, as proponents urge students to compare theories and decide which ones win out over the others.

Why "competing paradigms" may not always be best

Certainly, the competing paradigms approach has been used successfully at many colleges and universities. For some populations of students, however, there are drawbacks to structuring a course around a comparison of the history and principles of differing schools of thought.

First, one important reason why students—including potentially excellent ones—sign up for economics courses is because they want to understand how contemporary economies actually work. Classes that focus a great deal on the history of economic thought or debates among economists may seem to these students to be excessively backwards-looking, inward-turned, and abstract. It may not be that such students are inherently unable to appreciate history and intellectual debate, but rather that the students simply do not yet have the background of knowledge that makes philosophical debates so interesting to those of us involved in them. Many students—especially prime-age-college ones—have so little familiarity with economic history and experience with events and processes in the real economy that they have scant basis by which to understand—much less evaluate the validity of—any theory, no matter how bright they are. A course that asks them to engage in extensive critique too early may turn them off to the field.

One may note that the Neoclassical curriculum, in contrast, tends to feed right into many students' expectations that the they are going to learn "how the economy works." By pretending that the economy can be viewed in only a very limited range of ways, taking a thoroughly authoritative tone, and exploiting students' general naïveté about how the world works, it tends to satisfy students' desire for (what they are led to believe is) directly applicable, clear-cut knowledge.

Second, extended discussions of competing theories, and extended examinations of the philosophy or history of economic thought—no matter how interesting they may be to us as researchers!--may be too subtle and abstract given the cognitive development level of many students, perhaps even later in their academic careers. Some may not have the skills in

abstract and critical thought that would enable them to handle the ambiguity of a point-counterpoint approach. The result of too much abstraction may be that students simply memorize, for the purpose of passing the exams, two (or more) lists of principles rather than one, or learn to mechanically shift curves on a wider variety of graphs. Or students may adopt a disengaged, unhelpful "everybody has a right to their own opinion" attitude.

Thirdly, when instructors who teach such courses signal (whether intentionally or inadvertently) that they endorse the alternative view(s) and are strongly critical of the Neoclassical orthodoxy, a further pedagogical problem may be created. The emotional tone projected by an instructor who is metaphorically "holding her nose" when teaching the Neoclassical sections hardly inspires engagement and enthusiasm in her students (as I found out the hard way, as a graduate student TA). Students may (understandably) resent being required to learn the standard material, if they are simultaneously being told that it is wrong.

Very skilled instructors can work to overcome these obstacles, of course. And a long term goal of many heterodox economists is to ultimately replace neoclassical principles, theories, and methods with a better set, reformulating the whole core of economics teaching. But what can be done in the meantime, if one finds oneself in the unfortunate situation of facing a classroom in which a competing-paradigms approach meets with hostility, incomprehension, or merely mechanical learning? Is the only solution a reversion to neoclassical standard content?

Broader questions and bigger toolbox

There is another possibility. The broader questions and bigger toolbox approach (henceforth BQBT) is more in line with a pluralist and inclusive, rather than paradigm-centered, approach to economic research and teaching, and may more appropriately match the motivating interests and cognitive development stages of many students. Rather than beginning with a philosophical or history-of-thought introduction to various perspectives, such an approach starts with interesting and engaging questions, and then proceeds to draw from a variety of perspectives to help students think about the issues, progressively making students more aware of lively, investigative social science processes.

This approach, which I have used in university-level curriculum projects I have worked on, as well as in my own university-level teaching, has three major characteristics:

- First, economics is defined so as to encompass a broad set of concerns.
- Second, the motivational lead-in is through emphasis on contemporary real-world issues, institutions, and current events.
- Third, a variety of theoretical concepts, models, and other "tools" are presented as
 potentially useful—but also inherently limited and fallible—constructions, or "thought
 experiments," that humans have created to try to understand these real-world
 phenomena.

The first characteristic primarily distinguishes this approach from orthodox economics: Most alternative paradigms share a concern with at least somewhat broader questions.

The next two points distinguish this approach from the single- or contending-paradigm approaches. The BQBT approach, in emphasizing current events and a wide variety of particular "tools," sidesteps or postpones the study of the history of economic

thought, and de-emphasizes the explicit identification of theoretical systems. Instead of the course being framed as a contest among schools of economic thought, the phenomenon we call "the economy" is placed front and center, and then investigated using a wide variety of conceptual tools. In other words, the elephant is made the center of attention, in contrast to debates among the blind folks exploring the elephant. To the extent there is a war going on, it is a war against the hegemony of any (partial) theory, not a battle against any particular theory in itself.

Students are not necessarily required to classify the tools according to their school or history of origin, nor is the emphasis on critiquing theories in an abstract and general sense. Rather, students are asked to learn how each particular theory works, while paying attention to the assumptions it requires and the various aspects of reality that it highlights or ignores. From this basis, the suitability of various theories for addressing various real-world issues under investigation can be investigated.

Such an approach, while not crusading against any particular view, need not be apolitical. It is entirely appropriate for the instructor to point out that the lucky blind person exploring the elegant ivory tusk gets quite a different view of the elephant than the poor soul positioned directly under its tail. Especially when things come down.

Broader questions

A good way to start to reframe the content of economics courses is to think of economics as being defined by the concern of economic provisioning, or how societies organize themselves to sustain life and enhance its quality. Such a definition is much broader than definitions of economics that focus on individual rational decision-making under scarcity, markets, or GDP growth. Such a definition, or one similar to it, will be familiar to many economists from Institutionalist or socio-economic backgrounds, and is wide enough to encompass concerns from other perspectives as well.

Because it does not focus on individual rational choice, this approach puts social and economic institutions, real human psychology, and the actual unfolding of historical events within the domain of Economics instruction. Because it is broader than a concern with only markets, it is inclusive of government and community activities, as well as the economic contribution of unpaid household labor. Because it points directly to questions of survival and the quality of life, it invites questions about whether current patterns of wealth and income distribution, consumerist attitudes, and the use and abuse of the natural environment serve valuable ends. Before and unless students are brainwashed by Neoclassical definitions, the idea that economics is about how people get what they need to live and thrive, and that the study of economics is motivated by a desire to improve this process, are generally accepted as simple common sense.

To operationalize this broader definition of economics, it can be helpful to make explicit certain aspects of economic life that are absurdly downplayed in conventional treatments. These include:

 Stewardship of an economy's resource base. An easy way to make this explicit is to add another economic activity to the usual list of three--that is, to "production, distribution and consumption." In curriculum materials I have worked on, we call this additional activity "resource maintenance" define it as "the management of natural, manufactured, human, and social resources in such a way that their productivity is sustained," and list it first. You can't produce until you've taken account of your resources!

- Non-market forms of distribution. While in a standard course this mostly focuses on market exchange, adding an explicit discussion of distribution by way of one-way transfer opens up a wider set of issues, including, for example: the work involved in the care of dependent children, the sick, and the elderly; relations between current and future generations; the role of inherited wealth in perpetuating concentrations of economic power; and phenomena such as land grabs and armed conflict.
- Uncertainty, especially about the future. As pointed out in many heterodox (and particularly Post-Keynesian and Austrian) schools, economies evolve through time, and often in unexpected ways. Explicit introduction of uncertainty and time should also serve to create some healthy skepticism about purported universal "economic laws."
- The ways in which people must consciously work together to solve economic problems. It is helpful to introduce phenomena such as public goods, externalities, and market instability early on, as opposed to introducing them as "add-ons" late in a course. Since these cannot be satisfactorily addressed at the level of (Neoclassically-enshrined) individual, the students can see from the beginning the need for additional levels of analysis.
- Social institutions that shape economic activity—both non-market institutions as well
 as specific types of market institutions. Social institutions that create (or destroy) trust,
 social norms (including harmful ones such as prejudice), administrative structures,
 democratic organizations, and details of market construction (as compared to
 blackboard, abstract "markets") are important—and usually directly observable in a
 student's life.

Because the broader definition of economics in terms of survival and flourishing—with attention to stewardship, transfer, and uncertainty—is also inclusive of more traditional questions concerning financial incentives, markets, efficiency, and the aggregate level of economic activity, it does not preclude discussion of more conventional topics. A pluralist instructor is spared, then, being put in the awkward position of arguing that the dominant concerns of the traditional view (such efficiency or GDP growth) are wrong. Instead, the instructor may point out when they are too limited and have perhaps been too obsessively pursued—and then make a natural segue onto more interesting and relevant questions.

What might some of these larger and more relevant questions be? I will mention just two examples here that strike me as currently pressing:

- People in industrialized countries, for example, find themselves consuming more and more every year and contributing to massive degradation of the natural environment, but (according to survey research) do not seem to be getting on average any happier. Now is that not an interesting—and highly relevant--puzzle that economics classes could explore? Depending on instructor interest and the topic of the particular course, one could also highlight provocative questions about trends in income inequality, the role of corporations in social and economic life, the meaning of "development," what it means to have "quality of life" at the workplace, how technological change happens, the effects of globalization, the role of booms and busts, or other issues that affect students'—and everyone's—lives.
- What is the role of debt in economic life—whether it be at the level of individuals, households, communities, businesses, or nations? In an historical time period marked

by financial crises, bankruptcies, and bailouts at all levels, questions about levels of debt and the power and structure of financial institutions make the daily news. What role is played by unexpected events that develop over time? How do sudden changes in socially-held beliefs about the credit-worthiness of an actor come about, and what are their real-world consequences? Is there currently a student debt bubble—and if so, how will that affect the students themselves?

These are just a couple examples of big questions that might be focused on, or threaded through, a variety of economics courses, to motivate student interest and increase the relevance of learning.

A bigger toolbox: beyond the standard models

Besides expanding the range of questions addressed, there is also the question of methods or styles of analysis. Some professional economists consider the uniting force in economics of a set of techniques to be even stronger than that of a common subject matter or model. In a conventional undergraduate theory courses, students are taught that "doing economics" is largely a matter of manipulating equations and shifting curves, while for graduate students "doing economics" means using advanced calculus, real analysis, game theory and econometrics. Some heterodox economists agree that economics is defined by mathematical modeling techniques, and only disagree about the particulars. An improved economics course, from such a point of view, might just contain more or different mathematical models.

Other non-mainstream views, however, consider this to be a very limited perspective, based on an inadequate understanding of the nature of scientific investigation, and perhaps tainted by gender-related biases against methods that may appear to be relatively soft or imprecise (Ferber and Nelson 1993). A broader view of social science practice notes that, while mathematical representations may be precise and elegant, they often fail miserably on the criteria of richness or relevance. Much can be learned by other means.

Economics students at all levels (as well as many faculty) are often woefully ignorant about the basics of economic geography, economic history, and economic and social institutions. Most are also unaware of advances in the other social sciences concerning economics-related issues in human motivation and behavior, and in environmental science about the ecological effects of economic activities. Some do not even follow much in the way of current events. A dire lack of expository writing skills is also often evident. So one important tool in the larger toolbox is simply to spend more time reading. Reading assignments can help students gain the breadth of knowledge that a pluralist understanding economic issues demands. People who read extensively also tend to become better writers. Increased reading and writing may, of course, be looked down by methodological hard-liners as "only verbal" or "only descriptive"—or as "not economics" at all if it crosses disciplinary boundaries. Real reading and writing may also require more instructor effort on the grading side than mathematical problem sets. But, as well as being useful in themselves, such deeper assignments are also, of course, an essential precursor to any satisfactory (that is, rich, relevant, and connected to the real world) analytic research. More hands-on or fieldworkrelated investigative methods, such as service learning or "economic naturalist"-type assignments ² can also be of use.

² This is Robert Frank's (2007) term, though pluralist economists would likely including a broader range of explanatory concepts than Frank suggests.

What about how we teach statistical and econometric methods? The current tendency is to far overemphasize econometric theory at the expense of practical empirical skills. That is, students often spend months of classroom time studying the properties of the regression error term, but are lucky if an hour total is spent on issues of survey practices, understanding what variables actually mean, data "cleaning," and the many other considerations that divide quality data analysis from high-tech schlock. Discussions of professional ethics related to data work and means of effectively and honestly communicating empirical results are even rarer. These could and should be included in the economics curriculum.

It is also the case that our approach to teaching statistics has concentrated nearly exclusively on reasonably predictable, non-scalable, often bell-curve-type phenomena. Such an approach had the effect of failing to develop our ability to analyze the large, unpredictable, feedback-loop amplified, real world events that bring about major changes in economic life. Even worse—as Nassim Nicholas Taleb has recently pointed out in his book, The Black Swan (2010)—the standard economic approach, with it's Platonic roots in ideas of "laws" and predictability, has tended to reduce people's awareness of the importance of phenomena such as unexpected technological innovations (on the positive side) or market or environmental crashes (on the negative). Orthodox economists are in this way even worse that the carpenter who, having a hammer, treats everything as a nail. The orthodoxy goes further and tries to convince everyone else, as well, that only nails exist! This is a major disservice. A broader toolbox would include greater knowledge of economic history and of the limitations of bell-curve analysis. It would likely also (as Taleb suggests) take on the study of how economic institutions and systems can be made to be more appropriately resilient in the presence of feedback loops and prepared for change.

Some specific examples

The unifying theme of a BQBT approach are, to repeat, a broad definition of the field, a lead-in through real-world issues, and the treatment of a variety of approaches as each potentially useful in some spheres but also human-created and limited. How might this work out in various course? Let me give just a few examples from my own classroom experiences.

Microeconomics

Using textbook materials I helped write, my classes look at consumerist goals and broader goals, as well as the environmental impact of high through-put consumption. We talk about self-interested rational choice behavior and habit-driven behavior, behavior influenced by advertising, and behavior influenced by social norms. Before talking about theories about markets, we talk about real world markets. For example, I use the specific structures that characterize the market for university textbooks to talk—on the very first day of class—about both market power (gained by a few large suppliers) and about misaligned incentives (when instructors choose but students pay). After they have learned about spot markets, auction markets, sealed-bid auction markets, wholesale markets, markets with long-term contracts, and other such variations, they need no convincing to see that the supply-and-demand model is an abstraction. We discuss market forces and other forces such as entrenched custom or political clout. We explore the notion of a stable market equilibrium and the psychology of

speculative bubbles. The concept of demand elasticity is presented as something useful to think about if one ever becomes a producer—either a for-profit or non-profit—trying to figure out an appropriate price to set, and controversies over the ethical pricing of pharmaceuticals are discussed. The model of perfect competition is presented as a model, and the narrowness of its assumptions stressed. The concept of deadweight loss, for example, which relies on the model of perfect competition, morphs into "deadweight gain" if a tax is Pigovian. Instead of being judged right or wrong at a very high level of abstraction, theories are judged as very useful or less useful or not useful in analyzing a particular situation.

Macroeconomics

In macroeconomics, it is especially easy to talk about real world events and the limits of various theories, given that one can hardly avoid talking about the Great Depression, supply shocks, the financial crisis and so on, as well as varieties of (at least) Classical and Keynesian theories that have developed in response. I add to this by expanding the discussion of the national accounts into issues of unpaid work and social and environmental accounting. I avoid like the plague the model of a vertical long run aggregate supply curve, substituting instead consideration of uncertainty, time, and evolutionary dynamics. I show parts of the movie Inside Job. Questions of quality of life, the quality of employment, the composition of production, and the length of work weeks diffuse arguments about macroeconomic health and environmental sustainability being necessarily at odds. Having introduced "resource maintenance" early on and having related many aspects of the course to the issue of climate change, I was gratified by an incident that happened late one recent semester: When I happened to mention that most macroeconomics courses do not identify "resource maintenance" as a major macroeconomic issue, I was greeted by dropped jaws and expressions of appalled disbelief.

Statistics (and econometrics)

I enjoy teaching statistics because I think every citizen should have a basic understanding of the subject, and because it is traditionally less drenched in neoclassical orthodoxy than economic theory courses. Questions of "fat tails" that are now prominent in discussions of the economics of climate change, however, along with Taleb's discussion of black swans has caused me to rethink the usual emphasis on Central-Limit-Theorem-based inference. The dirty little secret not talked about in most conventional basic statistics books is that the sample size necessary for valid inference rises with the amount of skewness for distributions with finite variance, while no finite sample size suffices for inference about fattailed distributions with infinite variance. I am dealing with this by teaching the usual skills of inference, but also assigning a reading that discusses the sorts of areas (e.g. biometric) where these are more likely to apply, and the sorts of areas (e.g. investment returns) where standard inference skills are less likely to apply. I also stress hands-on practice with data and some of the ethical issues involved in analyzing data and presenting results. The general tenor of my courses convey that statistics and econometrics can be useful, but do not allow one to control the world or predict its future (as some designers of, e.g., financial derivative models seemed to believe).

Gender and the economy

There are many ways one might use a BQBT approach in a course on gender and the economy. Paying attention to the actual psychology of human behavior and to the social

institutions that shape economic life allows for explicit discussion of the roles of stereotyping, prejudice, and social norms in shaping existing labor markets. The broad definition of economics highlights the economic contributions of unpaid labor. While the Wal-Mart national class-action discrimination case was in play in the United States, I used publicly-available news stories, case studies, and statistical background papers used in the legal case to create a current-events themed door into these issues. Others might use gender-related issues in international development and international trade. I do teach, at least briefly, conventional models of occupational "choice" and presumed human capital deficiencies of women, since students will come upon these ideas while researching their term papers, but I set them in context as fallible theories based on certain assumptions (some of which, for example related to women's education, are no longer true). I also tend to stir up some of my more conventional students, who may have come to perceive me as injecting too many "social issues" into what they think should be cut-and-dried economics, by turning around and-late in the semester—teaching about economic models of the household (especially bargaining). Some of these same students (particularly young ones) have a rather idealistic view of families, and are jolted by seeing the conventional assumption of economic self-interest transplanted into a new context. This serves the useful purpose of making these students think about the assumptions in a fresh way. While my own research concentrates heavily on the more philosophical and epistemology aspects of feminist economics. I do not emphasize these in undergraduate topical courses—in keeping with the BQBT philosophy of motivating students through a focus on current issues.

Conclusion

This paper has laid out a "broader questions and bigger toolbox" (BQBT) approach to teaching pluralist economics. First, economics is defined so as to encompass a broad set of (provisioning) concerns. Second, emphasis is placed on contemporary real-world issues, institutions, and current events, rather than on debates in the history of economic thought. Third, a variety of concepts and theories are introduced, all of which are treated as partial and fallible--useful in some (perhaps very limited) situations while not so useful in others. I hope that some aspects of this approach may be found to be useful by economists from all backgrounds, as we seek to improve economics education.

References

Ferber, Marianne A. and Julie A. Nelson, Eds. (1993). Beyond Economic Man: Feminist Theory and Economics. Chicago. University of Chicago Press.

Frank, Robert H. (2007). *The Economic Naturalist: In Search of Explanations for Everyday Enigmas*. NY, Basic Books.

Goodwin, Neva, Julie A. Nelson, et al. (2008) "Economics in Context: Goals, Issues, Behavior." *GDAE Teaching Modules on Social and Environmental Issues in Economics*.

Goodwin, Neva, Julie A. Nelson, et al. (2008). *Microeconomics in Context*. Armonk, NY, M.E. Sharpe. Goodwin, Neva, Julie A. Nelson, et al. (2008). *Macroeconomics in Context*. Armonk NY, M.E. Sharpe.

Knoedler, Janet T. and Daniel A. Underwood (2003). "Teaching the principles of economics: a proposal for a multi-paradigmatic approach." *Journal of Economic Issues* 37(3): 697-725.

Maier, Mark H. and Julie A. Nelson (2007). *Introducing Economics: A Critical Guide for Teaching*. NY, M. E. Sharpe.

Mearman, Andrew. (2007). "Teaching Heterodox Economics Concepts." *The Handbook for Economics Lecturers*, 2008, from http://www.economicsnetwork.ac.uk/handbook/heterodox/.

Nelson, Julie A. (2009). The Principles Course. *The Handbook for Pluralist Economics Education*. J. Reardon. London, Routledge: 57-68.

Nelson, Julie A. and Neva Goodwin (2009). "Teaching Ecological and Feminist Economics in the Principles Course" Forum for Social Economics 38(2-3): 173-187.

real-world economics review, issue no. 58

Taleb, Nassim Nicholas (2010). *The Black Swan: The Impact of the Highly Improbable*. NY, Random House.

Author contact: <u>Julie.nelson@umb.edu</u>

SUGGESTED CITATION:

Julie A. Nelson, "Broader questions and a bigger toolbox: A problem-centered and student-centered approach to teaching pluralist economics", *real-world economics review*, issue no. 58, 12 December 2011, pp. 9-18, http://www.paecon.net/PAEReview/issue58/Nelson58.pdf

You may post and read comments on this paper at http://rwer.wordpress.com/2011/12/12/rwer-issue-58-julie-nelson/