Traditional special education preparation programs may not provide a sufficient supply of new teachers. Given the chronic severity of shortages, other approaches have been suggested to increase the supply of new teachers—including alternative routes to certification.

Analyzing the costs and benefits of these various programs may result in more efficient allocation of funds. What should be considered when doing a cost effectiveness analysis?

“When considering a cost effectiveness model for preparing special education teachers, two elements come to mind—cost and attrition,” COPSSE director and researcher Paul Sindelar tells us. Most people are aware of the typical program costs— instructional costs (e.g., instructor salaries, equipment, and materials), administrative costs (facilities, record keeping, and student services), and opportunity costs—and how these are considered in relation to the number of candidates. However, cost effectiveness also varies as a function of attrition so that high-cost programs may be cost effective when retention is sufficiently high and low-retention programs may be cost effective when cost is sufficiently low. Sindelar adds, “We also know that highly qualified teachers tend to persist longer.”

Given these variables, how do we measure cost effectiveness of preparation programs? COPSSE research is offering new insights into conceptualizing a model.

Costs of Preparation in Relation to Retention

Little is known from research about preparation and the probability that a beginning teacher will persist. Lacking good data, what can we infer about retention by preparation program type?

Some preparation program graduates enter teaching, while others do not. However, Sindelar cautions, “The number of individuals who begin a program and the number who complete a program can be somewhat misleading because some of them really should not pursue a career in teaching.” So, unit cost is better expressed as cost/number of graduates who enter the profession.

Cost also is expressed in terms of teach-
ing three to five years out. “Cost per capita and cost per capita three to five years out are part of the equation,” Sindelar points out. “Attrition should be considered at different points along the way. Teachers who remain beyond five years tend to stay throughout their careers, which enhances cost effectiveness.” Sindelar relates the following example from the work of Linda Darling-Hammond. It shows how cost interacts with attrition three years out:

- **Teach for America**—This national program targets individuals from outside education. The costs of preparation are relatively low, and a large percentage of candidates enter teaching. However, by three years out, a very low percentage of these individuals remain. Thus, the program would not be considered cost effective.

- **Holmes Group**—This program targets individuals who are willing to make a five-year-plus commitment to professional teacher education. Candidates are expected to invest considerable personal time and resources, which economists say partly explains persistence. After three years, the majority of candidates remain, making the program cost effective.

- **Traditional teacher education**—Traditional training has a relatively low average cost, since most students would attend college anyway. Attrition is highest at the point of graduation, with a large number of candidates opting for other career paths. For those who go into teaching, retention is higher after three years. Thus, this program is considered to have average cost effectiveness.

**An Example of Cost Effectiveness**

From 1992 through 1995, the U.S. Department of Education, Office of Special Education Programs (OSEP) funded the Volusia County/University of Florida Program. The program offered bachelor’s level teacher preparation for paraprofessionals. Nineteen paraprofessionals graduated from the program. The total cost of the program was $274,000, with a unit cost of $14,413 (discounting administrative costs). Sixteen of the original graduates currently are teaching in Volusia County. To date, graduates have provided 140 years of service, at an annual cost of service of $103.

**Beginning Teacher Quality Upgrade**

All other things being equal, if graduates of Program A are judged to be more effective teachers than graduates of Program B, Program A may be said to be more cost effective than program B. Similarly, if a low cost program produces large numbers of unqualified teachers, then cost effectiveness is low.

Sindelar describes some of the challenges in operationalizing this variable. “There is no ready measure that people accept for quality. Qualifications (e.g., credentialing) are not a persuasive or accurate measure of special education teacher quality.” To address this issue, COPSSE is currently embarked on a new study to identify elements of effective special education teacher preparation.

**For More Information**

Information reported in this preview was based on research that COPSSE researchers—Paul T. Sindelar, Michael S. Rosenberg, Jim Dewey, Dave Denslow, and Chifeng Dai—crafted into professional presentations (available on the COPSSE web site at www.copsse.org).

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**About COPSSE**

The Center on Personnel Studies in Special Education is funded by the Office of Special Education Programs of the U.S. Department of Education [cooperative agreement #H325Q000002]. COPSSE research is designed to inform scholars and policymakers about beginning teacher quality, effective initial preparation, and the effects of preparation alternatives. The Center is directed by Drs. Paul Sindelar and Mary Brownell. The research previews are produced by Warger, Eavy & Associates.