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## Significant Learning and Civic Education: Shifting Frameworks for Teaching in Light of Learning about the Financial Crisis

The recent financial crisis has motivated economic educators to rethink what economics should be taught, acknowledging disconnects between classroom content and real world events. We introduce a learning theory approach that is broader, one that goes beyond such context specific discussions of foundational knowledge and application (i.e., teaching *about* this specific crisis) and provide a framework to address the broader issue of how teaching practices can, by their very nature, minimize such disconnects and provide more effective processes for teaching about current economic conditions. The theory of significant learning (Fink 2003) is presented as a model of how experiences can be used to develop a deep approach to learning, learning that lasts. Experiential learning pedagogies are timeless in that they can be readily modified to promote deeper understanding over a wide range of economic environments. Focusing on one category of significant learning, the human dimension, and one component of the financial crisis, unemployment, examples which modify existing experiential learning practices are described to demonstrate how such pedagogic practices can be readily adapted to teaching and learning about current economic conditions. In short, we demonstrate that incorporating student experiences into pedagogic practice provides a natural alignment of teaching content and real world events, regardless of how those change over time.

### Keywords

pedagogy, service-learning, experiential education, financial crisis, unemployment

### 1. Introduction

Economic educators have struggled to find evidence that the learning we assume is occurring in our courses has any lasting effect.<sup>1</sup> Education literature provides insights into this “learning and forgetting” behaviour suggesting that “we can only learn from activities that are interesting and comprehensible to us, in other words, activities that are satisfying. If this is not the case, only inefficient rote learning, or memorization, is available to us and forgetting is inevitable” (Smith 1998, 87). Marton, et al. (1997, x) argue that the quality of learning is enhanced when the “student seeks a personal understanding” of the material, referred to as a deep approach to learning, as opposed to a desire to simply regurgitate material as exemplified by a surface approach to learning. In short, it is necessary to go beyond a simple transmission of knowledge and include broader objectives in the development of course goals.

The recent global financial crisis provides a unique opportunity to use the *experience of learning*<sup>2</sup> to move students beyond a surface understanding of economic systems. The crisis has fostered an increased interest in the study of economics among students, and drawn attention to broader discussions within the economics profession on what the study of economics should entail. For example, Peterson and McGol-

drick (2009) argue that a more pluralistic approach to both course content and pedagogy is fundamental for better preparing economics students for the world, and that learning theory is an integral component of understanding how to design practices to achieve desired outcomes. Fink (2003) provides one avenue for course development, identifying six categories associated with ‘significant learning’: foundational knowledge, learning how to learn, application, integration, human dimension and caring.

Traditional approaches to economic education focus primarily on foundational knowledge and application, falling short of the potential to develop deep learning, learning that lasts. Other categories of significant learning, the human dimension in particular, provide untapped opportunities to promote civic and economic education using the context of real world economic events, including the financial crisis. Addressing the human dimension necessitates informing “students about the human significance of what they are learning” (Fink 2003, 31-32). This may be facilitated through experiential pedagogies, such as service-learning, which promote “student engagement with the human condition” (Bowen 2005, 6). Through direct engagement with community problems – and taking an active role in trying to explain and find solutions for those problems – students confront the limits of a narrowly defined approach to economics and the importance of understanding the social and civic dimensions of economic problems.<sup>3</sup>

1 See for example, Saunders (1980), and Walstad and Allgood (1999).

2 A phrase coined by Marton, et al. (1997)

3 Examples of this in economics are provided by McGoldrick and Peterson (2009).



Some economists are already developing experiences consistent with the aspects of significant learning that move beyond foundational knowledge and application. For example, heterodox approaches have been shown to provide one avenue for developing experiences that promote a deep approach to learning (Peterson and McGoldrick, 2009). In this paper, we extend arguments that suggest learning could be further enhanced if instructors embraced the entirety of the tenets of significant learning. We focus specifically on how economic educators can use the category of human dimension through the utilization of experiential learning pedagogies to engage students, ultimately leading to a deeper understanding of economic conditions as demonstrated by one important outcome of the recent financial crisis – unemployment. In doing so, we demonstrate how experiential learning pedagogies are timeless, applicable and adaptable to a range of economic conditions and thus more readily able to minimize the disconnect between textbook driven pedagogies and the real world.

## 2. Current Discussions of the Crisis and Implications for Teaching

If there is a “silver lining” to the financial crisis for economic educators, it is the increased interest in economics the crisis has fostered.<sup>4</sup> One measure of this interest is the number of articles in the popular press on what the crisis means for the way economics is practiced, studied, and taught.<sup>5</sup> Even the “freshman economics course,” and how it might change in light of the crisis, has been discussed in *The New York Times* (Mankiw 2009). While a comprehensive review of how the financial crisis has led to discussions about how we teach economics is beyond the scope of the paper, we provide the following as representative of such discussions to illustrate our arguments for expanding pedagogic practices. We begin with a review of four articles appearing in the *Journal of Economic Education* as a symposium on teaching (primarily) the principles of macroeconomics, followed by an article focused on intermediate macroeconomic textbooks, and an additional four articles that represent broader perspectives.

Blinder (2010) notes the high level of interest in economics among students generated by the crisis – “This is truly a teaching moment ... The bad news is that the current curriculum fails to give students even imperfect answers” (p. 385). Although he views the basic framework of introductory macroeconomics as “solid” (p. 390), Blinder identifies several

“pedagogical choices” for reconsideration, including the relative emphasis placed on growth versus business cycles and Keynesian versus non-Keynesian analysis, as well as the assumption of a single interest rate (p. 386). Blinder calls for the introduction of more realistic – and complex – models into principles courses, offering several new topics for instructors to consider such as asset-market bubbles –applying the concepts typically used to discuss stock market bubbles to the “housing bubble” that preceded the crisis.

Questions including “What should we be telling our students ... that we are not now telling them?” and “More generally, what lessons should we draw about how we as economists should think about the world we are trying to analyze and about what economic policies might make it into a better place?” motivate Friedman’s perspective (2010, 391) He offers several propositions, all of which seek to shift the focus of economic analysis and teaching toward “the features of the economy in which we live, as opposed to some simpler alternative economy that we can readily imagine” (p. 396). This includes more explicitly recognizing the significance of living in a monetary economy, the role of credit, the role of institutions and irrationality in financial markets, and the importance of frictions in the economy.

Rajan (2010) also speaks to the importance of underlying institutional structures, which he refers to as the “plumbing.” He argues that prior to the crisis, macroeconomics assumed that that “the ‘plumbing’ works” and, therefore, “we do not have to focus on the plumbing in research or in teaching the macroeconomics of industrialized nations” (p. 398). As a result, questions concerning the evolution and adequacy of institutional structures fell to the field of development economics. The financial crisis, Rajan argues, “calls into question whether the industrialized countries have the plumbing problem solved” (p. 398), and illustrates the need to supplement macroeconomic analysis with work from “other areas of economics that look at the plumbing” (p. 401). That is, he calls for “blending development macroeconomics into standard macroeconomics” in order to better “integrate a consideration of the plumbing into our models and our teaching,” thus making standard economics “less parsimonious, but more useful” (p. 402).

The crucial link between questions about teaching economics and economic research – “We teach what we think we have learned” (2010, 403), is the basis for Shiller’s perspective. He argues that there is a crisis in economic research, and that: “The research and tea-

4 In this section, we focus on discussions occurring in the U.S. as this is the arena to which we are most exposed.

5 Popular critique of the economics profession in light of the financial crisis has come from non-economists as well as economists – see for example Epstein (2009) and Krugman (2009).



ching of macroeconomics both need to focus much more on what we don't know, and less on what we do know" (p. 405). To Shiller, this necessitates "respect[ing] alternative ways of understanding macroeconomics" (p. 407), incorporating the views "promoted by other social sciences: psychology, sociology, political science, and anthropology" (p. 407) as well as historical analysis. Further, he argues that "we must also keep in view the fundamental importance of institutions, our established organizations, practices, laws, and remind our students that these must be taken into account before judging any economic model" (p. 407).

Gray and Miller (2009) focus their analysis specifically on the content of intermediate macroeconomic textbooks, and ask: "How well would popular intermediate macro texts have prepared students for comprehending the economic crisis of 2008-2009 and the remarkable policy responses by the Federal Reserve, Treasury and Congress?" (p. 3). In particular, they examined the extent to which these texts prepared students to understand and critically evaluate the arguments for interventionist policy responses, as well the analyses of the crisis presented to the general public through *The New York Times*, *Wall Street Journal* and other sources. They conclude that "the overwhelming emphasis intermediate texts give to non-interventionist approaches would have, by and large, left students unprepared to either understand important historical precedents or fully comprehend the crisis, policy responses, and contemporary commentaries" (p. 21).

The financial crisis has also added urgency to on-going discussions and debates on the adequacy of current economic theories and methods for economic research and teaching more generally. Colander, et al. (2009), for example, argue that the financial crisis has "made clear a systemic failure of the economics profession" (p. 2), a failure that has "deep methodological roots" (p. 3). They further argue that economics, as currently defined and practiced, ignores the inherent and complex dynamics and instability of economic systems. As a result, economics has defined "away the most prevalent economic problems of modern economies" (p. 14).

Evaluating the implications of this failure for economic education, Colander and Rothschild (2010) argue that the continued presentation of "dynamically stable systems" as "the only intellectual frame we provide to our students – borders on professional mendacity" (p. 279). Colander and Rothschild call for the introduction and demonstration of "alternative complex visions *within* the supply-and-demand paradigm, so that vision of the universality of stability has less chance to become deeply ingrained in students" (p. 281). That is, they call for the introduction of new types of models, utilizing different mathemati-

cal tools (such as game theory), to better capture the complexity and instability of real-world economics.

For other economists, however, the problem is more deeply embedded in the neoclassical paradigm itself. Keen (2009), for example, argues that traditional economic frameworks promote the "false belief that all instability in the system can be traced to interventions in the market, rather than the market itself," thereby contributing to the developments in financial markets that increased the instability of the financial system (p. 2). Emerging approaches, such as behavioural economics and multi-agent modeling, provide "the beginnings of an alternative vision as to how individuals operate in a market environment" and the "foundations for understanding group dynamics in a complex society," and form the basis for replacing traditional economic frameworks (p. 5).

Still other economists question arguments that support the development and introduction of new models. Lawson (2009), for example, contends that the problem with economics as currently practiced is not "the use of specific inappropriate models, but the emphasis on mathematical deductivist modeling *per se*" (p. 760). He argues that the nature of social reality – composed of phenomena that are neither isolated nor constant – is "significantly at variance with the closed systems of isolated atoms that would guarantee the conditions of mathematical deductivist modeling" (p. 765). The financial crisis has, in Lawson's view, clearly revealed the interconnected nature of the world economy, and "is something that needs to be understood rather than modeled" (p. 774). The goal for economic analysis, then, should not be to mathematically model and predict crises, but to "understand the ever emerging relational structures and mechanisms that render them more or less feasible or likely" (p. 774).

The challenges described above focus on the content and method of economic analysis and evaluate current practices in ways that straddle both teaching and research techniques. The relationship between challenges to research in and the teaching of economics is demonstrated both in terms of calls to be more open about the limitations in economic research when teaching economics and to incorporate emerging insights and methods from the research into the classroom. The need to better and more accurately address the complexity of economic relationships is also a common theme, albeit one where the proposed solutions vary considerably. Addressing complexity in introductory-level courses provides a particular challenge, but practical suggestions – such as dropping the one interest rate assumption – provide a place to start. The need for economics, and its teaching, to be more reality-based is another common theme, calling on economists to study and model economies as they really are to emphasize usefulness over parsimony in economic explanations and prepare students to un-



derstand contemporary policy debates and popular economic commentary.

At the heart of much of the discussion of teaching and the financial crisis in the U.S. is an argument to revise the principles course and associated textbooks to include a more complex and realistic discussion of the structure of the economy. This would be a welcomed change given that “the principles textbook has deviated little from the Samuelsonian model of the 1950s in spite of significant changes in the economics it is purported to introduce (Colander 2005, 2006)” (McGoldrick 2009, 221). Recently, Grimes (2009) has argued “this textbook homogenization ... has also reduced the faculty’s discussion about what should be taught in the classroom” (p. 95). As authors react to the largest financial crisis since the Great Depression by changing the content of their textbooks, this dialog may once again come to life.

Despite the importance of these challenges to the economics that is currently taught, they fall short of challenging the status quo of students as passive receptors of textbook driven knowledge. Economics instructors have long relied on the lecture method as the dominant pedagogical classroom practice, regardless of course or institutional classification (Becker and Watts 2008), and there is evidence that reliance on this method of instruction is greater relative to instructors in other disciplines (Allgood, et al. 2004). While some may argue that demands on faculty time drive this reliance on lecture based methods, Becker and Watts (2000) suggest there is evidence that current practices are “established by convenience, custom and inertia rather than efficiency or, especially, by what represents effective teaching practices in today’s undergraduate curriculum” (p. 4).

In the sections that follow, we argue that educational practices should be advanced even further by using current discussions focusing primarily on content reform as a launching point to consider a more holistic framework of educational design, one that takes both content and practice into account.

### 3. A Framework for Expanding Current Pedagogic Practices

Pedagogy is more than content, it is also practice. We expand on current calls for reform by introducing an alternative framework to the discussion which reconsiders what *and* how we teach about the financial crisis. Fink (2003) presents a framework for developing courses in which the *experience of learning* motivates students to move beyond rote memorization, identifying six categories associated with “significant learning”:

- *Foundational knowledge*: Provides “the basic understanding that is necessary for other kinds of learning” (Fink 2003, 31). This encompasses understanding and remembering information and ideas.

- *Application*: Involves “using foundational knowledge” and encompasses the development of different skills and thinking (critical, creative, and practical), as well as the ability to manage complex projects (Fink 2003, 38).
- *Learning how to learn*: Learning about the learning process in a way that enables students to become better students, inquire about a subject and construct knowledge, and become “self-directing learners” (Fink 2003, 50-55).
- *Integration*: Involves making connections between ideas, people, and realms of life (Fink 2003, 31).
- *Human dimension*: Refers to the process of learning about oneself and others, to “inform students about the human significance of what they are learning” (Fink 2003, 31–32).
- *Caring*: Involves the “development of new feelings, interests and values” (Fink 2003, 74).

Even our abbreviated review of relevant literature reveals that the financial crisis has obliged economists to reconsider tenets that make up current *foundational knowledge*. This is manifested in recommendations for greater emphasis on Keynesian economics and business cycles, dropping the one interest rate assumption, promoting a better understanding of institutions and economic frictions, and the incorporation of new models. Similarly, calls for new *applications* with broader emphasis (such as including housing market bubbles in addition to those in stock markets) and introducing questions previously assumed away have also been prominent. *Integrating* insights from development economics, psychology, and history is also seen to be important for understanding macro-economic events. However, the categories of *learning how to learn*, the *human dimension* and *caring* are highlighted to a far lesser degree and often left implied rather than addressed explicitly. For example, although Lawson discusses the need to promote inductive, rather than deductive, reasoning it is presented as a “more fruitful approach in understanding the crisis” in terms of a research, not a teaching or learning how to learn, construct (p. 759).

Fink argues, and we agree, that *each* of the tenets of significant learning should be employed to achieve learning that lasts. Further, we have argued elsewhere as to the positive benefits of experiential learning approaches (McGoldrick and Peterson 2009 and Peterson and McGoldrick 2009). Here, we combine these two arguments, describing how experiential learning is a pedagogic method which can enhance the understanding of the current economics conditions, such as fallouts from the financial crisis, with a focus on the category of human dimension. Our goal is to demonstrate how adapting an existing (although perhaps not widely practiced) pedagogic method can further inform educational reform in light of the financial crisis.



#### 4. Using the Experience of Learning to Educate Students via the Human Dimension of Significant Learning

Experiential education is both a practice and a process in which students learn through experience (McGoldrick and Ziegert, 2012). The practice is one in which students reflect on experiences as a way of developing discipline specific knowledge. The process of teaching engages students in a direct encounter to apply knowledge and skills in an educationally relevant setting. Although experiential learning can occur in or out of the classroom, we focus our discussion on practices that motivate students to engage with their own experiences and with the community beyond the classroom walls thereby promoting civic engagement.

The financial crisis has increased interest in economics among students, yet current literature on teaching about the crisis reveals disconnects between discussions in economics classrooms and the real world. We argue that experiential learning is well suited to bring these different realms together because much of the interest in the crisis is rooted in the human dimension – students are seeing job loss in their families, housing foreclosures in their neighborhoods, and loss of opportunities in their own futures. That is, students' human experiences are stimulating their interest, but economics courses that provide them only with abstract, theoretical discussions which are disconnected from such experiences leave them frustrated and do not meet their needs. Further, while students *react* to their experiences, they need tools that allow them to *understand* the crisis and challenge their assumptions and misperceptions. As economic educators, we want them to have tools to think critically about the world in which they live and passion to help improve it. The financial crisis is providing a unique opportunity to pursue these two objectives, as students arrive in economics classes with a stronger interest in the human dimension, and a stronger civic commitment, than in the past.

Experiential education can contribute to a better understanding of the financial crisis and provide scaffolding for student engagement by integrating civic and economic education. Service-learning provides a framework for understanding such connections and guiding students to realize "the human significance of what they are learning" (Fink 2003, 31–32). Service-learning is "an experiential learning pedagogy that enables students to integrate their study of economics in the classroom with service activities in their communities" (McGoldrick and Ziegert 2002, 1). It is a strategy that:

"[b]uilds character, spurs civic engagement, and applies content to abstract theories, allowing teachers to engage students as active participants in the learning process. Instead of simply asking students to open their

textbooks, teachers using service-learning engage students in a critical thinking exercise to examine their world. Students are guided to connect their interests and moral leadership to solve a problem, serve a need, or be of service to others" (Pearson 2002, 6).

Service-learning has a long history in many disciplines, and has been practiced in economics for over a decade (McGoldrick 1998).<sup>6</sup> Service-learning builds bridges between constituencies, exposing the human dimension of economic issues and providing a framework for reforming education as connections are developed across the sanitized text and classroom and real world complexities. Such connections have already been developed in economics, through projects such as those focused on the living wage and child care. Banks, et al. (2005), for example, describe a service-learning exercise structured around a community based living wage research project which challenged students to "think differently about the world" (p. 354) and to question the absence of history, power and human agency in traditional economic theories of wage determination. By promoting "an alternative, ethically based vision of the world" that calls for wages sufficient to meet human needs (p. 354), the living wage project supported students' engagement with the human condition. Similarly, McGoldrick and Peterson (2009) describe projects in courses on women in the economy through which students were motivated to "apply their knowledge to making their community a better place" (p. 235). While analyzing results from a survey developed to measure the potential demand for a campus child care facility, for example, students gained a better understanding of why the needs of campus constituencies (faculty and staff) differed dramatically and implications for associated differences in policy recommendations. This brought a greater understanding of the human dimension to an application of otherwise "neutral" theoretic dimensions of the market (p. 243).

#### 5. Experience, Human Dimension and Unemployment

Unemployment is a widely recognized outcome of the financial crisis, as well as a topic already included in a range of economics courses. And, for many, unemployment best reveals the human dimension of the crisis – a dimension where economists are not always seen to have much to offer. In a March 2009 essay, David Mas Masumoto exemplifies this shortcoming:

"Ailing and unstable. We hear these terms describing today's economy as if it were alive with emotions. Yet like the 1930s, behind the statistics and data, beyond the unemployment rates and job layoffs, real people are hur-

6 McGoldrick and Ziegert (2002) provide a detailed introduction to the theory and practice of service-learning in economics.



ting and suffering .... Economic reports cannot capture the tension and drama of hard times, only stories – captured by artists – can fully tell the human saga of today ... Photographers from the Great Depression forced America to confront the faces of despair, to see the invisible masses in hard times. As the 2009 depression unfolds, economists need to give way to artists who can reveal and explore the human landscape of loss” [“Faces of Hard Times,” *The Fresno Bee*, March 29, 2009].

While economic educators can not reveal the human face of the crisis in the same way artists can, we can utilize student experiences (past and present, distant and local) to add faces to the statistics, analyze ramifications for society, and better understand or challenge policy decisions.

Whether students have direct familial unemployment experience, or they observe it in their communities through interactions with various social groups (including classmates, church groups, etc.), it is likely few students come to economics classes today disconnected from this issue. This personal connection can be used to frame academic discussions of various aspects of unemployment that the crisis has drawn attention to, such as weaknesses of the official (U.S.) unemployment measure; differential impacts of the economic downturn by gender and racial/ethnic groups; the relationship between unemployment and poverty; deep psychological and social costs of unemployment; and long-term negative impacts of prolonged unemployment.

In the U.S., it is increasingly common for students to come to the university with more formal community engagement experiences providing a basis for experiential pedagogies to promote a deeper approach to learning (McGoldrick and Peterson 2009, 229). As such projects have been developed and implemented in economics courses, many have focused on unemployment and related problems. Although developed prior to the current crisis, many of these projects are easily adapted to, and thus remain relevant for, current economic conditions. Consequently, experiential projects provide a valuable starting point for faculty wishing to employ a consistent pedagogic approach while covering constantly changing economic conditions. In the examples that follow, we demonstrate the potential to enhance understanding of the financial crisis, incorporating the human dimension of unemployment, blending civic and economic education using service-learning.

### 5.1 Labor Economics Course

The following experiential learning project is detailed in the syllabus for an upper-division Labor Economics

taught by G. Monsma at Calvin College, in Spring 2000<sup>7</sup>, as posted on the Campus Compact<sup>8</sup> website. It is a project consistent with service-learning as students learn about an economics issue in their community, contribute to a community organization addressing that issue and apply academic knowledge to understand their experiences. The human dimension is brought to the forefront through reflection assignments, as students evaluate what they have learned about the personal circumstances of those that the agency serves.

During the service-learning project, students volunteer to work “15-20 hours over the course of the semester for an organization [such as Goodwill Industries] helping the unemployed or underemployed find jobs that fit their needs.” The acceptable volunteer work for the project “can be varied in line with what would be helpful to the organization and the particular abilities of the student.” Consequently, it might involve working directly with clients, writing publicity materials or doing statistical analysis for the organization, or “work not directly related to economic knowledge, such as office work, if ... means were provided for the student to learn about the work of the agency.” In short, the experiences can be either directly or indirectly linked to the issue of unemployment, but either provides the opportunity for students to learn how the agency provides employment assistance.

Although students are required to broaden their foundational knowledge of unemployment by “learn[ing] about the organization and its activities,” they are also required to “learn about at least three people that the organization is working to help,” incorporating the human dimension of significant learning. Based on their service experience and other course work, students “write an organizational profile and keep a journal reflecting on their experiences and the relation of what they learned to labor economic theories. At the end of the semester they write a final paper relating what they have experienced and learned to concepts, models, and theories of labor economics.” Through their reflective assignments, Monsma finds that students “have come to understand the difficulties some have in becoming self-supporting, even in a booming economy, and the role of agencies such as Goodwill in helping them,” suggesting students move beyond misconceptions and stereotypes to a richer understanding of unemployment and the unemployed. Through their experiences, students learn about the education and employment histories of

7 <http://www.compact.org/syllabi/economics/labor-economics/3811>. Accessed 6/1/2010.

8 Campus Compact is a coalition of more than 1,100 U.S. college and university presidents “who are committed to fulfilling the civic purposes of higher education.” Campus Compact “pro-

motes public and community service that develops students’ citizenship skills, helps campuses forge effective community partnerships, and provides resources and training for faculty seeking to integrate civic and community-based learning into the curriculum” (www.compact.org).



those who are unemployed and underemployed, and effects (economic, social and psychological) of unemployment and underemployment on individuals and their families. Implemented today, in the context of a very weak economy, the specific insights to be drawn from the service experience might differ – with more emphasis on the negative psychological and social costs of long-term unemployment, for example.

This type of project provides a useful vehicle for exploring the challenges facing unemployed workers and the non-profit organizations many turn to for employment services. Students gain a deeper understanding of the impacts of the crisis through their own experience, far beyond that which simple textbooks stories can provide, and learn to apply standard theoretical explanations and understand their limitations. The project is designed so that experiences help inform student understanding of the current economic conditions, regardless of what those current conditions may be. This type of project is timeless; the pedagogic practice does not have to be modified as economic conditions change because the experiences of students are utilized to reveal the impact of those economic conditions.

## 5.2 Statistics/Econometrics Course

Another example of a service-learning project with the potential to reveal the human dimension of the crisis is described by G. Hoyt (2002). In this project, students in a second level statistics course (covering “the basics of sampling distributions, hypothesis testing, chi-squared tests, ANOVA, and regression analysis,” p. 138) were provided the opportunity develop their statistical analysis tools, answering a question for a community organization.

“One group worked with [God’s Pantry] to determine why and how the food allocated within Kentucky varies by county. Using data from God’s Pantry and the Kentucky Cabinet for Human Resources, the students examined the impact on food requests of transportation costs, other food service organizations in the county, and demographic characteristics of the county. The group presented its results at a meeting of the organization’s board, and the findings were to be incorporated in grant proposals” (p. 144).

This project can be easily modified for today’s economic environment by expanding the question of how demographic characteristics impact food requests to include unemployment. With this modification, this experiential project has the potential to not only strengthen student’s familiarity with the strengths and weaknesses of existing data, but to also provide them with a broader picture of the human costs and consequences of unemployment. For example, examining the relationship between poverty and unemployment, and how these variables explain differences in food requests across counties, illumi-

nates how the crisis is impacting this organization and the population it serves. It also provides a context for students to examine important questions concerning available data – for example, what do the official unemployment statistics measure and what do they leave out? Current discussions of unemployment at the national level also emphasize the long term nature of unemployment associated with the crisis. This too raises important questions for the students’ analysis – does the available data allow them to take this into consideration as they try to explain variations in food requests? National studies have also focused attention on differences by gender and racial/ethnic groups in the rising unemployment associated with the crisis, providing the motivation for students to explore this in their analyses as well.

The addition of a direct service component to the project could further emphasize the human dimension of the financial crisis. If the project is designed so that students volunteer at the pantry and work directly with those in need, they have an opportunity to connect with aspects of the crisis not captured in the formal data – such as the psychological and social costs of unemployment – and to consider the ramifications of these costs for their analyses. Incorporating this type of experiential activity into the project can engage students in a new way of looking at statistical analysis, allowing them to gaze beyond aggregate and average measures and see and/or interact with real people.

This type of project provides a vehicle for deepening students’ understanding of statistics and economics, as well illuminating the limits of applying statistical and economic concepts too narrowly. By bringing raw numbers to life, the underlying economic concepts have greater lasting meaning. And, by illustrating how the experiences of real people may or may not be reflected in aggregated statistics, students’ misconceptions of economic concepts may come to light and be re-evaluated. Students may be less likely to assume the individual is at fault when their experience reveals workers of all skills levels and economic backgrounds in need of services. Through assignments requiring reflection on service-learning experiences – such as a presentation to the organization’s board of directors – students have the opportunity to apply fundamental economic concepts to the question at hand, integrate their formal knowledge of economics with what they are learning from the community, and recognize the human significance of this knowledge. That is, through reflection, the service-learning experience can foster significant learning outcomes.

## 6. Conclusion

The financial crisis brings to light the need to overhaul economic education practices to provide students with a deeper understanding of the issues at



hand and the ability to respond as informed citizens. The emerging reform discussion focuses on significant learning categories *foundational knowledge* and *application*, calling for considerations of the limitations of economic theory, acknowledging alternative economic theories and methods, incorporating complexity into economic explanations, and making economics more reality based and useful. We argue that the discussion of reform should not stop here, and that other categories of significant learning, notably the *human dimension*, provide avenues to develop enhanced understanding of the financial crisis and, more broadly, help keep classroom context from lagging behind real world economics. Addressing the human dimension can build off existing, but perhaps neglected, structures of pedagogic practices, such as student experiences which serve as the basis for service-learning. This shift in pedagogic practices is important because “the broader educational debate, spurred in part by work on how people learn (Bransford, et al. 2000), suggests that context and engagement are key components of learning that lasts” (McGoldrick and Peterson 2009, 229).

The very nature of experiential learning is more holistic because it includes the opportunity to develop foundational knowledge first hand, challenges students to apply a broader understanding of economics, integrates knowledge across economics as well as other disciplinary courses, and develops the more personalized side of learning – the human dimension. Through direct engagement with community problems – and taking an active role in trying to explain and find solutions for those problems – students con-

front the limits of a narrowly defined approach to economics and the importance of understanding the social and civic dimensions of economic problems. Reflection activities teach students how to learn from their experiences, developing a more sophisticated and lasting understanding of the world in which they live.

Because students experience the financial crisis in different ways, it is impossible to generalize whether their conceptions of the causes and outcomes are accurate. By engaging students in a direct encounter to apply knowledge and skills in an educationally relevant setting, instructors can motivate students to go beyond their immediate, perhaps superficial, understanding of the financial crisis. Prompting students to evaluate their thinking in this way is important, because “If students are not deliberately guided to confront their misconceptions, they often revert to their pre-instruction, novice understanding” (Maier, McGoldrick, Simkins 2010).

The examples provided herein illustrate how experiential learning projects, even though developed prior to the financial crisis, would continue to provide important insights if utilized today. In this sense experiential learning is timeless. The financial crisis does not require the development of new pedagogical techniques to capture the civic and human dimensions, but rather the utilization of such approaches that capture the current reality. Utilizing students’ experiences to illuminate the human dimension of the crisis can reinforce proposed changes in course content, and allow instructors to fully take advantage of the “teaching moment” we have before us.



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