

# Cognitive Development of Social Justice through Re-Designed Courses and Community-Based Partnerships: An Initial Investigation

Robert E. Lee, Gary Creasey, Brent D. Showalter, and Verenice D'Santiago, Illinois State University

Identifying high quality teacher education programs that focus on preparation of teachers for urban schools is one of the major agendas of the current Presidential administration's *White House Office on Urban Policy* that provides federal initiatives and support for health care, education, housing, and families living in underserved, urban areas. Underserved urban areas are high-density contexts that are pressured by poor economic conditions, high family mobility, sub-standard health care, and inadequate living conditions. Youth living in such contexts are at added risk because underserved neighborhoods generally contain hard-to-staff schools, where high percentages of low achieving students are often pushed-out or simply drop out (Lee & Radner, 2006; Peterman, 2008).

Many experts indicate that there is a pressing need to attract and retain highly qualified teachers who are prepared to work in urban schools (Tough, 2008), but teacher shortages rarely exist outside the highest-need urban schools (Lee & Radner, 2006). It is in this arena that Illinois State University appears to be ahead of the national curve. Since 2004, this large, public, Midwestern university has successfully partnered with a large urban school district and a community-based organization to focus on pre-college preparation/recruitment of high school students interested in pursuing teaching careers, urban teacher preparation and clinical field experiences for university pre-service teachers, and continuing support for graduates who are now teaching in the partner district, Chicago Public Schools. Through its Chicago Teacher Education Pipeline™ (CTEP), Illinois State University has been successful in producing a significant increase in student clinical and field based experiences within schools in the district through one of its cornerstone initiatives, the *Urban*

*Teacher Preparation Course Development Grant* (CDG). Beginning in 2006 with seven re-designed courses, 198 students participated in clinical trips to Chicago public schools. Each subsequent year, CTEP has worked to expand the existing framework to accommodate increasing numbers of university pre-service teachers through additional course re-designs. In fact, in the program's fifth and current year, over 900 students are expected to participate in an urban field experience, an increase of 354% from the pilot year.

The rationale for this multidisciplinary program is to provide resources to university faculty across departments and colleges to re-design existing courses to better prepare pre-service teachers to work in underserved, urban communities. Instructors are supported to address these program initiatives by infusing relevant course content with urban issues and contexts, creating assignments that provoke awareness of social justice issues, and encouraging students to take an experiential trip to the partnering community and their respective schools within the partner urban district (Chicago Teacher Education Pipeline™, 2009). Grantees (course instructors) participate in a four day experiential learning professional development trip to underserved urban neighborhoods where the district partnership exists. The intent of this immersive professional development is to build into the courses activities that students will engage in to better understand the challenges that face people, schools, and communities in such underserved settings. It is hoped that as result of taking a course that has been fundamentally re-designed, students will "understand, critique, and as possible, participate in overcoming the systemic sources of racial and economic inequity in our society and schools" (Lee, Eckrich, Lackey, & Showalter, 2010, p. 108). Thus,

beyond nurturing the student's knowledge/beliefs (e.g., "What are the realities of working in these schools?"), efficacy ("Am I prepared to work in these settings?") and intentions ("Will I pursue such a job?"), it is also expected that students will demonstrate a growing sense of *social justice* which will become a part of their emerging professional identity and assist them in developing a teaching philosophy.

Thus far, 43 courses over five cohorts have been re-designed to serve the needs of pre-service teachers who have interests in urban education. The purpose of this research project is to evaluate the efficacy of this multidisciplinary CDG program. It is expected that students who take a re-designed class that has an urban education focus will display more positive knowledge/beliefs about urban education, more confidence about working in urban settings, and a stronger intention to work in these contexts than do students who take a parallel course that does not have such a specialized emphasis. It is also predicted that students will demonstrate growth in their awareness of social justice issues as they progress through a re-designed class. These hypotheses will be tested by contrasting students who are enrolled in a re-designed course with their counterparts who are taking a parallel, unaltered class at two time points (pre-course and post-course) during the semester.

Identifying (and assessing) the mechanisms responsible for promoting social justice awareness represent a process that could be illuminated via theory building (Woodard, 2009). To illustrate, integrated theories of moral reasoning and prosocial development stipulate that ultimate altruistic/benevolent intentions and behaviors are preceded by cognitive and affective events that affect motivational and personal goals (Eisenberg, 1986; Eisenberg, Fabes, & Spinrad, 2006; McPherson,

Terry, & Walsh, 2009), and that these can be rooted in situational contexts. A related construct, situated cognition (Brown, Collins, & Duguid, 1989; Lave, 1988; Lave & Wenger, 1991), posits learning as an essentially social phenomenon that is contextually-based, and thus helps to transform learners' identities. These events include a) an awareness and interpretation of the needs of others; b) a comparison of one's own resources and those in need; c) the development of distributive justice; d) an analysis of variables that contribute to social injustice; e) well informed solutions to problems; f) empathy and g) an evaluation of personal qualifications to assist (e.g., confidence vs. perceived barriers). Theoretically, advancement in these cognitive/affect components encourages an intention to assist (i.e., intention to work in an urban context) and subsequent action (e.g., employment in urban communities). In this study, changes in students' thinking vis-à-vis these components of situated cognition will be assessed using qualitative methods.

## METHOD

### Sample

Students were recruited from five courses in the Fall 2009 semester and two courses in the Spring 2010 semester that were recently re-designed to fulfill the objectives of the *Urban Teacher Preparation Course Development Grant*, including classes in mathematics education, psychology, physics education, sociology, chemistry education, history education, interdisciplinary studies, and business teacher education. Participants were asked to complete the pre-survey in the first weeks of class and the post-survey in the final weeks of the semester. The university professors received their CDGs the same year (2009-2010) and thus received similar urban education professional development and training. These courses are taught across different departments and colleges (reflecting the diversity of this multidisciplinary program) and contain students who are at different stages of pre-service teacher preparation. It was anticipated that at least 400 pre-

service teachers would participate in the survey. Fifty students would participate in the interview segment and 50 relevant student artifacts (e.g., reflection papers, capstone assignments) would be collected. Whenever possible, students in a parallel course that had not been re-designed would also be polled using the survey method.

### Instruments

The *Urban Education Survey* (Lee et al., 2010) was used to assess student knowledge and beliefs, student confidence in working in urban environments, and intentions to pursue urban teaching. This survey contains four major scales; for each, participants responded on a five-point Likert-type scale. The Urban Education Perceptions (UEP) scale contains nine items that assess knowledge and attitudes regarding urban education (e.g., "Urban schools are safe places to work in"). The Teacher Multicultural Attitudes Scale (TMAS), 22 items, assesses student beliefs and knowledge regarding diversity issues in the classroom (e.g., "In order to be an effective school teacher, one needs to understand the systemic causes of poverty and inequity"). The UEP and TMAS scales were found to have coefficient alphas of .71 and .87, respectively, for the first survey administration, and .73 and .89, respectively, for the second survey administration. The Teacher Sense of Efficacy (TSES) scale contains 18 items that assess student confidence in working in urban environments (e.g., "How much do you think you could control disruptive behavior in the classroom?"). This scale was highly reliable at both the pre-course administration ( $\alpha = .92$ ) and the post-course administration ( $\alpha = .93$ ). Finally, the Urban Teaching Intentions (UTI) scale contains six items that measure students' thoughts about working in an urban setting (e.g., "I am likely to pursue my career in an urban setting"). The observed alpha for the UTI scale was .79 pre-course and .83 post-course. This survey contains a demographic scale that assesses personal characteristics of the respondent: extracurricular involvement, experience with re-designed courses, experiences

working in urban environments, and additional courses that may have some bearing on their knowledge base concerning urban education. It is important to control for such experiences in all analyses (e.g., as co-variables or additional independent variables), because it is possible that some students may choose to enroll in re-designed classes because of their previous, positive experiences with the subject matter.

Although the survey provides quantitative data that will monitor student learning, confidence, and urban teaching intentions over the course of a semester, two additional strategies were used to assess changes in social justice development. First, permission was obtained from students and instructors to collect relevant course artifacts such as reflection papers or capstone activities. Second, at the beginning and end of the semester a trained research assistant interviewed students drawn randomly from the aforementioned courses. This .5-1 hour, audio-taped, semi-structured interview contained questions and relevant probes that tapped several concepts within integrated theories of moral reasoning and prosocial development rooted in situated cognition, outlined in the theoretical perspective guiding this study.

To expand general thinking on any topic, respondents were asked to provide specific examples or experiences (if any) that support their position:

1. What comes to mind when you consider the term, "underserved" school or neighborhood?
2. Select five adjectives that come to mind when you think of urban education, schools or neighborhoods (Probe each adjective for specific examples.)
3. What are some of the general challenges that face urban educators? Children who grow up in underserved, urban neighborhoods?
4. What are your personal feelings about these challenges? Why do you feel this way?
5. How do you compare your school

experiences to those of children who grow up in underserved, urban neighborhoods? Why do children in these areas traditionally have low achievement scores?

6. What are some possible solutions to the challenges that face underserved, urban schools?
7. How confident are you that you could work in an underserved, urban school? What skills do you think that you could provide? How did you develop these skills?
8. What are your intentions in terms of possibly teaching in an underserved, urban school? Let's explore some variables that have motivated your intentions.
9. Specific to 2nd interview: What have you learned in this class concerning urban education? Probe separately: How has the course (probe: content, instructor assignments, field experiences) affected your intentions and possible career path?

ed as a dependent measure set; previous urban education experiences will be co-variables) that will be deconstructed using single *df*, a priori contrasts. For the qualitative component (to be presented in a subsequent report), a consensual qualitative research (CQR) approach will be used (Hill, Thompson, & Williams, 1997). CQR combines elements of familiar qualitative approaches (grounded theory, phenomenological, comprehensive process analysis) into a "start to finish" protocol that includes: a) theoretically grounded, interview questions; b) trained judges throughout the data analytic process; c) judgment consensus d) one auditor to check the work of the judges; and e) theoretically driven domains, core ideas and cross-analyses in data analysis (Hill, Knox, Thompson, Williams, Hess, & Ladany, 2005, p. 196). Hill's approach has been successfully used to capture student intellectual growth and sensitivity to the human condition in a variety of populations (e.g., Hill, Sullivan, Knox, & Schlosser, 2007).

To organize the qualitative data from student artifacts or interviews, a primary team (who first reaches a consensus regarding potential domain definitions) will assign the raw data to theoretically driven domains (e.g., interpretation/awareness of the needs of others, empathy, comparison of self to others, distributive justice, personal analysis of variables that contribute to social injustices, possible solutions, in-

tentions to teach in an urban setting). Thus, the comment, "It's not fair that children do not have equal access to education" would be assigned to the "Distributive Justice" domain, whereas "I realize now I was very fortunate to have a good education compared to these children" would be placed into "Comparison of Self to Others" domain. Hill and colleagues (2005) indicate that some domains (via team consensus) may be modified or combined, new domains may emerge to capture unexpected trends and some comments may be re-assigned to the reconstituted domains.

Next, comments that have been assigned to domains are formatted as core ideas in which similar comments are phrased as themes. For example, a comment such as, "Well, you know, the city schools do not get enough property taxes, because more money could better equip these schools for computers, and, you know, better buildings and stuff like that" becomes "Respondent indicates that supporting schools via property tax increases is one solution to the problem." The purpose of assembling the raw comments into core ideas is to frame the comments (e.g., reduction of redundancies, irrelevant phrases, inconsistent pronoun use) to concise, clear statements that can be understood by all team members without sacrificing core content (Hill et al., 2005).

Thus far, the core ideas have been assigned to a broad domain by the primary team. In the cross-analysis phase, the core ideas are assigned to categories within a general domain. For example, when considering the "Sees Solutions to Problem" domain, a respondent may indicate that more support is needed for students (for teachers, school, or communities). Alternatively, a respondent may not envision a solution, or may provide a vague, general response ("We need more money"). Category assignment is first conducted independently by two team members. These members reach a consensus on discrepancies and their choices are reviewed by the arbitrator. Once the core ideas from all respondents are categorized, each category is assigned a theme. These themes are termed 1) General (at least 90% of responses in a category); 2) Typical (< 90%, >50%); Variant (< 50%, > 20%)

### Procedural/Analytical Considerations

The primary focus of this initial report will be to analyze the survey data using a 2 (Re-designed vs. Traditional course) X 2 (Time 1 vs. Time 2) mixed MANCOVA (survey scales will be treat-

Table 1.

#### *Intercorrelations Between Variables*

Variable	M (SD)	1	2	3	4	5	6	7	8
1. UTI (Time 1)	3.04 (.78)	--							
2. UTI (Time 2)	3.17 (.83)	.65**	--						
3. UEP (Time 1)	2.97 (.50)	.24**	.18**	--					
4. UEP (Time 2)	3.07 (.52)	.06	.26**	.43**	--				
5. TMAS (Time 1)	3.76 (.46)	.35**	.45**	.05	.09	--			
6. TMAS (Time 2)	3.84 (.49)	.21*	.38**	-.23**	-.00	.75**	--		
7. TSES (Time 1)	3.86 (.48)	.31**	.29**	.27**	.09	.24**	.04	--	
8. TSES (Time 2)	3.93 (.54)	.29**	.28**	.12	.14	.21*	.24**	.54**	--

\*\*  $p < .01$  \*  $p < .05$

and Rare (< 20%). Note that when disseminating the study results, changes in themes will be reported, but not the raw percentages. Thus, it would be expected that the participants' responses in the core domains/categories would become more typical or general by the second assessment point (Appendix 1).

To provide a consensual qualitative analysis, each primary team will be made up of two research assistants and one arbitrator. The arbitrators will help the investigators refine the interview questions after piloting, assist the primary team members in refining domains and developing core ideas, and help build consensus during the cross-analysis phase (Hill et al., 2005). In most phases, team members will provide their individual perspective, build consensus with the second team member and then have their work reviewed by the arbitrator. To sum, this systematic analysis of student artifacts and interview data will provide qualitative information that will enhance the quantitative survey results and provide evidence as to whether re-designed classes encourage a potent transformational learning experience. Whereas this initial report focuses on the quantitative data that have been collected, it is hoped that this coding system can be used to provide valuable qualitative information to augment the former data analysis.

## PRELIMINARY FINDINGS

Although a more thorough investigation of the data is forthcoming, some preliminary analyses were conducted for this manuscript. Full data (pre- and post- surveys) were collected for 186 participants in five newly re-designed courses and two parallel control courses during the Fall 2009 semester. The primarily White (94%) sample was composed of 132 women (71%) and 50 men (27%). Respondents had a mean age of 20.3 ( $SD = 1.3$ ) and were largely from suburban or rural backgrounds (89%). Most (79%) indicated an intention to teach after graduation.

Paired-samples  $t$ -tests were conducted to determine if there were significant increases in the four scales from the pre-course survey (Time 1) to

Table 2.

*Multiple Regressions of Teacher Multicultural Attitudes (TMAS) onto Experiential and Attitudinal Predictors at Time 1 and Time 2*

Predictor	$\Delta R^2$	$\beta$	$F$	$df_1, df_2$	$p$
<b>Time 1</b>	.13		6.25	3, 130	.00
Urban Experience		.07			
UTI		.33*			
UEP		-.04			
<b>Time 2</b>	.16		7.94	3, 130	.00
Urban Experience		-.03			
UTI		.42*			
UEP		-.10			

Note: \*  $p < .01$ . Urban experience was on a continuum ranging from 1 (no experience at all) to 5 (extensive experience).

the post-course survey (Time 2) among the five newly re-designed courses. Consistent with expectations, these students demonstrated significant growth in their awareness of social justice over time. A statistically significant increase in Urban Teaching Intentions (a scale of 1 to 5) was observed from Time 1 ( $M = 3.04$ ) to Time 2 ( $M = 3.17$ ),  $t(136) = -2.21$ ,  $p = .03$ . These re-designed course enrollees also demonstrated significant positive increases in Urban Education Perceptions,  $t(136) = -2.25$ ,  $p = .03$ , and Teacher Multicultural Attitudes,  $t(136) = -2.48$ ,  $p = .01$ . Table 1 depicts the means, standard deviations, and correlations for participants in the newly re-designed courses on each of the four scales. Again, all scores are on a scale from 1 to 5.

As hypothesized, students enrolled in the re-designed courses indicated higher levels of Urban Teaching Intentions ( $M = 3.17$ ) than those in the control courses ( $M = 2.93$ ), at the conclusion of the semester. This pattern was echoed in Urban Education Perceptions (Re-designed,  $M = 3.07$ ; Control,  $M = 3.00$ ), Teacher Multicultural Attitudes (Re-designed,  $M = 3.84$ ; Control,  $M = 3.82$ ), and Teacher Sense of Efficacy (Re-designed,  $M = 3.93$ ; Control,  $M = 3.72$ ). Although these findings suggest that participation in the re-designed courses contributes to awareness of social justice (in comparison to the parallel control courses), the difference in scale levels at Time 2 was significant only for Teacher Sense

of Efficacy,  $F(1, 181) = 6.04$ ,  $p = .02$ .

Using both pre-course and post-course data, multiple regressions were conducted among the five newly re-designed courses to determine which factors were significant predictors of participants' attitudes towards multiculturalism and diversity in the classroom (TMAS). The variables of self-rated urban experience, Urban Education Perceptions, and Urban Teaching Intentions were entered as main predictors. Table 2 displays the results of these analyses.

At both Time 1 and Time 2, only Urban Teaching Intentions emerged as a significant predictor of Teacher Multicultural Attitudes. That is, participants voicing more intent to teach in an urban school were significantly more likely to voice positive attitudes towards multiculturalism and diversity in the classroom. At Time 1, the main predictors combined to explain 13% of the variance in TMAS scores. These predictors culminated to explain 16% of the variance at Time 2.

While these presented results are noteworthy and support the stated hypotheses, the authors refrain from drawing conclusions from these preliminary data. A forthcoming manuscript will include more thorough (quantitative and qualitative) analyses using comprehensive data from the full academic year, integrating theories of moral reasoning and prosocial development rooted in situated cognition.

**Robert Lee** serves as Illinois State University’s Director of Chicago Programs and Partnerships, which includes the Chicago Teacher Education Pipeline™. Over the past six years and during his tenure at Illinois State, Dr. Lee has initiated, developed and sustained partnerships between the university’s five teacher producing colleges and Chicago Public Schools District 299, various non-profit and community-based organizations, corporations, and businesses supporting urban teacher education. This collaborative model of teacher recruitment and preparation has raised teacher quality to improve school progress; transformed public schools into community-driven learning centers; and has received national acclaim as recipient of the American Association of Colleges for Teacher Education’s *Best Practice Award in Support of Global Diversity and Inclusion*,

the National Network for Educational Renewal’s *Nicholas Michelli Award for Promoting Social Justice*, and most recently recognized for *Excellence in the Education of Emerging Education Leaders* at the Association of Teacher Educators, 2010 Leadership Academy.

**Gary Creasey** received his doctoral degree in Developmental Psychology at Virginia Commonwealth University and is currently a Professor of Psychology at Illinois State University. Dr. Creasey has published extensively in developmental and clinical journals, served on multiple editorial boards, received extramural grant support (e.g., NIH), and is actively involved in research efforts devoted to the Scholarship of Teaching and Learning. Dr. Creasey’s research efforts focus on intimacy, attachment and romantic relationships. He recently authored the textbook, *Research*

*Methods in Lifespan Development*.

**Brent Showalter** received his B.A. in Psychology from the University of Missouri-Columbia and M.S. in Industrial/Organizational Psychology from Illinois State University. He currently coordinates research and program evaluation for Illinois State University’s community-based work in Chicago. He has expertise in quantitative research designs, methodologies, and statistical analyses.

**Verenice D’ Santiago** earned her B.A. in Psychology from St. Mary’s University, San Antonio and is currently a PhD student in the School Psychology program at Illinois State University. Her primary research interests are in the areas of urban teaching, consultation in urban schools, and school-based sex education programs, particularly among the Latino population.

Appendix 1.

*Sample Data Analytic Approach Involving Identification of Social Justice Domains, Core Ideas, and Cross-Analysis (Hill et al., 2005).*

Sample Domains	Sample Categories	Frequency	Sample Core Ideas
Empathy	Unsure Lack of empathy Focus on Personal Distress Empathic Concern	Variant Variant General Typical	Participant uncertain of their feelings Indicates they are not concerned or bothered by injustice Participant expresses their own anger, fear, or sadness Participant expresses sorrow or concern for others
Solutions to Problems	Unsure There is no solution Vague or general solution Specific teacher training practices Innovative school practices Community improvement National attention	Variant Variant Variant General General Typical Typical	Participant unsure how to solve problem Sees problem as irresolvable Vague/general idea, “We need better teachers” Participant mentions team teaching or looping Participant discusses benefits of career academies Participant identifies impact of community organization Participants makes reference to specific national reform
Qualifications to Assist	Unsure Sees barriers Expresses confidence Skill development	Variant Variant General General	Participant uncertain they could teach in urban setting Expresses fear or anxiety about urban context Participant indicates they are confident Indicates they have developed skills for urban teaching

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