



POLICY BRIEF

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Informing the Education Community

Cost of Teacher Turnover in Hawai'i

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Hawai'i is experiencing a severe teacher shortage in both public and independent schools. In 2000-2001 the Hawai'i Department of Education (DOE) alone hired nearly 1500 new teachers while all of the teacher education programs in Hawai'i combined produced fewer than 700 teachers. Recruiting teachers from the mainland is necessary but extremely difficult given, among other things, Hawai'i's geographic isolation, poor teacher salaries, and the general shortage of teachers throughout the nation.

The teacher shortage must also be addressed by reducing teacher turnover. On average approximately 300 teachers voluntarily leave their DOE positions each year (i.e. they leave their positions for reasons other than retirement, termination or death). According to a 2001 study by the Hawai'i Educational Policy Center (HEPC), forty percent of these individuals report dissatisfaction with the teaching profession.

While this level of dissatisfaction on the part of so many teachers is cause for concern, it also indicates an opportunity for Hawai'i. According to the HEPC researchers, a substantial proportion of the teachers leaving the DOE might be encouraged to stay in their DOE positions. Better salaries are a necessity. But so too are better working conditions including, smaller class sizes, mentoring and other support for beginning teachers, professional development opportunities for experienced teachers, and time and financial support for teachers to earn advanced degrees.

Turnover Costs

Investing in teachers improves education and it has potential to save money by reducing teacher turnover. According to a recent study by the Texas Center for Educational Research (TCER) commissioned by the Texas State Board for Educator Certification, teacher turnover in Texas costs the state anywhere from \$329 million to \$2.1 billion per year depending on which model for turnover costs is used. Conservative models estimate turnover costs related to hiring costs,

training costs, and lost productivity costs. Unlike more comprehensive models, the conservative models do not calculate the actual costs an organization invests in termination, recruitment and hiring, substitutes, learning curve loss, and training. One conservative model, Advantage Investment Inc., calculates turnover costs as 25% of the leaver's salary and benefits. The U.S. Department of Labor also uses a conservative model but calculates the estimate at 33% of the leaver's salary and benefits.

The less conservative models take a more comprehensive approach. Termination costs include exit interviews, costs of administrative tasks related to termination such as processing employee records, security, and payroll as well as costs related to stoppage of payroll, benefits, and deductions. Hiring costs include factors such as recruitment, advertising, agency fees, relocation costs, interviewing, screening, and establishing payroll and benefits. Training costs include orientation and other subsequent training for new employees. One comprehensive model (Fitz-enz) estimates turnover costs based on 200% of a leaver's annual salary and benefits.

The TCER researchers calculate teacher turnover costs in Texas using a "pragmatic" formula.

$$\textit{Turnover} = 1.50 * (\textit{leaver's annual salary})$$

Teacher Turnover Costs in Hawai'i

New teachers in Hawai'i with no experience will earn approximately \$33,300 per year. Using the US Department of Labor formula (.33 * leaver's annual salary and benefits), the turnover cost per teacher is \$13,407. To obtain the cost of voluntary turnover in the Department of Education we multiply by 300, the typical number of annual leavers. A conservative estimate of the annual cost of voluntary teacher turnover in the Hawai'i DOE is \$4,021,974. This estimate is low in that it uses a conservative model for calculating turnover costs, the beginning teacher salary, and a low estimate of the number of leavers.

Using the more comprehensive “pragmatic” model for estimating turnover costs, the costs of teacher turnover for the Hawai‘i DOE would be over \$14,985,000. This estimate is less conservative because it uses the pragmatic model for estimating turnover costs (turnover = 1.50 * leaver’s annual salary). It is, however, still conservative in that it uses beginning teacher salary and the same low estimate of leavers.

The high-end estimate for turnover costs in Hawai‘i is \$24,375,600. The formula used in this instance is

$$\text{Turnover} = 2.0 * (\text{leaver's annual salary \& benefits})$$

This too is still conservative in that it uses the beginning teacher salary and the low estimate of teacher turnover.

The table below shows the three estimates using the beginning teacher salary and one using a somewhat higher salary, \$40,000.

campus and system support costs as well as direct instruction. The teacher education component of the undergraduate program takes place in the junior and senior years. The COE graduate programs which lead to licensure are two years in length. The COE post-baccalaureate program that leads to licensure is three semesters in length. Roughly one quarter of the teachers prepared in the UH system are graduate students another quarter are post-baccalaureate and half are undergraduate.

The table below shows the approximate loss to the state in teacher education investment for different numbers of DOE leavers who leave the profession or leave the state entirely. These numbers do not take into account the general education component of the undergraduate experience. Neither do the numbers take into account the cost of undergraduate education for students who begin their teacher education at the post-baccalaureate level.

MODEL	DOE COST PER TEACHER	TOTAL DOE COST PER YEAR	DOE COST PER TEACHER	TOTAL DOE COST PER YEAR
	<i>Using Beginning Teacher Salary</i>	<i>Using Beginning Teacher Salary</i>	<i>Using salary of \$40,000 per Leaver</i>	<i>Using Salary of \$40,000 per Leaver</i>
US Dept of Labor	\$13,407	\$4,021,974	\$16,104	\$4,831,200
Pragmatic (TCER)	\$49,950	\$14,985,000	\$60,000	\$18,000,000
High-end (Fitz-enz)	\$66,660	\$24,375,600	\$97,600	\$29,280,000

NUMBER OF STATE OR PROFESSION LEAVERS	LOSS TO THE STATE
	<i>(Assuming: 25% graduate preparation, 25% post-baccalaureate preparation, and 50% undergraduate preparation)</i>
200	\$3,702,262
100	\$1,851,131
50	\$ 925,565

All of this is to say that much of the money the DOE currently must spend to hire new teachers and train them could better be spent in programs to retain teachers. Turnover costs are not totally avoidable but they can be reduced.

Also important to note is that these estimates of turnover costs are only related to the Hawai‘i DOE and they do not take into account the state’s investment in teacher education through the University of Hawai‘i. The state contributes significantly to the education of every teacher prepared through the University of Hawai‘i. Everytime a UH-prepared teacher leaves the state or leaves the profession, the state loses its investment in that person as a teacher.

The 1999-2000 cost per year per FTE undergraduate upper division student (FTE) in the College of Education was \$10,670 and the cost per year per FTE graduate student was \$17,923. (UH Mānoa: 1999-2000 Net Program Costs) These costs include the College of Education major’s share of

Concluding Remarks

Supporting teachers will reduce teacher turnover and create efficiency in the system but the costs of teacher turnover include more than money. The greatest costs lie in the damage to the quality of education Hawai‘i students receive. When teachers leave they take with them experience and expertise that add value to the educational experiences of their students. Novice teachers, no matter how well prepared, still learn a lot in their first few years of teaching.

Experience in teaching as in other professions adds tremendously to the individual’s effectiveness. Students pay an immeasurable price when they lose well-qualified and experienced teachers.

To make matters worse, however, many of the teachers who leave cannot be replaced at all by properly qualified teachers. In 2000-2001, over 50 percent of the new teachers hired by the DOE were not fully licensed. But even if licensed teachers are hired, they are of necessity often placed in teaching positions outside their field of expertise. In fact, in

some fields such as mathematics, chemistry or physics it is rare to have a teacher who has a major or even a minor in those fields.

Investing more money to improve teacher pay and working conditions will certainly reduce the high cost of turnover to the state. It will at the same time improve the learning environments for many of our students. We can only calculate rough estimates for how much turnover costs will be reduced and how much learning environments will be improved but the potential is certainly great.

REFERENCES

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