

## PARTNER Project

# Course Development Grant: Spring 2007 Report



# TABLE OF CONTENTS

TABLE OF CONTENTS .....	2
EXECUTIVE SUMMARY .....	3
METHODOLOGY .....	4
OVERALL EFFECTS OF REDEVELOPED COURSES .....	6
EFFECTS OF CLINICAL VISITS TO URBAN SCHOOLS .....	7
EFFECTS BY COURSE/PROGRAM.....	9
CORRELATIONAL FINDINGS.....	11

## EXECUTIVE SUMMARY

One of the goals of the Teacher Quality Enhancement – PARTNER project is to increase beginning teachers' level of preparedness for and exposure to urban school settings primarily in Chicago's Little Village community. To that end, the TQE's Upper Division Recruitment and Program Development Work Team issued a Request for Proposals (RFP) targeting campus-wide faculty members who teach teacher education courses at ISU.

The RFP asked faculty members to describe how they would redesign an existing course to better prepare future teachers for the realities of urban and high-need settings. As part of the grant recommendation, proposed redesigned courses were strongly urged to include an urban clinical/field experience component to take place in the Little Village (Chicago) community.

In the Summer of 2006, 7 ISU faculty members were selected for the Course Development Grant. Faculty grantees received a partial bibliography of suggested readings/resources and a copy of two common texts. Grantees also participated in a Little Village residency trip to learn about the social, cultural, and educational opportunities available in that community.

A research study was conducted to evaluate the effects of the redeveloped courses on students' intentions to teach in an urban setting, their attitudes towards urban education, their attitudes towards multiculturalism and diversity in education, and their self-efficacy as teachers. During the Spring 2007 semester, data were collected from five redeveloped courses, a stand-alone experiential trip to Chicago, and a course that did not go through the redevelopment process, which served as a control. Overall, 217 students participated in the study. Findings suggest a modest but statistically significant positive effect of the redeveloped courses on students' intentions to teach in an urban setting, on their attitudes towards urban education, and their self-efficacy. However, more detailed analyses found that these results varied by course/instructor. The study's findings are presented in this report.

# METHODOLOGY

In order to evaluate the effects of the redeveloped courses on students' attitudes over time, the study was conducted in a pre- and post-survey design. Students in the targeted courses were asked to complete a survey during the first weeks of the Spring 2007 semester and then again at the end of the semester.

The targeted courses included five redeveloped courses through the Course Development Grant, one stand-alone experiential trip to Chicago, and a comparison course that had not been redeveloped. To protect the instructors' identities, neither the instructors' names nor the course titles will be named in this report. Instead, they will be referred to as "Instructor A", "Instructor B", and so forth, and "Course 1", "Course 2", and so forth. The relationship between the instructor, the course number, and their respective department is shown in Table 1.

Table 1

*Courses, Instructors, and Departments*

Course #	# of Sections	Instructor	Department
Course 1	1	Instructor A	Biological Sciences
Course 2	2	Instructor A Instructor B	Department of History
Course 3	2	Instructor C	Educational Administration & Foundations (EAF)
Course 4	3	Instructor D	EAF
Course 5	1	Instructor E	Lang., Lit., & Cultures
Trip	1		College of Education
Course 6 (Control)	2	Instructor F	EAF

**Participants.** All students in the selected courses were given the chance to participate and were offered a chance to win a \$25 giftcard as an incentive to participate. Two hundred and seventy one students were asked to participate, 217 completed at least one of the surveys, and 125 completed both surveys in their entirety (representing a 46% response rate). Due to practical difficulties in data collection, students in Course 6 (Control) completed the survey only at the end of their course.

The sample's demographic information was collected in the first survey administration. The average age of the respondents for whom complete data was available was 21.8 years of age ( $SD = 3.83$ ). There were nine sophomores (7%), 70 juniors (56%), and 46 seniors (37%). The sample included 85 women (68%). There were 106 Whites (84.8%), three African-Americans (2.4%), nine Hispanic/Latinos (7.2%), one Asian-American (.8%), and five participants of other ethnicities (4%). Seven (5.6%) of the participants indicated they had attended high school in an urban setting, 85 (68%) attended a suburban high school, 27 (21.6%) reported attending high school in a rural setting, and 5 (4%) attended high school in another setting. 115 (92%) indicated they intended to begin teaching upon their graduation from Illinois State University. Eighty-seven (70%) of the participants indicated they had had no or very little experience in an urban school setting.

**Measures.** The survey instrument (see Appendix A) included four measures; the Urban Teaching Intentions (UTI) scale, the Urban Education Attitudes scale (UEA), the Teacher Multicultural Attitudes Scale (TMAS), and the Teacher Sense of Efficacy Scale (TSSES).

The UTI and UEA measures were specifically designed for this study and were composed of eight and 11 items, respectively. The UTI measured students' intentions of teaching in an urban setting once they graduate. The UEA measured participants' endorsement of stereotypical beliefs about urban schools and is scored in a manner that higher scores mean more positive attitudes towards urban education. Reliability analysis found that the UTI scale presented satisfactory internal consistency ( $\alpha = .81$ ) while the UEA presented an only moderate reliability ( $\alpha = .59$ ). Item analysis suggested the exclusion of two items on the UTI scale and three items on the UEA

scale. Upon exclusion, the UTI and UEA scales were found to have alphas of .82 and .64, respectively, for the first survey administration, and .85 and .78, respectively, for the second survey administration.

The TMAS is a 20-item survey instrument designed to measure multicultural awareness for teachers working in kindergarten through grade 12 (Ponterotto, Baluch, Greig, & Rivera, 1998). The wording of some items was adapted for administration to preservice teachers. Previous work has demonstrated the reliability and validity of the scale (Ponterotto et al., 1998). The observed alpha was .83 and .83 for the first and second survey administrations.

The TSES has a long-form (24 items) and a short-form (12 items) (Tschannen-Moran & Woolfolk Hoy, 2001). The short-form was utilized for this study. The instrument developers reported an alpha of .90 (Tschannen-Moran & Woolfolk Hoy, 2001). For this study, six items that were relevant to urban education were added to the scale. The observed alpha for the scale was .92 and .92 for the first and second survey administrations. Thus, the added items did not seem to affect the scale's reliability.

## OVERALL EFFECTS OF REDEVELOPED COURSES

A paired-samples *t*-test was conducted for each of the four scales to determine if there was a significant increase from the first survey administration (Time 1) to the second survey administration (Time 2) in the general sample. Analyses determined that there was a statistically significant increase over time in Urban Teaching Intentions,  $t(124) = 3.47, p = .001$ , in Urban Education Attitudes,  $t(124) = 3.11, p = .002$ , and in Teacher's Sense of Efficacy,  $t(119) = 2.66, p = .009$ . There was no statistically significant change in Teacher's Multicultural Attitudes. Figure 1 presents these results graphically.

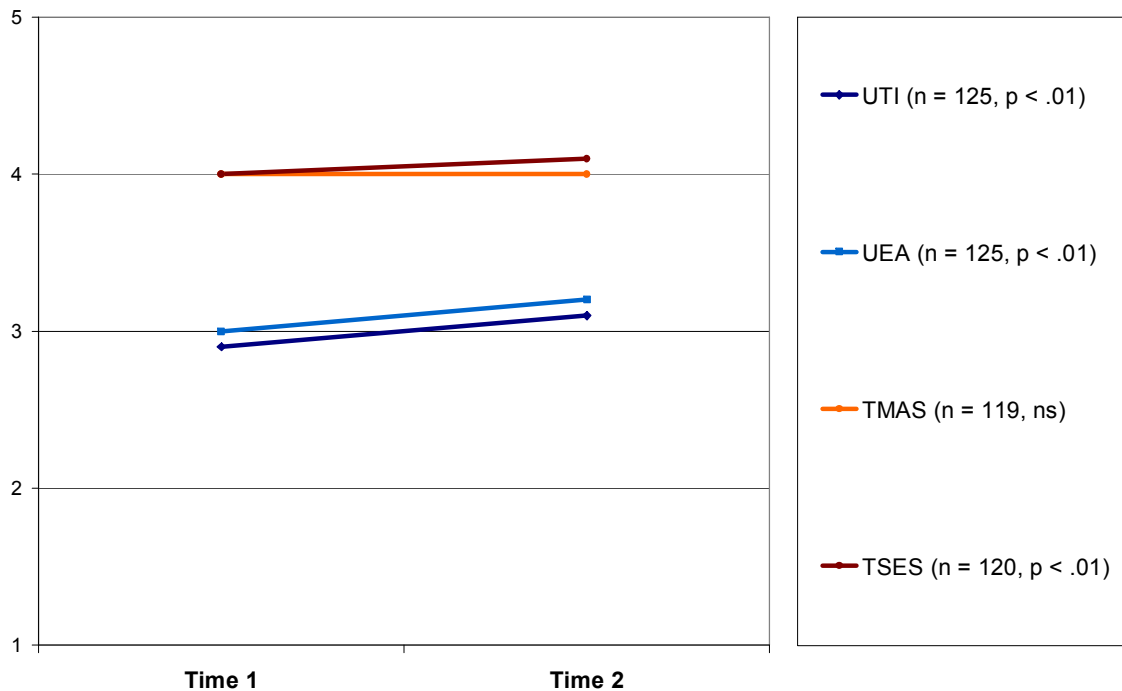


Figure 1. Overall effects of redeveloped courses on UTI, UEA, TMAS, and TSES.

Table 2 shows the means, standard deviations, and effect sizes for each of the scales at both points in time.

Table 2

*Means, standard deviations, and effect sizes at Time 1 and Time 2.*

Scale	Time 1	Time 2
	Mean (SD)	Mean (SD)
UTI	2.91 (.78)	3.11 (.82)
UEA	3.04 (.48)	3.19 (.58)
TMAS	3.99 (.44)	4.00 (.45)
TSES	3.99 (.50)	4.09 (.47)

An examination of the observed means and effect sizes indicates that, although there were statistically significant increases in three of the four scales, the effects were relatively small.

# EFFECTS OF CLINICAL VISITS TO URBAN SCHOOLS

It was an assumption of the Course Development Grant that including a field-based trip to urban schools would enhance a course's impact on students' attitudes and dispositions. Of the 125 participants for whom complete data were available, 36 (28.8%) chose not to go on an experiential trip, 69 (55.2% went on an experiential trip, and 20 (16%) did not report whether they went on a trip.

Multiple regression analysis was used to test whether there was a moderation effect of attending an experiential trip on participants' change in attitudes as measured by the four scales. Surprisingly, no significant differences between the two groups' attitudinal change over time were found. Figure 2, 3, 4 and 5 present the differences between the "trip" and "no trip" groups in terms of UTI, UEA, TMAS, and TSES.

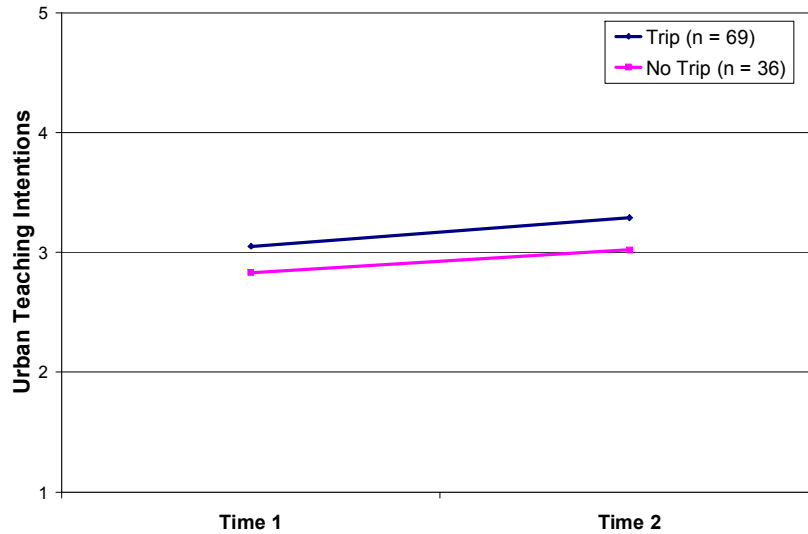


Figure 2. Differences between "Trip" and "No Trip" groups on Urban Teaching Intentions (UTI).

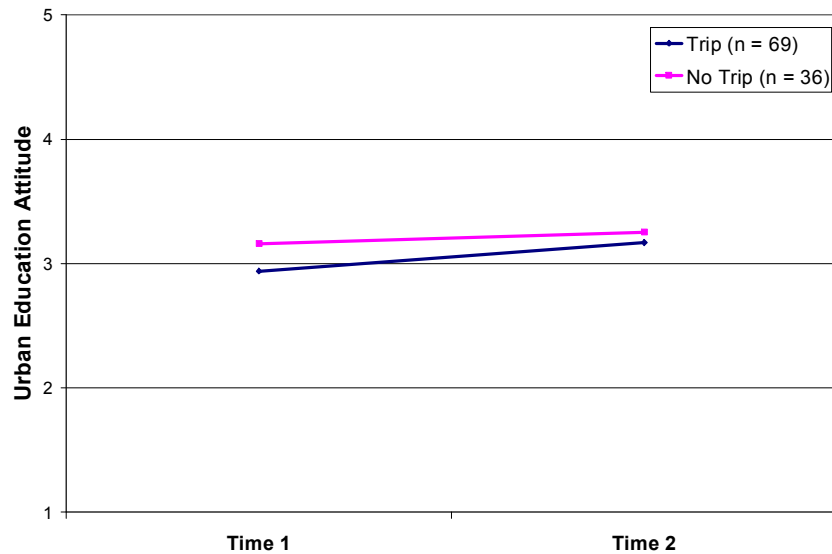


Figure 3. Differences between "Trip" and "No Trip" groups on Urban Education Attitudes (UEA).

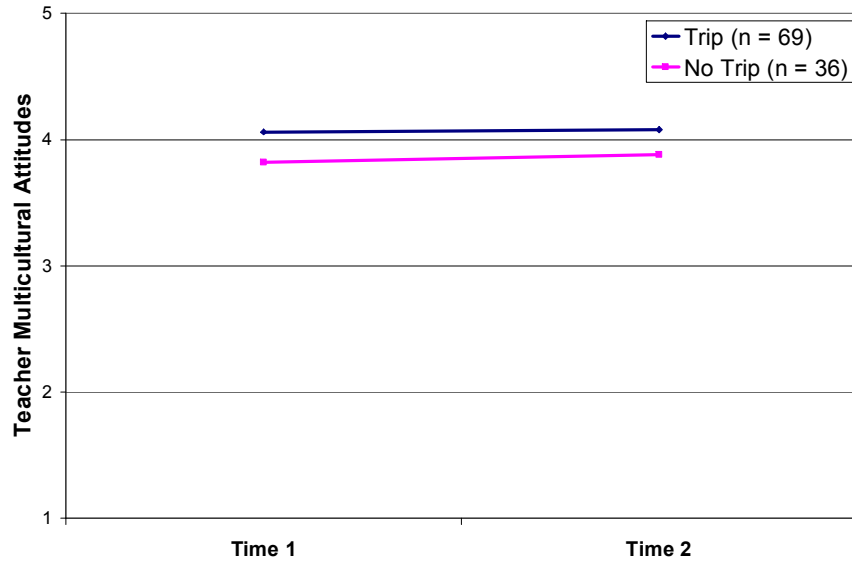


Figure 4. Differences between “Trip” and “No Trip” groups on Teacher Multicultural Attitudes (TMAS).

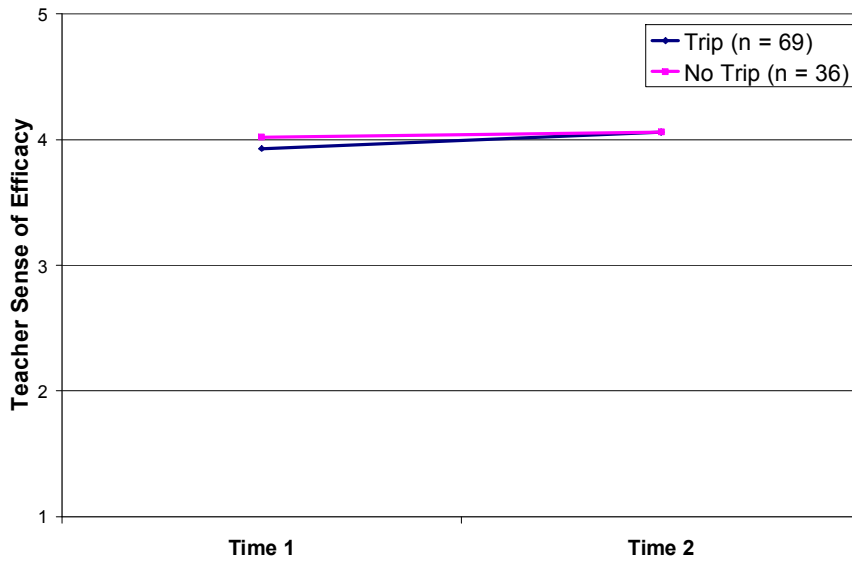


Figure 5. Differences between “Trip” and “No Trip” groups on Teacher Sense of Efficacy (TSES).

It is interesting to note that the students who chose to go on a trip tended to, on average, have slightly greater intentions to teach in an urban setting, more positive multicultural attitudes, and a higher sense of efficacy at the outset of the study. In fact, on the TMAS, the difference between the “trip” group ( $M = 4.06$ ,  $SD = .38$ ) and the “no trip” group ( $M = 3.82$ ,  $SD = .54$ ) was statistically significant at Time 1,  $t(98) = -2.62$ ,  $p = .01$ ,  $d = .53$ . On the other hand, the “trip” group ( $M = 2.94$ ,  $SD = .49$ ) held significantly less positive attitudes towards urban education (UEA) than the “no trip” group ( $M = 3.16$ ,  $SD = .46$ ) at Time 1,  $t(103) = 2.22$ ,  $p = .03$ ,  $d = .44$ .

## EFFECTS BY COURSE/PROGRAM

To test whether there were significant differences in students' attitudinal changes due to the specific course they were in, four one-way ANOVAs (one for each scale) were ran with difference scores (Time 2 – Time 1 scores) as the dependent variable and the redeveloped courses as the independent variable. Each of the analyses is presented below.

### Urban Teaching Intentions (UTI)

There was no significant effect of course on change in students' Urban Teaching Intentions. As can be seen in figure 6, students in all the surveyed courses and programs showed, in varying degree, an increase in their intentions to teach in an urban setting.

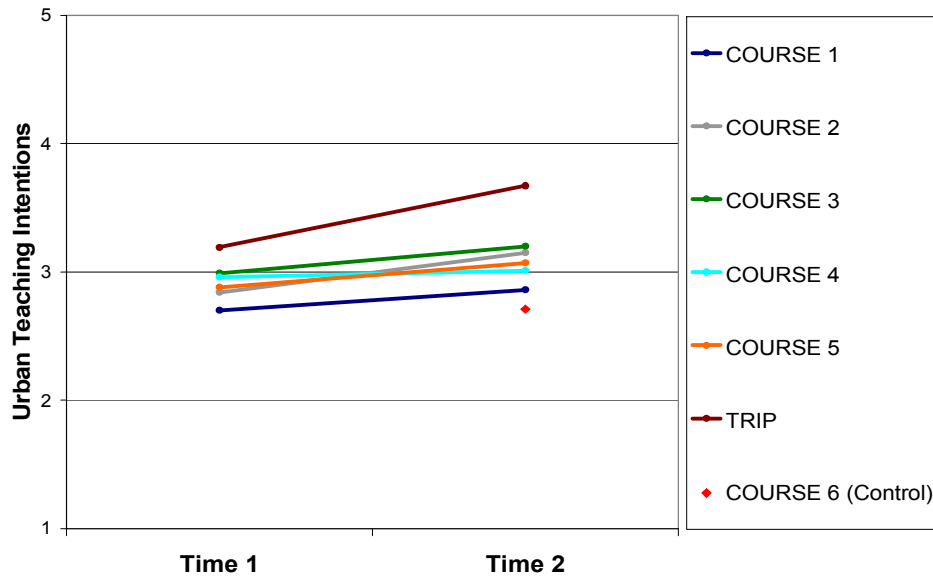


Figure 6. Change in Urban Teaching Intentions by course/program.

### Urban Education Attitudes (UEA)

There was a significant effect of course taken on change in Urban Education Attitudes,  $F(5, 117) = 5.03$ ,  $p < .001$ , partial  $\eta^2 = .18$ . As can be seen in Figure 7, participants' attitudes towards urban education became more positive in courses 2, 3, 5, and the stand-alone trip. These attitudes became less positive in courses 1 and 4.

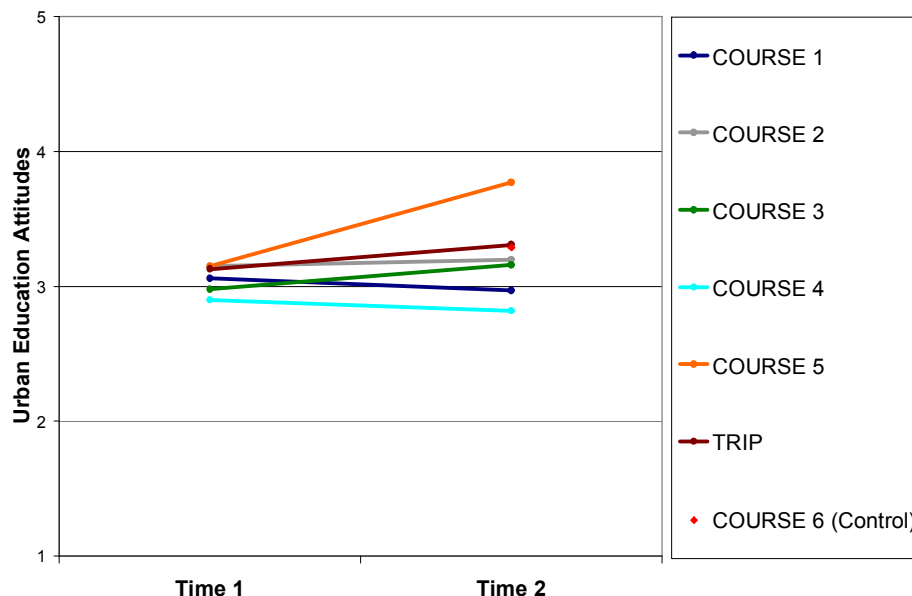


Figure 7. Change in Urban Education Attitudes by course/program.

### Teacher Multicultural Attitudes (TMAS)

There was a significant effect of course taken on change in Multicultural Attitudes,  $F(5, 111) = 3.22, p < .01$ , partial  $\eta^2 = .13$ . Figure 8 shows participants' change in multicultural attitudes over the course of the semester. There was an observed increase for students in course 3 and the stand-alone trip. For all other courses, there was an observed decrease in students' multicultural attitude scores.

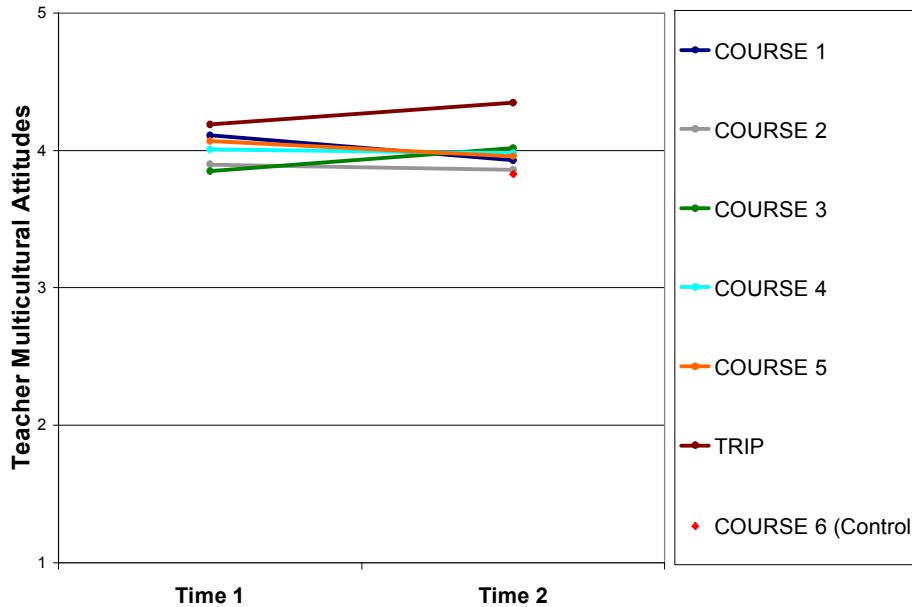


Figure 8. Change in Teacher Multicultural Attitudes by course/program.

### Teacher Sense of Efficacy (TSES)

There was a significant effect of course taken on change in Teacher Sense of Efficacy,  $F(5, 112) = 3.07, p = .012$ , partial  $\eta^2 = .12$ . As Figure 9 depicts, there was an increase over time in courses 1, 3, 5, and the stand-alone trip. Students' sense of efficacy, on average, diminished in courses 2 and 4.

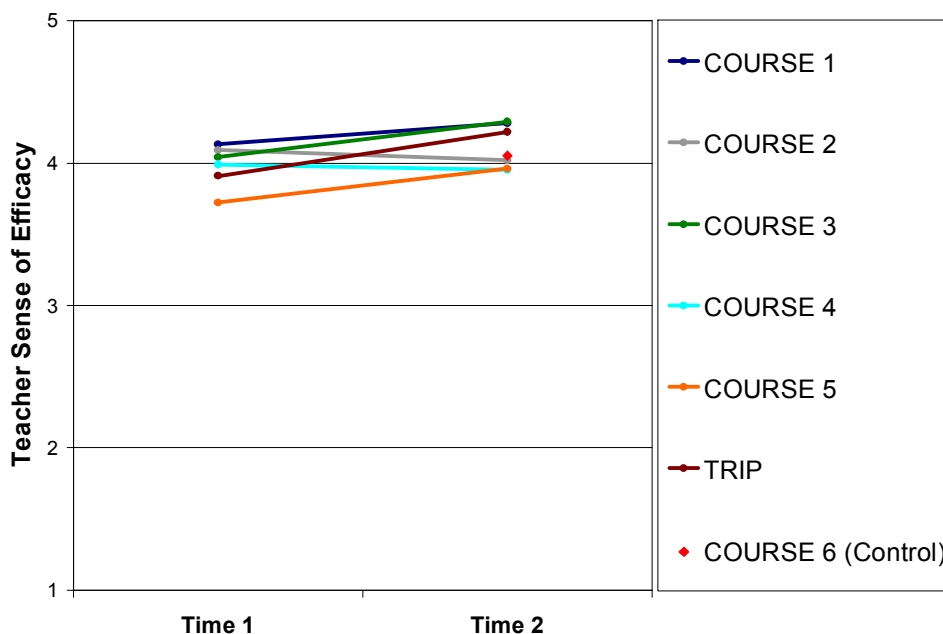


Figure 9. Change in Teacher Sense of Efficacy by course/program.

## CORRELATIONAL FINDINGS

Multiple regression analyses found that participants' race/ethnicity (White versus Non-White) and high school setting (Urban versus Non-Urban) were not significant predictors of *change* from Time 1 to Time 2 in urban teaching intentions, urban education attitudes, teacher multicultural attitudes, or teacher sense of efficacy.

Hierarchical multiple regression analysis was used to determine which factors were significant predictors of participants' intentions to attend college at Time 1. The demographic variables of race/ethnicity and participant high school setting were entered in the first step. The experiential variables of self-rated experience in an urban school setting and a composite measure of urban-relevant coursework taken at ISU were included in the second step. Finally, in the third step, the attitudinal variables of multicultural attitude, urban education attitude, and sense of efficacy at Time 1 were entered. Table 3 displays the results of this analysis.

Table 3

*Hierarchical Multiple Regression of Urban Teaching Intentions (UTI) onto Demographic, Experiential, and Attitudinal Predictors at Time 1.*

Step/Predictor	$R^2$	$\Delta R^2$	$\beta$	$F$	df1, df2	$p$
Step 1	.14	.14		14.28	2, 178	.000
Race/Ethnicity			.29***			
HS setting			-.16*			
Step 2	.25	.11		14.64	4, 176	.000
Race/Ethnicity			.22**			
HS setting			-.06			
Urban experience			.31***			
ISU relevant coursework			.14*			
Step 3	.35	.10		13.49	7, 173	.000
Race/Ethnicity			.19**			
HS setting			-.03			
Urban experience			.29***			
ISU relevant coursework			.12 <sup>†</sup>			
TMAS			.28***			
UEA			.11			
TSES			.06			

Note: <sup>†</sup>  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . The "Race/Ethnicity" variable was coded as "0" for Whites and "1" for Non-Whites. The "HS Setting" variable was coded as "0" for Urban HS and "1" for Non-Urban HS.

At Time 1, three variables emerged as statistically significant predictors of participants' intentions to teach in an urban setting; (1) ethnicity/race ( $\beta = .19$ ), with non-White students being more likely to want to teach in an urban school, (2) urban experience ( $\beta = .29$ ), with more experienced students scoring higher on the UTI scale, and (3) teacher multicultural attitude ( $\beta = .28$ ). Curiously, each of these variables represents a demographic, an experiential and an attitudinal component, respectively, which illustrates the importance of all these three aspects.

All seven predictor variables combined to explain 35% of the variance in UTI scores, which is a respectable amount, particularly in field survey research. However, there are limitations to these data. For instance, all available data were gathered through self-report surveys and there is a reasonable concern that these data suffer from method bias. Further, correlational analyses make it difficult to draw firm, directional conclusions. Nonetheless, this study is an important step in better understanding how teacher education candidates can be better prepared and stimulated to take on a teaching career in high-need, urban centers.

Chicago Teacher Education Pipeline Programs & Partnerships

College of Education, Illinois State University

Phone: (773) 522-1780

[www.teacherpipeline.ilstu.edu](http://www.teacherpipeline.ilstu.edu)

Last Update: 02.13.2008