

# VALUE ADDED TEACHER PREPARATION ASSESSMENT OVERVIEW OF 2007-08 STUDY

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The Louisiana Board of Regents is the first in the nation to publicly use a performance model based upon the achievement of students in grades 4-9 as one of several measures to examine the effectiveness of teacher preparation programs. The State has supported the development and implementation of a Value Added Teacher Preparation Assessment Model that utilizes data from all school districts in the state and all 22 public and private teacher preparation programs. This has been a collaborative effort involving the Louisiana Board of Regents, Office of the Governor, Board of Elementary and Secondary Education, and Louisiana Department of Education.

#### MAJOR FINDINGS OF STUDY

The five major findings of the 2007-08 Value Added Teacher Preparation Assessment study are:

- Some teacher preparation programs are preparing new teachers whose teaching effectiveness is equivalent to experienced certified teachers.
- Varying levels of effectiveness exist within teacher preparation programs and across teacher preparation programs.
- The mean ACT scores of graduates in the programs in this assessment are very similar and as a result do not explain differences in teacher preparation program effectiveness.
- ACT mathematics scores of individual teachers are modest predictors of teacher effectiveness in mathematics.
- Certified teachers are more effective than teachers who are not certified to teach the content.

#### **BACKGROUND**

Louisiana recognized the need for teacher preparation programs to prepare high quality new teachers when a Blue Ribbon Commission for Teacher Quality presented 60 recommendations in 1999-2000 and an additional 40 recommendations in 2000-2001 to improve teacher quality to the Board of Regents and Board of Elementary and Secondary Education. These recommendations resulted in the creation of new certification structures, redesign of all public and private teacher preparation programs, evaluation of all redesigned programs by national consultants, and the approval of redesigned programs by July 1, 2003. In addition, the recommendations led to the creation of a new Teacher Preparation Accountability System that examined passage rates of

program completers on state licensure examinations, survey data from new teachers about the quality of their teacher preparation programs, and quantity of program completers. The Blue Ribbon Commission also recommended that a *growth in student achievement indicator* be added to the Teacher Preparation Accountability System once the state developed the capacity to assess growth of achievement of students taught by new teachers.

Funding was provided by the Board of Regents during 2003-04 and 2004-05 for Dr. George Noell, Department of Psychology, Louisiana State University and A&M College, and his research team to develop a Value Added Teacher Preparation Assessment Model using data from 10 school districts in Louisiana. During 2005-06 and 2006-07, the study was expanded to include all school districts and 22 public and private teacher preparation programs in the state. Names of universities that met the criteria for inclusion in the study were released to the public during 2006-07. During 2007-08, funding was provided by the Carnegie Corporation of New York and the Louisiana Board of Regents to conduct a Quantitative Research Study and a Qualitative Research Study to further expand the model.

#### 2007-08 QUANTITATIVE RESEARCH STUDY

The Value Added Teacher Preparation Assessment developed for Louisiana 1) models typical student achievement based on prior achievement, demographics, and attendance, 2) assesses actual student achievement, and 3) calculates *effect estimates* that identify the degree to which students taught by new teachers met achievement of similar students taught by experienced teachers. The teacher preparation *effect estimates* are based upon multiple new teachers in multiple schools across multiple school districts in the state. The *predictors* examine student variables, teacher variables, and building variables and differ slightly based upon the content areas (e.g., mathematics, science, and social studies) being examined. Please refer to Table 1 for a listing of the predictors for each content area.

New teachers in the study are defined as teachers who are in their first or second year of teaching after 1) completing their teacher preparation program leading to initial certification, 2) receiving a standard teaching certificate, 3) teaching in their area of certification, and 4) having completed a teacher preparation program within five years. *Experienced teachers* are all other certified professionals who possess a standard teaching certificate and have taught in their area of certification for two or more years.

The model has the capacity to examine the following four pathways to teacher licensure: 1) Undergraduate Pathway; 2) Alternate Pathway – Master of Arts in Teaching; 3) Alternate Pathway – Practitioner Teacher Program; and 4) Alternate Pathway – Non-Master's/Certification Only Program. All three alternate pathways require candidates to meet the same entry/exit requirements and require all candidates to address the same standards; however, the mode of delivery varies.

Due to the redesign of all teacher preparation programs in Louisiana during 2000-2003, universities stopped admitting new candidates to pre-redesign programs on July 1, 2003. Candidates who started the pre-redesign programs prior to July 1, 2003 were allowed to complete the pre-redesign programs. As a result, a phase-out period has been occurring for pre-redesign programs while post-redesign programs have been implemented. *Effect estimates* for pre-redesign programs were reported in the 2006-07 Value Added Teacher Preparation

Assessment report as baselines. The 2007-08 Value Added Teacher Preparation Assessment report identifies *effect estimates* for post-redesign programs.

For a teacher preparation program to be included in the study in a content area, the program had to have 25 or more new teachers from the current (redesigned) program who were teaching in their area of certification and who had remained with the students for the full academic year. Only seven teacher preparation programs met this criteria for their post-redesign alternate certification programs. It is anticipated that large teacher preparation programs will meet this criteria for their post-redesign undergraduate programs when the results of the 2008-09 Value Added Teacher Preparation Assessment study are released during summer 2009. In addition, additional alternate certification programs will meet the criteria when the 2008-09 results are released.

The current study used State achievement data in the areas of mathematics, science, social studies, language arts, and reading for students enrolled in grades 4-9 who attended public schools in Louisiana during a full school year (2004-05, 2005-06, and/or 2006-07). In addition, the study used data for all grades 4-9 teachers in public schools in Louisiana who taught students mathematics, science, social studies, language arts, and/or reading during 2004-05, 2005-06, and/or 2006-07. Please see Table 1 for more specific information about the types of data used for the analysis.

A Hierarchical Linear Model (HLM) was used for the analysis. This is a layered statistical model that is designed to analyze data within natural layers or groups (e.g., students within classes within schools.) In addition, Propensity Sample Matching (PSM) was used as a pre-analysis matching strategy to match the graduates of each teacher preparation program to all teachers who taught demographically similar classes within that school year using classroom means for prior achievement and demographic variables. Simultaneous analysis across both school years was used to produce separate demographic estimates and combined university estimates.

#### Performance Bands

Five bands of performance were created to focus attention on clusters of performance rather than a continuous ranking of teacher preparation programs. The definitions for the performance bands are listed below.

Level 1 – Programs whose *effect estimate* is above the mean effect for experienced teachers by its standard error of measurement or more. These are programs for which there is evidence that new teachers are more effective than experienced teachers, but this is not a statistically significant difference. The difference between these programs and the mean for new teachers would commonly be statistically significant.

Level 2 – Programs whose *effect estimate* is above the mean effect for new teachers by its standard error of measurement or more. These are programs whose effect is more similar to experienced teachers than new teachers.

Level 3 – Programs whose *effect estimate* is within a standard error of measurement of the mean effect for new teachers. These are programs whose effect is typical of new teachers.

Level 4 – Programs whose *effect estimate* is below the mean effect for new teachers by its standard error of measurement or more. These are programs for which there is evidence that new teachers are less effective than average new teachers, but the difference is not statistically significant.

Level 5 – Programs whose *effect estimate* is statistically significantly below the mean for new teachers.

## **Specific Findings**

The results for the seven teacher preparation programs in Louisiana that had a sufficient number of new teachers who completed redesigned or new alternate certification programs and met the criteria to be included in the study have been provided in Table 2 and are summarized below.

- Level 1 and Level 2: Northwestern State University and the University of Louisiana at Monroe prepared new teachers whose students demonstrated achievement in *four or more content areas* that was *comparable or above* the growth of achievement demonstrated by children taught by *certified professionals* who had taught two or more years.
- Level 1, Level 2, and Level 3: The New Teacher Project prepared new teachers whose students, demonstrated achievement in *four content areas* (i.e., science, mathematics, language arts, and reading) that was *comparable or above* the growth of achievement demonstrated by children taught by *certified professionals* who had taught two or more years. Achievement of student learning in one content area (i.e., social studies) was *comparable* to the growth of achievement of students taught by other *new teachers*.

Louisiana College prepared new teacher whose students demonstrated achievement in three content areas (i.e., social studies, language arts, and reading) that was comparable or above the growth of achievement demonstrated by children taught by certified professionals who had taught two or more years. Growth of student achievement in the remaining two content areas (i.e., science and mathematics) was comparable to the growth of achievement of students taught by other new teachers.

- Level 2: Nicholls State University prepared new teachers whose students demonstrated achievement in *one content area* (i.e., language arts) that *was comparable* to growth of achievement demonstrated by children taught by *certified professionals* who had taught for two or more years. The language arts content area was the only area in which the university had 25 or more new teachers in a single content area that met the requirements for inclusion in the study.
- Level 3: The University of Louisiana at Lafayette and the Louisiana Resource Center for Educators prepared new teachers whose students demonstrated growth in achievement that was *comparable to other new teachers in four of the five content areas*.
- Level 4 and 5: The University of Louisiana at Lafayette and the Louisiana Resource Center for Educators each had *one content area* where student achievement was *less than*

that of new teachers. In the content area of language arts, the University of Louisiana at Lafayette program performed at a level where there was evidence that new teachers were less effective than average new teachers but the difference was not statistically significant. In the content area of reading the Louisiana Resource Center for Educators program performed at a level that was statistically significantly less effective than new teachers. These two programs will be working with other programs in the state to identify ways to enhance the performance of their new teachers in the identified content areas.

ACT test scores were matched to the teacher data files to examine the impact of teacher candidates' educational attainment prior to entering teacher preparation on instructional effectiveness. It was determined that the mean ACT scores of graduates in the programs were very similar and did not explain differences in teacher preparation program effectiveness. However, when examining ACT scores of individual teachers across all teacher preparation programs, it was determined that ACT mathematics scores were modest predictors of teacher effectiveness in mathematics.

The research team also examined the impact of teacher preparation as indicated by teacher certification on teacher effectiveness. Teachers were classified as Not Content Certified if they were uncertified, teaching on a temporary authority, or teaching outside their area of certification. A statistically significant difference was found demonstrating that teachers who were certified in the content area they were teaching were more effective than those who were not certified to teach that content.

#### **QUALITATIVE RESEARCH STUDY**

A State Qualitative Research Team composed of a researcher from each of the 22 teacher preparation programs in the state was formed by Dr. Jeanne Burns, Louisiana Board of Regents/Governor's Office to answer the following research question.

Why do students taught by new teachers from some teacher preparation programs demonstrate greater growth in learning than students taught by new teachers from other teacher preparation programs?

During 2007-08, the State Qualitative Research Team identified a series of questions, determined types of data needed to answer the questions, and created tools to collect data pertaining to the teacher preparation curriculum in reading and mathematics, teacher preparation program structure, teacher preparation faculty attributes, and program completer attributes. The tools were used by the researchers during summer and fall 2008 to collect data for all 22 teacher preparation programs in the state. The data will be analyzed during spring 2009 to identify factors that are evident within Level 1 and Level 2 teacher preparation programs (identified in the 2007-08 value-added study) that produce new teachers who are as or more effective than certified professionals who have taught for two or more years.

In addition, the State Qualitative Research Team developed and identified instruments to be used to collect 1) survey data from student teachers, supervisors of student teachers, new teachers, and mentors of new teachers and 2) observation data for student teachers and new teachers. In addition, instruments were identified by the research team to collect data from a set of randomly

selected new teachers (from the 2007-08 value-added study) who agree to serve as teacher researchers. The teacher researchers will respond to questions on a disposition survey, working conditions survey, and in-depth survey. In addition, an in-depth observation of the teacher researchers will occur. The data will be analyzed during spring 2009 to identify factors that have a positive impact upon the effectiveness of new teachers. The results of the study will be disseminated to the public to assist teacher preparation programs in improving the effectiveness of new teachers who complete their programs.

#### CONCLUSION

Five years of developmental work has occurred as state leaders, lead researchers, research teams, university/district partners, and national experts have worked together to develop and implement Louisiana's Value Added Teacher Preparation Assessment. Louisiana is now to a point where it is possible to use an additional performance measure that extends beyond licensure test scores, completer satisfaction surveys, and number of completers to assess the effectiveness of new teachers who complete teacher preparation programs. While the achievement of children taught by new teachers should not be the only measure used to assess the effectiveness of teacher preparation programs, it does provide programs with valuable information about the impact of their completers upon the achievement of children in schools. The work that is occurring in Louisiana is helping teacher preparation programs determine "how" they are impacting the achievement of children and providing programs opportunities to work together to determine "why" some programs are more effective in preparing new teachers in specific content areas. Results from the 2007-08 Value Added Teacher Preparation Assessment study have shown that "Teacher Preparation Matters." As effective teacher preparation programs share their best practices in specific content areas with other programs in the state, the quality of new teachers and the achievement of students in Louisiana will continue to improve across the state.

#### ADDITIONAL INFORMATION

More in-depth information pertaining to the 2007-08 study can be found at the following URL in a 43 page technical report entitled: *Value Added Assessment of Teacher Preparation in Louisiana:* 2004-2005 to 2006-2007.

http://www.regents.state.la.us/Academic/TE/Value%20Added.htm.

Copies of technical reports for the 2003-04, 2004-05, 2005-06, and 2006-07 value added studies are also available on the web site.

Please contact Dr. George Noell (<u>gnoell@lsu.edu</u>) or Dr. Jeanne M. Burns (<u>jeanne.burns@la.gov</u>) for additional information.

# VALUE ADDED TEACHER PREPARATION ASSESSMENT MODEL BASIC ELEMENTS OF 2007-08 STUDY

Element	Description
Size of Data Base	Data for public schools, new and experienced teachers, and students in 70 school districts in Louisiana were used to calculate the <i>effect estimates</i> . Data were drawn from the 2004, 2005, 2006, and 2007 student assessments to examine the 2004-05, 2005-06, and 2006-07 school years. Across content areas and years approximately 163,000 to 243,000 students contributed to the analyses for each content area per year. These students were taught by approximately 5,100 to 7,300 teachers in 990 to 1300 schools per year.
Student Inclusion Requirements for Data	To be included in the study, students had to be promoted the previous year, be taught by the same teacher(s) for the entire year, and have completed standardizes tests in grades 4-9 for mathematics or English Language Arts or grades 4-8 for science and social studies.
Teacher Preparation Program Data	Title II and state data for teacher preparation program completers from 14 public universities, 6 private universities, and 2 private providers were used in the data analysis.
Content Achievement Areas	Data were used from the <i>Iowa Test of Basic Skills</i> , <i>i-LEAP</i> , and <i>LEAP-21</i> for student achievement in mathematics, science, social studies, reading, and language arts.
Pathways to Certification	Data were used for new teachers completing undergraduate teacher preparation programs and three separate alternative certification programs for initial certification as a teacher.
Minimum Number of New Teachers for Analysis	To be included in the analysis, a teacher preparation program had to have at least 25 new teacher within school year observations in a content area. In order to be included teachers had to teach a set of students for the full academic year.
Pre-Redesign Programs & Post- Redesign Programs	Pre-redesign programs are teacher preparation programs that admitted students prior to July 1, 2003. Post-redesign programs are all state approved new or state approved redesigned programs that have been implemented since July 1, 2003. This report only includes data for post-redesign programs.

# VALUE ADDED TEACHER PREPARATION ASSESSMENT MODEL BASIC ELEMENTS OF 2007-08 STUDY (CONT'D.)

Elements	Descriptions	
Predictors	Mathematics:	
	Student Variables: Prior Year Language Arts Test; Prior Year Reading Test; Prior Year Math Test; Prior Year Science Test; Prior Year Social Studies Test; Emotionally Disturbed; Section 504; Mild Mental Retardation; Other Health Impaired; Speech and Language; Specific Learning Disability; Special Education – Other; Gifted; Gender (male); Free Price Lunch; Reduced Price Lunch; Asian American; African American; Native American; Student Absences.	
	Classroom Variables: % Special Education; % Gifted; % Free Price Lunch; Teacher Absences; Mean Prior Year Math Test; Mean Prior Year Social Studies Test.	
	Building Variables: % Minority; % Free Price Lunch; Mean Prior Year Math Test; Mean Prior Year Science Test; Mean Prior Year Language Arts Test.	
	Science:	
	Student Variables: Prior Year Language Arts Test; Prior Year Reading Test; Prior Year Math Test; Prior Year Science Test; Prior Year Social Studies Test; Emotionally Disturbed; Mild Mental Retardation; Other Health Impaired; Specific Learning Disability; Special Education – Other; Gifted; Section 504; Limited English Proficiency; Free Price Lunch; Reduced Price Lunch; Gender (male); African American; Student Absences.	
	Classroom Variables: % Special Education; % Gifted; % Free Price Lunch; % Minority; Teacher Absences; Mean Prior Year Math Test.	
	Building Variables: % Free Price Lunch; Mean Prior Year Social Studies Test.	
	Social Studies:	
	Student Variables: Prior Year Language Arts Test; Prior Year Reading Test; Prior Year Math Test; Prior Year Science Test; Prior Year Social Studies Test; Emotionally Disturbed; Section 504; Mild Mental Retardation; Other Health Impaired; Specific Learning Disability; Special Education – Other; Gifted; Gender (Male); Free Price Lunch; Reduced Price lunch; Hispanic American; Asian American; African American; Student Absences.	
	Classroom Variables: % Free Price Lunch; Teacher Absences.	
	Building Variables: Mean Prior Year Reading Test; Mean Prior Year Science Test; Mean Prior Year Social Studies Test; % Limited English Proficiency; % Free Price Lunch.	

# VALUE ADDED TEACHER PREPARATION ASSESSMENT MODEL BASIC ELEMENTS OF 2007-08 STUDY (CONT'D.)

Elements	Descriptions	
Predictors (Cont'd.)	Language Arts:  Student Variables: Prior Year Reading Test; Prior Year Language Arts Test; Prior Year Math Test; Prior Year Science Test; Prior Year Social Stu Test; Emotionally Disturbed; Section 504; Mild Mental Retardation; Of Health Impaired; Speech and Language; Specific Learning Disabit Special Education — Other; Gifted; Gender (male); Free Price Lu Reduced Price Lunch; Asian American; African American; Hisp American; Limited English Proficiency; Student Absences.	
	Classroom Variables: % Special Education; % Free Priced Lunch; Teacher Absences; % Gender (Male); Mean Prior Year Social Studies Test; Mean Prior Year Math Test.	
	Building Variables: Mean Prior Year Language Arts Test; % Free Price Lunch; % Reduced Price Lunch.	
	Reading:	
	Student Variables: Prior Year Reading Test; Prior Year Language Arts Test; Prior Year Math Test; Prior Year Science Test; Prior Year Social Studies Test; Emotionally Disturbed; Mild Mental Retardation; Other Health Impaired; Speech and Language; Specific Learning Disability; Special Education – Other; Gifted; Section 504; Limited English Proficiency; Free Price Lunch; Reduced Price Lunch; Gender (Male); African American; Student Absences.	
	Classroom Variables: % Special Education; % Gifted; % Free Price Lunch; % Minority; % Gender (Male); Teacher Absences; Mean Prior Year Math Test.	
	Building Variables: % Minority; % Free Price Lunch; Mean Prior Year Reading Test; Mean Prior Year Science Test.	

# POST-REDESIGN ALTERNATE CERTIFICATION PROGRAMS TEACHER PREPARATION EFFECT ESTIMATES 2004-05, 2005-06, 2006-07 ACADEMIC YEARS

	Performance Bands	Social Studies	Science
Level 1:	Programs for which there is evidence that new teachers are more effective than experienced teachers.  (Effect estimate is a standard error of measurement or more above the mean effect for experienced teachers.)	University of LA – Monroe Effect Estimate: 2.8 (0.5, 5.0)	Northwestern State University Effect Estimate: 2.7 (1.5, 4.0) University of LA – Monroe Effect Estimate: 1.7 (0.6, 2.8)
Level 2:	Programs whose effect is more similar to experienced teachers than new teachers.  (Effect estimate is a standard error of measurement or more above the mean effect for new teachers.)	Louisiana College Effect Estimate: 2.6 (-0.5, 5.7)  Northwestern State University Effect Estimate: 0.8 (-0.4, 2.0)	The New Teacher Project  Effect Estimate: 0.7 (-1.1, 2.4)
Level 3:	Programs whose effect is comparable to new teachers.  (Effect is within a standard error of measurement of the mean effect for new teachers.)	The New Teacher Project  Effect Estimate: -0.1 (-2.2, 2.1)  University of LA – Lafayette  Effect Estimate: -1.1 (-4.0, 1.8)  Louisiana Resource Center  Effect Estimate: -3.2 (-5.5, -0.9)  Mean for New Teachers  (Effect Estimate -2.1)	Louisiana College Effect Estimate: 0.4 (-2.3, 3.1)  University of LA – Lafayette Effect Estimate: -0.9 (-3.0, 1.1)  Louisiana Resource Center Effect Estimate: -1.3 (-2.7, 0.1)  Mean for New Teachers (Effect Estimate -1.1)
Level 4:	Programs for which there is evidence that new teachers are less effective than average new teachers, but the difference is not statistically significant.  (Effect estimate is a standard error of measurement or more below the mean effect for new teachers.)		
Level 5:	Programs that are statistically significantly less effective.  (Effect estimate is statistically significantly below the mean of new teachers.)		

Note: The number in each cell is the mean adjustment to student outcome that would be expected based upon a standard deviation of 50. The numbers in parentheses are the 68% confidence intervals.

# POST-REDESIGN ALTERNATE CERTIFICATION PROGRAMS TEACHER PREPARATION EFFECT ESTIMATES 2004-05, 2005-06, 2006-07 ACADEMIC YEARS (CONT'D.)

	Performance Bands	Mathematics	Language Arts
Level 1:	Programs for which there is evidence that new teachers are more effective than experienced teachers.  (Effect estimate is a standard error of measurement or more above the mean effect for experienced teachers.)	The New Teacher Project  Effect Estimate: 3.1 (1.5, 4.7)	University of LA – Monroe Effect Estimate: 2.7 (0.3, 5.0)  The New Teacher Project Effect Estimate: 1.6 (0.2, 2.9)
Level 2:	Programs whose effect is more similar to experienced teachers than new teachers.  (Effect estimate is a standard error of measurement or more above the mean effect for new teachers.)	University of LA – Monroe  Effect Estimate: 1.1 (-0.4, 2.6)  Northwestern State Univ.  Effect Estimate: 0.8 (-1.4, 3.0)	Louisiana College Effect Estimate: 1.5 (-0.7, 3.6)  Northwestern State Univ. Effect Estimate: 0.5 (-1.1, 2.1)  Nicholls State University Effect Estimate: -0.3 (-1.7, 1.0)
Level 3:	Programs whose effect is comparable to new teachers.  (Effect is within a standard error of measurement of the mean effect for new teachers.)	Louisiana College Effect Estimate: -2.7 (-4.8, -0.6)  University of LA – Lafayette Effect Estimate: -2.9 (-4.5, -1.2)  Louisiana Resource Center Effect Estimate: -3.2 (-4.8, -1.6)  Mean for New Teachers Effect Estimate: -2.7	Louisiana Resource Center Effect Estimate: -1.8 (-3.3, -0.3)  Mean for New Teachers Effect Estimate: -1.8
Level 4:	Programs for which there is evidence that new teachers are less effective than average new teachers, but the difference is not statistically significant.  (Effect estimate is a standard error of measurement or more below the mean effect for new teachers.)		University of LA – Lafayette Effect Estimate: -4.6 (-6.7, -2.5)
Level 5:	Programs that are statistically significantly less effective.  (Effect estimate is statistically significantly below the mean of new teachers.)		

Note: The number in each cell is the mean adjustment to student outcome that would be expected based upon a standard deviation of 50. The numbers in parentheses are the 68% confidence intervals.

# POST-REDESIGN ALTERNATE CERTIFICATION PROGRAMS TEACHER PREPARATION EFFECT ESTIMATES 2004-05, 2005-06, 2006-07 ACADEMIC YEARS (CONT'D.)

	Performance Bands	Reading
Level 1:	Programs for which there is evidence that new teachers are more effective than experienced teachers.  (Effect estimate is a standard error	The New Teacher Project  Effect Estimate: 2.2 (0.7, 3.7)  Louisiana College  Effect Estimate: 2.1 (0.3, 3.9)
	of measurement or more above the mean effect for experienced teachers.)	
Level 2:	Programs whose effect is more similar to experienced teachers than new teachers.	Northwestern State University  Effect Estimate: 0.6 (-1.0, 2.1)
	(Effect estimate is a standard error of measurement or more above the mean effect for new teachers.)	
Level 3:	Programs whose effect is comparable to new teachers.	University of LA – Lafayette Effect Estimate: -2.4 (-4.2, -0.6)
	(Effect is within a standard error of measurement of the mean effect for new teachers.)	Mean for New Teachers  Effect Estimate: -1.8
Level 4:	Programs for which there is evidence that new teachers are less effective than average new teachers, but the difference is not statistically significant.	
	(Effect estimate is a standard error of measurement or more below the mean effect for new teachers.)	
Level 5:	Programs that are statistically significantly less effective.	Louisiana Resource Center  Effect Estimate: -6.2 (-8.2, -4.2)
	(Effect estimate is statistically significantly below the mean of new teachers.)	

Note: The number in each cell is the mean adjustment to student outcome that would be expected based upon a standard deviation of 50. The numbers in parentheses are the 68% confidence intervals.