4-22-2003

Education Policy Analysis Archives 11/13

Arizona State University

University of South Florida

Follow this and additional works at: http://scholarcommons.usf.edu/coedu_pub

Part of the Education Commons

Scholar Commons Citation
http://scholarcommons.usf.edu/coedu_pub/425

This Article is brought to you for free and open access by the College of Education at Scholar Commons. It has been accepted for inclusion in College of Education Publications by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.
The Massachusetts Signing Bonus Program for New Teachers: A Model of Teacher Preparation Worth Copying?

R. Clarke Fowler
Salem State College


Abstract
This article examines the Massachusetts Signing Bonus Program for New Teachers, a nationally prominent program that has recruited and prepared $20,000 bonus recipients to teach after seven weeks' training at the Massachusetts Institute for New Teachers (MINT). Although state officials have trumpeted this initiative as a national model that other states are copying, they announced in November 2002 that they were radically changing it. The changes included halting the state's national recruitment efforts and replacing the seven-week, fast-track training program designed by the New Teacher Project with year-long programs to be designed by three of the state's education schools. Even though the
state spent more than $50,000 recruiting individuals from states outside the Northeast over the first four program years, it garnered just seven bonus recipients from the non-Northeast states its recruiters visited, only four of whom were still teaching in Fall 2002. The state did, however, generate a substantial number of applicants in each program year (ranging from 783 to nearly 950), most of whom came from Massachusetts or nearby states. Contrary to state officials’ claims, though, it appears that many of these individuals had substantial prior educational experience. Although officials stated that all bonus teachers would go to 13 designated high-need urban districts, the state has never met this commitment, sending fewer bonus teachers to these districts in each of the first three years of the program. The state has lost a high percentage of its bonus teachers to attrition particularly in state-designated, high-need districts. These attrition rates are substantially higher than comparable national rates. Although the state has portrayed the Bonus and MINT programs, combined, as highly successful, officials exaggerated many of the purported positive outcomes. On the positive side, independent survey data (Churchill et al., 2002) indicated that principals rated MINT graduates' performance favorably, when compared to traditionally-trained teachers. It is not clear, though, whether such ratings varied either by a) the extent of the teacher's prior educational experience or b) the nature of the teacher's placement (urban vs. suburban). The Bonus Program has produced relatively few urban teachers, relatively few minority teachers, and low rates of teacher retention, even though this effort was modeled after Teach for America and critical parts of it were designed and often managed by the New Teacher Project—two organizations that the Bush administration has praised for their ability to design and run programs of this type. Policy makers are urged to resist calls to embrace rapid certification, an approach that has produced, in Massachusetts, low numbers of urban teachers and high numbers of exiting teachers, all at a cost of more than four million dollars.

Improving teacher supply and quality is among the most important educational issues the United States faces today as policy makers seek to hire, over the next ten years, both more and better teachers than ever before (Zernike, 2000). In Massachusetts, state officials have developed a number of initiatives to address this goal, the most notable being the Massachusetts Signing Bonus Program for New Teachers. This fast-track alternative to traditional certification programs has garnered national attention for its $20,000 bonuses to selected candidates, its cross-country recruiting campaign, its intensive seven-week training provided by the Massachusetts Institute for New Teachers (MINT), and its claims of success (School Board News, 2001).

But the Bonus Program has also generated significant controversy. In February 2001, independent research suggested that the Bonus Program had failed to live up to policy makers' promises. Twenty percent of its first cohort of bonus recipients left teaching after one year, and less than half of its second cohort chose to teach where policy makers said they would—in 13 state-designated, high-need school districts (Fowler, 2001).

The Massachusetts Commissioner of Education, David Driscoll, steadfastly defended the
Bonus Program against the preceding criticisms, claiming that this initiative was "hugely successful" (Setera, 2001). In November 2002, however, Commissioner Driscoll announced radical changes in the Bonus Program. Starting in March 2003, bonus recipients will be both nominated and trained by three "innovative" year-long post-baccalaureate teacher preparation programs (Massachusetts Department of Education, 2002a). The state will continue to run the MINT program, but Bonus recipients will not attend it.

With these changes, the Bonus Program silently dropped its cross-country recruiting campaign, stopped participating in the MINT training program, terminated its relationship with the New Teacher Project (the organization that designed and managed many aspects of this initiative), and abandoned the 7-week, fast-track approach to training bonus recipients. Massachusetts has now turned to the state's schools of education, formerly portrayed by the state's policy makers as the source of poor teacher quality, as the sole source of new teachers worthy of $20,000 bonuses.

Why did one of the first states to jump with both feet into fast-track certification pull one foot out? According to Orin Gutlearner, who coordinates the Bonus and MINT programs, this change represents "a better use of our resources" (Archer, 2002). Commissioner Driscoll stated that "by making this change in our program … we will not only be able to support our colleges and universities, but also be better equipped to truly find the most qualified recipients for our signing bonus” (Massachusetts Department of Education, 2002a).

The preceding statements fail to answer precisely why the state made radical changes to its famed bonus program. The current paper investigates, however, factors that surely influenced state policy makers' decision to radically alter this program. The data discussed here were obtained from the Massachusetts Department of Education, either through its web site or through a series of Freedom of Information requests submitted to the Department between 1999 and 2002.

Two factors warrant scrutiny of the Bonus Program. First, the Commonwealth of Massachusetts has invested a substantial amount of money, more than $4 million, for this initiative that policy makers have used, in part, as a template for recruiting and training at least ten percent of the state's new teachers (Commonwealth of Massachusetts, 2001). It is critical to gather information that will allow Massachusetts legislators and the public to assess the effectiveness of this major effort.

Second, the federal government is vigorously promoting fast-track alternative certification programs that, like Massachusetts's Bonus Program, "recruit highly qualified candidates who are interested in teaching but did not attend schools of education and place them quickly into high-need schools, providing training, support and mentoring … These programs should become models for the future, as states make it less burdensome for exceptional candidates to find teaching positions in our nation's schools" (U. S. Department of Education 2002, p. viii). Indeed, the federal government is endorsing not just the fast-track approach implemented in Massachusetts, but the organization that inspired this initiative, Teach for America, and its offshoot, the New Teacher Project, that the Massachusetts Department of Education hired to plan and implement central elements of the Bonus Program.

For the Bush administration, the fast-track approach to teacher preparation constitutes a
"more promising model for the future" (U. S. Department of Education 2002, p. 2), a model that, if adopted nationally, will lead to the production of both more and better teachers and thereby make it possible for the United States to place highly qualified teachers in all schools, particularly challenging urban schools. It is important to investigate, therefore, what this approach has delivered to Massachusetts and, concomitantly, what it promises to deliver to the country.

Background

The Massachusetts Signing Bonus Program for New Teachers was introduced in the summer of 1998 in the wake of the great uproar over the results of the first two administrations of the Massachusetts Teacher Tests (now called the Massachusetts Tests for Educator Licensure). Concerned both about the quality of the state's teaching force and about looming shortages of teachers in particular content areas (such as math and science), the legislature and then governor Paul Cellucci supported legislation that established a $60 million endowment to improve teacher quality. The most prominent feature of this legislation was a fast-track certification program that was initially called Teach for Massachusetts (Massachusetts Department of Education, 1998) but was later named the Massachusetts Signing Bonus Program for New Teachers.

The stated aim of the Bonus Program is "to encourage high achieving candidates to enter the profession who would otherwise not consider a career in teaching" (Massachusetts General Laws, Chapter 15A, Section 19A). The form of encouragement the state offers is a $20,000 bonus signing bonus, with $8,000 distributed in the first year and $4000 in each of the following three years.

The Massachusetts Department of Education contracted with the New York-located New Teacher Project, an offshoot of Teach for America, to design and oversee the recruitment and selection of the first cohort of bonus teachers. The Department named the recipients of the first round of bonuses in spring 1999 and trained 59 individuals in an intensive seven-week summer training program at the Massachusetts Institute for New Teachers (MINT). These individuals began teaching in Massachusetts public schools in fall 1999.

In order to increase the number of MINT-trained teachers in the following years, the Department 1) increased the number of bonus recipients to over 100, 2) offered scholarships (worth $2,250) to selected applicants who applied for but did not receive a bonus, 3) encouraged school districts to sponsor individuals' MINT training, and 4) allowed individuals to attend MINT at their own expense. The state has now recruited and trained four cohorts of bonus recipients (FY 1999-2002), as well as three cohorts of scholarship recipients and other MINT graduates (FY 2000-2002).

Organizations that either advocate for or are involved in fast-track teacher certification have lauded Massachusetts's Bonus Program. The Milken Foundation recognized it as a model for other states to follow (Hayward, 2000). The National Council on Teacher Quality (2002) listed Massachusetts as a "place to watch" for its recruiting practices. The New Teacher Project, which took the lead in conceptualizing and implementing all aspects of the state's effort, listed its work with Massachusetts as the first of four project highlights on its web page (New Teacher Project, 2002).

In February 2001, the Massachusetts Commissioner of Education, David Driscoll,
stated that many other states have followed the Massachusetts model: "The immense influence of the potential of our new teacher recruitment program has influenced California, Connecticut, Florida, Maryland, New York and other states to initiate similar programs. We are encouraged by the fact that other states are copying what we are doing and have judged that what we are doing is worth copying" (Massachusetts Department of Education, 2001a).

But should other states copy the recruitment and training methods that Massachusetts has employed in its Bonus and MINT programs? Did the Bonus Program merit the praise it garnered? What factors influenced state officials to radically alter this program? To answer these and other questions, I consider next the Bonus Program's record in a number of crucial areas: recruitment, placement, attrition, and program effectiveness.

**Recruitment**

One element of the Bonus Program that garnered much national attention was its recruiting campaign, particularly its cross-country recruitment efforts. Headlines appeared across the country describing how Massachusetts was scouring the country, looking for "the best and the brightest" to come teach in Massachusetts. Although a number of articles indicated that this effort was highly successful (Ferdinand, 1999; Magee, 1999), data obtained from the Massachusetts Department of Education indicate that Massachusetts's efforts to recruit bonus recipients from states outside the Northeast (i.e., outside New England, New York, and Pennsylvania) have been ineffective. As Table 1 indicates, through the first four years of the program (FY 1999-2002), the state garnered just seven recruits from non-Northeast states, despite recruiting in five non-Northeast states in 1999, seven in 2000, nine in 2001, and four in 2002—at a cost of more than $50,000. Since three of these seven recruits have now stopped teaching, Massachusetts has spent more than $12,000 just to recruit each of the four active bonus teachers from these states.

**Table 1**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Costs of Recruitment in Non-Northeast States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Travel</td>
</tr>
<tr>
<td>1999</td>
<td>$7,571</td>
</tr>
<tr>
<td>2000</td>
<td>$8,865</td>
</tr>
<tr>
<td>2001</td>
<td>$14,513</td>
</tr>
<tr>
<td>2002</td>
<td>$6,943</td>
</tr>
<tr>
<td>Total</td>
<td>$37,892</td>
</tr>
</tbody>
</table>

Ironically, as described in Table 2, between 1999 and 2002, Massachusetts actually recruited more than twice as many bonus teachers from non-Northeast states where they did not send recruiters than from states where they did (18 vs. 7).

**Table 2**
### Number of Bonus Recruits from Non-Northeast States

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of recruits from non-Northeast states where Massachusetts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sent recruiters</td>
<td>Did not send recruiters</td>
</tr>
<tr>
<td>FY 1999</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>FY 2000</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>FY 2001</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>FY 2002</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>18</td>
</tr>
</tbody>
</table>

Why did Massachusetts experience such difficulty with its out-of-state recruiting? One probable factor, discussed in a prior study (Fowler, 2001), is that many of the areas where Massachusetts sent recruiters are experiencing teacher shortages that are far more severe than in Massachusetts. These states include Texas, California, and Florida.

Another factor may be that Massachusetts' recruiters frequently visited states where the average starting salary, when adjusted for the cost of living, is substantially higher than in Massachusetts. According to Education Week (2002), Massachusetts' average starting teacher salary, adjusted for the cost of living, is $26,565 and ranks 30th in the nation. Over the last four years (1999-2002), the state's recruiters have frequently visited higher paying states, including nine of the twelve top-paying states. New teachers in these nine states can expect to earn, on average, from $2,662 to $6,120 more per year than new teachers in Massachusetts.

Table 3 lists a) the states that Massachusetts's recruiters have visited, b) how Education Week (2002) ranked each state's starting salary on a national scale (adjusted for the cost of living), c) each state's average starting teacher salary, and d) the difference between the average starting teacher in that state and in Massachusetts.

**Table 3**  
*States Where Massachusetts Recruited for Bonus Teachers (1998-2002).*

<table>
<thead>
<tr>
<th>State</th>
<th>Rank (1-51)</th>
<th>Average Starting Salary*</th>
<th>Difference from Massachusetts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>2</td>
<td>$32,685</td>
<td>$6,120+</td>
</tr>
<tr>
<td>Texas</td>
<td>3</td>
<td>$31,568</td>
<td>$5,003+</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>5</td>
<td>$30,911</td>
<td>$4,346+</td>
</tr>
<tr>
<td>Michigan</td>
<td>6</td>
<td>$30,878</td>
<td>$4,313+</td>
</tr>
<tr>
<td>Illinois</td>
<td>7</td>
<td>$30,745</td>
<td>$4,180+</td>
</tr>
<tr>
<td>North Carolina</td>
<td>8</td>
<td>$30,529</td>
<td>$3,964+</td>
</tr>
<tr>
<td>Delaware</td>
<td>10</td>
<td>$30,113</td>
<td>$3,548+</td>
</tr>
<tr>
<td>State</td>
<td>Rank</td>
<td>Average Starting Salary</td>
<td>Bonus</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>--------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Indiana</td>
<td>11</td>
<td>$29,306</td>
<td>$2,741+</td>
</tr>
<tr>
<td>New York</td>
<td>12</td>
<td>$29,227</td>
<td>$2,662+</td>
</tr>
<tr>
<td><strong>U.S. Average</strong></td>
<td></td>
<td><strong>$27,989</strong></td>
<td><strong>$1,424+</strong></td>
</tr>
<tr>
<td>Virginia</td>
<td>20</td>
<td>$27,383</td>
<td>$818+</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>21</td>
<td>$27,339</td>
<td>$774+</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>26</td>
<td>$26,896</td>
<td>$331+</td>
</tr>
<tr>
<td>Florida</td>
<td>28</td>
<td>$26,631</td>
<td>$66+</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>30</td>
<td>$26,565</td>
<td>$------</td>
</tr>
<tr>
<td>New Jersey</td>
<td>31</td>
<td>$26,542</td>
<td>$23-</td>
</tr>
<tr>
<td>California</td>
<td>36</td>
<td>$26,225</td>
<td>$340-</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>39</td>
<td>$25,843</td>
<td>$722-</td>
</tr>
<tr>
<td>Connecticut</td>
<td>41</td>
<td>$25,352</td>
<td>$1,213-</td>
</tr>
<tr>
<td>Ohio</td>
<td>43</td>
<td>$25,017</td>
<td>$1,548-</td>
</tr>
<tr>
<td>Maine</td>
<td>46</td>
<td>$24,007</td>
<td>$2,558-</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>47</td>
<td>$23,337</td>
<td>$3,228-</td>
</tr>
</tbody>
</table>

*Average starting salary is adjusted for the cost of living (Education Week, 2000).

A third factor that surely hindered the Bonus Program's national recruiting effort is the state's certification exam, the Massachusetts Tests for Educator Licensure (MTEL). While most states offer the Praxis, an exam that is administered throughout the United States, the MTEL is unique to Massachusetts. Therefore, when Bonus Program recruitment began in 1999, candidates had to travel to Massachusetts to take (and pass) the MTEL to be eligible to win a bonus.

State officials attempted to address this problem by offering the MTEL in seven cities outside Massachusetts on one date in FY 2001 and on two dates in FY 2002. As Table 4 indicates, however, this strategy met with limited success. The Department canceled the tests for three cities (Detroit, Houston and Miami) due to low enrollment. Tests were given, however, on each of the scheduled dates in Chicago, Los Angeles, Philadelphia, and Washington, DC. In all, 205 individuals sat for the MTEL in four cities in the last two program years (2001 and 2002).

**Table 4**

**Number of Individuals Who Took the MTEL Outside Massachusetts.**

<table>
<thead>
<tr>
<th>Test site</th>
<th>Number who took the MTEL on:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January 2001</td>
</tr>
<tr>
<td>Chicago</td>
<td>16</td>
</tr>
<tr>
<td>Detroit</td>
<td>0 (Canceled)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Houston</td>
<td>0 (Canceled)</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>11</td>
</tr>
<tr>
<td>Miami</td>
<td>0 (Canceled)</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>24</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>63</strong></td>
</tr>
</tbody>
</table>

Besides offering the MTEL in other states, the Department responded to its disappointing national recruiting campaign by cutting back on out-of-state trips in 2002, when they visited just four non-New England states (Georgia, North Carolina, Virginia, and Wisconsin) and Washington, DC. The Department continued to exercise questionable judgment, though, when deciding where to visit. Four of the preceding areas, unlike Massachusetts, produce fewer teachers than they themselves require. For example, North Carolina needs to hire 10,000 teachers, but expects to graduate just 2,200 from their education schools (Silberman, 2001); Virginia needs to hire 4,000 new teachers, but expects to graduate just 3,500 (Turner, 2001).

Data from Georgia illustrates the questionable decision to recruit teachers from that state. According to the Atlanta Journal Constitution, Georgia is desperate for teachers:

> Georgia schools hired 12,000 teachers this year, and the projected annual need is expected to reach nearly 20,000 by the end of the decade. The state's colleges of education only graduated about 3,500 students last year. Most hires come from out of state or are former teachers returning to the profession. (Salzer, 2002)

Moreover, Georgia's average teacher starting salary of $32,685 (adjusted for the cost of living) is $6,120 higher than in Massachusetts. Given this difference, an individual who chooses to teach in Georgia would effectively earn, over the next four years, $4,500 more than a Massachusetts bonus recipient would earn. Moreover, he or she would be able to enter the classroom more quickly in Georgia because that state's fast-track certification program, TAPP (Teacher Alternative Preparation Program), requires four weeks of training but Massachusetts' MINT requires seven.

Since Massachusetts's recruiters visited historically black colleges during their spring 2002 trips to Georgia, it appears that their aim was to recruit minority applicants. Although this is a worthy goal, only four individuals attended the Department's two recruiting sessions in Georgia (according to recruiters' notes I obtained from the Department via a FOIA request), and no one from Georgia applied to the program in that year (Churchill et al., 2002).

Despite the apparent failure of the state's national recruiting campaign, the state has nevertheless generated a considerable number of applications in each of its four program years: 783 individuals applied in 1999 (Massachusetts Department of Education, 1999a), "nearly 950" in 2000 (Massachusetts Department of Education, 2000a), 905 in 2001, and 932 in 2002 (Churchill et al., 2002). Not surprisingly, given the preceding analysis, most of the applications came from Massachusetts or neighboring states: specifically, in 2001 and 2002, 84% of applicants came from Massachusetts, and 93% came from New
England or New York (Churchill et al., 2002).

With the recent changes to the program, though, the state has abandoned its bonus teacher recruitment efforts. Henceforth, three "innovative" post-baccalaureate programs will nominate candidates for the bonus and the state will make the final selection.

**Placement**

Although the state's initial set of recruitment materials clearly stated that all bonus recipients would teach in 13 high-need districts, (Note 2) Massachusetts has never met this goal. 71% of the first of bonus recipients cohort (FY 1999) were placed in these districts and 48% of the second cohort (FY 2000). In the third program year (FY 2001), only 35% of the bonus recipients went to the high-need areas. Table 5 shows that, from 1999 to 2001, the percentage of bonus teachers in high-need districts has steadily declined while the percentage in high-need districts has more than doubled.

**Table 5**

*Initial Bonus Teacher Placement, Fiscal Years 1999-2001*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of bonus teachers</th>
<th>Bonus teachers initially placed in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High-need areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>1999</td>
<td>59</td>
<td>42</td>
</tr>
<tr>
<td>2000</td>
<td>105</td>
<td>45</td>
</tr>
<tr>
<td>2001</td>
<td>105</td>
<td>37</td>
</tr>
</tbody>
</table>

When teacher attrition and migration are taken into account, 41% of all active bonus recipients in the 2001-2002 academic year taught in the state's designated high-need areas. This means, of course, that 59% of all active bonus recipients taught in non-high-need areas.

Many of the bonus recipients have taught not just outside of the designated high-need areas, but in the state's most wealthy and academically successful districts. In 2001-2002, 37 bonus recipients taught in school districts that scored in the top 50 of the Boston Globe's (2001a, 2001b) rankings of districts according to their scores on the 2001 Massachusetts Comprehensive Assessment System (MCAS). More than half of these bonus teachers, 21 in all, taught in nine elite districts that scored in the top ten of the Globe's 2001 MCAS rankings. These districts are: Belmont (5 bonus recipients), Concord-Carlisle (2), Lexington (3), Lincoln-Sudbury (1), Needham (1), Newton (5), Wayland (2), Wellesley (1), and Weston (1). Two of these highly advantaged communities, Belmont and Newton, had more bonus teachers together (10) than eleven of the communities that the state designated as high-need areas, i.e., Brockton (5), Cambridge (4), Chelsea (7), Fall River (2), Holyoke (1), Lawrence (3), Lowell (6), Lynn (6), New Bedford (2), Springfield (6), and Worcester (6).

Why did the promise of a bonus not result in the placement of teachers in high-need districts? At least two factors are at work here. First, many bonus recipients are not
interested in teaching in the state's high-need areas. According to notes I obtained from
the Department (via a FOIA request), a Boston principal informed a MINT evaluator
that, when he (the principal) asked for a list of (FY 2000) bonus recipients willing "to
teach in a urban school, the list was only about 1/3 of bonus recipients."

The second factor is the inconsistent nature of the state's commitment to high-need
districts. When the media reported in February 2001 that many of the FY 2000 bonus
recipients were not teaching in the high-need districts, two top state officials offered
conflicting responses. When a television interviewer asked Commissioner Driscoll why
so many bonus recipients were not teaching in these districts (where he had said they
would teach at a spring 1999 press conference), Mr. Driscoll replied, "What I said is that
was our goal" (Setera, 2001). Deputy Commissioner of Education Alan Safran told the
Boston Globe, however, that the state did not have such a goal: "it is 'bizarre' to think
qualified teachers should teach only in 13 urban school districts" (Vaishnav, 2001, p.
B1). Later he told another reporter that "there are at least 50 districts that we would
consider high need" (Associated Press, 2001). Each of the preceding statements
contradicts, however, prior statements from the Department, (Note 3) rendering the
goals of the program ill-defined at best.

The Boston Herald reported in January 2002, however, that the state had reaffirmed its
previously denied commitment to sending bonus teachers to urban, high-need areas.
Orin Gutlearner, the Department's Director of Alternative Teacher Recruitment, stated
that the Bonus Program was now seeking "people with experience in urban communities
and a mindset to work where they are most needed" (Hayward, 2002). This intention was
reflected in the wording of the state's (FY 2002) recruiting materials that were
subsequently on the Department's web site: "Priority will be given to candidates who are
committed to working in an under-resourced urban district (i.e., Boston, Brockton, Fall
River, Lowell, Springfield, and Worcester)" (Massachusetts Department of Education,
2002).

Problems remained, however, with the state's new-found commitment to high-need
schools districts. First, at the same time that the Department renewed its commitment to
high-need areas in the statement cited above, it dropped seven districts from its list of
such areas. Specifically, it dropped Cambridge, Chelsea, Framingham, Holyoke, Law
rence, Lynn, and New Bedford. Although it is understandable that the state would
drop Framingham, a district with higher MCAS pass rates and lower poverty rates than
the other high-need districts, from this list, it is incomprehensible that it would no longer
designate Lawrence and Holyoke as such. In these two districts, which are dead last on
the Boston Globe's MCAS rankings (Boston Globe, 2001a), 61% of 10th graders failed
the math MCAS in 2001, and more than 65% of the students qualify for free or
reduced-price lunch. By contrast, Brockton, with fewer math failures (38%) and fewer
poor students (38%), while certainly deserving extra resources, does not have such
extreme needs. Nevertheless, Brockton was on the Department's new list of high-need
districts and Lawrence and Holyoke are not.

The second problem with the state's renewed commitment to high-need districts is that
the new list of six such districts posted on the Department's web site in spring 2002 does
not match another list of nineteen such districts that the Department provided at the
same time to researchers it commissioned to evaluate the Bonus and MINT programs.
(Note 4) Indeed, between 1998 and 2002, state officials referred to four different sets of
high-need districts: 1) the thirteen districts named in the FY 1999 recruiting materials; 2)
the 50 (unnamed) districts that then Associate Commissioner Alan Safran mentioned to a reporter in February 2001; 3) the list of 19 districts that DOE officials provided to Churchill et al. (2002); and 4) the six districts named in the FY 2002 recruiting materials.

The third problem with the state's new (spring 2002) commitment to high-need districts is that the state failed to fulfill this commitment. Fewer than half (40%) of the FY 2002 cohort of bonus recipients (N=43) began teaching in fall 2002 in the newly-designated set of six high-need districts. (Note 5) And 12% of this, the fourth cohort of Bonus recipients, are teaching in districts that scored in the top 50 on the 2001 MCAS.

Attrition

The bonus program has lost teachers at rates well above comparable national averages. I describe next the attrition rates for each cohort of bonus recipients and then discuss these findings as a whole.

First Cohort (FY 1999)

The first cohort of bonus recipients (N=59) began teaching fall 1999. In fall 2000, 20% (12 of 59) of this cohort did not return to the classroom, an attrition rate that is more than twice the national rate of 9% for first-year teachers (NCES, 1998). In the 13 high-need districts, the attrition rate was higher, with 31% (18 of 42) either stopping teaching or migrating to non-high-need areas (Fowler, 2001).

In fall 2001, seven more bonus recipients did not return to teaching, raising the attrition rate to 32% (19 of 59) after two years. Concurrently, 48% (20 of 42) of the first cohort who were initially placed in the high-need areas stopped teaching in these areas. This loss was even greater in particular districts. According to the Department's records, 91% (10 of 11) of the first cohort of bonus recipients in Chelsea stopped teaching, or left to teach elsewhere, after just two years.

After the third year, eight more members of this cohort stopped teaching, raising this group's attrition rate to 46% (27 of 59), more than twice the national 3-year attrition rate of 20% (NCES). And attrition for this cohort's high-need teachers rose to 55% (23 of 42), a loss of more teachers in three years than the nation's cities lose in five years (i.e., 50%) (Darling-Hammond & Schlan, 1996).

Second Cohort (FY 2000)

The second cohort of bonus recipients (N=105) began teaching in fall 2000. In fall 2001, 12% (13 of 105) of this group stopped teaching, with 18% (8 of 45) of those placed in the high-need areas either exiting the profession or migrating to non-high-need districts.

In fall 2002, 16 more members of this cohort left teaching, raising their 2-year attrition rate to 28% (29 of 105). Concurrently, five bonus recipients who had been teaching in high-need districts did not return to these districts, bringing the 2-year attrition rate for this group to 29% (13 of 45).

Third Cohort (FY 2001)
The third cohort of bonus recipients (N=105) began teaching in fall 2001. In fall 2002, 17% (18 of 105) of this cohort stopped teaching. Of the 37 bonus teachers working in high-need areas, 30% (11 of 37) did not return to teach in a high-need area.

**Analysis**

The preceding data, summarized in Table 6 below, indicates that each cohort of bonus recipients has sustained attrition rates that are above—usually well above—comparable national averages. While the United States loses 9% of new teachers after their first year of teaching, each cohort of bonus teachers exceeded this rate. Indeed, the first cohort's 1-year attrition rate (20%) more than doubled the national rate (9%), and the third cohort's first year losses (17%) came within one percentage point of doubling the national rate as well. Although the second cohort's 1-year attrition rate (12%) was closer to the national average, its 2-year rate (28%) exceeded the nation's 3-year rate (20%) by eight percentage points.

**Table 6**

**New Teacher Attrition Rates**

<table>
<thead>
<tr>
<th>Teaching Population</th>
<th>Percentage of new teachers who left after:</th>
<th>1 year</th>
<th>2 years</th>
<th>3 years</th>
<th>4 years</th>
<th>5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass. Bonus Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st cohort (FY 1999)</td>
<td>All</td>
<td>20%</td>
<td>32%</td>
<td>46%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>High-need</td>
<td>31%</td>
<td>48%</td>
<td>55%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2nd cohort (FY 2000)</td>
<td>All</td>
<td>12%</td>
<td>28%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>High-need</td>
<td>18%</td>
<td>28%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd cohort (FY 2001)</td>
<td>All</td>
<td>17%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High-need</td>
<td>29%</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>United States</td>
<td>All</td>
<td>*9%</td>
<td>**20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban areas only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>***50%</td>
</tr>
</tbody>
</table>

* (NCES, 1998); ** (Education Week, 2000); *** (Darling-Hammond & Schalan, 1996)

There is greater variation between the three cohorts' attrition rates for bonus teachers placed in high-need districts. In the first cohort, attrition was high, with 31% leaving after the first year, 48% after the second year, and 55% after the third. The second cohort's attrition rate for such teachers was not as high, though, with 18% leaving after one year, although this rate climbed to 29% after two years. However, the third cohort's 1-year attrition rate for high-need teachers, 30%, nearly equaled the first cohort's
attrition rate for the same interval and exceeded the second cohort's 2-year attrition rate.

The attrition rates reported above are consistent with previous research which indicates that teachers who emerge from abbreviated preparation programs leave teaching sooner than those who emerge from longer preparation programs (Darling-Hammond, 2001). Indeed, given this fact, it may that the Bonus Program's attrition rate might have been even higher had all its participants been entirely new to teaching. Data obtained from the Department indicate, however, that a surprisingly high number of individuals who attended MINT had substantial prior educational experience. Specifically, 22% of MINT 2000 participants (more than 70% of them bonus recipients) indicated on a Department-sponsored survey that they had "attended a teacher training program (as part of their undergraduate or graduate education) before attending MINT." Another 5% indicated that they had substantial prior teaching experience, ranging from one year's teaching experience as a long-term substitute, to four years' experience teaching in both and public and private schools. Consequently, 27% of the FY 2000 MINT participants had substantial educational experience before attending MINT. It is possible, therefore, that the bonus recipients who were truly new to teaching left the classroom at even higher rates than reported above.

These high attrition rates entail, however, not just a loss of teachers, but a loss of training and bonus money. The state has now spent $921,250 ($748,000 for bonuses and $173,250 for MINT scholarships) for the 74 bonus recipients who have left the program. Ironically, Churchill et al. (2002) found that 76% of MINT graduates said they would have entered MINT without a bonus, a finding that concurs with other research (Liu, et al., 2000).

**Program Effectiveness**

One kind of evidence that Massachusetts officials offered in 2001 as proof of the Bonus Program's effectiveness was the large number of working teachers who have graduated from MINT. This number included not only Bonus recipients (62% of all MINT graduates), but also scholarship recipients (23%-30%) (Note 6), and other MINT graduates as well. For example, Commissioner Driscoll stated in June 2001 that "over the last three years, this program has put more than 450 teachers into classrooms. These are highly talented professionals who wouldn't be in schools today, if not for this initiative" (Massachusetts Department of Education, 2001c).

If accurate, this would be an impressive contribution over three years. However, analysis of Churchill et al.'s (2002) research indicates that the preceding statement inflates this contribution in a number of ways. First, the state produced not 450, but 444 MINT graduates between 1999 and 2001. Second, 44 of those graduates were no longer teaching in fall 2001. Third, the state was unable to confirm the teaching status of another 79 graduates. Consequently, 123 (28%) of MINT graduates had either stopped teaching or the state was unable to confirm whether they are teaching. Thus, the state may claim, at most, that 321 MINT graduates taught in the public schools in 2001-2002.

This would still be a substantial contribution if, as Commissioner Driscoll has claimed, these individuals would not otherwise have entered the teaching profession. But this is not the case. Churchill et al. (2002) found that, not all, but 61% of MINT graduates say they would not have entered the classroom without the fast-track approach. This further
reduces the contribution of the MINT and Bonus programs to approximately 196 teachers who, to use Commissioner Driscoll's terms, "wouldn't be in schools today, if not for this initiative" (Massachusetts Department of Education, 2001c).

The effectiveness of the Bonus Program should be judged, however, not by the number of such teachers "in schools today," but by the number of such teachers in high-need schools or school districts. Why? Because one of "the three major goals for the MINT/Signing Bonus program [is to] .... address teacher shortages in high-need schools" (Churchill et al., 2002, p. 6). The Bonus Program falls short in this area, though, because Churchill et al. (2002) found that, during the 2001-2002 academic year, just 34% of MINT graduates were teaching in the 19 high-need districts that the Department identified for these researchers, which means that approximately 67 of the 196 teachers mentioned above taught in such districts. Consequently, the Bonus and MINT programs together have brought to state-designated high-need schools a small number of individuals who would not otherwise have gone into teaching.

Another kind of evidence that policy makers have offered regarding program effectiveness is principals' responses to survey questions about MINT graduates. For example, when Commissioner Driscoll issued a statement defending the Bonus and MINT programs in February 2001, he wrote that "90% of their principals want to hire more" Bonus recipients and MINT graduates (Massachusetts Department of Education, 2001b). The preceding statement does not capture accurately, however, what principals said. In the first MINT evaluation, the source of this statistic, the author wrote that "most principals noted that hires are made following an interview process" (Massachusetts Department of Education, 2000b, p. 9). This comment implies that principals were open to hiring, but not necessarily actively seeking out, more MINT graduates. Findings by Churchill et al. (2002) confirm this implication. When they asked principals how they would consider hiring more MINT graduates, 10.6% said they would consider them "with preference;" 10.7% said "with reservations [9.4%] or not at all [1.3%];" and 79% said "the same as everyone else." In other words, principals who have supervised Bonus and MINT graduates are neither eager nor reluctant to hire more MINT graduates, rather they are willing to consider them as they would other traditionally-trained teachers.

Finally, state officials have pointed to principals' comparatively favorable ratings of MINT-trained versus traditionally-trained teachers. For example, they reported that "71% of principals who were interviewed … rate their MINT graduate/Bonus Recipient(s) as average (42%), above average (19%), or well above (10%) average compared to all of the teachers at their school" (Massachusetts Department of Education, 2000c).

The source of the preceding statistic, the 2000 MINT and Bonus evaluation, lacks credibility, in part because it failed to report either the number or percentage of principals' unfavorable ratings for survey questions of this kind. In order to ascertain this information, I requested all of the original survey data from the Department and calculated the percentages for the statistic cited above. I found that the evaluator had calculated this statistic incorrectly: 64% (not 71%) of principals had rated bonus teachers average or above. Further, when I weighted the principals' ratings by the number of teachers they supervised, I found that 60% of Bonus teachers were rated as average or above. When these percentages are aggregated in the other direction, though, the same percentage of teachers, 60%, were rated as average or below.
Further doubt surrounds this evaluation because it wrongly implied that the attrition rates of the first cohort of first-year teachers (FY 1999) was less than 15%, when it was actually 20%. Moreover, its author was, at the time she wrote the evaluation, a contract employee of the Department who went on national recruiting trips for the Bonus Program and earned approximately $150,000, over three years, while working for this and other related Department programs. This is not to say that the evaluator did not strive to be objective, but it is to say that few would consider a contract employee whose future employment depends on a) the continued existence of the programs which she is simultaneously working for and evaluating, and b) the good will of her immediate supervisors whose performance she is indirectly judging, to be independent. Indeed, it is doubtful that the Department, which calls for school districts to produce "outside evaluation reports" (Massachusetts Department of Education, 2000d, p. 2) as evidence of effective performance, would consider an evaluation produced by such an employee to be an "outside" evaluation.

Due to the factors cited above, the 2000 Bonus Program evaluation is not credible. Fortunately, Churchill et al. (2002) have conducted an evaluation that is far more credible. The authors of this Department-commissioned report a) are independent and b) surveyed far more individuals (including MINT graduates, supervising principals and trainers) than the author of the 2000 evaluation. Although it is not practical to summarize the many findings of this wide-ranging report here, it is pertinent to note that the authors also asked principals to compare MINT-trained and traditionally-trained teachers. They found that "overall, the principals were very positive about the quality of the MINT graduates" (Churchill et al., 2002, p. 15) when comparing MINT graduates' with other traditionally-teachers in the following areas: a) content knowledge, b) ability to employ effective instructional strategies, c) ability to work with students with special needs, and d) classroom management skills.

It is not clear, though, whether, and to what extent (if any), these ratings varied according to where graduates' taught (high-need vs. suburban districts). Absent such details, it is not possible to say whether principals in high-need districts were more or less satisfied with the performance of the MINT graduates they supervised, particularly those with little or no prior educational experience.

It is pertinent to note, though, that this Department-commissioned evaluation questioned whether the state's seven-week fast-track approach to teacher preparation was sufficient for high-need, largely urban districts. The authors recommend, among other items, that that the state "consider whether MINT needs to be changed fundamentally if it is to meet its current goal of serving high-need districts. The demands of urban teaching are such that a Bonus and a seven-week summer session simply may not be sufficient to adequately prepare significant numbers of high-quality teachers who will stay" (Churchill et al., 2002, p. 39). They go on to suggest that a variety of one-year apprenticeship type programs may be more suitable.

The ultimate comment on the Bonus Program's effectiveness, though, is not what the state's policy makers have said about it but what they have done to it. Their recent radical revision of this initiative is an implicit admission that the program suffered from chronic problems. Although state officials have not specifically named these problems, the current research has identified a number of issues that have beset this initiative since its inception. As I discuss next, these problems raise doubts about federal policy makers'
claims that fast-track certification programs will help the country produce more and better teachers in the coming years.

**Implications for State and National Policy**

The US Department of Education is a strong proponent of fast-track certification initiatives. It claims that if more such programs are adopted nationally, this will open up a new, previously untapped pool of teachers to the country and thereby deliver the following five benefits to the nation's schools: 1) more teachers, 2) more urban teachers, 3) more minority teachers, 4) higher teacher retention rates, and 5) better teachers (U.S. Department of Education, 2002). Since Massachusetts's Bonus and MINT programs were a) designed in accordance with the principles and practices the federal government is exhorting other states to adopt, and b) managed for the most part by an organization (the new Teacher Project) that the Bush administration has lauded for its ability to implement such initiatives (The White House, 2001a, 2001b, 2002), it is appropriate to consider to what extent Massachusetts has realized each of these benefits.

1. **More Teachers**

   Approximately 196 individuals, MINT graduates who would not have otherwise gone into teaching, taught in Massachusetts's public schools in 2001-2002. This provided a moderately positive boost to the state's supply of teachers, comparable to the number of working teachers that one of the state's mid-sized schools of education would produce over a similar three-year period.

2. **More Urban Teachers**

   The first three cohorts of the Bonus Program produced approximately 67 working teachers who would not otherwise have entered teaching and who taught in the state's high-need school districts in 2001-2002. This represents a negligible increase in the state's supply of urban teachers.

3. **More Minority Teachers**

   Department records (obtained via a FOIA request) indicate that 9% of the 2002 MINT trainees are minority. This is one percentage point lower than the 10% of new teachers hired in Massachusetts in 1999 who were from minority groups (Massachusetts Department of Education, 2000e). Churchill et al. wrote of the Bonus Program's minority teacher recruitment, "there has been negligible success recruiting minority candidates, to date" (2002, p. 37).

4. **Higher Teacher Retention Rates**

   According to the US Department of Education, "nationwide, about 85 percent of teachers certified through alternate routes remain in the classroom five years later, demonstrating that truncated training programs with highly qualified candidates do not result in those same teachers leaving the profession early in their careers" (2001, p. 16).

   This has not occurred in Massachusetts, however, where only 54% of the first cohort of bonus recipients remain after three years, 72% of the second cohort
after two years, and 71% of the third cohort after one year. These retention rates were even lower in state-designated high-need districts, with 45% of the first cohort remaining after three years, 72% of the second after two years, and 71% of the third after one year.

5. Better Teachers

To date, the Bonus Program has not offered any objective, test-based evidence (of the sort that the federal government and most state governments now require schools to produce) to indicate that its teachers are raising children's academic achievement. Massachusetts has produced, however, survey data which indicates that principals rated MINT graduates' performance favorably, when compared to traditionally-trained teachers. It is not clear, though, whether principals' ratings varied either by a) the extent of the teacher's prior educational experience or b) the nature of the teacher's placement (urban vs. suburban). Nor is it clear whether these ratings predict improved student performance.

Conclusion

The Massachusetts Signing Bonus Program for New Teachers has failed to produce in Massachusetts the positive outcomes that federal policy makers promise such programs will produce in the nation, even though this program was modeled after Teach for America and critical parts of it were designed and often managed by the New Teacher Project—two related organizations that the Bush administration has repeatedly and effusively praised for their ability to both design and run programs of this type. This does not necessarily mean, of course, that fast-track alternative certification will not work, either in Massachusetts or elsewhere. It strongly implies, however, that simply embracing the two core principles the federal government has endorsed for such programs—1) recruit high-achieving candidates and 2) get them quickly into the classroom (US Department of Education, 2002)—will fail to deliver the benefits the Bush administration is promising.

Officials should respond to the current research by resisting calls to embrace rapid certification. It would be unwise to devote extensive funding to an approach that has produced, in Massachusetts, such low numbers of urban teachers and such high numbers of exiting teachers, all at a cost of more than four million dollars. Given the current teacher shortages in many states, though, it is understandable that policy makers at all levels of government are increasingly willing to experiment with alternative forms of teacher preparation. It is critical, however, that when officials fund such initiatives, they do so with a spirit of experimentation—and with the rigor, transparency, and objectivity that characterize proper experimentation.

Policy makers must insist on ongoing and independent evaluations of any experimental program, evaluations that track participants' characteristics, such as prior educational experience, eventual teaching placements, retention rates, and more. Absent rigorous collection and independent analysis of such data, the public will not know whether such initiatives are effective. Independent analysis of carefully collected data is critical if other states are to avoid what happened in Massachusetts, where state officials have a) offered inaccurate information regarding the number and characteristics of MINT graduates working in schools, and b) issued an audit in 2000 that inflated the program's
favorable statistics (principals' ratings) and underreported its unfavorable statistics (the first-year attrition rate). This inaccurate information helped convince some that Massachusetts is developing a model of teacher preparation for other states to follow. When independent data are brought to bear on this program, however, this initiative looks less like a model of teacher preparation worth copying and more like an expensive quick-fix that has failed to solve a complex problem.

References


Education Week (2002). Quality Counts 2002: Who Should Teach?


Massachusetts Department of Education (2001b, June 1) 230 to get accelerated training


### About the Author

Clarke Fowler  
Education Department  
Salem State College  
Salem, MA 01970  
(978) 542-7041  
clarke.fowler@salemstate.edu

Dr. Clarke Fowler, an Associate Professor in the Education Department at Salem State College, has published written articles on socio-moral and cognitive development. His most recent articles have focused on the Massachusetts Teacher Tests, Title 2 of the Higher Education Reauthorization Act of 1998, and Massachusetts's fast-track teacher certification initiatives.

### Notes

1. To calculate these costs, I obtained, via a series of Freedom of Information requests, all recruitment-related travel documents from the Department. To calculate personnel costs, which the Department did not include in its recruiting budget, I identified the employees who went on each trip and then used salary schedules to estimate how much these individuals earned while recruiting.

2. The Department's initial set of recruiting materials explicitly stated, in a Question-and-Answer format, that bonus recipients would teach in thirteen high-need urban districts: "Q: What are the possible placement sites? A: Boston, Brockton, Cambridge, Chelsea, Fall River, Framingham, Holyoke, Lawrence, Lowell, Lynn, New Bedford, Springfield, and Worcester" (Massachusetts Department of Education, 1999b).

3. Note 2 (above) contains the wording of the 1999 recruiting materials. Commissioner Driscoll reaffirmed this commitment orally during a May 1999 press conference, when he announced the awarding of the first round of bonuses: "We're working with the urban areas in Massachusetts where these recipients will be placed." Later, he said, "We have commitments from all of the major urban areas— Boston, Cambridge, Chelsea, Fall River, New Bedford, Holyoke, Springfield, Lawrence, Lowell—so we have commitments from all of the schools districts. It's just a matter of matching them up" (Massachusetts Department of Education, 1999c).

Finally, the Massachusetts Board of Education's 1999 Annual Report says: "New teachers begin their four-year commitment in the summer in an intensive, seven-week teacher-training institute, and groups of four to five began teaching in thirteen high needs Massachusetts public school districts in the fall of 1999" (Massachusetts Department of Education, 1999a, p. 20).

4. Churchill et al. (2002) reported that "The Department of Education has identified nineteen districts as being high-need, based on overall number of students, percent
of students qualifying for free- or reduced-price lunch, and MCAS scores” (p. 26). These districts are Boston, Brockton, Cambridge, Chelsea, Chicopee, Fall River, Haverhill, Holyoke, Lawrence, Lowell, Lynn, New Bedford, Pittsfield, Revere, Salem, Somerville, Springfield, Taunton, and Worcester.

5. Whereas the state sought to recruit 125 bonus teachers in 2000 and 2001, in 2002 they planned on recruiting no more than 50. The Boston Herald reported that, due to the poor performance of the bonus program's endowment, much less money was currently available to pay for bonuses (Hayward, 2002). At 43, the FY 2002 cohort of bonus teachers is the smallest cohort the Bonus program has placed in schools to date.

6. I report a range of scholarship recipients because the Department's records are incomplete: officials are unsure of the award status of 39 of their MINT graduates. That is, the Department did no know whether the state, the individual, or a school district paid the $2,250 tuition for these individuals to attend MINT.
Benjamin Levin  
University of Manitoba

Thomas Mauhs-Pugh  
Green Mountain College

Les McLean  
University of Toronto

Heinrich Mintrop  
University of California, Los Angeles

Michele Moses  
Arizona State University

Gary Orfield  
Harvard University

Anthony G. Rud Jr.  
Purdue University

Jay Paredes Scribner  
University of Missouri

Michael Scriven  
University of Auckland

Lorrie A. Shepard  
University of Colorado, Boulder

Robert E. Stake  
University of Illinois—UC

Kevin Welner  
University of Colorado, Boulder

Terrence G. Wiley  
Arizona State University

John Willinsky  
University of British Columbia

---

**EPAA Spanish Language Editorial Board**

**Associate Editor for Spanish Language**

**Roberto Rodríguez Gómez**  
*Universidad Nacional Autónoma de México*

roberto@servidor.unam.mx

---

Adrián Acosta (México)  
Universidad de Guadalajara  
adriana_costa@compuserve.com

J. Félix Angulo Rasco (Spain)  
Universidad de Cádiz  
felix.angulo@uca.es

Teresa Bracho (México)  
Centro de Investigación y Docencia Económica-CIDE  
bracho@dis1.cide.mx

Alejandro Canales (México)  
Universidad Nacional Autónoma de México  
canalesa@servidor.unam.mx

Ursula Casanova (U.S.A.)  
Arizona State University  
casanova@asu.edu

José Contreras Domingo  
Universitat de Barcelona  
Jose.Contreras@doe.d5.ub.es

Erwin Epstein (U.S.A.)  
Loyola University of Chicago  
Eepstein@luc.edu

Josué González (U.S.A.)  
Arizona State University  
josue@asu.edu

Rollin Kent (México)  
Universidad Autónoma de Puebla  
rkent@puebla.megared.net.mx

María Beatriz Luce (Brasil)  
Universidad Federal de Rio Grande do Sul-UFRGS  
lucemb@orion.ufrgs.br

Javier Mendoza Rojas (México)  
Universidad Nacional Autónoma de México  
javiermr@servidor.unam.mx

Marcela Mollis (Argentina)  
Universidad de Buenos Aires  
mollis@fiolo.uba.ar

Humberto Muñoz García (México)  
Universidad Nacional Autónoma de México

Angel Ignacio Pérez Gómez (Spain)  
Universidad de Málaga  
aiperez@uma.es
humberto@servidor.unam.mx

Daniel
Schugurensky (Argentina-Canadá)
OISE/UT, Canada
dschugurensky@oise.utoronto.ca

Jurjo Torres Santomé (Spain)
Universidad de A Coruña
jurjo@udc.es

Simon Schwartzman (Brazil)
American Institutes for Resesarch–Brazil
(AIRBrasil)
simon@sman.com.br

Carlos Alberto Torres (U.S.A.)
University of California, Los Angeles
torres@gseis.ucla.edu