

REPORT TO THE  
UTAH LEGISLATURE

Number 2007-07

**A Review of the Public Education Costs  
of Undocumented Children**

May 2007

Audit Performed By:

Audit Manager	Tim Osterstock
Audit Supervisor	Janice Coleman
Audit Staff	Brandon Bowen

# Digest of A Review of the Public Education Costs of Undocumented Children

For fiscal year 2006, we estimate that between \$54.9 million and \$85.4 million of state and local expenditures went toward the public education of undocumented children. This estimated expenditure range excludes federal funding. This cost range can be separated into grades K-8 and grades 9-12. These two cost allocations are shown below as well as the total cost allocations when federal money is added.

---

**Undocumented Student Costs by Grade Category for Fiscal Year 2006.** These total costs are based on weighted annual per-pupil costs from five school districts multiplied by a high and low estimate of the undocumented student population.

---

	Low Estimate (expressed in millions)		High Estimate (expressed in millions)	
	State & Local	Federal, State, & Local	State & Local	Federal, State, & Local
High School	\$20.7	\$23.0	\$32.1	\$35.7
K-8	34.2	40.0	53.3	62.2
<b>Total</b>	<b>\$54.9</b>	<b>\$63.0</b>	<b>\$85.4</b>	<b>\$97.9</b>

**Review Limited for Both Population and Cost Estimates.** This review is not a comprehensive study on the impacts of undocumented residents on Utah's economy as a whole. Such a study was recently issued by the State of Texas. Instead, this review focuses exclusively on the costs of educating children who are themselves undocumented.

**Cost Estimates Derived from Actual Program Costs.** For this review annual per-pupil costs have been developed to account for English language learner and low-income programs, two possible programs used by an undocumented student as noted in research published by Dr. Jeffrey Passel, considered a national authority on the undocumented population. Identifying areas where these programs are concentrated yields annual per-

---

**Undocumented annual per-pupil costs of \$4,900 and \$5,500 for grades K-8 and 9-12, respectively, are estimated.**

---

pupil costs of \$4,900 and \$5,500 for grades K-8 and grades 9-12, respectively.

**Population Estimate Is a Range.** Using nationally collected information, Dr. Jeffrey Passel determined the range of total undocumented residents in Utah to be approximately 75,000 to 100,000. The undocumented student population is estimated to be 1/6 or 1/7 of the total undocumented population resulting in an estimated range of 10,714 to 16,667 undocumented students.

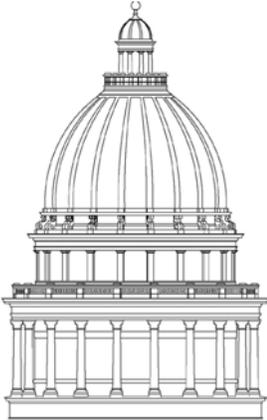
**Simpler Methodology Provides Support.** A more basic methodology incorporating the state's average annual per-pupil cost can also be used to make an estimate. This methodology treats all students similarly with all costs spread equally over all students.

---

**Utah's total undocumented student population is estimated between 10,714 and 16,667.**

---

Office of  
LEGISLATIVE AUDITOR GENERAL  
State of Utah



**REPORT NUMBER 2007-07**  
**May 2007**

## **Public Education Costs of Undocumented Children**

For fiscal year 2006, we estimate that between \$54.9 million and \$85.4 million of state and local expenditures went toward the public education of undocumented children. This estimated expenditure range excludes federal funding and is based on two underlying estimates: the annual per-pupil education cost of an undocumented child in grades K-8 and grades 9-12 and the potential population range of undocumented, school-age children living in Utah.

### **Review Limited for Both Population and Cost Estimates**

Shortly after this review was initiated, a citizens' group requested that the Governor's Office conduct a comprehensive study on the impacts of undocumented residents on Utah's economy as a whole. The State of Texas had recently issued such a study, which is briefly discussed later in this section, and the citizens' group requested a similar study be performed in Utah. This review is not such a study. Whether or not such a comprehensive study will be performed by the Governor's Office has not been decided, and our office has received no request for a comprehensive study.

---

**The review includes only education costs of children who are, themselves, undocumented.**

---

This review addresses the costs of educating undocumented children. It does not include the costs of educating citizen children of undocumented parents. Any child born in the United States, regardless of the citizenship status of their parents, is a United States citizen. Nor does this review include other short- and long-term potential costs or benefits associated with undocumented children or other undocumented residents. Other economic issues associated with undocumented immigrants that have been addressed by studies in other states include: emergency medical service costs under Medicaid, incarceration costs, and tax contributions.

The estimates in this report are based on average allocated costs rather than marginal costs. Marginal costs would be those costs incurred by adding one additional undocumented child to Utah's public education enrollment. In our opinion, the data necessary to identify marginal costs associated with undocumented children is not currently available.

### **Some Studies Have a Broader Scope**

Other studies have addressed some of the costs of services and programs provided to, or necessary for, undocumented immigrants in other states. In 1994, the Urban Institute, a nationally recognized research group, released a study of the costs of undocumented immigrants in seven heavily impacted states: Arizona, California, Florida, Illinois, New Jersey, New York, and Texas. Figure 1 identifies the estimated combined costs of undocumented immigrants in the seven states studied.

**Figure 1. Results from 1994 Urban Institute Study.\*** This study includes the seven states most heavily impacted by undocumented immigration, and discusses associated costs and revenues.\*\*

Category	(Cost) Revenue	Undocumented Population
Education	( \$3.1 billion)	641,000
Incarceration	(\$474 million)	21,395
Medicaid	(\$445 million)	<i>unreported</i>
Taxes collected	\$1.9 billion	<i>unreported</i>

\* "Fiscal Impacts of Undocumented Aliens: Selected Estimates for Seven States" authored by Rebecca L. Clark, Jeffrey S. Passel, Wendy N. Zimmerman, and Michael E. Fix, September, 1994.

\*\* The seven states in this study are: Arizona, California, Florida, Illinois, New Jersey, New York, and Texas.

**Other studies have included more costs and used different methods.**

The Urban Institute study results suggest that costs of undocumented immigration incurred by states are greater than revenue realized from it. However, the study acknowledges not all revenue sources nor services used were considered.

In 2006, the State of Texas Comptroller's Office released an analysis with a broad scope similar to that of the 1994 Urban Institute Study, but reaching an opposing conclusion. The study concluded that the \$1.16 billion in state services that undocumented immigrants receive in Texas is out-weighted by the \$1.58 billion in state revenue received from taxes paid by undocumented immigrants. However, Texas also noted that their analysis did not include local government costs of \$1.44 billion for law enforcement and health care.

It is worth pointing out that Texas is unlike Utah in two significant respects. First, Texas has no personal income tax. Instead, Texas relies on consumptive and property tax, both of which are more difficult to avoid than personal income tax, as well as lottery revenue. Therefore, Texas might capture more revenue than Utah. Second, some services having state-level impact in Utah are delivered at the local level in Texas.

### **Methodology and Objectives**

Our methodology for identifying educational costs for undocumented children is dependent on two critical pieces of information: (1) an estimate of the annual per-pupil cost of an undocumented child, and (2)

an estimate of the population of undocumented children in Utah. The cost of educating an undocumented child in Utah is based on an adjusted average per-student cost. This adjustment primarily accounts for the potential additional costs required by English-language learners and low-income students.

The estimated population of undocumented school children in Utah was provided by Dr. Jeffrey Passel, a researcher who was key to the Urban Institute study and who is now with the Pew Hispanic Center. Dr. Passel's population estimates have been used by the Government Accountability Office and the Office of Management and Budget.

The objectives of this review are:

- Determine the costs funded by Utah taxpayers necessary to provide a public education to undocumented children in grades K through 8.
- Determine the costs funded by Utah taxpayers necessary to provide a public education to undocumented children in grades 9 through 12.

### **Cost Estimates Derived from Actual Program Costs**

For fiscal year 2006, between \$54.9 million and \$85.4 million of state and local expenditures went toward the public education of undocumented children in Utah. This cost range represents public education expenditures funded with state and local money; expenditures using federal money are not included in the above range. This cost range can be separated into grades K-8 and grades 9-12. These two cost allocations are shown in Figure 2 as well as the total cost allocations when federal money is added.

**Figure 2. Undocumented Student Costs by Grade Category for Fiscal Year 2006.** These total costs are based on weighted annual per-pupil costs from five school districts multiplied by a high and low estimate of the undocumented student population.

	Low Estimate (expressed in millions)		High Estimate (expressed in millions)	
	State & Local	Federal, State, & Local	State & Local	Federal, State, & Local
High School	\$20.7	\$23.0	\$32.1	\$35.7
K-8	34.2	40.0	53.3	62.2
<b>Total</b>	<b>\$54.9</b>	<b>\$63.0</b>	<b>\$85.4</b>	<b>\$97.9</b>

To calculate these costs, two estimates were made:

- An annual per-pupil average cost estimate based on actual program costs
- A population range estimate based on census data provided by a national authority

**Cost Averages Are Based on Annual Per-Pupil Costs**

For this review, annual per-pupil costs have been developed to account for programs potentially utilized by undocumented children. The school districts selected for review represent areas with high concentrations of students who are English-language learners and low-income, two possible characteristics of an undocumented student, as noted in research published by Dr. Jeffrey Passel. In addition, variances in cost per age of student have been addressed to some extent by utilizing grades K-8 and 9-12 information.

The estimated average annual per-pupil cost for grades K-8 is \$4,900. The estimated average annual per-pupil cost for grades 9-12 is \$5,500. These annual per-pupil costs are comprised of expenditures funded with state and local money and are made up of three components:

- Base costs, which are costs shared by all students
- English-language learner costs, which are costs specific to students learning English

- General low-income costs, which are costs specific to aiding children from low-income families

The contribution of these components to the overall annual per-pupil cost is shown in Figure 3. In addition, Figure 3 shows the annual per-pupil cost components when federal dollars are added.

**Figure 3. Average Annual Per-Pupil Costs for Fiscal Year 2006.** These annual per-pupil costs are weighted averages based on actual costs from five school districts.

Cost	High School		K-8	
	State & Local	Federal, State & Local	State & Local	Federal, State & Local
Base	\$5,000	\$5,500	\$4,800	\$5,100
Low-Income	100	200	100	500
ELL	400	400	40	100
<b>Rounded Total</b>	<b>\$5,500</b>	<b>\$6,100</b>	<b>\$4,900</b>	<b>\$5,700</b>

*Note: Estimates are rounded to the nearest hundred.*

In order to assign costs to undocumented students, we first needed to identify what specific services this population might use. According to research published by Dr. Jeffrey Passel, an undocumented student is likely to be an English-language learner (ELL) and is likely to be from a low-income family. So, our undocumented student cost model was conceptualized as an ELL, low-income student.

### **Annual Per-Pupil Costs Developed from Representative Districts**

To develop an average annual per-pupil cost for the state, we chose five districts—Granite, Ogden, Provo, Salt Lake, and Tooele. These districts were chosen because schools in these five districts represent 80 percent of all the schools that received highly impacted school money in fiscal year 2006. The allocation of highly impacted school money is based, in part, on the number of low-income and ELL students. Since these five districts have high concentrations of low-income and ELL

---

**Cost factors were calculated by dividing enrollment populations into corresponding expenditures.**

---

students, our population of interest, these districts form a strong base for developing average annual per-pupil costs for the state.

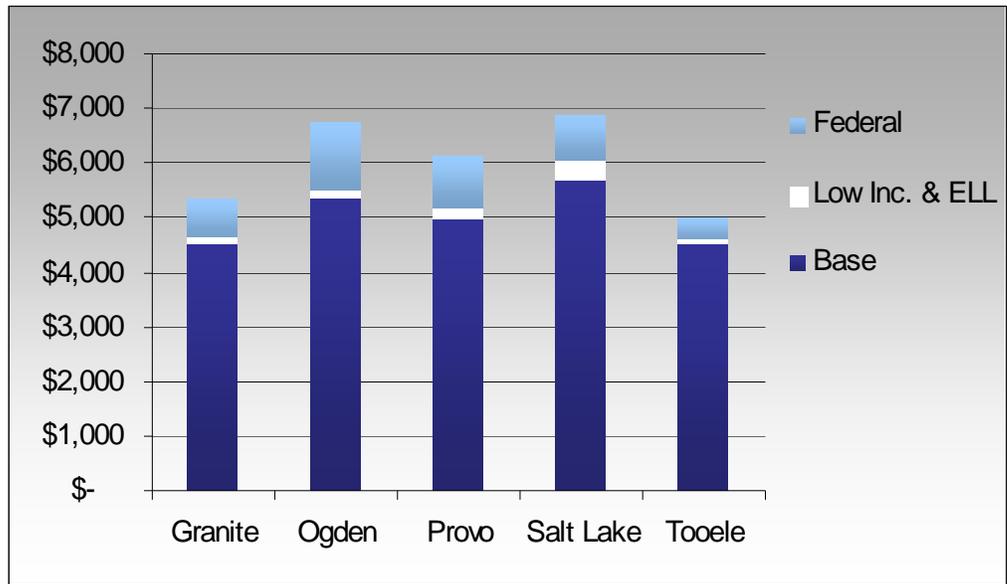
These five districts provided us with records containing all their expenditures made in fiscal year 2006. We selected only the expenditures that the Utah State Office of Education selects when identifying and reporting annual per-pupil instruction expenditures to the federal government (i.e., net current costs). These expenditures exclude any property costs.

Once all appropriate expenditures were identified, these expenditures were separated into elementary, junior, senior, and district cost centers. Next, specific ELL and general low-income program expenditures were separated. The resulting totals were then divided by the number of students in the cost center in order to arrive at the annual per-pupil base costs. Each districts' base cost was assigned as overhead to the other three cost centers.

The per-student ELL and low-income costs were derived through a similar approach. The total ELL and low-income expenditures for each district cost center were divided by the number of students in the respective district cost center that qualify as either ELL or low income. The resulting quotient is the per-student ELL or low-income cost for the school district's cost centers. Again, districts' ELL and low-income costs were assigned as overhead to the other three cost centers. This approach avoids applying ELL and low-income costs to all students in a district.

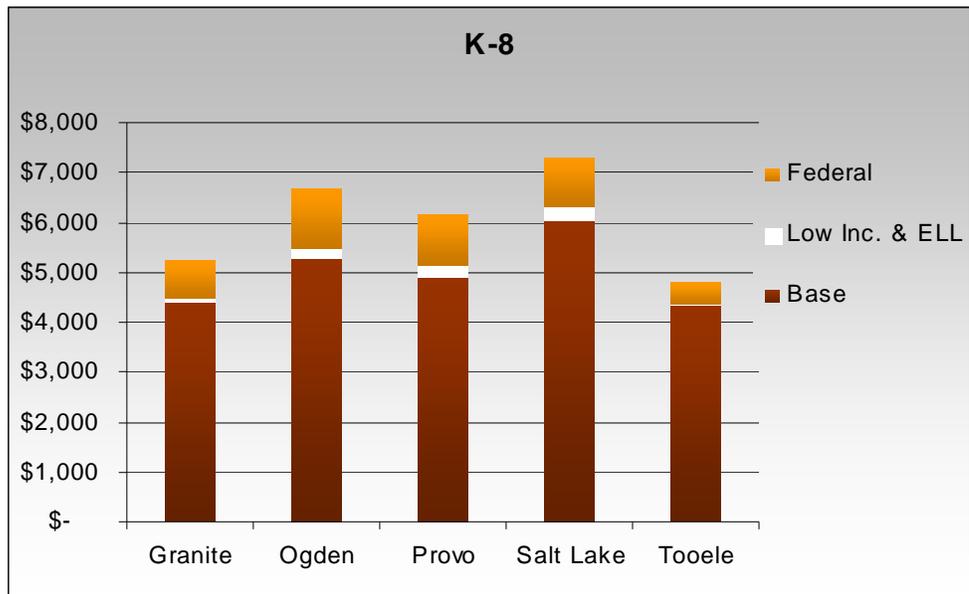
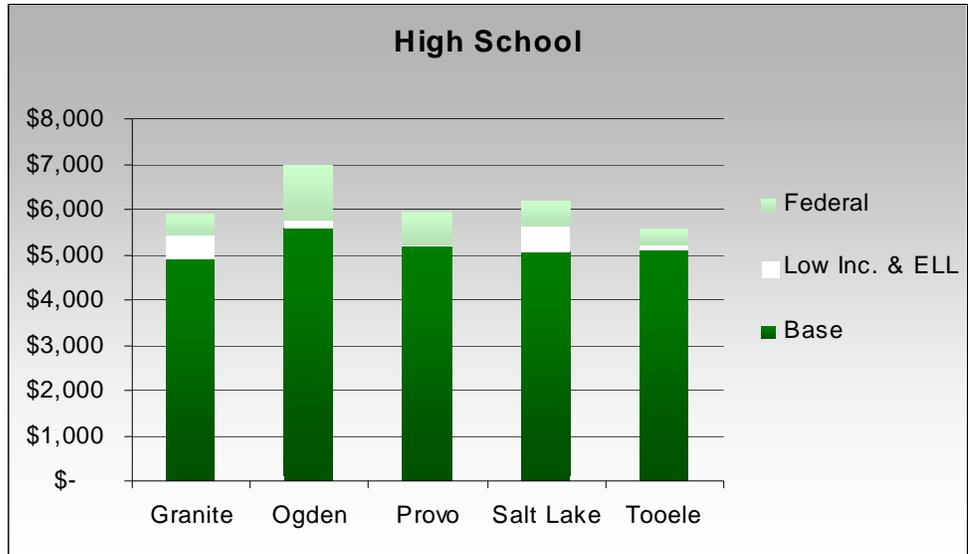
Figure 4 shows the annual per-pupil costs by school district before these costs are segregated into grades K-8 and 9-12 annual per-pupil costs. As can be seen, school districts vary in their annual per-pupil expenditures and in their annual per-pupil use of federal money.

**Figure 4. Annual Per-Pupil Costs by School District for Fiscal Year 2006.** These annual per-pupil costs are weighted averages based on actual costs from each district. The base costs and low-income and ELL costs are entirely from state and local government dollars.



The overall annual per-pupil cost used to make the total cost estimate (\$4,900 for grades K-8 and \$5,500 for grades 9-12 identified in Figure 3) was calculated as a weighted average of the five district averages for grades 9-12 and grades K-8. The district averages for grades 9-12 and grades K-8 are shown in Figure 5.

**Figure 5. Costs by School District & Grade Category for Fiscal Year 2006.** These district costs were used to create the weighted averages in Figure 3, because these five districts have high concentrations of ELL and low-income students.



As can be seen in the figure, the actual annual per-pupil costs are somewhat greater when federal dollars are included. However, the primary purpose of this review was to estimate costs to Utah’s taxpayers of providing a public education to undocumented children.

## Population Estimate Is a Range

Total undocumented student cost estimates were calculated by multiplying average annual per-pupil expenditures, developed from the selected five districts, by an estimate of the population range of undocumented children enrolled in Utah public schools. The population estimate was provided by Dr. Jeffery Passel of the Pew Hispanic Center.

The methodology employed for estimating the population of undocumented students involves subtracting the population of legal foreign-born residents from the total foreign-born population. The total foreign-born population is identified by the Current Population Survey conducted by the US Census Bureau as well as other federal data sources. The legal foreign-born population is determined from data provided by the Department of Homeland Security and other federal agencies.

Using this nationally collected information, Dr. Passel determined the range of total undocumented residents for Utah in 2005 to be approximately 75,000 to 100,000. The ratio of undocumented students to the total undocumented population is estimated between 1/6 and 1/7. The calculation based on this data is shown in Figure 6.

**Figure 6. Undocumented Student Population Estimate for Utah.** These population estimates, ranges, and ratios were estimated by Dr. Jeffrey Passel of the Pew Hispanic Center.

Ratio (Student to Total)	Total Undocumented Population Estimate (Based on March 2005 Data)	
	75,000	100,000
1/6	12,500	16,667
1/7	10,714	14,286

The resulting range of the population of undocumented students in Utah is 10,714 - 16,667. These ranges were not subdivided between K-8 and high school age groups. To accomplish this subdivision, Dr. Pamela Perlich, a senior research economist at the Bureau of Economic and Business Research, reviewed non-citizen, foreign-born age data for Utah

from the 2005 American Community Survey and concluded that approximately 65 percent of the undocumented student population could be in grades K-8, while 35 percent could be in grades 9-12. This final computation is shown in Figure 7.

**Figure 7. Undocumented Student Estimate by Grade.** Estimated proportions were used to separate the total undocumented student population range into grades.

Grade Category	Pew Hispanic Center Estimate (Based on March 2005 Data)	
	Proportion	10,714 - 16,667
High School	35%	3,750 - 5,833
K-8	65%	6,964 - 10,834

We believe these estimates from Dr. Jeffrey Passel of the Pew Hispanic Institute are the best available at this time; however, we could not audit his data. One of the observations of Dr. Passel’s work is that it is not very transparent. In fact, Dr. Perlich indicated that it is not clear to her exactly how he makes his estimates. Nonetheless, he is viewed as the national authority on estimating undocumented populations.

### **Simpler Methodology Provides Support**

In addition to the primary methodology that this review employed, a simpler methodology exists. This method is comprised of multiplying the average state annual per-pupil cost by the population estimate. One potential strength of this simpler methodology is that it treats all students the same; all costs are spread equally over all students. We made two calculations. The first calculation used the 2006 state average annual per-pupil cost without exclusions, which means federal costs are included. Figure 8 shows the results of this calculation.

**Figure 8. Simple Cost Estimate Using Fiscal Year 2006 Annual Per-Pupil Cost without Exclusions.** The simple cost estimate is lower than the estimate resulting from the review’s primary methodology.

	Population Estimate	Average 2006 State Annual Per-Pupil Cost	Total 2006 Cost Estimate (expressed in millions)
Low Estimate	10,714	\$5,405	<b>\$58.0</b>
High Estimate	16,667	\$5,405	<b>\$90.1</b>

*Note: This average annual per-pupil cost includes all costs whether funded by federal, state, or local money.*

Using the average annual per-pupil costs we developed that include federal funding (\$5,700 annual per-pupil K-8 cost and \$6,100 annual per-pupil 9-12 cost as shown in Figure 3), our low and high estimates would be \$63 million and \$97.9 million. Since this simpler methodology spreads all costs equally over a large base, while our review methodology assigns specific costs to a smaller base of specific program users, a difference between the two estimates is to be expected.

The second calculation used the 2006 state average annual per-pupil cost with exclusions. Two of the primary exclusions from this annual per-pupil cost are Federal Title I and Title V funding. Figure 9 shows the results of this calculation.

**Figure 9. Simple Cost Estimate Using Annual Per-Pupil 2006 Cost with Exclusions.** This simple cost estimate is very close to the estimate resulting from the review’s primary methodology.

	Population Estimate	Average 2006 State Annual Per-Pupil Cost	Total 2006 Cost Estimate (expressed in millions)
Low Estimate	10,714	\$5,140	<b>\$55.1</b>
High Estimate	16,667	\$5,140	<b>\$85.7</b>

*Note: This average annual per-pupil cost excludes federal Title I and Title 5 money.*

These estimates are very close to the estimates that are a result of this review’s primary method (\$54.9 million and \$85.4 million respectively). However, the simpler method uses an annual per-pupil cost that only

excluded some federal funds, while the annual per-pupil costs of our primary methodology excluded all federal funds.

We conducted these calculations in an effort to provide some level of support for the final estimate that resulted from the review's methodology. The comparisons between the two methodologies' results increased our confidence. As a result, we believe our estimate to the Legislature of \$54.9 million to \$85.4 million as an expenditure allocation for the public education of undocumented children is reasonable.

**This Page Left Blank Intentionally**

**Agency Response**

# UTAH STATE OFFICE OF EDUCATION

Leadership. . . Service. . . Accountability

Patti Harrington, Ed.D.

State Superintendent of Public Instruction

Voice: (801) 538-7500

Fax: (801) 538-7521

TDD: (801) 538-7876

250 East Cesar E. Chavez Blvd. (500 South)

P.O. Box 144200 Salt Lake City, Utah 84114-4200

May 10, 2007

John M. Schaff, Auditor General  
Office of the Legislative Auditor General  
W315 Utah State Capitol Complex  
PO Box 145315  
Salt Lake City, UT 84114-5315

Dear Mr. Schaff:

Thank you for the opportunity to review the draft report of, "A Review of the Education Costs of Undocumented Children." While the Utah State Office of Education cannot verify or audit the methodology used in the report, it is a reasonable assumption that there are additional costs to educating English Language Learners (ELL) and students who are living in poverty. Experience in schools verifies that assumption.

An ELL child needs to learn English as soon as possible as they enter school. Some enter at young ages; others come to the U.S. as high school students, without English-speaking abilities. Teaching English as a second language is best done by an endorsed English as a Second Language teacher who understands how to rapidly develop English-speaking abilities. Most ELL students are in ELL-specific settings for part of the day, perhaps two or three hours if they have little or no English-speaking capacity. Others, with growing abilities in English, need only one hour daily or occasional monitoring and help. However, ELL children are also assigned to a traditional classroom (elementary) or schedule of classes (secondary). There are, therefore, costs associated with additional teachers for ELL students.

Some innovative practices are underway in Utah to try alternative methods of instruction for ELL students. These include newcomer schools (a school of full-day English instruction for the first few months of non-English speaker enrollment) and dual immersion classrooms (classes where two languages are used daily for instruction, thus helping speakers of English and speakers of other languages learn two languages proficiently).

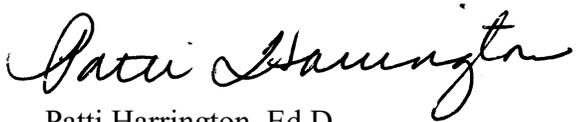
The Utah State Board of Education has created an ELL core curriculum and assessments tied to high expectations of English acquisition. Students reach benchmarks of performance to make their way toward full English-speaking ability. Technology has been used in many schools to individualize learning in English. At some point in each day, however, it is vital that ELL students participate in group discussions with an expert educator so as to connect conversation with context and culture.

John M. Schaff  
May 10, 2007  
Page 2

Historically, student achievement and poverty status of students have been linked. It is not universally true, but more the norm than not that students living in poverty will need additional help, specifically in language development leading to proficient reading skills. Thus, additional time and/or intensified or small group instruction is needed to help students develop vocabulary and comprehend language and meaning. This additional help (in time and/or intensity) usually comes at additional cost and may be best targeted at the preschool years and in the early years of elementary school.

The Utah State Office of Education is dedicated to helping all children succeed and hopes this audit may be helpful in acquiring additional funding for English Language Learners in Utah.

Sincerely,

A handwritten signature in cursive script that reads "Patti Harrington". The signature is written in black ink and is positioned above the printed name and title.

Patti Harrington, Ed.D.  
State Superintendent of Public Instruction