

Wisconsin State Personnel Development Grant

**Evaluation Architecture:
Focus on
Fidelity of Implementation and Sustainability**

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Background

Passage of the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA '97) marked a significant shift in federal funding for professional development activities by authorizing a new initiative: Part D, Subpart 1 *State Program Improvement Grants for Children with Disabilities*. Previous to the 1997 Amendments, institutions of higher education were the federal government's apparent preferred provider of professional development and received the bulk of federal funds for professional development programs. The immediate impact of authorizing *State Program Improvement Grants for Children with Disabilities* was the diversification of professional development program funding to include funding for State Education Agencies (SEAs) for the purpose of addressing "personnel needs of States as identified and defined by States, not the Federal Government" (p. 37).¹ In creating this new avenue for SEA involvement, Congress expected SEAs would also change how professional development programs were administered by undertaking systemic reform that emphasized collaboration among multiple individuals, agencies, and institutions in the identification, design, development and delivery of personnel training.² Three specific systems were identified in IDEA '97 for systemic change: professional development, technical assistance, and dissemination of information.³ Between fiscal years 1999 and 2006, OSEP funded 49 state's *State Program Improvement Grants for Children with Disabilities* (Note: Texas did not apply for the State Improvement Program during these years).

Support for continuation of the *State Personnel Development Grants for Children with Disabilities* (hereafter referred to as SPDG) was reaffirmed in the IDEA Amendments of 2004. Most noticeably, new provisions shifted the emphasis from the previous focus on systemic change to improvement in educational outcomes for children with disabilities by requiring states to submit proposals for dedicating at least 90% of their funding to professional development needs.⁴ OSEP is currently administering SPDG Programs totaling \$22.6 million dollars in 24 states⁵ with annual state awards ranging from between \$500,000 and \$1,029,000. Anticipated FY 2009 funding will total \$41.175 million with awards to individual states ranging from between \$835,000 and \$2.2 million dollars. Personnel development interventions vary across the 24 currently funded states and include scientifically-based interventions such as instruction for children with high incidence disabilities, reading instruction, positive behavioral interventions; supports to improve student behavior in the classroom; and transitioning to postsecondary processes. Depending on the intervention, training participants serve preschoolers, K-12 students, parents, and individuals who provide direct supplementary aids and services to children with disabilities. Of particular note, evaluation of each state's SPDG professional development initiative is highly valued by OSEP; 20 of 100 possible points are awarded for the evaluation section of each state's five-year SPDG request for funding proposal.

¹ Senate Report No. 105-17 (1997) p. 37.

² Senate Report No. 105-17 (1997) p. 37.

³ IDEA, 1997, Part D, Subpart 1, Sec. 651(b)

⁴ IDEA, 2004, Part D, Subpart 1, Sec. 654 (d) (1).

⁵ SIG Grantees 2007-2011. Retrieved on October 8, 2008 <http://www.signetwork.org/grantees.html>

Wisconsin's State Personnel Development Grant

The OSEP five-year award of Wisconsin's State Improvement Grant (FY2002 – FY2006) provided funding for the Department of Public Instruction (DPI) to systemically change over a five-year period the professional development, technical assistance, and dissemination of knowledge systems for the purpose of improving results for children with disabilities served by both general and special education personnel. The primary focus of Wisconsin's State Improvement Grant was to accomplish this systemic change by initiating multiple collaborative efforts between the Wisconsin Department of Public Instruction, parents, schools, institutes of higher education, Wisconsin's parent center, Wisconsin's Cooperative Educational Service Agencies, and other agencies for the purpose of 1) improving the outcomes and opportunities for birth to 21 children with disabilities, and 2) producing professional development materials for wide dissemination during an anticipated second five-year State Improvement Grant award.

Building on the multiple collaborative partnerships developed during implementation of the Wisconsin's State Improvement Grant (FY2002 – FY2006), the current *Wisconsin SPDG* (FY2007 – FY2012) seeks to maximize the impact of personnel development statewide through implementation of a model initially conceptualized by Joyce and Showers⁶ (and subsequently used statewide in Iowa over the past several years) that links staff development with student achievement. The Wisconsin Personnel Development Model is being used by *Wisconsin's SPDG* Leadership Team to strategically guide movement *away from* the current practice of delivering professional development activities to individuals who randomly enroll in training events *towards* delivery of cohort oriented professional development activities (e.g., cross discipline group of professionals from one school, multiple groups from multiple districts within the same professional development event, etc.). In essence, the Wisconsin Personnel Development Model (hereafter referred to as *Wisconsin PDM*) acknowledges personnel development is a cyclical set of activities based on: 1) child/student learning outcome data; and 2) implemented through sustained group work that continuously utilizes child/student and educator assessment and evaluation information. "The fundamental tenant of the Wisconsin PDM is that data drives decision making around the delivery of effective, outcome based professional development".⁷ The *Wisconsin PDM* is organized into three areas (see Figure 1 on the next page).

Area #1: Joyce and Showers' seven steps of professional development

Collecting and analyzing data

Goal setting for student learning

Selecting content

Designing a professional development action plan including training and learning

Opportunities

Collaboration and implementation

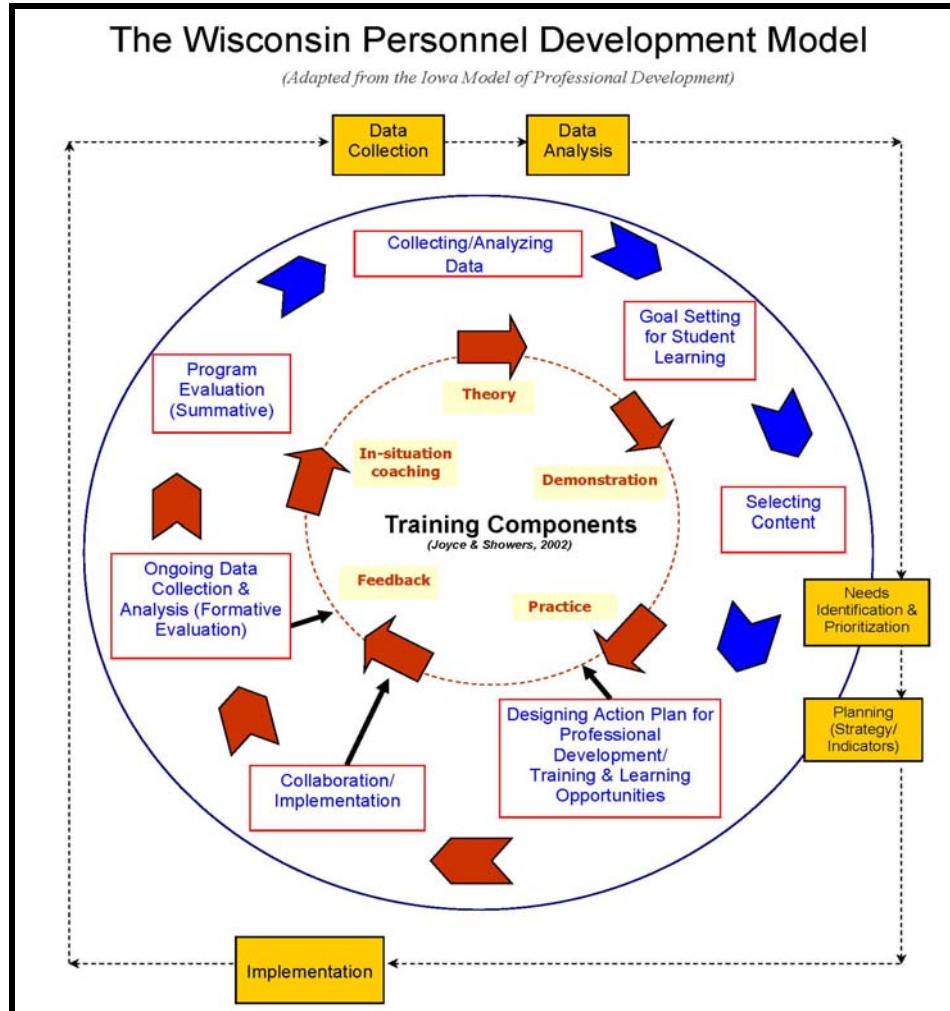
Ongoing data collection and analysis (formative evaluation)

Program evaluation (summative evaluation)

⁶ Bruce R. Joyce and Beverly Showers. *Student Achievement Through Staff Development*. (3rd Edition). 2002. Alexandria, VA: Association for Supervision and Curriculum Development. 2002.

⁷ Wisconsin Personnel Development System. Wisconsin Personnel Development Model Instructional Manual. Part 2. Wisconsin Department of Public Instruction – State Personnel Development Grant. Page 22. Retrieved on October 13, 2006 http://www.reachwi.com/index.php?option=com_docman&task=cat_view&gid=83&Itemid=28

Figure 1. The Wisconsin Personnel Development Model.⁸



Area #2: Training components that influence the design of professional development

Theory
 Demonstration
 Practice
 Feedback
 In-situation coaching

Area #3: Data-driven school improvement processes

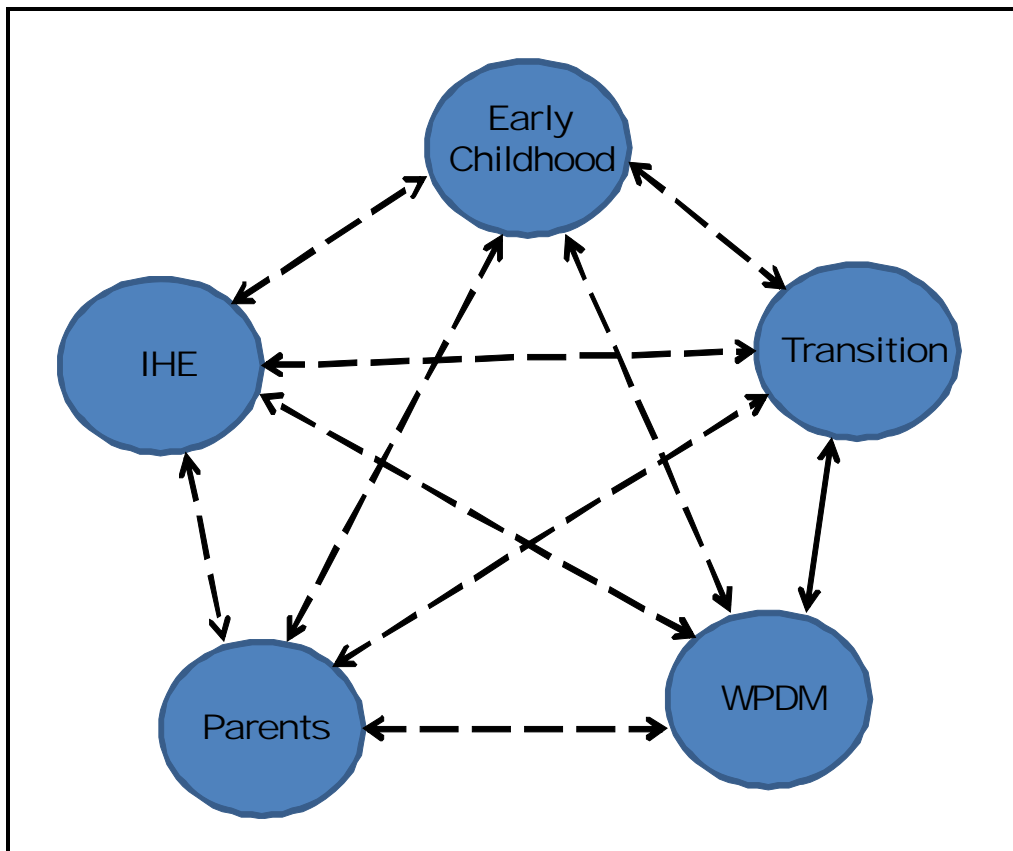
Needs identification and prioritization
 Action plans consisting of strategies and indicators of progress
 Implementation
 Data collection and analysis

⁸ The Wisconsin Personnel Development Model. Wisconsin Department of Public Instruction. Produced in part with funds from the U.S. Department of Education Project CFDA#84/323A, Wisconsin State Improvement Grant and IDEA Discretionary Grant funds. Page 19. Retrieved on October 13, 2008

http://www.reachwi.com/index.php?option=com_docman&task=cat_view&gid=83&Itemid=28

Operationally, Wisconsin’s SPDG is organized by five collaborating “Hubs” (Figure 2). Each “Hub” is responsible for delivering and supporting ongoing professional development activities within their respective special education domain: Early Childhood, Parent Leadership, Secondary Transition, Institutions of Higher Education (IHE), and Wisconsin Personnel Development Model (WPDM) – a statewide system change initiative directed at promoting proactive and collaborative educational decision making in Wisconsin schools.

Figure 2. Wisconsin’s SPDG five collaborating Hubs



The diversity of professional development activities within and across the five “Hubs” (such as, birth to age 6 for Early Childhood; late adolescent to young adult for Transition, etc.), coupled with their dissimilar portfolios of SPDG funded development activities, present a unique set of delivery and support challenges. For example, each “Hub” delivers professional development activities statewide, at different locations, and at different times during the year; some school districts participate in multiple professional development activities, delivered and supported during the year by more than one “Hub”; and/or a school district or school within a district may require multiple engagements in professional development activities caused by teacher turnover, change in administration, and/or reduced school budgets. In addition to these Wisconsin SPDG delivery and support challenges, OSEP specifically requires each state receiving SPDG funding

to annually evaluate the progress of SPDG-funded professional development activities in meeting six OSEP performance measures.⁹ The six performance measures are:

1. Personnel receive professional development based on instructional practices that were judged to be scientifically based or evidence-based
2. Professional development activities are aligned with improvement strategies identified in the State's Performance Plan
3. Cost per person receiving professional development is within a specified range
4. Instructional or behavioral scientifically based or evidence-based practices are implemented with fidelity
5. The extent to which elements (e.g., provision for mentoring, coaching, structured guidance, modeling, continuous inquiry, etc.) are in place to sustain professional development using scientifically based or evidence-based instructional/behavioral practices provided by the SPDG
6. In states that have special education teacher retention as a goal, the percentage of highly qualified special education teachers participating in a SPDG funded retention activity who remain teaching for at least 2 years following their participation in a SPDG activity

Evaluation of Sustainability and Fidelity of Implementation Efforts

The focus of this paper is on the procedures and processes used by the Wisconsin SPDG evaluator to collect data for informing OSEP Performance Measure #4. The same data collection procedures and processes are also used to inform OSEP Performance Measure #5.

Data Collection Challenges

The *Wisconsin PDM* places special emphasis on the forming of self-directed working groups of professionals that are bounded geographically by local education agency (i.e. stakeholder cohorts) to participate in SPDG-funded professional development activities. During the five-year SPDG funding period, hundreds of individuals formed into self-directed 6-15 member stakeholder cohorts will participate in personnel development activities delivered and supported by the five Wisconsin SPDG "Hubs".

Data Collection Challenge #1: The strategies employed by Wisconsin's five "Hubs" to sustain individual stakeholder cohort professional development practices are heavily dependent upon each stakeholder cohort's self-identified needs. For example, structured guidance may be employed to sustain incremental improvement in developing IEP Early Childhood transition plans in one district, while continuous inquiry may be an acceptable strategy for sustaining incremental improvement in developing Early Childhood IEP transition plans in another school district. Mentoring may be employed to sustain early childhood age transition planning between Health and Family Service agency personnel and Special Education personnel in one school district, while a community of practice or learning community format may be an acceptable strategy for sustaining early childhood age transition planning between Health and Family Service agency personnel and Special Education personnel in another school district. In essence,

⁹ FY 2008 Department of Education Justifications of Appropriation Estimates to the Congress. Special Education Fiscal Year 2008 Budget Request, H-54-H57. Retrieved on October 10, 2008
<http://www.ed.gov/about/overview/budget/budget08/justifications/h-special-ed.pdf>

Wisconsin's PDM emphasis on the formation of self-directed stakeholder groups *calls out* for individual school district level data collection that informs the extent to which specific strategies are in place for sustaining each stakeholder cohort's implementation of professional development practices.

Data Collection Challenge #2: Over the five-year SPDG funding period, stakeholder cohorts experience different levels of maturity in their efforts to sustain professional development practices within their respective local education agency; some cohorts progress rapidly and others experience difficulty. For example, a local education agency stakeholder cohort may be in the second year of implementing a parent-teacher after school outreach initiative but must be deeply restructured because of a sudden increase in school heating and transportation costs due to fuel increases that decreases teacher salary support for the initiative and requires adjustment in strategy for sustaining implementation of the initiative. Again, *Wisconsin's PDM* emphasis on the formation of local education agency stakeholder groups *calls out* for individual school district level data collection that acknowledges stakeholder cohorts are at different levels of maturity and concomitantly informs the extent to which specific strategies are in place for sustaining each stakeholder cohort's successes and/or difficulties.

Data Collection Challenge #3: Wisconsin has 426 local education agencies. Participation of stakeholder cohorts in SPDG-funded personnel development activities is self-identified and determined as an outcome of the initial four steps of the Wisconsin PDM (see page 2 above: Area #1 Joyce and Showers' seven steps of professional development). As a result, a stakeholder cohort from any district within the state can enroll in one or more of the five Wisconsin SPDG "Hubs" professional development activities. Some stakeholder cohorts are in remote rural Wisconsin, other stakeholder cohorts are from the inner city of Milwaukee, others from local education agencies in urban areas such as Green Bay and Madison, others from affluent suburbs outside of Milwaukee. Once again, *Wisconsin's PDM* emphasis on the formation of self-directed stakeholder groups *calls out* for data collection from geographically separated local school districts informing the extent to which specific strategies are in place for sustaining each stakeholder cohort's implementation of professional development practices.

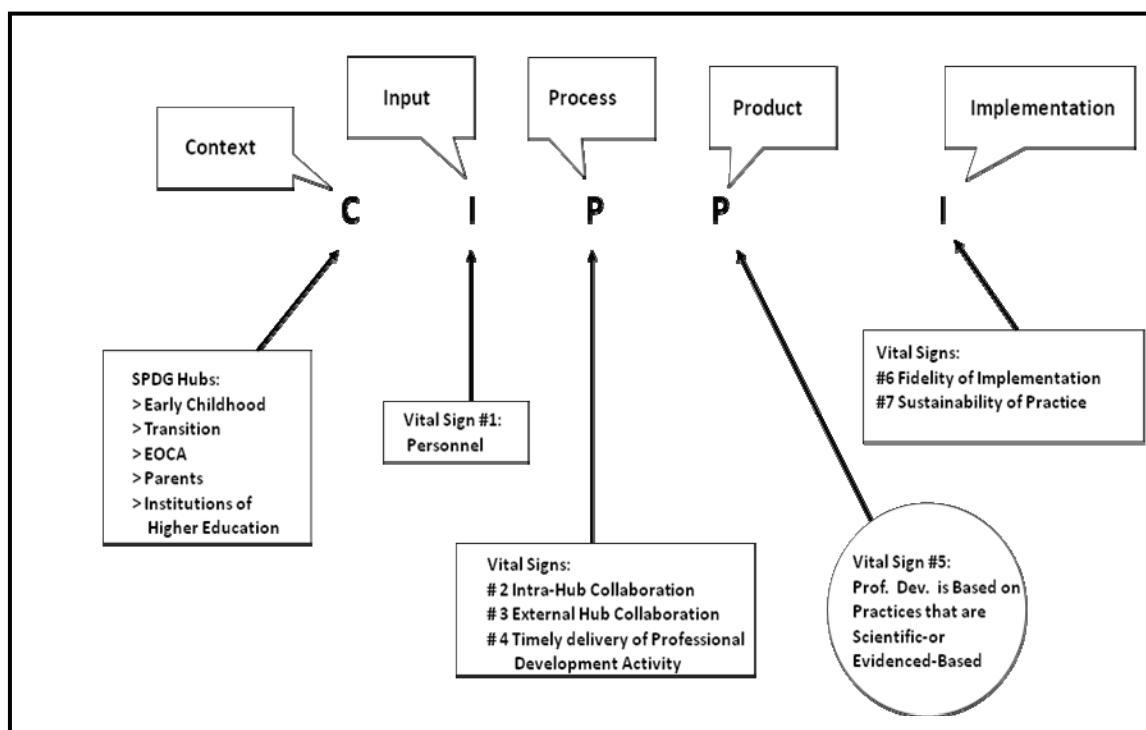
Wisconsin's SPDG Evaluation Architecture

An adaptation of the CIPP Evaluation Model¹⁰ provides the conceptual framework for structuring the focus of gathering information for informing decisions related to improving Wisconsin's SPDG professional development activities throughout the five-year SPDG funding period. The four components of evaluation activity are: *Context (C)*, *Input (I)*, *Process (P)*, and *Product (P)*. With the addition of "*Implementation*" (I), the CIPP Evaluation Model is expanded to five components (i.e., CIPPI) and is graphically shown in Figure 3 on the next page. The identification of SPDG vital signs (i.e., indicators of particular importance within each CIPPI evaluation component) for the five CIPPI components draws on the analogy of the physician examining a patient's vital signs to make preliminary judgments about a person's health. Vital signs that are below expected levels can then be investigated by the physician in more depth by asking additional questions, ordering specific tests, and/or involving the medical

¹⁰ Daniel L. Stufflebeam. The 21st Century CIPP Model: Origins, Development, and Use. In Marvin C. Alkin (Editor). *Evaluation Roots: Tracing Theorists' Views and Influences*. Thousand Oaks, CA: Sage Publications. 2004.

expertise of other physicians.¹¹ Seven Wisconsin SPDG Vital Signs were identified through a series of structured interviews conducted by the evaluator with all members of Wisconsin's SPDG Hub Management Team.

Figure 3. Wisconsin's SPDG Evaluation Conceptual Framework



Internet-Based Enumeration Surveys

Enumeration surveys include the entire population, are expensive to implement when the population of interest is large in number, and are difficult to implement over widely distributed geographic areas.¹² However, enumeration surveys are especially useful for collecting data from key informants when the population of interest is small in number and individuals can be easily contacted for data collection purposes.¹³ Internet-based enumeration surveys are a low cost, minimally intrusive data collection method that can be implemented with small numbers of geographically dispersed education professionals; virtually all education professionals have access to email at school.¹⁴ Easily implemented, internet-based enumeration surveys do not require the use of paper, take the time to address an envelope, pay for postage, or require time to compile individual survey respondent's survey data.

¹¹ Tim. L. Wentling and Chris A. Roegge, Development of a Computer-Aided Evaluation System for Vocational Education Programs, *Journal of Vocational Education Research*, Fall 1989, Vol. 14, No. 4. 1 – 14. See also, Tim L. Wentling and Chris A. Roegge, Computer-Assisted Outcomes-Based Evaluation for School Programs, *Evaluation Review*, Vol. 15, No. 3, June 1991 378-392.

¹² Pamela L. Alreck and Robert B. Settle, *The Survey Research Handbook. 2nd Edition* (Chicago: Irwin), 1995, p. 54.

¹³ Blaine Worthen, James Sanders, and Jody Fitzpatrick, *Program Evaluation: Alternative Approaches and Practical Guidelines* (2nd Edition), White Plains: Longman, 1997, p. 358.

¹⁴ Wells, J., and Lewis, L. (2006). *Internet Access in U.S. Public Schools and Classrooms: 1994–2005* (NCES 2007-020). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

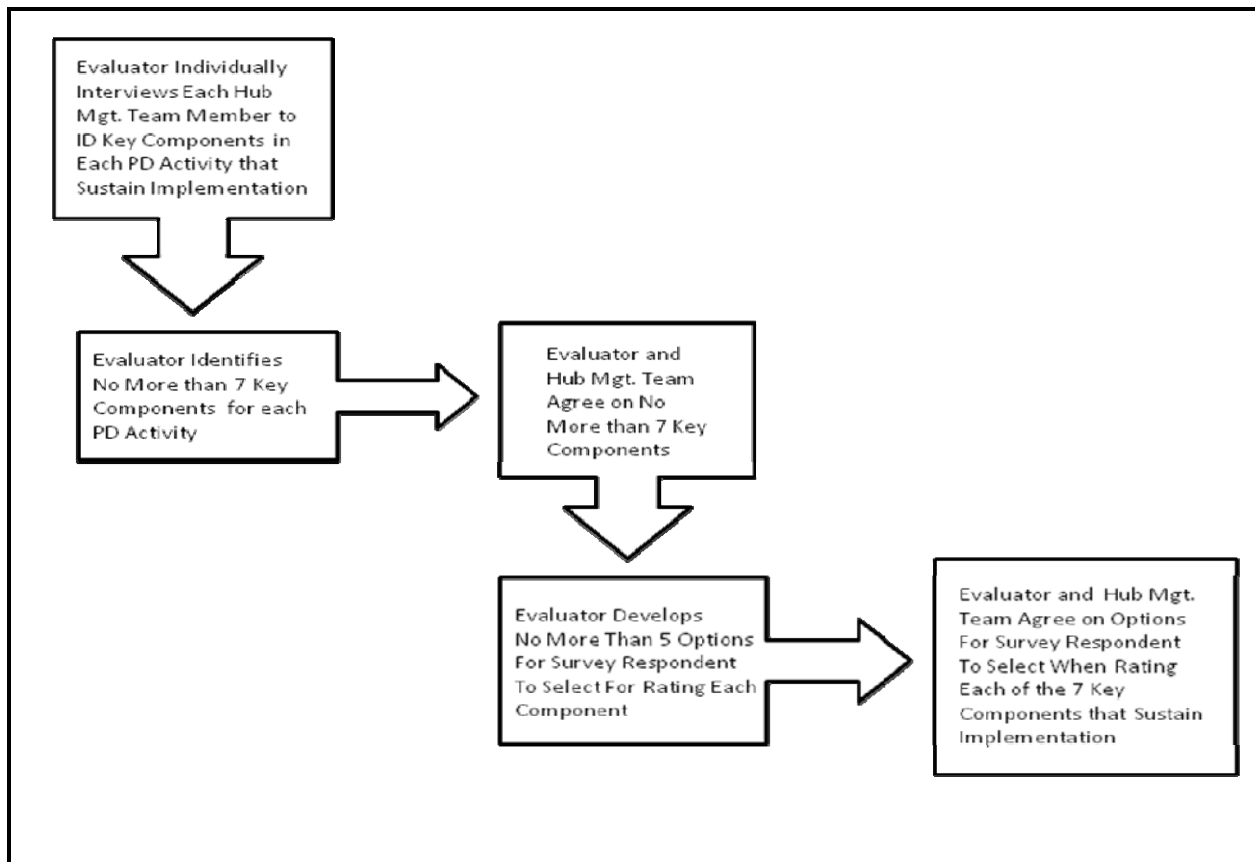
Using Internet-Based Enumeration Surveys to Collect Post-Training Implementation Data

Wisconsin's SPDG evaluation utilizes internet-based enumeration surveys to collect data for determining the extent to which elements are in place to inform Vital Sign #6: *Fidelity of Implementation* and Vital Sign #7: *Sustainability of Practice* (see Figure 3 on previous page).

Developing enumeration survey questions

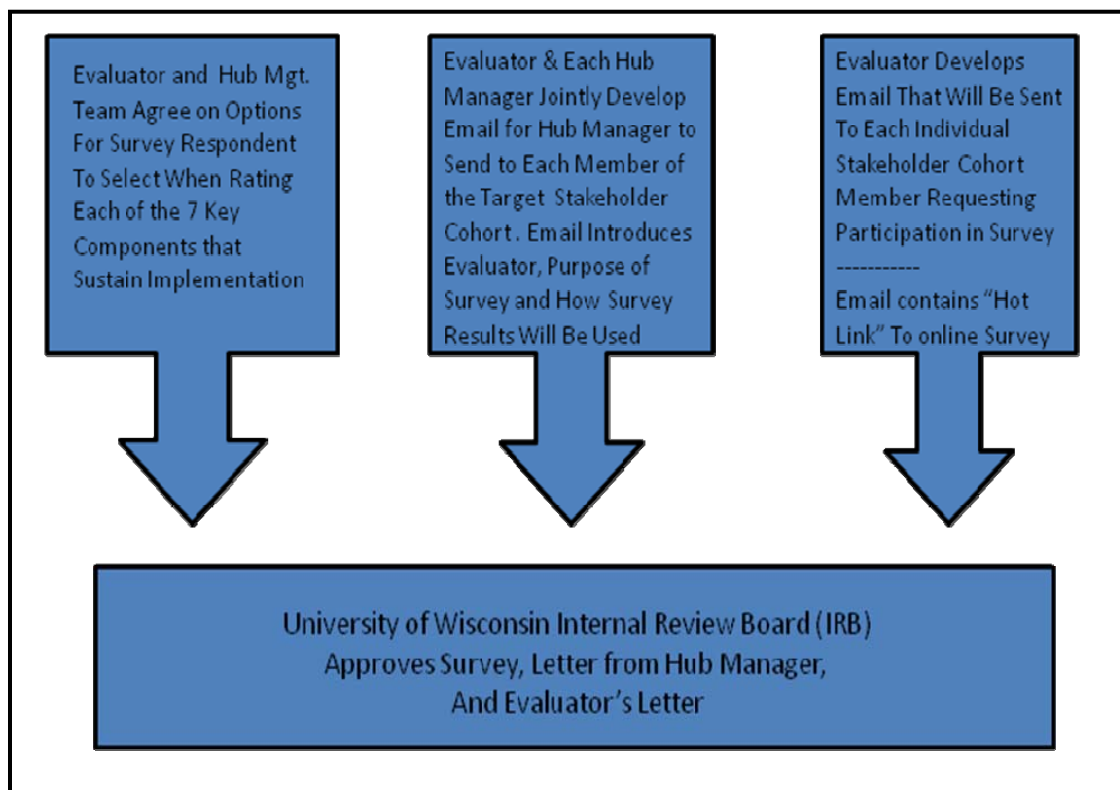
The two-step process used to develop enumeration vital sign survey questions for collecting data about each "Hub" professional development activity to inform Vital Sign #6 and #7 is summarized in Figure 4 below and Figure 5 on the next page.

Figure 4. Process for developing enumeration survey questions



NOTE: All research and evaluation projects involving human subjects must be reviewed by the Education Research Institutional Review Board (IRB) at the University of Wisconsin-Madison. The purpose of this review is to assure that research on issues related to education is conducted in accordance with state and federal laws and guidelines, University of Wisconsin policies, and ethical practices related to the protection of human research participants. Before proceeding with deployment of each professional development data collection activity, the survey implementation procedures and protocols must be reviewed and approved by the University of Wisconsin-Madison Social and Behavioral Sciences IRB.

Figure 5. Process for ensuring protection of human subjects



Developing enumeration survey questions (i.e. vital signs)¹⁵ for each “Hub” professional development activity provides; a) individual school district level data collection, and b) aggregate data across school districts to evaluate the extent to which specific strategies are in place for sustaining each stakeholder cohort’s implementation of professional development practices (*Data Collection Challenge #1*, page 5). To maximize the potential for collecting contextually appropriate information from each stakeholder cohort, the evaluator acts as a “critical friend” in developing survey questions by working in close consultation with each “Hub” management team.¹⁶ By engaging the knowledge of the “Hub” management team members about the local education agency stakeholder cohort, each question is carefully crafted to individualize the respondent’s experience in responding to the seven vital sign questions. Working together, the evaluator and “Hub” management team develop the seven most salient questions for identifying discrepancies between what respondents’ in each stakeholder cohort expected to happen and what is actually happening.¹⁷

¹⁵ Tim L. Wentling and Scott D. Johnson, *The Design and Development of an Evaluation System for Online Instruction*, WebNet '99 World Conference on the WWW and Internet Proceedings (Honolulu, Hawaii, October 24-30, 1999). ERIC Document No. ED 448 74. See also, Tim L. Wentling, *Cost Efficiency of Online Instruction in a Research One University: A Case Study of a Department's Efforts*, Paper presented at the Sloan ALN Workshop 2000 in Lake George, New York on September 17-20, 2000.

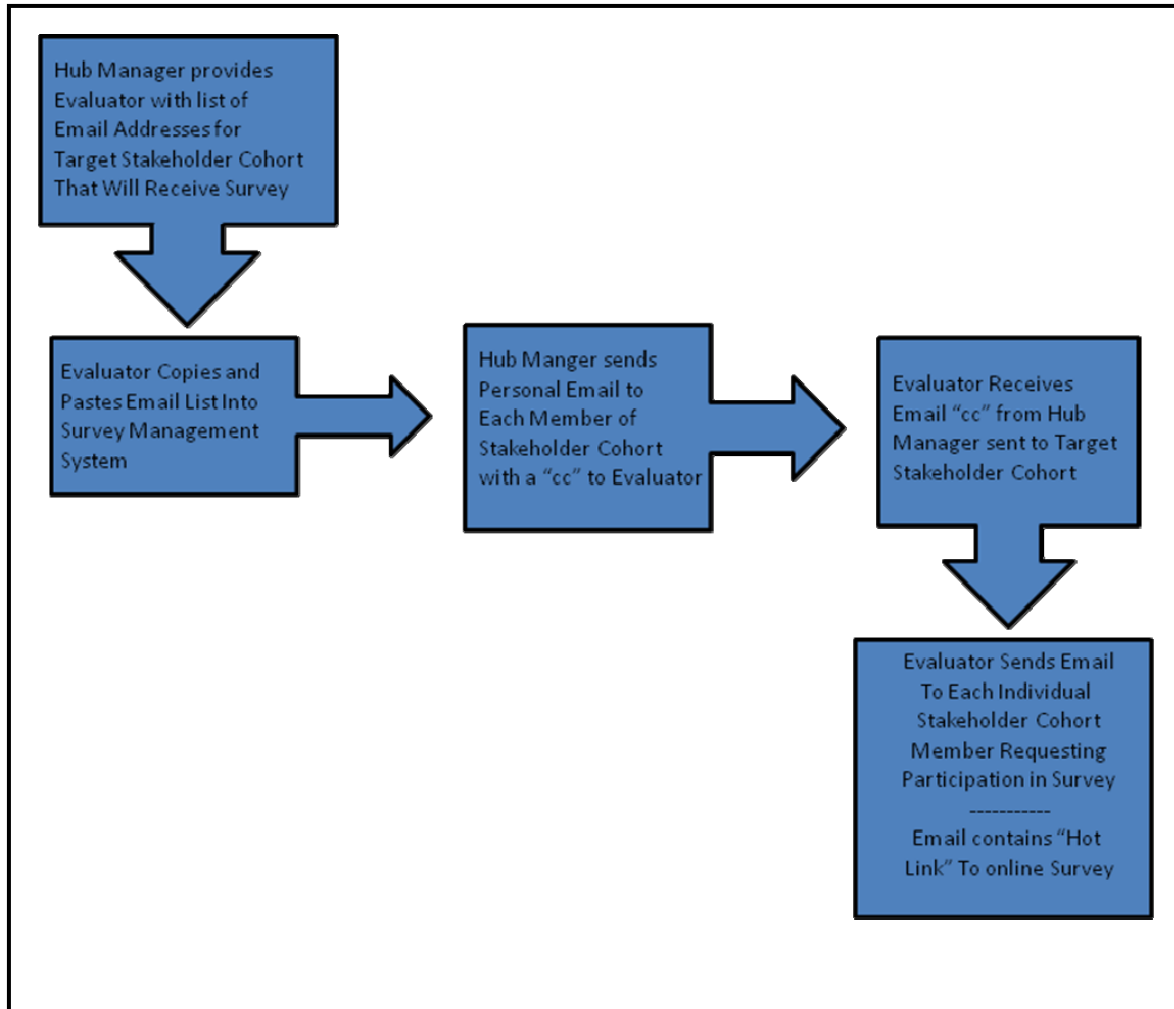
¹⁶ David M. Fetterman, A Window into the Heart and Soul of Empowerment Evaluation. In David M. Fetterman and Abraham Wandersman (Editors) *Empowerment Evaluation Principles in Practice*. New York: NY. Guilford Press, 2005.

¹⁷ David M Fetterman. *Foundations of Empowerment Evaluation*. Thousand Oaks: CA. Sage Publications, 2001.

Deployment of the enumeration survey

Deployment of an enumeration survey to collect data from an individual stakeholder cohort at different levels of maturity (*Data Collection Challenge #2*, page 6) utilizes a specially developed survey software developed by the University of Wisconsin's Division of Information Technology. The survey software was developed using Microsoft's ASP.NET framework with an Oracle database. The process for deployment of an individual stakeholder cohort (or multiple cohorts) survey is summarized in Figure 6.

Figure 6. Process for deployment of enumeration survey.



Data Collection, Compiling of Respondent's Data, and Preparation of Data Displays

The respondent's clicking on the "Submit" button at the bottom of the Vital Signs Survey (see bottom of page 11) triggers the electronic collection of responses to each of the survey questions. Transmitted via the Internet to a server at the University of Wisconsin-Madison, respondent data is compiled electronically in an Oracle database. Each submission also triggers comparison of the respondent's email address against the list of individuals in the stakeholder cohort email list, and subsequent marking of the individual as having responded to the survey. At any time during conduct of the survey, data display reports by individual stakeholder group can be generated by the survey administrator. In essence, the process from data entry to data display is a seamless one-step electronic activity initiated by the respondent.

Perhaps most important, since *all* members of each stakeholder cohort are surveyed, respondents' answers to each of the 7 questions provides preliminary information about agreements and/or discrepancies among cohort members' experience related to sustainability (or fidelity of implementation). Wisconsin's experience with using enumeration surveys has been that between 70% and 100% of each stakeholder cohort membership responds to the survey after only one (1) follow-up request to non-respondents. Since the local education agency stakeholder cohorts vary in numbers from as few as five (5) and as many as 30 members, bar chart data displays showing frequency of responses are sufficient for producing discussion among the evaluator and "Hub" management team, and/or "Hub" management team and individual stakeholder cohort membership. The overall objective is to engage a collaborative interpretation and discussion among individual stakeholder cohorts and the "Hub" management team, and when appropriate the evaluator, about survey results for the purpose of incrementally improving application of their target professional development learning.¹⁸

Data Analysis

Frequency of responses is automatically compiled for each question by the survey tool and produced in the form of bar chart data displays. Since *all* members of each stakeholder cohort are surveyed, respondents' answers to each of the 7 vital sign questions provides information about agreements and/or disagreements among the TAC members' experience related to fidelity of implementation: that is, discrepancies between what the DPI Transition State Consultant expected to happen and what is actually happening from the perspective of the TAC members.

Data are analyzed on three separate occasions for the purposes of providing fidelity of implementation information (see Figure 4 on page 10) for incrementally improving application of the target cohort's personnel development learning.¹⁹

- *First*, for each survey question, the evaluator and the DPI Transition State Consultant discussion of data results to identify agreements and/or discrepancies between what the DPI Transition State Consultant expects to happen and what is actually happening from the perspective of each TAC's participants.
- *Second*, by the DPI Transition State Consultant engaging the leader/trainer of the TAC training event in a discussion of data identifying agreements and/or discrepancies

¹⁸ Margret A. Dugan. Participator and Empowerment Evaluation: Lessons Learned in Training and Technical Assistance. In David M. Fetterman, Shakeh J. Kaftarian, and Abraham Wandersman (Editors) *Empowerment Evaluation: Knowledge and Tools for Self-Assessment and Accountability*. Thousand Oaks: CA. Sage Publications, 1996. p.277-303.

¹⁹ Margret A. Dugan. Participator and Empowerment Evaluation: Lessons Learned in Training and Technical Assistance. In David M. Fetterman, Shakeh J. Kaftarian, and Abraham Wandersman (Editors) *Empowerment Evaluation: Knowledge and Tools for Self-Assessment and Accountability*. Thousand Oaks: CA. Sage Publications, 1996. p.277-303.

between what the DPI Transition State Consultant expects to happen and what is actually happening from the perspective of the TAC training participants.

- *Third*, the leader/trainer of the TAC training engaging the county TAC membership in a formal discussion of data identifying agreements and/or discrepancies between what was expected to happen and what is actually happening from their perspective as a TAC.

Internet-Based Enumeration Surveys – Advantages

1. Provide a minimally intrusive method for periodically gathering:
 - School district level data that informs the extent to which specific strategies are in place for individual stakeholder cohort's fidelity of implementation efforts in applying their respective professional development practices (graphically summarized in Figure 7 on the next page).
 - School district level data that acknowledges individual stakeholder cohorts are at different levels of maturity in their efforts to sustain professional development practices (graphically summarized in Figure 8 on the next page).
 - School district level data from geographically separated stakeholder cohorts in city, urban, and rural contexts.
2. Data displays provide highly context bound information for use in identifying discrepancies about the extent to which individual stakeholder cohort's *fidelity of implementation* and/or *sustainability of practices* are in place.
3. The process from data entry to data display is a seamless one-step electronic activity initiated by the respondent.
4. After agreement is reached on the survey questions and respondent's answer options, only minimal time is required of the survey administrator from the initial deployment of the survey to production of the data displays.
5. The software programming cost is relatively reasonable – 3K for Wisconsin's highly customizable Vital Sign Survey.

Figure 7. Individual Stakeholder Cohort fidelity of implementation data collection.

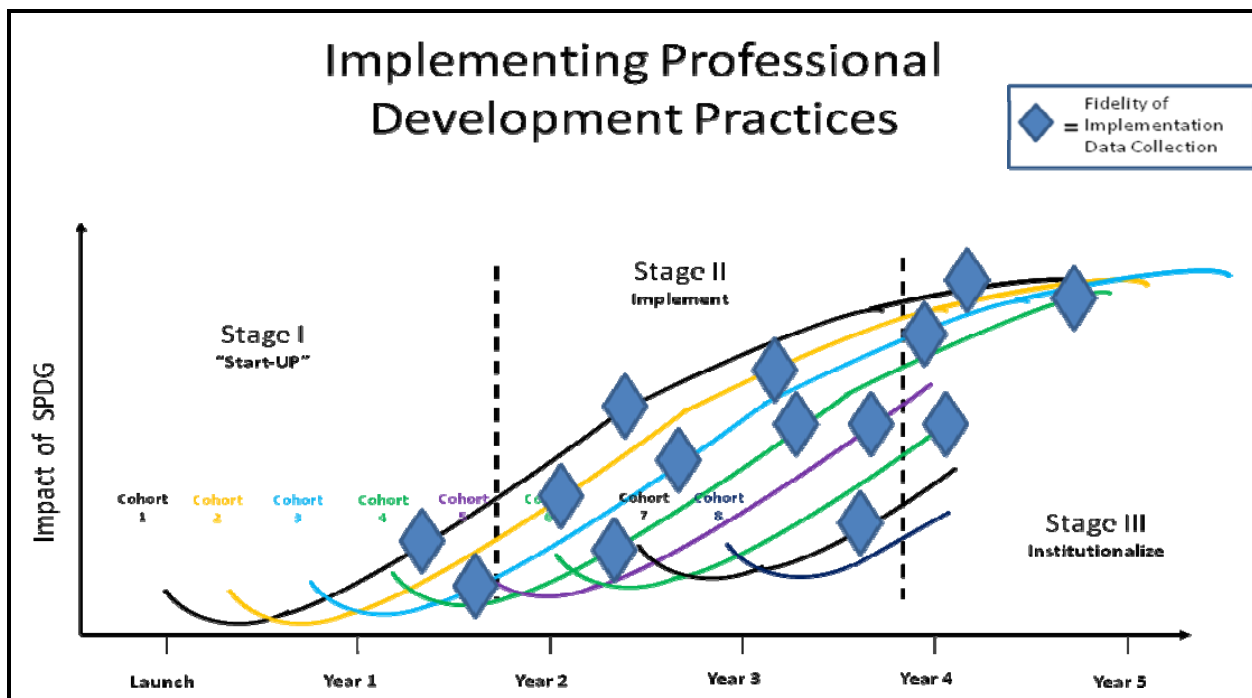


Figure 8. Individual Stakeholder Cohort sustainability of practice data collection.

