TEXAS

Joanie Rethlake
Sridevi Rangineni
Elizabeth Thompson

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A Comparison of Student Outcomes for Credential and Non-Credential Teachers
Research Questions

1. Do students in classes taught by teachers who have a Texas Teacher Credential have greater persistence than students taught by teachers without the Texas Teacher Credential?

2. Do students in classes taught by teachers who have a Texas Teacher Credential have more level completions than students taught by teachers without the Texas Teacher Credential?
Texas Teacher Credential
Optional

- Open to teachers of record in AEFLA-funded programs
- Based upon professional development and critical self-reflection
- Emphasizes link between current adult education theory and professional practice
- Participants earn 130 points across six content areas
- Teachers create professional development plans that address individual needs based on the six content areas
Texas Teacher Credential
Core Content Areas

- Principles of Adult Learning
- Adult Learning Transaction
- Diverse Learning Styles, Abilities and Cultures
- Integrating Technology into Adult Learning
- Accountability and Assessment
- Contextual Learning
Almost all teacher effectiveness research was conducted for K–12 teachers. We are pioneers!

The assumption is that K–12 teachers work full time; Texas adult education teachers are largely part time

Nye 2004 and Harris and Sass 2007 studied effects of teacher experience. Based on their work, we have decided to consider teacher experience in three groups: 0–3 years, 4–5 years, more than 5 years
In a Nutshell

- Identified Credential teachers and non-credential groups
- Pulled student data from state database
  - Contact Hours
  - Completions in any domain
- Calculated student data by teacher
- T-test
About the Credential Group (Treatment Group)

- Completed Teacher Credential on or before June 30, 2011
- Active in the 2011–2012 year
- Assigned to a class in 2011–2012
- 44 Teachers
About the Non-Credential Group (Control Group)

- Active in the 2011–2012 year
- Assigned to a class in 2011–2012
- Matched to the Treatment Group on three variables:
  - Years of experience
  - Employment Status
  - Level of Education (Degree)
- Three Control teachers for every teacher in the Treatment Group
- 132 teachers to start
Adjustments to Non–Credential Group (Control Group)

- 4 teachers removed – team taught with a teacher not in this study during the project year
- 2 teachers removed because they began and completed the credential during the project year
- 2 teachers removed because they were assigned to 7–8 classes during the year.
- Final number: 124
Limitations of the Study

- Study includes only one year of data
- Study is based on teacher characteristics, not student characteristics or whether the program is rural or urban
- Study cannot account for teacher motivation to participate in the Credential program
Years of Experience

- 0–3 Years: 19% Non-Credentialed, 16% Credentialed
- 4–5 Years: 23% Non-Credentialed, 18% Credentialed
- 5 or More Years: 58% Non-Credentialed, 66% Credentialed

N=124
N=44
Employment Status

- **Part Time**
  - Non-Credentialed: 65% (N=124)
  - Credentialed: 70% (N=44)

- **Full Time**
  - Non-Credentialed: 33% (N=124)
  - Credentialed: 30% (N=44)

- **Volunteer**
  - Non-Credentialed: 2% (N=124)
  - Credentialed: 0% (N=44)
Teacher Educational Levels

- Bachelor:
  - Non-Credentialed: 52%
  - Credentialed: 61%
  - Total: N=124

- Master:
  - Non-Credentialed: 38%
  - Credentialed: 43%
  - Total: N=44

- Doctorate:
  - Credentialed: 9%
  - Total: N=124

- Less than Bachelor:
  - Total: N=44
# Observations

<table>
<thead>
<tr>
<th></th>
<th>Non-Credential</th>
<th>Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Years Experience</strong></td>
<td>8.4</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>2011–2012 PD Hours/teacher</strong></td>
<td>24.5</td>
<td>57</td>
</tr>
<tr>
<td><strong>Contact hours/student</strong></td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td><strong>Participants/teacher</strong></td>
<td>69</td>
<td>91</td>
</tr>
</tbody>
</table>
## Outcomes by Indicator

<table>
<thead>
<tr>
<th></th>
<th>Non-Credential</th>
<th>Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Progress Tested</td>
<td>72</td>
<td>76</td>
</tr>
<tr>
<td>% Completed a Level in any Domain</td>
<td>66</td>
<td>67</td>
</tr>
<tr>
<td>% Completed 2 or More Levels in any Domain</td>
<td>47</td>
<td>47</td>
</tr>
</tbody>
</table>
# T–Test Results

<table>
<thead>
<tr>
<th></th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test for % Progress Tested</td>
<td>0.0883</td>
</tr>
<tr>
<td>T-test for Completion Rate for One Level Completion</td>
<td>0.8189</td>
</tr>
<tr>
<td>Completion Rate for Two or More Level Completions</td>
<td>0.9138</td>
</tr>
</tbody>
</table>
Conclusions

- Credentialed teachers continue participating in professional development at more than double the rate of their non-credentialed peers
- Students in classes taught by credentialed teachers are progress tested at a slightly higher rate than those taught by non-credentialed teachers
- Credentialed teachers teach more students/teacher
Also of Note

- No way to quantify teacher confidence/satisfaction in the classroom
- Need data over several years to evaluate rates of teacher turnover for the two groups
- Data under additional review
Implications for Application

- Share results with the credential project staff and develop observations/recommendations
- Share results with local program directors, GREAT Centers, teachers
- Look at teacher turnover data for 2–3 years to see if credentialed teacher turnover is decreased/increased/no change
- Develop follow-up questions to determine further study and/or decision to collect qualitative data
Texas Contact Information

Joanie Rethlake, State Director
jrethlake@hcde-texas.org

Elizabeth B. Thompson, Assistant Director
ethompson@hcde-texas.org

Sridevi Rangineni, Systems Analyst/Programmer
Sridev.Rangineni@tea.state.tx.us