# **Supply and Demand Storytelling:**

### Preservice teachers and critical consciousness in economics

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"I now confess that the American poems which move me most are those which marvel most, simply and clearly at the queer shapes which the massive indifference of America gives to lives" (Vonnegut, 1999, p. 138).

We live in an era where to be a citizen is to be a consumer (Sandlin, Burdick, Norris, & Hoechsmann, 2012), where schools are increasingly characterized by individualism (Glass, Rud, & Higgins, 2012), and the economy enhances inequality to the detriment of democracy (Piketty, 2014). These themes require educators to ask themselves several questions. What shapes are our students forced into as a part of these economic stories? How does this massive indifference manifest in their lives? How could we tell different stories to counter American consumerism, individualism, and oligarchism? These paradigmatic challenges are products of a dominant narrative that pervades economics education. In terms of both content and pedagogy, economics education promotes a conception of economics that is wedded to the idea of the market as unquestioned force for good (Schug & Clark, 2001) where the invisible hand maintains justice. This conception of justice extends to the domain of morality, where there is "dismissal of the political and moral dimensions of economy and an unfounded faith in mathematical modelling of human economic behavior" (Lofstrom & Berg, 2013, p. 53). A discourse of economics as valuefree and neutral science belies the ethical questions inherent in economics (Schank & Lorch, 2014) and in fact promotes myths such as the equivalence of value with profit, or the American

Dream as the ability to work hard and become wealthy or that maximizing revenue is a social good to be pursued regardless of human cost. As a response to these paradigmatic challenges, this paper seeks to understand the way that preservice teachers conceptualize the role of economics in social studies. Then, by considering the critical consciousness preservice teachers have about the society they live in, it seeks to understand the pedagogical content knowledge that these preservice teachers have to turn their critical consciousness into classroom practice. This critical consciousness is instrumental as a tool to "perceive the epochal themes and above all, how they act upon the reality within which these themes are generated" (Freire, 2005, p. 5). It is vital that economics educators and social studies teacher educators consider these perceptions as pathways to action in the preparation of future teachers.

### Literature review

#### **Economics Education**

Economics as a social studies discipline has the potential to allow both students and educators the tools to critically evaluate their world as an impetus for taking action to improve it (Vanfossen, 2005). It may allow students to question taken-for-granted assumptions embedded in the prevailing economic system such as the idea that "one person's gain is another's loss" (Davies, 2006, p. 23), it may allow students to rethink concepts like well-being (Gibson, 2012), or it may allow students to think about the distinction between wealth and income and how these terms relate to inequality (Neumann, 2015). These opportunities are unique to economics, and by troubling these epochal themes of individuality, material success, and vast disparities in wealth; economics and economics teacher education can be sites where critical consciousness and pedagogy meet to allow students to act as subjects rather than be acted upon as objects.

Unfortunately, despite the potential for economics as a critical tool, economics has traditionally been an understudied discipline within K-12 Social Studies (Miller & VanFossen, 2008) even though it is required curriculum in the vast majority of the United States and it has a presence in schools greater than at any time in the past due in some part to the recent financial crisis (Grimes, 2012; Mikl-Horke, 2010; Walstad & Watts, 2015). The financial crisis does provide an opportunity to consider significant, human consequences of economic policy (McGoldrick & Peterson, 2011), but there is a danger that the increased emphasis may lead to doubling-down on market rationality and ignoring social components of economic theory (Mikl-Horke, 2010).

It is also important to point out, that whatever the emphasis on economics and whatever the conception of what it is for, there is a "relative lack of student learning in economics" (Miller & VanFossen, 2008, p. 291) as well as a generally minimal amount of economic and financial literacy among students (Anthony, Smith, & Miller, 2015; Council for Economic Education, 2016; Davies, 2015; Gutter & Garrison, 2011). So, in an environment where the state of the economy is receiving greater attention and yet students are struggling with basic economic literacy, it is important to consider the way that teachers are prepared to teach economics and how that might affect a more critical disposition toward teaching economics.

#### **Economics Teacher Education**

Economics teacher education has a minimized space as part of social studies preparation. As Walstad (2001) found, preservice teachers tend to receive little or no training in economics, despite the fact that "many states require ten courses in history and other social sciences for social studies certification" (p. 205). This lack of preparation makes it difficult to understand the way economics teachers view the role of economics and the way it can be used to critically

evaluate society. There is a "dearth of studies on effective practices in economic education for preservice teachers" (Joshi, 2003; Joshi & Marri, 2006) and only a few dated analyses that are available about teacher preparation (Miller & VanFossen, 2008).

The information we do have suggests that economics teachers often have little content knowledge due to a lack of coursework in college (Bosshardt & Watts, 2005), with most having two or fewer courses in economics (Lynch, 1994) despite a finding from Lynch (1990) that in order to have a significant impact, teachers need at least four courses in economics, and a finding from Allgood and Walstad (1999) that six courses in economics provides the greatest increase in student understanding. This lack of preparation shows up in tests of economic literacy among teachers of economics (Grimes, Millea, & Thomas, 2010), it shows up in the lack of collaborative learning and research undertaken in economics courses compared to other subjects (Knowles & Theobald, 2013), and it shows up in reliance on traditional teaching approaches when preservice teachers cannot put economics concepts into simple ideas, nor translate those concepts into student-centered activities (Choi, 2013). Despite this lack of preparation, preservice teachers do come to the table with certain ideas about the world they live in. They have ideas about what is just, they have ideas about morality, and they have political convictions guided by these ideas. To put it simply, the lack of preparation that teachers receive matters little if teacher educators are not attuned to the critical dispositions that preservice teachers bring to the table. It is then incumbent on teacher educators to consider the level of critical consciousness in these views and the role of pedagogical content knowledge as they seek to translate the nascent economic pedagogy into a "critical optimism [which] requires a strong sense of social responsibility and of engagement in the task of transforming society" (Freire, 2005, p. 10).

# **Pedagogical Content Knowledge**

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If the field of economics education rarely addresses notions of consciousness and the way that content is directed at a set of values that promote dominant discourses (Brant, 2016; Cohen & Emmett, 2012), it is essential to consider the way that economics as content could be challenged in addition to ways that economics pedagogy could be challenged. As a result, this project intersects a Freirean critical consciousness framework with teacher cognition and knowledge that would sustain different pedagogical practices. Shulman (Shulman, 2004a) in particular codifies teacher knowledge in at least three categories: subject-matter content knowledge, or how much a teacher knows about a subject; curricular knowledge, or understanding of materials and characteristics that are used to teach a subject; and pedagogical content knowledge (PCK), which "goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge for teaching "(p. 203). The literature on PCK is vast in a variety of content areas (Abbitt, 2011; Depaepe, Verschaffel, & Kelchtermans, 2013; Goldschmidt & Phelps, 2010; Schneider & Plasman, 2011), and includes some attention to PCK in the social studies, however the attention to PCK in economics is limited.

There are some measures of PCK that have been used to evaluate teachers of economics (Fritsch et al., 2015; Kuhn, Alonzo, & Zlatkin-Troitschanskaia, 2016), though it is in some cases unclear which opportunities to learn economics affect PCK (Fritsch et al., 2015), and while there have been almost no studies of the PCK of economics teachers (Ayers, 2016), teacher educators have created separate economic methods courses to address the lack of content knowledge and PCK among preservice teachers (Ayers, 2016; Joshi & Marri, 2006). These studies have found that PCK could be developed by modeling economic lessons, utilizing an analysis of economic events, and through active-learning interdisciplinary economic lessons (Ayers, 2016), and that

development of PCK "may require more subject matter exposure than has been previously thought" (Joshi & Marri, 2006, p. 200).

These limited analyses of economic PCK can be supplemented by an understanding of PCK in social studies more broadly. Recent studies have shown that preservice teacher education in social studies can increase PCK by explicitly focusing on distinctive pedagogical decisions (Harris & Bain, 2010), focusing on distinct literacy practices (Mitton Kukner & Orr, 2015), and by creating "reflective spaces that help pre-service teachers uncover and critically evaluate their intellectual biographies and its role in their thinking about the disciplines they teach" (Salinas & Blevins, 2013). It should be noted that "most of the research on preservice social studies teachers' PCK involves the process of historical thinking" (Journell, 2013, p. 320) and in many cases even within the same teacher preparation program, PCK can vary widely among preservice teachers (Monte-Sano, 2011) and the resulting lessons that preservice teachers construct can vary in quality (Waring, Torrez, & Lipscomb, 2015). However, the analysis of PCK and historical thinking in social studies includes a consideration of teacher purpose (Swan & Hicks, 2006), which may be the strongest influence on teachers' development and enactment of PCK. Therefore, this study makes considers both PCK and critical consciousness as crucial to understanding preservice teachers' conceptualization of economics.

#### **Critical Consciousness**

Critical consciousness (Freire, 2005) refers to the ability to see the epochal themes that dominate an individual's sociopolitical context, and to "act upon the reality within which these themes are generated" (Freire, 2005, p. 5). This consciousness can be classified in several ways according to Freire. Assistencialism is a form of consciousness that indicates awareness, but imposes "silence and passivity" which "denies men conditions likely to develop or to 'open'

their consciousness" (p. 12). Opening the conscious, but only to problems relating directly to biological necessity is referred to as semi-intransitive consciousness. Naïve transitivity "is characterized by an over-simplification of problems; . . .a lack of interest in investigation; . . .by fragility of argument; . . . [and] by the practice of polemics rather than dialogue" (p. 14). Finally, critical transitive consciousness makes use of "depth in the interpretation of problems; . . . by the testing of one's 'findings' and by openness to revision; . . .by soundness of argumentation; [and] by the practice of dialogue rather than polemics" (p. 14).

While some have tried to distill critical consciousness down to further constituent parts in an effort to quantify its effect on teaching perspectives (Weis, 2012), it is perhaps unwise to relegate critical consciousness to "a list of attributes, a chart of characteristics, or a collection of behaviors teachers should emulate" (Espinoza-Gonzalez et al., 2014, p. 59). In this study the specificity is intended to frame critical consciousness or *conscientização* (Freire, 1993) as a process, and to consider the path preservice teachers take toward "a deepening awareness of the social realities that shape their lives and discover their own capacities to recreate and transform them" (Darder, 2011, p. 210).

This study integrates PCK and critical consciousness as a way to best understand preservice social studies teachers' conceptualization of the role of economics. PCK is essential to understanding what teachers know about economics and how they can put it into practice. Critical consciousness is essential for understanding their purpose for doing so. It is possible that this bridge between purpose and pedagogy can be enhanced by a pedagogical focus on the specific literacy practice of storytelling, and that this technique can be used in conjunction with the critical consciousness of teachers in a way that can help move toward a more critical use of economics within the social studies curriculum.

#### Methods

In pursuit of an understanding of the way preservice social studies teachers feel about economics, their level of consciousness with regard to the epochal themes they seek to address in their teaching, and their ability to put those feelings and that consciousness into action as teachers, this qualitative study analyzed preservice teachers in a master's program designed to prepare preservice teachers for teacher certification. The following section outlines the design of the study, the reasons for analyzing this particular group of preservice teachers, the process of data collection, and methods of data analysis.

# **Research Design**

The nature of the research questions and purpose for the study lead to the use of a qualitative research design as part of a general interpretive study. In this case, the selection of qualitative methods was desirable given that there was a focus on a specific program with individual outcomes, the need for in-depth information, and an intent to understand participants' beliefs (Mertens, 2015). The interpretivist tradition was desirable for a number of reasons.

According to Glesne (2011), interpretivist inquiry offers the contributions of engaging with a "multiplicity of voices and visions", "complexities and particularities of people's actions", and "can inspire others to perceive, believe, or act in different ways" (p. 24). This depth of analysis into a number of unique perspectives leading to action brought the study's research questions and design together in a unique and important context.

# **Setting and Participants**

This study took place in a large public university in the southwest, and specifically focused on an urban teaching program designed to prepare preservice teachers to succeed in

urban schools by valuing the diverse linguistic and cultural backgrounds that students bring to the classroom (Yosso, 2005). The program also focuses on constructing ideals of participatory citizenship that are intended to turn learning into action that addresses social and economic inequality. The explicit attention to preparing students for diverse experiences in urban schools generally means that candidates have broader goals than merely earning a teaching certificate; many have a desire to reshape the education system to be more just and equitable.

The purposeful sampling involved in choosing to study these preservice teachers was the result of a desire to "discover, understand, and gain insight . . . from which the most can be learned" (Merriam, 2009, p. 77). In this case, seeking out preservice teachers with a specific intention (revealed through their application to the program) to challenge dominant modes of teaching allowed for a greater range of critical consciousness while still representing a random distribution of economic content knowledge. In addition to their teacher certification, the preservice teachers complete a Master's degree with a curricular focus on these issues. This study took place in the second semester of the two-year program, where on top of coursework, they were in their second semester of fieldwork, spending a minimum of 45 hours in a public school throughout the semester. The specific course under study was the second of two secondary social studies methods courses in the degree plan designed to further trouble dominant narratives in social studies while continuing to expand preservice teachers' repertoires of teaching and planning. The six participants included Xavier, a White male; Selena a Latina female; Robert, an Asian male; Nick, a White male; Bryce a Latino male; and Britney, a White female. They were from a variety of class backgrounds, and their racial composition represented a diversity greater than the teaching profession in general (U.S. Department of Education, 2016).

As a white, male, middle class doctoral student, who taught economics in an urban school, I have a particular interest in the way economics is conceptualized for students in urban contexts. I have seen how dominant modes of teaching economics can disenfranchise students of color and students from low socioeconomic backgrounds, but I have also seen how an understanding of economics can allow students to be critical of the structures that maintain and reinforce racial and economic inequality. This was, to some extent, my purpose in pursuing a doctorate degree at this large, southwest institution, and was my goal in working as a TA in this class and the co-leader of instruction during our economic sessions.

# **Data Collection**

In the Spring of 2016, preservice teachers were asked prior to the class sessions on economics (2) to respond to discussion board questions about the role of economics with a more socially just focus, and the types of compelling questions that might best be answered with economics as a result of a greater critical consciousness. Preservice teachers then engaged in these two class sessions that addressed the purposes and possibilities for teaching economics in more critical ways. The sessions included activities and discussions about the role of storytelling in economics, economic pedagogical tools, and the construction of units that made use of the preservice teachers' new understandings about the teaching of economics in ways that confront dominant ideologies and discourses. These sessions were supplemented by readings on the place of economics in the field of Social Studies and some possibilities for thinking about the subject differently both in practice and theoretically. (e.g. disrupting a singular focus on capitalist/individualist values; using art and literature to broach economic concepts, etc.) The sessions were videotaped and transcribed for analysis, and student artifacts were collected from the class. In addition, student-generated units relating to economics were collected. After the

units were submitted and the class sessions were concluded, digitally recorded, semi-structured interviews were conducted to further investigate preservice teacher attitudes and as a way to member check some of the preliminary findings from the class and artifact data.

# **Data Analysis**

Upon completion of data collection, qualitative methods were used to analyze discussion postings, class dialogue, unit artifacts and interviews. In this method of qualitative inquiry, "the researcher focuses analytical techniques on searching through the data for themes and patterns" (Glesne, 2011, p. 187). Transcripts of interviews were manually coded as well as audio data from the class sessions and discussion postings and analyzed them as Miles, Huberman, & Saldaña (2014) suggest by noting patterns and themes, arriving at comparisons and contrasts and determining conceptual explanations of the observations. For example, when preservice teachers noted systematic injustices through an economic lens, in both discussion postings and class discussions, they were demonstrating levels of semi-intransitive conscious (Freire, 2005), but further discussion and interview data show that they were unable to muster the content knowledge (Shulman, 2004b) to turn this nascent consciousness into critical transitive consciousness via pedagogical content knowledge. The patterns, themes, and comparisons of interview, observation, and artifact data lead to the findings included in this paper. The data and resultant themes were then interpreted, and checked with participants through a series of member checks to verify that conclusions matched their perspectives, and to help develop new ideas and interpretations.

### Results

In pursuit of an understanding of preservice teachers' critical consciousness and pedagogical content knowledge, data from the study lead to the emergence of three major themes. Preservice teachers in this study demonstrated a variety of levels of critical consciousness throughout, however, their stated intentions for economics and their views on society tended to reflect a more critical consciousness than their units and classroom activities which tended to reflect a naïve or assistential consciousness. Second, with a few exceptions, preservice teachers in the study demonstrated a lack of both content and pedagogical knowledge which rendered them unable to transform their understandings of the epochal themes into pedagogical content knowledge that would enhance student understanding. Finally, the concept of storytelling in economics was a helpful tool as an introduction to a new way of thinking about economics, and it opened the door for the inclusion of some critical material to enter the curriculum and served as a bridge to future success in merging stated goals and purposes of economics with pedagogy.

### **Consciousness in Practice**

"In the love of larger truth,
Rapt in the expectation of the birth
Of a new Beauty
Sprung from Brotherhood and Wisdom.
I with eyes of spirit see the Transfiguration
Before you see it" (Masters & Herford, 1919, p. 46).

Though the preservice teachers in this study demonstrated a variety of levels of consciousness throughout the exploration, there were small yet important patterns in their expressions of consciousness. In general, the preservice teachers expressed a more critical consciousness in discussions and interviews, while their units and lesson ideas tended to be more likely to reflect assistentialism or naïve transitivity.

Passivity. In class sessions, discussion board postings, and interviews, students demonstrated assistentialism in the way that they talked about the purpose of economics and the way individuals interact with economic structures. Assistencialism, while indicating awareness to oppressive structures, maintains a silence that limits the ability to further develop their consciousness. During the first class session, as students constructed economic stories in groups, Robert and Nick constructed the story of two women differentially affected by a raise (or lack thereof) and the resultant ability to live and work in an area experiencing gentrification. While this story had the potential to be critical of the role of capital and social forces of gentrification, the preservice teachers chose to tell their story in a way that was about the "role and function of money" and to practice ideological skepticism (Joshi & Marri, 2006) to "help students become wise consumers of economic theory and ideology" (p. 199) rather than critical actors seeking to change a system that has differential impacts on people from varying social classes. This silence and passivity was represented in discussion board responses to a question about the purpose of economics. Economics, according to Robert:

should be taught at urban schools especially because it gives students another way to understand their circumstances and the world and it will prepare them for life on their own. Many decisions, from everyday things like 'which bread brand should I buy?' to complex decisions such as 'what area makes the most fiscal sense to start a business?' involve the ability to be financially literate (Spring 2016)

Again, this response indicates awareness of the world, but conceptualizes economics as a way to become "financially literate" and thus succeed within the current structure rather than work to change it.

Finally, in interviews Selena talked about how economics helps in "knowing the role that you play as an individual in a more either globalized or even local sense and how you play a role as a consumer" and as an enabling students to "know their own role . . . either as a working citizen or as a consumer or producer of products and services, and how that could . . define a cycle that they might be contributing to." Her response, like Robert's shows a clear understanding of economics' potential to analyze society, but occludes any consideration of how it could allow students to transcend these reproductive roles.

Critics outside the arena. Preservice teachers in this study often demonstrated a level of consciousness when discussing economic issues that were important to them and their students, and did so in class sessions, generated units and interviews. For instance, in a unit entitled "The Economics of the Civil Rights Movement" centered around an inquiry question (loosely based on Swan et al., 2013) of "Is money power?" Nick and Britney planned a sequence of lessons that challenged a dominant narrative of the civil rights movement that "the Civil Rights Movement was primarily about racial social harmony," countering with a narrative that showed how "[r]acism in fact hurt African Americans economically . . . and was addressed as such by movement leaders". Over-simplifying problems and polemical criticism rather than dialogue characterize naïve transitivity, and while this line of inquiry critiqued a simplistic portrayal of the era in a significant way, the culminating activity was for students to put together a "mock boycott of a business or entity with practices they think are wrong." The procedure for this assessment activity called for students to describe the reason for the boycott, identify the supply and demand for that business/entity's product, and methods of organization. While this activity has the potential for critical transformativity, keeping the activity in the domain of a 'mock' boycott over-simplified the task at hand, giving students an impression of 'success' in their

boycott without sacrifice and allowing them to craft a polemical project with no real audience or dialogue with the offending institution.

Elsewhere, Selena indicated in discussion board postings that economics is important because:

the staggering gentrification of [our city] to the east and south sides have pushed specifically low-socioeconomic groups into more secluded areas that have impacted the environment of schools and students in the areas. Food deserts, unemployment, and lack of funding for social programs in at-risk neighborhoods, all while luxury condos and single-family homes are being built and integrated into communities. The economy effects the way I teach Social Studies because in some cases, a students is directly affected by the repercussions of a gentrified community and the parallel of a low SES student from that of a high SES students (Spring 2016)

This justification for economics identifies a significant problem in the community, yet it simplifies the problem, and reveals a fragility of argument that might inhibit a critical investigation of the forces of gentrification. By painting gentrification as the problem (rather than the racism and capitalism, that undergirds it), and claiming that its main impact is the affect it has on how students learn, this analysis precludes the opportunity for gentrification to become the basis for inquiry and transformative action. Also, by calling out all the touchstone effects of this social phenomenon, this preservice teacher engages in a diatribe against the ramifications of a problem rather than proposing a sound argument for teaching against gentrification. In this way future students are positioned as objects to be acted on by forces outside their control rather than subjects who refuse to be "mere spectator[s] of the historical process" (Freire, 2005, p. 10).

**Doers of deeds.** Returning to Freire's (2005) definition of critical transformative consciousness as making use of "depth in the interpretation of problems; . . . by the testing of one's 'findings' and by openness to revision; . . .by soundness of argumentation; [and] by the practice of dialogue rather than polemics" (p. 14), we see how preservice teachers demonstrated this level of thinking in some ways at nearly every stage of the study, though more so in their personal disclosures (discussion board postings and interviews) than their practical enactments (class activities and unit plans). In a discussion posting, Bryce described the role of economics as having the potential to allow:

Students in urban schools to not only recognize possibilities for change, but also to feel hopeful and powerful over the future direction of their nation. It is imperative, therefore, that educators shine a light on the fact that throughout the history of our country many individuals of varying races, creeds, genders, ages, abilities etcetera have faced, and will continue to face, active oppression in the workplace that prevents them from enjoying a more full quality of life. More importantly, students must also grasp that it was only when these individuals organized and sought collectively for a redress of grievances that tangible change was possible. (Spring 2016)

In our class session, during an activity where preservice teachers considered current events for their potential as economic stories, Nick brought up the water supply in Flint, "and why the source of the water that Flint is getting . . . why the decision was made to change it, and getting into populations, populations in general but also cities as entities and the resources that [students] have to appeal for attention." By constructing the Flint crisis as a story, where decisions were consciously made to seek a cheaper water supply at the expense of public health,

Nick also attended to the way students could engage in action that would appeal to localities about public health and other issues.

In a unit entitled "The Age of Exploration" centered around the compelling question of "Does money yield power?", Selena and Robert created a series of lessons that challenged the dominant narrative of European contact as bringing riches and resources and supplementing international trade. They countered this with a thorough investigation of how colonialism eliminated cultures and populations while profiting off of slave labor. After analyzing exploration from a European point of view and conducting a modified version of a trial of Columbus ("The People vs. Columbus, et al.," 2009), their third formative activity connected the vestiges of colonialism to migrant labor and the sourcing of fruits and vegetables for fast food chains. Students would then use research along these lines to write a letter to a CEO of a fast food company that does not support fair wages for migrant workers using their new understanding of this connection. In this way students investigated a problem in depth, argued soundly, and attempted to engage in dialogue.

While there was evidence of each of these forms of consciousness in class sessions, unit artifacts, interviews and discussion board postings, preservice teachers tended to exemplify critical transitive consciousness more often in their discussion postings and interviews rather than their class sessions (which generally required a justification for lesson ideas as well as a connection to state standards) and units. This indicates that chronology was not necessarily a factor (discussion board postings were prior to class sessions and unit creation, interviews took place last) but that the implementation of a critically transformative pedagogy is much easier said than done. By exploring the levels of content, curricular and pedagogical content knowledge, as well as the efficacy of storytelling as an economics approach, we can make sense of the way that

preservice teachers integrate these levels with pedagogy as they attempt to fashion a pedagogy that addresses their perceived role of economics.

# **Dimensions and Expressions of Knowledge**

"My tongue could not speak what stirred within me, And the village thought me a fool. Yet at the start there was a clear vision, A high and urgent purpose in my soul" (Masters & Herford, 1919, p. 29)

Preservice teachers in this study came in with a vastly different amount of prior familiarity with economics. Some teachers had never taken an economics course in high school or college, while others had pursued an economics degree and taken multiple classes prior to switching to a different major. This contrast meant that subject matter knowledge varied greatly, yet there was a distinct sense of unfamiliarity with how to teach economics, and further how to do so in a way that was in line with their beliefs about what economics was for. The majority of data for this section is derived from interview data where preservice teachers were asked directly about their understandings, but some material from unit artifacts and classroom observations offer important insight into their PCK.

Economic understanding. In this project, there were preservice teachers had no economics experience in high school or undergraduate course work. In some instances they had taken as many as five courses, yet only one preservice teacher interviewed characterized his content knowledge "near the top" when compared to other social studies disciplines. Most described their content knowledge in economics as "weakest" or "at the bottom" or "towards the middle to the end" among all social studies disciplines. Despite this, they were able to offer economic concepts they felt most comfortable with, including supply and demand models, inelastic vs. elastic demand, consumer habits and decision making, and mercantilism. This self-

analysis of limited content familiarity was reflected in the state standards selected as part of the generated units for the course assignment. While these units were not necessarily required to be exclusively about economics, and thus were focused on economic dimensions of world and US History, a cursory analysis of the standards shows that only ten out of the 27 standards listed by the groups dealt with economics (37%), and no individual group had more than 45% of their standards as economic. This inability to make use of or critique economics standards (which are prevalent in both world and US history) affirmed the conception of preservice teachers' weak content knowledge and their use of history standards as a crutch in this assignment.

Pedagogical practices. The experiences in prior economics classes that preservice teachers could draw on as examples of curricular knowledge were as varied as their economic coursework. Despite some attention to simulations in the experience of one preservice teacher, most participated in rote explorations of economics through readings and discussions, or analyzing supply and demand curves (to say nothing of the preservice teacher who took no economics classes in high school or college). With few exceptions, the preservice teachers expressed a desire to integrate simulations, games, and competition into their pedagogies. A review of completed units, however shows that they were in many cases unable to put these desires into practice. The only simulation that was planned for was a simulation of a trial, the only game was an online game designed to contextualize post-slavery agricultural life, and while there were a number of interactive activities throughout the units, none made use of what might be considered an explicitly economic simulation or competition.

**Putting understanding into practice.** Preservice teachers were not confident in their ability to integrate their understandings of content and curriculum knowledge into effective pedagogy. Whether they had a lot of content knowledge or not, they were unlikely to identify

themselves as prepared to make this important connection. For example, Robert, the preservice teacher with the most economics coursework rated his ability to integrate that strong content knowledge into pedagogy as "pretty poor, for the reason . . . that you need to relate it to the student's lives, and you need tangible examples. All the things that I've ever learned through economics have been abstract, which I think has been for a certain reason". He felt that the overwhelming adherence to neoclassical economics was that reason, the net result of the dominant narrative of free-markets as ideal. Bryce, who had only taken a few economics courses felt comfortable integrating economics into history content, but said "I don't know if I were going in with an economics [state standard] in mind, that I'm going to get them to get here by the end of this". Like the use of history standards over economic standards, this shows a lack of confidence in teaching explicitly economic content. Finally, when discussing ways to integrate critical economics into relatively conservative state standards, teachers described a divide between what they want to teach and the help they would need to teach it. For Nick, this divide was caused by "definitely content knowledge, because . . . . the [state standards] aren't explicit, and the only way you are going to see those gaps is if you know what's missing."

These widely held concerns regardless of content familiarity demonstrate the challenge of working with preservice teachers. Simply put, bringing together critical dispositions, unfamiliar (or irrelevant) content, and meaningful activities is difficult even for experienced teachers. If teacher educators are to expect preservice teachers to take up this demanding task, they must attend to the way that economics is presented in methods courses. To that end, this study looked at the specific method of economic storytelling as a way to bridge these difficult gaps in a small way, and to evaluate the impact it had on preservice teachers' critical consciousness and pedagogical content knowledge.

# **Telling Stories with Economics**

"Ladies and gentlemen, your kind attention To my interpretation of the scene. I rise to give your fancy comprehension, And analyze the parts of the machine" (Masters & Herford, 1919, p. 301)

Joshi and Marri (2006) make brief reference to economic storytelling as a descriptor of current events such as "the People's Republic of China's seemingly syncretic combination of market economy and autocratic government, and the proper distribution of the burden of drug costs among pharmaceutical firms, patients, HMOs, and the state. Both have an important impact on national life and require economic understanding" (p. 197). However, as instructors of this course we took this concept a step further. Rather than use economic storytelling as a way to talk about current events, we conceptualized economic storytelling as a way to engage the contextual, human, and structural issues that are implicated in a given economic issue.

The example provided for the class told the story of a White<sup>1</sup> serviceman returning from World War II, who was able to use a VA loan to purchase a home and farm, thus ensuring his financial security and the subsequent ability of his child to attend college. The child then met a college-educated spouse, and they had children (one of whom is the author of this paper) who were afforded the privilege of growing up in a middle class home where college attendance was the expectation. The second component of the story follows a Black serviceman returning from World War II who did not have access to those same benefits (including the GI Bill, Social Security, and the VA loan program), and thus was not able to take part in the "nearly \$100

<sup>&</sup>lt;sup>1</sup> I use White and Black in this story to drive home the socially constructed nature of race and to further underscore the economic injustice inherent in the story perpetrated on the basis of melanin content. A different story regarding forced vs. voluntary migration might utilize the terminology of European-American and African-American, again in service of the story and maintaining an understanding that race has no biological foundation, and is entirely a way of enforcing inequality via global racial formation (Omi & Winant, 2014; Winant, 2001).

billion worth of benefits in the hands of white veterans" that can "safely be credited with the creation of the white middle class" (Wise, 2013, p. 75). This deliberate use of personal narrative in a tale of economic inequality that resonates from the past to the present was the foundation of our exploration of economic storytelling. Preservice teachers were then asked to create their own economic stories, and with little hesitation they built narratives of two women who were differentially affected by gentrification, a story that demonstrated conceptions of the glass ceiling vs. the glass escalator, and a story of how the imperial sugar trade manifests in the present-day Americas.

Though the idea of economic storytelling made up only a small part of the time spent on economics in this methods course (approximately 1 hour out of 6), the impact that this conception of economics had on the preservice teachers was noteworthy. In class sessions and interviews, preservice teachers of varying levels of economic familiarity felt that storytelling was effective as a method for allowing them to understand economics better, and as a way to implement an economics curriculum. Positive responses to storytelling as a methodology focused on its benefits as a relevant introduction to economics, its reflection of a more humanizing conception of economics, and as a bridge between their purposes for teaching social studies and economics pedagogy.

Storytelling as relevant. Preservice teachers felt that storytelling was an important component of economics education because it made economics relevant and easier to understand. Without broaching any economic content, the instructor constructed a simple story about economics showing the differential economic paths of white and black servicemen in World War II. The ability to take advantage of the GI Bill by white servicemen lead to increased economic opportunities for several generations. Immediately after this brief discussion of an

economic story, participants were able to construct their own economic stories that dealt with relevant issues such as gender wage gaps, gentrification, and agricultural labor. These stories involved deep dives into economic issues, and obviously would require content support to put into practice in a class, but the concept allowed for easy entry into the world of economics pedagogy even among preservice teachers with limited economic backgrounds. One such teacher, Selena, felt that it was helpful because it "creates that connection. For me, I was able to understand it at that level, where I could say 'Oh yeah, that's relevant to my life' and I could see how my students could relate to something more meaningful like that". Likewise, Xavier, who had not taken an economics class in high school or college, remarked how the tool didn't seem like traditional ways of teaching economics, and thus was perhaps more relevant to students: "It had nuance but made it relatable and understandable. . . [it was] relatable, human, non-intimidating, and it gave a lot of potential for detail." This entrée into economics through story worked well for these two teachers who had the least amount of prior experience with economics, but it also lead to a rethinking of what economics could be and could be for.

Storytelling as humanizing. The easy entry into economics pedagogy regardless of content preparation lead to a reconceptualization of economics as containing more humanity and feeling than the preservice teachers had previously thought. As Bryce put it, "I like the idea of economics through stories . . . I had never thought about that, and it sort of brings your attention in and also makes it very emotional because it *is*." Xavier felt that "It wasn't something that at face value I thought, oh this is economics, it wasn't a Wall Street Journal graph with numbers". In class sessions, every story generated by the preservice teachers included a human element, personalizing the gender disparity through the creation of characters affected by the 'glass ceiling' and 'glass escalator'. Likewise, the story of gentrification was personalized with names

and familial detail, and human effect of agricultural labor was a major theme in the third story.

Again, these stories were not always infused with in-depth economic content, but the relevance and humanity engaged preservice teachers in a way that previous economic discussions hadn't.

Storytelling as merging purpose with pedagogy. Finally, storytelling was a way in which preservice teachers could bring their stated purposes for teaching into the curriculum of economics, a pursuit they were previously dubious about. In class, Britney described the value of storytelling in her social studies pedagogy as ensuring that, "you can turn any story you're telling into an economic story and that's probably a really good way to actually teach it because it will be contextual." In interviews, Bryce described his purpose for teaching economics as allowing "students [to] walk away feeling more informed about the economic decisions in everyday life" and he felt that storytelling could be a remedy to the feeling that "a lot of our economic decisions are disconnected and we are made to feel disassociated from the consequences of them, and so, to fix some of that, I want my students to become more grounded in their economic decisions." Xavier expressed a desire to teach for social justice and felt that storytelling allowed students to

recognize their own economic power individually and collectively, talking about past times where people have collectivized, joined together and exercised that as workers, how others have concentrated monopolies, how money interacts with politics, with society in general. It just seems . . . the tapestry of history is shot through with a bolt of economics. (Spring 2016)

These responses show that storytelling has the potential to unite critical consciousness and pedagogical content knowledge in ways that are powerful and meaningful to preservice teachers.

### **Findings**

"The cooper should know about tubs But I learned about life as well" (Masters & Herford, 1919, p. 67).

Teachers in this study had a purpose for teaching. They expressed a desire to challenge dominant narratives, and to pursue relevant instruction with students who have been marginalized. Unfortunately, the ability of these teachers to put their purpose into action was blunted by their inability to bring critical narratives into economics class due to a limited or specific content background. Whether they had no formal economics training, or a great deal of market-based neoclassical economics education, preservice teachers struggled to fully integrate their critical consciousness into economics pedagogy to a level that was satisfactory to them. They had only a few examples from their methods course of ways to put their critical consciousness into action, and many of their constructed lessons reflected their inability to merge purpose and pedagogy. It should be noted that this is a difficult thing to do for an experienced teacher, and it can (and should) be the work of a career to meld critical consciousness and pedagogical consciousness in ways that are meaningful to students. Therefore, preparing teachers to teach a critical version of economics requires more than just PCK. It requires an analysis of purpose, a consideration of power and dominant narratives, and a merging of content and pedagogy.

The range of critical consciousness that preservice teachers demonstrated is instructive in several ways. First, it should be noted that in a variety of subjects, not just economics, young teachers with critical backgrounds are almost instinctively including a challenge to the epochal themes in their pedagogy. Most significantly, it became clear that regardless of familiarity with economics, preservice teachers could conceptualize the role of economics in critical ways.

Though some only conceived of the utility of economics as a way to allow students to succeed in

an unjust system, this assistentialist view is ambitious and goes beyond a commonly-held view of economics as nothing but "[g]raphs, equations, foreign terminology, a jumble of words and phrases that have little or no meaning or, worse, mean something different than they mean to normal people" (Charkins, 2013, p. 16). Preservice teachers were immediately thinking beyond this, and even if only on an intellectual level, this represents an important consideration for those who might pursue critical economics in their pedagogy or in teacher education. Of course, their consciousness was not limited to this form, and they demonstrated the ability to think about challenging oppressive structures both polemically, and in a transformative way through discussions, examples, and created lesson plans. Even in the limited time and space for this exploration, and even taking into account the varying levels of economic familiarity, these preservice teachers were ready, willing, and able to conceptualize economics as a vehicle for challenging oppressive epochal themes. To that end, it is important to think about the literature gap that attends to critical dispositions in economics. While in history, civics, and geography there are attempts to formulate conceptions of what those disciplines look like in a critical sense, economics education literature is quiet on the subject.

Finally, storytelling appears to be one way to combine the transformative potential of these students with their limited economics pedagogical content knowledge. Economic stories are more than just history told through economics. They are an attempt to make economics relatable, human, and an essential part of a pedagogy that seeks to disrupt the dominant narrative of economics as a value-neutral analysis of markets (Blanchard & Coléno, 2016; Brant, 2016). These stories can involve racial injustice, class analysis, social inequality, power and hegemony, and through their use teacher educators can begin to combine their pedagogy in a challenging subject with their purpose of pursuing social justice. It should be noted that this is only one way

of thinking about critical economics. As teacher educators seek to address the need for a fusion of PCK and critical consciousness, and as preservice teachers search for ways to merge their purpose with their pedagogy, we must continue to look for ways to contest epochal themes through methods that challenge, critique, and re-envision economics. This may mean counterstorytelling, it may mean re-conceptualizing global economic citizenship, or it may mean simply allowing students to name their world with economic language. Regardless, critical transitive consciousness and PCK can merge in a variety of ways that allow the discipline of economics to be a place where teachers and students actively pursue a more just world.

# **Limitations and Recommendations**

The generalizability of this study is certainly limited by the size of the group under study, and by the purposeful choice of using a teacher preparation program designed to be critical of dominant narratives. In many cases, it cannot be taken for granted that teacher candidates enter their preparation program with the desire to challenge a system they see as unjust. This is also a unique case as the course afforded two weeks for consideration of economics methods in social studies. This space is not a given, nationally, and time for economics in social studies preparation can vary greatly. Finally, the relationship between the author of the study as a TA and participants as students may have subconsciously influenced responses.

Further research into economic storytelling is certainly necessary. This study made use of this undertheorized concept as part of teacher education pedagogy, but a firmer base of understanding about what concepts are necessary components in economic storytelling and why they are necessary is important. There is also a limited amount of research in what might be termed critical economics. Unfortunately for theoretical diversity in the discipline, roughly 80% of economists are committed to market-based, neoclassical economics as the only valid,

scientific approach and maintain "tight paradigmatical borders" which minimize "the scope of the debate within mainstream economics (Ötsch & Kapeller, 2010, p. 17). An exploration into critical economics through a heterodox lens (Bendixen, 2010; Jeziorski, Legardez, & Valente, 2013) or another challenge to the dominant conception of economics is necessary, with particular attention paid to the ramifications in K-12 and teacher education pedagogy. There is also a need to consider how economic storytelling, critical consciousness, and pedagogical content knowledge merge in a K-12 setting.

#### Conclusion

"I would actually like to have "The Class of '57" become our national anthem for a little while. Everybody knows that "The Star Spangled Banner" is a bust as music and poetry, and is as representative of the American spirit as the Taj Mahal. I can see Americans singing in a grandstand at the Olympics somewhere, while one of our athletes wins a medal – for the decathlon, say. I can see tears streaming down the singers' cheeks when they get to these lines:

Where Mavis fin'ly wound up Is anybody's bet." (Vonnegut, 1999, p. 141-142).

The stories we tell become us. They give us our origins, our heroes, and a sense of purpose. And yet, they can obscure. They can reinforce harmful archetypes, create dehumanizing myths, and maintain inequality. It is vital that social studies educators at all levels consider the stories they tell in a critical light. Are these stories that resist? Or do they reinscribe? Is the instructor telling the story? Or are the students? The discipline of economics is too important to leave the answers to these questions to the status quo. The teachers of the future need to understand that they have the power to tell stories with economics; stories that reflect the issues that affect them and their students, stories that speak back to a system that maintains inequality, stories that attack the epochal themes that sustain hegemony. When these teachers bring a critical consciousness to their teacher preparation program, teacher educators must give them the tools

necessary to put their consciousness into action. They must know how to teach supply and demand, of course, but they must do with stories that are poetic, purposeful, and powerful.

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