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Using the Purdue Three-Stage Model to Facilitate Local Program Evaluations

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Abstract

Program evaluations conducted by district staff for the purpose of providing feedback to local decision makers are necessary for program improvement and accountability (Fetterman, 1993) and can facilitate the creation of longitudinal data bases on the outcomes of gifted and talented programs. This research and development project was undertaken to design, implement, and evaluate a year-long staff development program to improve the evaluation skills of the participants. The Purdue Three-Stage Model (Feldhusen & Koloff, 1978; Moon, 1994) was used as the theoretical framework for the training program developed. Results suggest that the self-evaluation training was effective in helping coordinators become more skilled program evaluators. Implications of the project for program evaluation, training of program administrators, and longitudinal research on the outcomes of gifted and talented programs are discussed.

Introduction

Scholars in the fields of evaluation research and gifted education have long recommended that educational programs be evaluated regularly to determine their effectiveness (Callahan & Caldwell, 1984; Carter, 1991; Chronbach, 1963; Renzulli, 1975; Shore, Cornell, Robinson, & Ward, 1991; Stufflebeam, 1966; Stufflebeam & Webster, 1993; Van Tassel, 1980). However, reports indicate that only a handful of states have a plan for ongoing evaluation of gifted programming (Olenchak, & Castle, 1995; Schwartz & Taylor, 1995); few school districts seem to evaluate their gifted programs on a regular basis (Hunsaker & Callahan, 1993; Tomlinson & Callahan, 1993); and it appears that program administrators are generally not knowledgeable about evaluation design (Callahan & Caldwell, 1993).

Both external and self-evaluations are needed to promote the health and longevity of gifted programs (Fetterman, 1993). External evaluations are useful for summative purposes and statewide accountability. Evaluations conducted by outside experts provide train-

ing, experience, and an "objective eye" rarely found inside a program (Fetterman, 1993; Olenchak & Castle, 1995). Self-evaluations are useful for formative purposes and local accountability; they enable program administrators

Putting Research to Use

Continuous program evaluation is a recommended practice for the field of gifted education (Shore, Cornell, Robinson, & Ward, 1991). Continuous program evaluation can provide local decision makers with the information needed to improve programs for gifted and talented students and defend their value. This article describes a staff development project that provided coordinators of gifted and talented programs with training in self-evaluation methodology (Fetterman, 1993). The results suggest that the Purdue Three-Stage Model (Feldhusen & Koloff, 1986; Moon, 1994; Moon, Feldhusen, Powley, Nidiffer, & Whitman, 1993) is an effective framework for staff development when implemented with sensitivity to the needs of adult learners (Dettmer, 1986). Designers of university courses, workshops, and inservice programs for teachers, counselors, and administrators may want to consider using the Purdue Three-Stage Model as a framework for curriculum development.

The project also had implications for the evaluation of gifted programs. The training program was quite successful in helping coordinators develop the skills they needed to conduct successful self-evaluations but was not as successful in helping them find the time to actually conduct self-evaluations. The project suggests that program coordinators are aware of the need for continuous evaluation but need training, incentives, and release time in order to carry out effective evaluations. University-school collaborations may be an effective way to ensure ongoing, longitudinal evaluation of program outcomes for talented students. Practical, hands-on training in self-evaluation that is designed to meet the needs of adult learners should be provided to all persons who are responsible for administering gifted and talented programs. In addition, policy makers need to build incentives and/or requirements for continuous self-evaluation into local and state guidelines for gifted and talented programs.

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to detect problems early, prevent program deterioration, and develop context-specific program improvements (Fetterman, 1993).

The Purdue Three-Stage Model provides a flexible framework for course, program, and curriculum design that has been applied in a wide variety of settings including undergraduate educational psychology courses (Feldhusen, Linden, & Ames, 1975), elementary enrichment programs (Feldhusen & Kolloff, 1986; Kolloff & Feldhusen, 1981), and secondary talent development programs (Moon, 1994; Moon, Feldhusen, Powley, Nidiffer, & Whitman, 1993). When applied to the development of gifted and talented programs, the Purdue Model offers (a) clear program goals, (b) broad-based, program specific identification procedures, (c) opportunities for interaction with gifted peers, (d) well-trained instructors, and (e) differentiated instruction (Feldhusen & Kolloff, 1978; Kolloff & Feldhusen, 1986; Moon, Feldhusen, Powley, Nidiffer, & Whitman, 1993). At the level of curriculum and instruction, the model includes three stages of instructional activities. In Stage I, short-term, instructor-led activities provide learners with foundational content knowledge and experiences with creative and critical thinking skills. In Stage II, the instructor becomes a facilitator as learners undertake small group activities that create opportunities for application, analysis, synthesis, and evaluation of Stage I concepts. In Stage III, independent projects encourage self-sufficient learning and the development of original products (Feldhusen & Kolloff, 1978; Kolloff & Feldhusen, 1986; Moon, Feldhusen, Powley, Nidiffer, & Whitman, 1993). In each stage the learner takes progressively more responsibility and uses higher levels of thinking.

This project represents the first known application of the Purdue Three-Stage Model to inservice training. The purpose of the project was to design, implement, and evaluate a staff development program based on the Purdue Model (Feldhusen, 1980; Feldhusen & Kolloff, 1978; Moon, 1994) and the needs of adult learners (Dettmer, 1986) that would enable coordinators of gifted programs to become more effective at self-evaluating the programs they administer.

The Self-Evaluation Training Project

The training program was developed using the Purdue Three-Stage Model as the theoretical framework for a year-long inservice program. The project was initiated by practitioners and carried out collaboratively by practitioners and a university-based consultant. Coordinators in a regional networking group identified program evaluation as a weakness in most of their districts, sought out the author of this paper, and requested a year-long consultation for the purpose of improving their self-evaluation skills. The participants selected the topic

and indicated the type and amount of time they were willing to devote to the project (one day of planning in the spring and five half-days of instruction spread throughout the following academic year). The consultant conducted two needs assessments to gather more specific information about the type of training that was needed and designed the self-evaluation training project to meet those needs with sensitivity to basic principles of adult education such as ownership in the learning process, developmentally appropriate learning activities, utilization of participants' rich experience bases, and practical, problem-centered instruction (Dettmer, 1986; Wood & Leadbeater, 1986). As the training program was implemented it was revised on the basis of both formal and informal evaluation data gathered from the participants. The inservice training was thus characterized by:

1. *Needs assessments* that enabled the consultant to tailor the workshops to the specific needs of the participants (coordinators of gifted programs).
2. Inservice program *goals* developed collaboratively by the target audience and the inservice consultant.
3. *Opportunities for interaction* among participants with common learning needs, experiences, and goals.
4. A *trained consultant* as the inservice provider.
5. *Differentiated instruction* following the curricular framework of the Purdue Three-Stage Model and principles of adult education.
6. *Formative and summative evaluations* of the inservice program.

The goals of the Self-Evaluation Training Project were to help participating coordinators of gifted and talented programs: (a) improve their evaluation knowledge and skills (Stage I); (b) plan systematic, longitudinal, self-evaluations of the short- and long-term effects of their gifted programs on cognitive, affective, and social student outcomes (Stage II); (c) systematize the collection and storage of relevant student data (Stage II); and (d) design and implement a micro-evaluation of one component of their gifted program (Stage III). The project was designed to simultaneously increase the program evaluation skills of participating coordinators and improve the quality of evaluations of student outcomes in the participating districts.

The group training sessions included five half-day workshops planned in consultation with the participants and conducted by the consultant. The workshops were presented over a period of a year at approximately six week intervals. Training was provided in specific areas of evaluation design such as planning and utilization; survey design; and qualitative and quantitative methods (Table 1). Attendance at the workshops was optional and the number of coordinators present varied from session to session. Occasionally a district sent more than one representative to a session.

Table 1
Session Topics and Attendance

<i>Session</i>	<i>Topic</i>	<i>Attendance</i>
1	Evaluation Planning and Design	19
2a	Survey Design I: Principles	16
2b	Survey Design II: Instrument Critiques	15
3	Qualitative Data Analysis	16
4	Quantitative Data Analysis	11

Each workshop included 90 minutes of group instruction on a specific topic such as survey construction or qualitative data analysis. Each instructional period began with Stage I activities (lectures and short, instructor-led creative and critical thinking activities) and ended with Stage II activities (individual and/or small-group applications of concepts). After the instructional period, participants spent 45 minutes on district-specific evaluation planning (Stages II and III). Between workshops, participants applied what they had learned in their local districts and worked on their District Evaluation Plans (DEPs) (Stage III). At the first training session in September, participating coordinators established written DEP goals for (a) evaluation planning, (b) data systematization, and (c) a year-long, micro-evaluation. At subsequent sessions, the districts worked on tasks related to their plans and completed and shared progress reports.

Evaluation Methods

All aspects of the Self-Evaluation Training Project were evaluated by the consultant who provided the inservice training. The needs assessments served as formative evaluations of the needs and evaluation skills of the participants and were used to design the five workshop sessions. Evaluations of the early workshops in the series provided formative evaluation data that was used to help plan later workshops. At the conclusion of the project all data sources were triangulated to develop the summative, self-evaluation of the training project reported here.

Participants

The eighteen participating districts ranged in type from rural to small city; in size from 1,100-8,000 students; and in the percentage of time that the coordinators devoted to administering the gifted program from less than 25% to 100%. Slightly more than half of the participating coordinators (53%) were serving in small rural districts where they had numerous responsibilities and were able to devote only small amounts of time to gifted program coordination. Four of the smaller districts dropped out of the project after the first session. Follow-up interviews were conducted with three of these districts (the fourth could

not be reached) to determine the reasons that they decided not to participate after the first session and the extent to which they had accomplished the program evaluation goals they established in that session.

The evaluation consultant was a university professor with training in evaluation research and previous experience as a coordinator of gifted and talented programs and program evaluator. She served in two roles throughout the project: She was a *consultant* to the participants on evaluation design and an *action researcher* (Borg, Gall, & Gall, 1993; King & Longuit, 1995). In the role of consultant, she provided group training sessions and individualized guidance on program evaluation to the participating coordinators. In the role of an action researcher she worked collaboratively with the participants to design, implement, and evaluate the self-evaluation training model.

Procedures

Needs Assessments. A planning session was conducted prior to beginning the project to determine the needs of the group. At the planning session the participants discussed stakeholders that they might want to involve in program evaluations, student outcomes they might want to consider evaluating, existing data they were currently gathering on those outcomes, and program evaluation resources and inhibitors that existed in their districts. Each participant also completed a program evaluation planning sheet.

The initial prototype of the staff development model was designed to meet the needs generated in this pre-session using the Purdue Three-Stage Model as a theoretical framework. In addition, the planning session results were used to develop a formal needs assessment instrument administered to all participants present at the first of the five training workshops. The formal needs assessment included Likert Scale items designed to assess the relative importance to each participating district of specific *student outcomes* participants had suggested as important to evaluate longitudinally (20 items), the impact of specific *inhibitors* of self-evaluations (16 items), and the availability of *resources* for conducting program evaluations (22 items). The results of this needs assessment were used by all eighteen participating districts in developing district-specific evaluation goals and by the researcher/consultant in planning training sessions that focused on (a) evaluation of the student outcomes perceived as important by most group members, (b) utilization of resources available in most districts, and (c) methods of overcoming the inhibitors existing in most districts.

Training Model Evaluation. Data were collected on the efficacy of the training model by the researcher using the following techniques: (a) participant observation, (b) informal conversations with participants, (c) qualitative analysis of District Evaluation Plans (DEPs) and progress reports, (d) an evaluation instrument administered at the

close of each workshop session containing five Likert-scale items rated on a five point scale and five open-ended questions; and (e) telephone interviews with participants who dropped out of the training program.

Data Analysis

Quantitative data were analyzed with frequency counts and descriptive statistics. Qualitative data were analyzed by content and constant comparative analyses (Goetz & LeCompte, 1984). The analysis was recursive and ongoing throughout the project. The results of the analysis of each session were used to guide planning for the subsequent sessions.

Evaluation Results

Needs Assessment

Student Outcomes. During the planning session in the spring, the group had brainstormed the student outcomes they felt important to evaluate longitudinally. Participants in the needs assessment session in the fall were asked to rate items on the brainstormed list on a five-point scale from very important (5) to very unimportant (1). All of the items ($N = 20$) received mean ratings > 3.00 and all of the standard deviations except one were < 1.00 , indicating fairly good agreement among the participants on the outcomes rated. The most important student outcomes for the participants were *skills* [such as thinking skills (4.82, .39); problem solving skills (4.82, .39); writing skills (4.59, .51); independent learning skills (4.47, .80); and creative thinking skills (4.25, .79)]; *advanced content* (4.35, .86); and *motivation* [enthusiasm for learning (4.76, .44); achievement motivation (4.59, .71); talent motivation (4.35, .61); self-efficacy (4.06, .66)]. Social and career goals were not rated as highly. For example, social conscience received a mean rating of 3.71 (.77); career development opportunities received a mean rating of 3.29 (.92); and good family relationships received the lowest rating of all of the items (3.18, .81).

Inhibitors. Mean ratings of potential inhibitors to self-evaluations in the participating districts are shown in Table 2. The biggest inhibitors appeared to be *lack of time* (4.41, .80) and *lack of knowledge* about program evaluation in general (4.29, .69) as well as lack of knowledge about specific data collection and analysis techniques such as survey construction (4.06, .97), qualitative analysis (4.29, .69), and statistics (4.06, 1.09). These were followed by inhibitors related to *planning* such as lack of planning (3.88, 1.05), procrastination (3.71, 1.31), inadequate filing systems (3.76, 1.09), lack of leadership (3.47, 1.07), and the low priority given to evaluation (3.29, 1.21). Attitudes of teachers (3.53, 1.42) were perceived as more inhibiting than attitudes of administrators (2.94, 1.34) or parents (2.53, 1.01). Somewhat surprisingly, especially considering the small size of most of the participating districts, resources were not seen as a major barrier to program

Table 2
Mean Ratings of the Importance of Specific Inhibitors to Program Evaluation

Inhibitor	Mean	SD
Lack of Time	4.41	.80
Knowledge of Qualitative Analysis	4.29	.69
Knowledge of Program Evaluation	4.29	.69
Knowledge of Statistics	4.06	1.09
Knowledge of Survey Construction	4.06	.97
Lack of Planning	3.88	1.05
Inadequate Files	3.76	1.09
Procrastination	3.71	1.31
Attitudes of Teachers	3.53	1.42
Lack of Leadership	3.47	1.07
Low Priority Given to Evaluation	3.29	1.21
Complexity of GT Program Outcomes	3.19	1.11
Attitudes of Administrators	2.94	1.34
Lack of Funds	2.88	1.22
Attitudes of Parents	2.53	1.01
Inadequate Equipment/Facilities	2.41	1.18

$n = 17$
Scale range = 1.0 (strongly disagree) - 5.0 (strongly agree)

evaluation. For example, inadequate equipment/facilities was the lowest-rated item (2.41, 1.18) and lack of funds was the third-lowest item (2.88, 1.22).

Resources. Mean ratings of the helpfulness of available resources that might facilitate program evaluations are shown in Table 3. The participants rated the *evaluation training project* as the most helpful resource available to them (4.94, .24), perhaps because they perceived the project as one way to correct the knowledge and planning deficits they noted as inhibitors to effective evaluations. They also rated *people in their districts supportive of gifted education* [themselves (4.82, .39); GT teachers (4.25, .77), GT parents (4.18, .88); GT students (4.18, 1.01); broad-based planning committees (4.06, .90)] and *computers* (4.41, .80) as valuable resources. Building and district administrators were perceived as somewhat less helpful (3.71, 1.26; and 3.69, 1.35, respectively) and regular classroom teachers were seen as the least helpful resource (2.63, 1.02). With respect to funding, state department grants (4.00, 1.18) and the district GT budget (3.80, 1.01) were perceived as more helpful than general district funds (3.11, 1.17).

Training Sessions (Stages I and II)

Participants perceived the training workshops very positively (Table 4). Mean ratings across all items and sessions

Table 3
Mean Ratings of the Helpfulness of Available Resources

<i>Resource</i>	<i>Mean</i>	<i>SD</i>
Evaluation Training Project	4.94	.24
GT Coordinator	4.82	.39
Computers	4.41	.80
GT Teachers	4.25	.77
GT Parents	4.18	.88
GT Students	4.18	1.01
Evaluation Consultants	4.18	.88
Overtime	4.18	1.13
Broad-Based Planning Committee	4.06	.90
State Department Grant Funds	4.00	1.18
Clerical Support	4.00	1.36
District GT Budget	3.80	1.01
Building Administration	3.71	1.26
District Administration	3.69	1.35
Storage	3.50	1.03
Volunteers	3.38	1.26
Dedication	3.35	.86
District Assessment Experts	3.22	1.20
State Office of Gifted Education	3.19	1.11
District Program Evaluation Experts	3.11	1.17
District Funds	3.11	1.17
Regular Classroom Teachers	2.63	1.02

n = 17
 Scale range = 1.0 (strongly disagree) - 5.0 (strongly agree)

averaged > 4.5. All of the sessions were rated as meeting the needs of the participants and being helpful to them in designing more effective program evaluations. Participants also reported increased confidence in their ability to design evaluations and said that they planned to apply what they had learned in their districts. Comments from the open-ended portion of the survey suggested that the participants particularly appreciated the Stage II activities that allowed them to apply concepts in meaningful ways. For example, one of the most highly rated sessions (Session #2b) involved a Stage II activity where participants critiqued each other's surveys. In this session, participants applied the criteria for evaluating surveys that had been taught in a previous session to their colleagues' instruments. Each district that brought a survey to share received specific feedback on how to improve their instrument.

District Evaluation Plans (Stage III)

District Evaluation Plans (DEPs) were initiated by 18 of the participant districts at the first training session in

September. At this session, participants developed goals for evaluation planning, data systematization, and a micro-evaluation. The *evaluation planning goals* mentioned most frequently were stakeholder involvement (*n* = 14, 77%), self-education (*n* = 12, 67%), and staff training (*n* = 7, 39%). The *data systematization goals* mentioned most frequently were computerization (*n* = 14, 77%), organizing files and records (*n* = 10, 56%), finding and/or creating new data gathering instruments (*n* = 9, 50%), blocking time for evaluation tasks (*n* = 5, 28%), and delegation (*n* = 4, 22%). The mean number of evaluation planning and data systematization goals established by the four districts that dropped out of the project (*M* = 3.5) was considerably lower than that of the fourteen districts that remained involved (*M* = 5.1).

Progress reports completed at the fourth and fifth training sessions by 17 of the districts, including 3 of the 4 dropouts (one dropout could not be reached), indicated that all of the coordinators who had developed DEP goals were making progress toward accomplishing at least some of those goals whether or not they had been able to participate in additional training sessions. The districts had made the most progress toward their evaluation planning and data systematization goals. With respect to evaluation planning, all of the coordinators (100%) who set self-education goals reported making progress on improving their program evaluation knowledge and skills. All but three (79%) who had wanted to involve stakeholders in evaluation planning reported doing so. All (100%) of the seven districts that had planned to work with staff on evaluation planning had begun collaborative evaluation planning. With respect to data systematization, all but one of the districts (93%) that had established computerization goals had made progress in computerizing identification and evaluation data. Seven of the ten districts that had set goals related to organizing files and records reported progress (70%). The data systematization goal that the participants were least successful in accomplishing was allocating time for evaluation. Of the five districts that established this goal only two (40%) reported success.

Participants were somewhat less successful in carrying out their micro-evaluation plans. Only three districts (18%) reported completing their plan. Eight districts (47%) reported that their micro-evaluation was partially completed or in progress and two (12%) that they had revised their plan because of changes in their local situation or information they had received during the self-evaluation training workshops. Four (24%) stated that they had not made any progress at all.

Dropouts

The primary reasons given for dropping out of the project were increased responsibilities at the local level that made it difficult to get away for the workshops and lack of scheduled time for gifted program administration.

Table 4
Responses to Likert Scale Items on the Session Evaluation Forms

Questionnaire Item	Session 1 (n=19)		Session 2a (n=16)		Session 2b (n=15)		Session 3 (n=16)		Session 4 (n=11)	
	M	SD	M	SD	M	SD	M	SD	M	SD
The session met my needs.	4.57	(.51)	4.62	(.50)	4.93	(.26)	4.62	(.72)	4.72	(.47)
What I learned will help me develop more effective program evaluations.	4.68	(.58)	4.75	(.44)	4.93	(.26)	4.72	(.51)	4.72	(.47)
Today's session held my attention.	4.68	(.48)	4.69	(.48)	5.00	(.00)	4.75	(.48)	4.82	(.40)
I am feeling more confident about designing program evaluations.	4.42	(.84)	4.50	(.52)	4.87	(.35)	4.50	(.63)	4.80	(.42)
I plan to apply what I've learned today in my district.	4.68	(.58)	4.52	(.63)	4.87	(.35)	4.62	(.71)	4.72	(.67)

Scale range = 1.0 (strongly disagree) - 5.0 (strongly agree)

For example, in one of these districts the gifted coordinator was teaching full-time in the gifted program so all program administration tasks had to be accomplished during personal time. In another, the gifted program coordinator had just had her assignment changed from 100% gifted program teaching and administration to 10% gifted program administration and 90% other central office administration. This reassignment left her with little time for professional development activities and gifted program evaluation.

All four of the districts that dropped out had developed DEP goals. In follow-up telephone interviews at the end of the year, they were asked whether and to what extent they had been able to accomplish their goals. All of the districts that could be reached for comment (three out of four) reported that they had made some progress in accomplishing their self-evaluation goals and expressed disappointment that they had not been able to attend the workshops.

Discussion

The results suggest that the Self-Evaluation Training Project was successful in helping participating coordinators improve their program evaluation skills. The Purdue-Three Stage Model appeared to be an effective organizing framework for the staff development project, probably because of its excellent fit with the needs and characteristics of adult learners (Dettmer, 1986). The project enabled most participants to become more systematic about collecting, organizing, and storing information on student outcomes. The project was less successful in motivating coordinators, particularly those with less than 25% of their time allocated for program administration, to find time in their busy schedules for program evaluation tasks.

The project has implications for the administration of gifted and talented programs, the training of coordinators of gifted and talented programs, and research on the longitudinal effects of gifted and talented programs on student outcomes.

Gifted Program Administration

In an era of accountability, administrators of gifted and talented programs are being encouraged to conduct effective, systematic evaluations of the programs they administer (Fetterman, 1993; Olenchak & Castle, 1995; Shore, Cornell, Robinson, & Ward, 1991). This project suggests that several things are needed if program administrators are to conduct effective self-evaluations. First, administrators must understand the principles of program evaluation and develop related skills. Second, they must make the longitudinal evaluation of student outcomes a priority. Third, they must have the resources they need to carry out program evaluation tasks.

The most important resources for self-evaluations seemed to be knowledge about program evaluation, time, and computerization. Coursework, inservice training, and consultants can provide knowledge and skills. Time scarcities can only be corrected by shifts in priorities. If effective self-evaluations are going to take place, state departments of education and local school districts must determine that evaluation is a priority so that human and financial resources can be allocated to program evaluation tasks. Districts also need to develop ways to systematically collect and computerize data on student outcomes. As coordinators become active self-evaluators, they should find ways to share both their procedures and their findings with others and ensure that the results of the evaluations will be utilized in local decision making.

This project suggests that collaborations between university and public school personnel can facilitate longitudinal self-evaluations. University personnel can provide district administrators with training in evaluation design, data analysis techniques, and computerization. School personnel can provide data and field-based questions. Partnerships between university-based researchers and gifted program administrators can facilitate longitudinal self-evaluations of student outcomes in specific school districts.

Training

Coordinators of gifted programs come from many different backgrounds — teaching, administration, special education. Their training may or may not include advanced work in program evaluation, measurement, and research methodology. Most need inservice training in order to become effective program evaluators. This project suggests that a year-long staff development program based on the Purdue Three-Stage Model can be an effective way to provide inservice training to gifted program administrators who are motivated to learn more about program evaluation. The most effective aspects of the staff development model seemed to be the long-term format which enabled participants to apply what they learned in each session in their districts, the Stage I and II training activities, and the Stage III DEP components on evaluation planning and data systematization.

The Stage III DEP component on micro-evaluations was somewhat less successful, perhaps because it was assigned before the participants had the skills they needed to design an effective self-evaluation. It might have been more advantageous to assign the development of a micro-evaluation plan as a culminating activity at the end of the year-long training program. Then participants could have applied everything they had learned during their training when they implemented their micro-evaluation the following year. Alternatively, better implementation of the micro-evaluation component might have been achieved if it had been a state or course requirement or if more on-site technical assistance had been available to the participants.

The results also indicate that the Purdue Three-Stage Model is an effective theoretical framework for the development of inservice programs. The Model is a good fit with the needs of adult learners for self-direction and practical, problem-centered learning (Dettmer, 1986). When using the Purdue Three-Stage Model to guide inservice development, the developmental stage and specific goals of the learners should be assessed through formal or informal needs assessment(s) (Wood & Leadbeater, 1986) prior to beginning the inservice program.

Finally, the project suggests that program administrators might benefit from practical, hands-on coursework in gifted and talented program evaluation. Such training should be designed to match the needs and characteristics

of adult learners and emphasize the topics of evaluation planning and utilization, qualitative methodology, measurement, quantitative methodology, instrument construction, data systematization, and computerization. Specific problems related to the evaluation of gifted programs such as the difficulty of measuring complex outcomes related to higher order thinking and creative problem solving should also be addressed (Robinson, 1991).

Research

There are many questions that need to be answered about the effects of gifted programs (Feldhusen, 1991). The National Research Center on the Gifted and Talented has identified longitudinal studies of the effects of gifted programs on student outcomes as a top research priority for the field of gifted and talented education (Renzulli, Gubbins, & Reed, 1992). One way of encouraging more longitudinal outcome research is to train program administrators to systematically collect and analyze data on students in the gifted programs they administer as part of ongoing self-evaluations.

Future research should evaluate the effectiveness of the Purdue Three-Stage Model as a framework for the development of other types of inservice programs. Future research should also evaluate other training models to see if there are better ways of providing coordinators of gifted programs with the skills they need to be effective self-evaluators. Perhaps most importantly, school districts across the nation need to take up the challenge of conducting ongoing, systematic, longitudinal self-evaluations of gifted programs over long periods of time and of sharing the results. Longitudinal evaluations of gifted programs are essential to building understanding of the ways that school-based gifted programs facilitate talent development.

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