

Development and Implementation Costs of Student Learning Objectives:

Considerations for TIF Grantees

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Introduction

This brief explores the costs of developing and implementing Student Learning Objectives (SLOs) in order to help Teacher Incentive Fund (TIF) grantees interested in adopting SLOs anticipate and understand the costs of implementing them in a district or school. The brief focuses on the costs involved with the initial design and implementation of an SLO system rather than the ongoing costs of operating SLOs once initial implementation has been completed; however, a brief discussion of ongoing operating costs is also included. The brief begins with an overview of SLOs and the SLO process, then moves to a description of a cost framework developed for this effort. Those sections are followed by a discussion of the costs likely faced by grantees engaged in this work. The discussion of costs is supplemented with actual cost data provided through interviews with two TIF grantees that have gone through the SLO development and implementation process. Finally, the brief offers several conclusions based on the two grantees' experiences.

An Overview of SLOs

One of the challenges of implementing compensation plans based on performance as measured by student learning is how to measure learning in grade levels or subject areas not subject to state testing. In many states, such testing is done only in reading and math in grades 3–8 and once in high school. SLOs provide one option for generating student growth data in these non-tested grades and subjects. In the SLO process, an educator, or team of educators, establishes learning targets based on classroom or district-provided data, carries out instruction or specific interventions, then, after a predetermined period of time, measures how well students met the learning targets (Lachlan-Haché, Cushing, & Bivona, 2012b).

When done with integrity and the appropriate amount of resources and support, SLOs have been shown to have a number of benefits that exemplify good professional practice. They include encouraging (and sometimes requiring) collaboration among educators, using data to identify student needs and guide instruction, and reflecting on one's practice. Compared to standardized assessments

for measuring educators' contributions to student learning (typically through value-added or other statistical growth models), SLOs often have a higher degree of buy-in among educators because they are actively involved in the process. In contrast, standardized assessments may be perceived by educators as distant from their daily instruction, requiring a long time to return results, and offering little in the way of meaningful feedback about how to improve instructional practice. SLOs also provide a greater range of coverage than standardized growth measures because they can be developed for all educators (McCullough, English, Angus, & Gill, 2015; Gill, English, Furgeson, & McCullough, 2014; Lachlan-Haché, Cushing, & Bivona, 2012a; Reform Support Network, n.d.).

Emerging research on SLOs has also identified several potential limitations and tradeoffs that states and districts (including TIF grantees) should consider. Developing and implementing a high-quality SLO process involves substantial time on the part of educators (and the costs associated with this time, as discussed below). There may be limited variation in SLO score distribution, which may inadvertently magnify minor differences in actual student growth (particularly where SLOs are used for high-stakes purposes, such as performance bonuses). The technical quality and rigor of both the assessments and the growth goals used in the SLO process may be lower

The Process for Developing SLOs

The process of developing SLOs consists of the following steps (Lachlan-Haché et al., 2012b). First, educators must identify what content knowledge or skills students should acquire during a course or unit. In this step, educators articulate the key content that will be taught and assessed during the specified period of instruction.

The second step entails collecting student performance data from multiple sources to gain an understanding of student needs related to the content of the course or unit and to establish a baseline against which performance growth will be measured. These data may include results of state or district assessments, educator-developed assessments, student work, or other measures.

Once these data have been collected, educators must thoroughly analyze them to identify the particular content knowledge or skills on which to focus, establish a performance baseline, and determine the appropriate amount of learning growth to expect. This analysis may be accomplished by examining trends in past performance and assessing the current level of prerequisite knowledge and skills students bring to the subject.

In the next step, educators determine the focus of the SLO. There may be multiple dimensions of this focus, including the identification of particular standards or areas of content where improvement is needed as well as the separation of students into groups based on prior achievement level (e.g., students with a weak prerequisite knowledge, those approaching mastery, and those have already mastered the content). In this step, educators also determine period

of instruction over which learning will be measured by the SLO—a unit, a semester, or an entire school year. This time period may be dictated by external factors such as state or district assessment schedules.

Next, educators must select the summative assessment or assessments that will be used to measure student learning at the end of the relevant period of instruction. These assessments may include state or district-adopted assessments, off-the-shelf assessments, educator-developed assessments, or student work samples. Whichever assessment is selected, steps must be taken to ensure its validity, reliability, and rigor.

In the final step, educators set a growth target for the SLO. This growth target represents the desired amount of learning to occur over the established baseline during the specified instructional period. This growth will be measured via the assessment(s) selected in the previous step and should represent a challenging yet attainable amount of learning.

It is clear from this brief description of the SLO process that implementing SLOs district- or schoolwide is a complex undertaking. It requires a thorough and inclusive planning process along with extensive professional development for educators who are often not well prepared for working analytically with data, setting measurable learning targets, or designing their own valid and reliable assessments. District and school administrators also face a learning curve with regard to providing the necessary supports for educators, ensuring consistent rigor across all SLOs, and incorporating SLO results in educator evaluations.

than would be the case with more statistically informed growth models such as value-added. Finally, there may be an incentive for educators to set low growth goals within their SLOs, particularly when the results are used for high-stakes purposes (McCullough et al., 2015; Gill et al., 2014; Lachlan-Haché, Cushing, & Bivona, 2012a; Reform Support Network, n.d.).

The Cost of Designing and Implementing SLOs

The process of designing and implementing a SLO system entails a number of steps. While the specific approach used by districts or schools may vary, the implementation process generally requires the following elements:

- Staff time. Included is time to research and evaluate alternative SLO models, manage the planning and implementation process, communicate with educators, and provide or arrange for educator training.
- Consulting contracts. Grantees may use consultants to assist with designing their SLOs, facilitate the development and implementation process, develop local assessments, or provide educator training.
- Technology and materials. The process may also involve the development or purchase of specific technologies and materials. The most common materials include resources such as books, reports, and issue briefs on SLO design; a SLO handbook for educators; and specialized software for managing SLOs.
- Travel. During the planning and development stage, staff may travel for site visits to schools or districts with experience using SLOs or to conferences or other forums to learn more about alternative SLO approaches. Travel costs include transportation, such as vehicle mileage or airfare, accommodations, and meals.
- Release time. Release time consists of the costs of providing the time teachers with classroom coverage responsibilities need for participating in planning and implementation activities. These costs cover substitute teachers or stipends for work performed outside of the regular contract day or year.
- Meeting and training space. This cost category typically consists of renting space for holding planning meetings or training sessions, for example, in a meeting room at a hotel.

This brief disaggregates its analysis of the startup costs of SLOs into two distinct sets of activities that are typical at the start of the development process. The first set is related to the design and implementation of the SLO process. In this development stage, the grantee is undertaking several steps, such as the following.

- Researching alternative SLOs models. This step includes reviewing the literature on SLOs, searching out exemplary SLO designs, visiting sites known to run an effective SLO process, or consulting with SLO experts.
- Establishing a design and implementation process. This step may include establishing a committee or work group to manage the process, communicating with educators about the process and evolving design, and working to establish a consensus around the SLO process with educators.
- Taking steps to implement the design. This step may include setting an implementation timetable, creating in-house or purchasing necessary materials, designing necessary educator training, and taking other steps to roll out the SLO process in the first year of implementation.

The second set of activities relates to carrying out educator training on SLOs and the SLO process. These activities include identifying necessary training, scheduling and holding the training sessions, and providing follow-up training and support as necessary.

A third set of costs is not addressed in this brief. They are the ongoing annual costs of the SLO process once the initial implementation has been completed. The types of ongoing costs a grantee should consider are briefly noted later in this paper.

SLO Cost Framework

For the purpose of this brief, a cost framework was designed based on the cost elements described above. The framework was used to collect cost data from two TIF grants on designing, implementing, and providing training to educators on an SLO system. The two grantees are a regional education service agency working with multiple rural school districts and a large urban school district. The cost data were collected via telephone interviews using the framework to guide the conversation. To make the cost data comparable across the geographical regions represented by the grantees, only cost elements, or ingredients, rather than actual cost data, were collected during the interview. The cost elements include the number of staff involved and their positions, the amount of time dedicated to different SLO tasks, consulting contracts, the number and type of materials developed or purchased, technology purchased or developed in-house, and the number of substitute teacher days and stipends paid out. Spending was then estimated by applying national prices taken from a database developed by the Center for Benefit-Cost Studies of Education (2013) at Teachers College, Columbia University to each of the cost elements. Because these costs were collected well after the expenditures were made and detailed itemization by our cost categories was not available, they should be considered as best available estimates, not a comprehensive cataloging of the costs incurred.

Nonetheless, this brief represents a significant first step toward better understanding the resources and their corresponding costs required to implement SLOs. The analysis illustrates how the costs of two successful grantees' SLO projects vary based on the design and approach of the SLO process.

Table 1 shows the total estimated spending for SLO design, implementation, and training for the two grantees reporting SLO cost data. Grantee A is the education service agency and Grantee B is the urban district. The difference in total spending results from three factors. First, Grantee A was working with only 1,200 teachers during this period of time (SLOs have since been introduced in a number of additional schools, impacting between 5,000 and 6,000 teachers total) compared to 2,700 teachers for Grantee B. Other factors causing higher spending by Grantee B is a greater investment in paid time by district staff and a greater use of consultants (since all SLOs approved by building-level administrators are also reviewed by either consultants or central office staff).

Although Grantee B's total spending on SLO implementation was higher, Grantee A's cost per teacher writing SLOs was actually higher than Grantee B's per-teacher expenditures. Total perteacher spending by Grantee A was \$371 compared to \$281 by Grantee B.

Table 1.

Total costs of SLO design, implementation and training

Cost ingredient	Amount Grantee A	Percent of total Grantee A	Amount Grantee B	Percent of total Grantee B
Staff salaries and benefits	\$94,081	21	\$361,331	48
Consultants	20,000	4	143,000	19
Technology and materials	210,584	47	133,933	18
Travel	121,090	27	10,000	1
Release time	0	0	109,316	14
Meeting/training space	0	0	0	0
Total	445,755	100	757,580	100

NOTE: Percents may not add to 100 because of rounding.

Figure1 shows the combined spending by both grantees by cost element. The cost of staff salaries and benefits is the largest spending area, making up 38 percent of the total. The magnitude of spending in this category is not surprising, given that staff time is required to manage the planning and implementation process, research and develop the design of the SLO model used by the grantee, communicate with educators and other stakeholders, and develop (or purchase) appropriate assessments and other materials required for doing SLOs. The next largest cost element, technology and materials, accounted for 29 percent of total spending. The vast majority of spending in this area for both grantees was for the development of SLO management software. Spending on consultants and travel expenses accounted for a similar proportion of total spending, 13 percent for consultants and 11 percent for travel. A significant portion of spending on consultants was for the development of SLO assessments and SLO management software. However, the amounts spent in each category by the two grantees were quite different. Grantee B accounted for nearly 90 percent of the total spending on consultants, while Grantee A accounted for more than 90 percent of total spending on travel expenses. Finally, the cost of

release time for educators to participate in the process made up 9 percent of total spending, but Grantee B incurred all of the release time costs. Neither grantee reported spending for the use of rented facility space.

Figure 1.

Total SLO design and implementation costs, by cost element



The following sections take a closer look at the strategies employed by the two grantees to design and implement their SLO systems, the spending by cost element for each grantee, and an assessment of how differences in the grantees' approaches led to variation in spending within each of the cost element areas.

Design and Implementation

Both organizations carried out their initial design and implementation work over a four- to six-month period. They each employed similar strategies such as establishing a small committee or working group to guide the process, working with consultants to provide specialized expertise, and purchasing or developing specific materials and technology to support their SLO processes. However, there was considerable variation in the specific approaches taken within each of these general strategies. Table 2 summarizes the costs for the two grantees during the initial design and implementation of SLOs.

Table 2.

Total costs of design and implementation

Cost ingredient	Amount Grantee A	Percent of total Grantee A	Amount Grantee B	Percent of total Grantee B
Staff	\$94,081	31	\$174,296	36
Consultants	0	0	65,000	13
Technology and materials	210,584	69	131,633	27
Travel	0	0	10,000	2
Release time	0	0	109,316	22
Meeting/training space	0	0	0	0
Total	304,665	100	490,245	100

Staff. Establishing a team or committee of staff was central to driving the process for both grantees. The makeup of the teams differed partially because of the difference in how the two grantees are organized. Grantee A is an education service agency working with six small, rural school districts. Its process was led by five staff from the agency and two central office administrators from each of the participating districts. As a single school district, Grantee B assembled a steering committee with representatives of various stakeholder groups within the district, including four to five central office administrators, two to three principals, three teachers, a parent, and a community member. While all of the staff members had other responsibilities during the time the work took place, the time they dedicated to SLO implementation ranged from about half-time for several of the education service agency staff to a few days a month for other members of the committee.

While Grantee B spent more overall on staff time for planning and implementation (\$174,296 versus \$94,081), on a per-teacher basis Grantee A spent \$78 compared to \$65 for Grantee B. Grantee A spent more in relative terms because it elected to do much of the design and implementation work in-house, relying primarily on education service agency staff. Grantee B, on the other hand, supplemented staff efforts with several consultants who helped with facilitating the process, designing the SLO process, and developing an assessment strategy. In both cases, roughly a third of total spending was for staff salaries and benefits.

Consultants. Both grantees made use of consultants to assist with the design and implementation process. However, Grantee B spent \$65,000 for consultants who worked on a wider range of tasks and over a longer period of time. The consultants helped staff facilitate the development process, worked as thought partners on the design of the SLO process, and helped to write SLO assessments. Grantee A took advantage of opportunities for accessing short-term, no-cost consulting services, including the no-cost technical assistance provided through the TIF program and a free site visit by staff from a nearby school district with extensive experience in designing and using SLOs.

Technology and Materials. The costs of technology and materials for both grantees consisted primarily of developing SLO management software and publishing a SLO handbook for educators participating in developing SLOs. Software development represented the largest share of these expenditures, totaling \$210,584 by Grantee A and \$131,633 by Grantee B. The two grantees took different approaches to software development, with Grantee A contracting the work out and Grantee B developing it in-house. Grantee A spent \$200,000, 69 percent of its total spending on SLO development, for a vendor to write the software and provide ongoing maintenance once it became operational. Alternatively, Grantee B tasked an in-house programmer with developing the software and creating a SLO database. A district programmer spent about 25 percent of her time working on the SLO software during the first year of SLO implementation, which cost the grantee about \$25,776. A full-time programmer, whose compensation totaled \$88,374, was also hired to create and maintain a districtwide SLO database.

The other major expense in this category was the publication of a SLO handbook for educators. This element only captures the cost of printing the handbook as the staff time required for developing the content is captured in the staff time costs. Grantee A spent \$8,727 to reproduce 1,200 copies of its handbook, while Grantee B spent \$14,727 to produce 2,700 handbook copies.

Travel. Travel costs consist of spending for airfare, hotels, meals, and mileage for conducting site visits and attending conferences related to the SLO development process. The \$10,000 expenditure by Grantee B was for the costs of sending three staff persons on a three-day site visit to a district with extensive experience in using SLOs. Since Grantee A was able to bring a nearby district with SLO experience in to consult onsite, it did not incur any travel costs during the design and implementation phase.

Release Time. Release time costs consist of either stipends for paying educators for time spent working on SLO implementation outside of the normal contract day or year (for example, after school or during the summer) or for the cost of substitutes to cover educators' class periods. Grantee A avoided release time costs by working primarily with district central office staff during the design and implementation phase. Grantee B incurred \$109,316 in release time costs through two activities. It paid educators stipends for time spent during the summer writing SLOs for initial implementation the following fall. It also provided substitute teachers to provide student-free time for a cadre of new SLO facilitators who worked in schools to help educators write SLOs during the first year of implementation. This practice continued for the duration of the TIF grant but may not be continued after grant funding ends.

Meeting/Training Space. The meeting/training space category refers to the cost of renting space for holding planning meetings, sharing information with larger groups of staff or the community, or other designand implementation-related purposes. Both grantees were able secure adequate facilities onsite rather than rent from an external vendor. Grantee A primarily used meeting space available at the education service agency facility, while Grantee B used space in district-owned buildings. Neither grantee incurred any costs for this purpose.¹

1 A cost framework based on opportunity costs (e.g., Levin & McEwan, 2001) would include the costs of using "owned" facilities based on usage and annual value; from this perspective, not including these types of facility costs underestimates the total costs.

Although SLO work by educators may not represent additional expenditures by a grantee because this work is accomplished either during the contract day or year, or on educators' own time, there is still a "cost" involved. Economists refer to these costs as "opportunity costs." An opportunity cost represents the tradeoff of either no longer doing a task, or spending less time on the task, to make time for doing something new. For example, to make time for developing and administering SLOs in her classes, a teacher may need to spend less time on other tasks such as lesson planning.

Educator Training

Because of the importance of providing adequate training for educators and school and central office administrators on the SLO writing and review process, training costs are examined separately from other implementation costs. Table 3 summarizes the costs for the two grantees for SLO-related training.

Table 3.

Total costs of educator training

Cost ingredient	Amount Grantee A	Percent of total Grantee A	Amount Grantee B	Percent of total Grantee B
Staff	\$0	0	\$187,036	70
Consultants	20,000	14	78,000	29
Technology and materials	0	0	2,300	1
Travel	121,090	86	0	0
Release time	0	0	0	0
Meeting/training space	0	0	0	0
Total	141,090	100	267,336	100

Similarly to the costs associated with SLO design and implementation, there are large differences in the spending patterns for training between the two grantees, which result from differences in the way they are structured and the strategies they adopted to carry out their training. The following section summarizes the two grantees' expenditures for initial educator training on SLOs using the same cost framework cost categories.

Staff. Grantee A reported no expenditures on staff time for training. While it is likely there were some staff costs not captured by this brief, Grantee A relied primarily on contracted training followed by less formal training opportunities offered in participating educators' districts and schools. Grantee B reported spending an estimated \$187,036, 70 percent of its total spending, for staff-led training. The bulk of this expenditure represents the salaries and benefits of a team of teachers on special assignment (TOSAs) who worked with educators one on one and in small groups in schools. This key training strategy for the grantee will continue after TIF funding has ended.

Consultants. Both grantees reported purchasing the services of consultants to provide specialized training related to SLOs. Grantee A reported spending \$20,000 for an extensive training session on writing SLO assessments for 12 participants from the six participating districts. The bulk of the training occurred in the fall, just before the start of the school year. A second follow-up training session was also held later in the school year. Grantee B reported spending \$78,000 for similar training on writing SLO assessments. Most of this training occurred during the school year along with a two-day session held during the summer.

Technology and Materials. Neither grantee reported significant spending in this category. Grantee A reported no costs in the category, while Grantee B reported spending a total of \$2,300 for the purchase of a SLO assessment guidebook for each of its participating TIF schools.

Travel. The majority of expenditures for training reported by Grantee A, 86 percent, falls into this category. All of Grantee A's spending on travel was for two multiday SLO trainings held at the education service agency's offices. One hundred and fifty principals and lead teachers from the six participating districts participated in both trainings. The costs included hotel, meals, and mileage reimbursements. Grantee B reported no spending in this category. **Release Time.** Neither grantee reported expenditures for release time for educator training. Both grantees avoided these costs by scheduling training during the contract day or year. For example, Grantee A used professional development days built into its participating districts' contracts for its multiday SLO training.

Meeting/Training Space. Again, both grantees used their own facilities for all related activities, thereby avoiding facility rental costs.

Ongoing Annual Costs of Administering SLOs

Although not a focus of this brief, grantees should also be aware of the types of ongoing costs associated with administering SLOs. The most significant ongoing costs consist of staff time. Educators spend significant time developing one or more annual SLOs—reviewing student data, identifying an area or areas of focus, setting learning targets, and selecting or developing assessments. Time is also required for administering and grading the assessments and assessing how well students performed vis-á-vis the learning targets, as well as for principals or other administrators to review and approve SLOs and meet with educators to discuss their findings about SLOs as part of the educator evaluation system.

These annual costs of educators' developing and reviewing SLOs are just two of the ongoing costs

grantees may incur for the annual operation of an SLO system. Other costs include providing ongoing training and support for continuing educators; training educators new to the system on the SLO process; maintaining SLO management software; and producing SLO handbooks, forms or templates, assessments, and other consumable materials. While these costs are not trivial, the most significant costs—staff time tend to be rolled into the "cost of doing business" in districts and schools. In most cases, both of these tasks are assumed to occur during the regular work day, i.e., during time paid for through employees' contracts. While it is likely some of this work occurs during the evening or over weekends, the staff are not paid for this extra time. Thus, in many settings there is no additional expenditure of funds for performing these tasks.²

Conclusions

This brief provides one of the most complete looks to date at the types and magnitude of costs grantees will face when implementing SLOs and demonstrates how the costs will vary by the design and implementation of the SLO process

Total spending by the two grantees for design, implementation, and initial educator training for SLOs was \$371 per teacher by Grantee A and \$281 by Grantee B, or an average over the two grantees of \$309 per teacher (weighted by the number of teachers for each grantee). A sample of two grantees is hardly adequate to use for estimating typical costs other grantees can expect, but given the differences between these two grantees in terms of their organizations and the planning and implementation approaches used, the range of total per-teacher costs may provide a good starting point for other grantees embarking on

² Although SLO work by educators may not represent additional expenditures by a grantee because this work is accomplished either during the contract day or year, or on educators' own time, there is still a "cost" involved. Economists refer to these costs as "opportunity costs." An opportunity cost represents the tradeoff of either no longer doing a task, or spending less time on the task, to make time for doing something new. For example, to make time for developing and administering SLOs in her classes, a teacher may need to spend less time on other tasks such as lesson planning.

SLO development. However, these estimates may be low, as at least one other preliminary review of SLO implementation costs (McCullough et al., 2015) found much higher SLO implementation costs of \$1,000 to \$1,500 per teacher.

The total cost of this process will be driven by several factors. The first concerns the capacity of staff to do the work in-house rather than relying on consultants. To the extent that staff can carry out the work within the bounds of their current work day or year, the grantee may not incur significant additional costs. Additional costs will accrue if additional staff need to be hired or if current staff are paid for time outside of the normal work day or year. Any work carried out by consultants will represent a real, additional cost to the grantee. In deciding between doing the work in-house versus using consultants, the grantee should consider 1) whether current staff have, or can develop, the necessary expertise, and 2) whether the costs of staff time will be less than the cost of hiring consultants for the same work.

Based on the experience of these two grantees, another important factor influencing costs is whether there is currently time built into educators' schedules for training and reflecting on SLOs. The grantees interviewed for this brief made use of professional development days at the start of the school year that were built into their contract year for much of their SLO training. To the extent schools have other time for collaborative professional development, such as daily or weekly professional learning community time, or late start/ early release days, they can minimize release time costs, potentially another significant cost.

Finally, the different organization types represented by the grantees also impacted costs. Grantee A, as an education service agency working with multiple districts distributed over a wide geographical area, incurred significant travel costs when hosting educator trainings. Roughly a quarter of its total spending for SLO development was used to pay for mileage, hotels, and meals for educators attending its trainings. Grantee B, on the other hand, is a stand-alone district. Its educator training could be held onsite without any travel costs as long as the training occurred during the normal contract day and year.

The cost structure developed for this brief provides a useful structure for organizing and categorizing cost data related to SLO implementation, and serves to inform grantees of the types of costs they may encounter when developing and implementing SLOs. This cost structure consists of the following cost elements: 1) staff, 2) consultants, 3) technology and materials, 4) travel, 5) release time, and 6) space for meetings and training. Using this cost structure to organize SLO-related expenditures shows that overall, the cost of staff involved in the process is greatest across the different cost elements. For Grantee B, staff costs represented nearly half of total spending. However, as an illustration of how much the magnitude of these costs may vary across grantees, staff costs only accounted for 21 percent of total spending by Grantee A. Other significant cost elements include consultants, technology and materials, and, for Grantee B, release time for educators.

Grantees can use this cost structure to identify the costs of their SLO implementation and benchmark the costs against other grantees SLO costs and/or against other growth measure options (an SLO cost checklist is included as Appendix A). Additionally, as grantees move toward sustaining their SLO process, it will be important for them to assess the return of investment of SLOs; identifying the costs is a critical initial step.

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Appendix A: SLO Cost Checklist

Phase	Cost Elements
Design	Staff time
Researching	= Steering committee
-	 Design meetings
Fact finding	 Administration
Designing	Site visits
Communicating	Presentations or other communications
Consensus building	Consultants
	= Facilitation
	Design expertise
	 Assessment writing
	Technology and materials
	 Information resources
	Communications materials
	Website
	Travel
	Site visits airfare, mileage, hotels, meals
	Release time
	 Stipends or substitute teacher time to allow educator
	participation in planning, presentations, other design
	activities
	Meeting space
	Space for holding planning/design meetings
	or presentations with educators
Initial Implementation	Staff time
	Administration
	Materials development (e.g., SLO handbooks)
	SLO management software development
	SLO database development
	 Dissemination
	Consultants
	Materials development (e.g., SLO handbooks)
	SLO management software development
	SLO database development
	Technology and materials
	Materials (e.g., SLO handbooks)
	SLO management software/hardware
	SLO database
	= Website
	Release time
	Stipends or substitute teacher time to allow educator
	participation in implementation activities

Table continued on next page

Phase	Cost Elements
Educator Training	 Staff time Administration Leading training sessions Consultants Training development Leading training sessions Technology and materials Online resources Website Travel Educator travel to training sessions Release time Stipends or substitute teacher time to allow educator participation in training activities Meeting space Space for holding training sessions