NRS Tips

National Reporting System

Planning for a Successful Data System

Your data system can provide a trove of information to help identify opportunities to strengthen Adult Education in your state. Planning a new system offers an opportunity to reflect on current and future needs and then to identify tools to help address those needs. Implementing an NRS data system without proper planning is like teaching a class without a curriculum. Without proper planning it may not meet state or local needs, collect all relevant information, operate reliably, or provide accurate information. Further, it may rely on technology resources that do not exist or require expertise to run that your organization does not possess. This edition of NRS Tips outlines a process to plan and build a successful data system.

Planning & Building a Data System

Over the years, software engineering practices have developed that assure the success of new systems. These approaches minimize the risk and help to manage the cost of new systems. Consider using the following planning & implementation steps to assure the quality of your NRS data system:

Requirements Analysis

Before jumping-in, spend some time thinking about your needs. Consider the overall mission for the system and discuss it with stakeholders. What functions are needed to fulfill NRS data collection requirements? Talk with your data analysis staff about requirements and best practices. Ask local program staff about what they like or dislike about the current system and identify lessons learned. Don't forget to talk with your IT department about available infra-

structure and in-house expertise. Put together a *requirements document* that describes the system, including required data elements, functionality, user characteristics & locations, and operating constraints. Take some time to review your plans.

Communicate Your Needs & Require Relevant Responses

Your *requirements document* can serve as the core of an RFP for your data system. It provides a detailed description of the capabilities you require and other important information. When you receive a proposal from a vendor or consultant, check it against your requirements document to be sure that it includes all needed functions. If you are building a system *to order*, ask that a *technical specification* be developed. This helps assure that system developers truly understand your needs and proper care is being taken as the system is developed.

Implementing the System

Test Your System

Once the system is ready, be sure to test that it meets your requirements. To prepare for this activity, develop an *acceptance test plan*. An acceptance test plan provides a protocol for trying out the system in a methodical way and proactively identifying problems. You may also want to recruit one or more local programs to try the system and provide feedback. Significant problems after *system rollout* may reflect poorly on your organization, not just on the vendor, so this is an important step.

Rollout Your System

During rollout, you or the vendor will prepare the system for *live* use. At this time, basic data

about each program, its classes, staff, and other information may need to be loaded into the system. Before going *live*, plan to do additional testing. Be sure to provide training for state and program staff. Training should cover new features and operating procedures.

Provide Ongoing Support

Careful planning and execution of your new system will help to minimize technical support requirements. However, system users will still need technical assistance – especially at rollout. The quality of the service you provide will significantly affect the perceived value and quality of your system among the user community.

Why Sweat the Technical Stuff?

You build a data system to generate NRS tables and to provide actionable insights into the effectiveness of programs, so its technical details may seem like a distraction. However, the following technical characteristics assure the success of your NRS data system:

Reliability

No matter how function-packed and user-friendly, your system cannot succeed unless it is reliable. Systems that are *down* or *bug riddled* cannot provide you with reliable and accurate information when you need it. With an unreliable system, you risk the loss of local staff's confidence, making it more difficult to enforce compliance in using it and further degrading effectiveness

Here are two ways to judge whether a system is sufficiently reliable:

1) Ask other states about their experiences with it. Does it always work as advertised? Does it ever bog down? Strange results in their NRS tables? Ask specific questions and probe for details of problems that others have experienced.

2) Try it for yourself. Using a system setup specifically for testing is a helpful. Even better, try it out using your own data if you have the time. Have a tech-savvy local program try it out. They will identify real world scenarios to test its limits. Also run reports and validate results.

It is important to assess system reliability before rollout. If you do not test before a system is installed for end-users, the most important test will come when the pressure is really on.

Usability

When systems are easy-to-use, less training and technical-support is required. Well designed programs also enable users to accomplish tasks in less time and to enter data with fewer errors. Local program staff may enjoy operating an easy-to-use system and use it more regularly as a result. In this way, usability promotes the collection of more accurate and up-to-date data.