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ABSTRACT

This report evaluates the Quality Education Initiative (QEI) evaluation system developed in Pennsylvania to monitor and report progress of individual programs or sites serving students with and without disabilities. The system has three parts: a Program Documentation Outline (PDO), a Program Reporting Outline (PRO), and a Program Improvement Outline (PIO). This report summarizes analyses conducted of the PDOs, PROs, and PIOs submitted by 21 QEI programs representing 7 different models. The study examined, first, the progress made by QEI programs in using the evaluation system and, second, the reported evaluation data. Findings indicated better performance with outcome than process evaluations. Programs reported achieving two-thirds of process objectives and two-fifths of outcome objectives. Recommendations address: (1) identification of key process and outcome evaluation objectives by the Pennsylvania Department of Education; (2) provision of training to QEI program personnel on how to evaluate key process and outcome objectives; (3) development of a common pool of instruments to assess program impacts on students, teachers, and parents; and (4) examination of the evaluations of the QEI programs as part of ongoing routine monitoring. QEI evaluation system forms and details of rating results are appended. (DB)

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An Analysis of  
the QEI Evaluation System

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## Executive Summary

In 1989-90, the Pennsylvania Department of Education (PDE) contracted with Research for Better Schools (RBS) to develop an evaluation system as part of its Quality Education Initiative (QEI). PDE intended the evaluation system to be used by individual programs or sites (i.e., school districts or intermediate units) to monitor and report their progress. In addition, PDE expected to use the resulting findings to evaluate the overall initiative and identify key QEI program elements.

The QEI evaluation system has three parts -- a Program Documentation Outline (PDO), a Program Reporting Outline (PRO), and a Program Improvement Outline (PIO). The PDO is completed at the start of each year and lays out the program's objectives, measures (or instruments) for monitoring progress on these objectives, a timeline, and expectations (or levels) of performance anticipated for each objective. PDOs include both process and outcome evaluation objectives. PROs are completed at the end of the year and indicate the progress made by the program for each objective included on the PDO. Space is also provided to explain why an objective was accomplished or not. The PIO is filled in once all of the data for the PRO are analyzed and discrepancies known between the intended and actual performance of the program; the PIO describes what improvements will be made so that the program achieves the objectives in the future.

Fifty-seven of the 104 QEI-funded programs attended training on this evaluation system during the first year. Following this initial training, these programs were expected to complete PDOs, PROs, and PIOs at the end of each year. This report summarizes analyses conducted of the PDOs, PROs, and PIOs submitted by 21 of the 57 QEI programs (36.8 percent) at the end of the second year. These 21 represented seven different models funded under QEI. Two sets of analyses were conducted: the first to determine the progress made by QEI programs in using the evaluation system and the second to summarize the evaluation data reported by the individual QEI programs. The findings from both sets of analyses were then used to make recommendations for the continued use of the QEI evaluation system in Pennsylvania.

### QEI Evaluation System

The following three questions were used to focus the first set of analyses:

- Were high quality process evaluations designed and conducted by individual programs?
- Were high quality outcome evaluations designed and conducted by individual programs?
- Were evaluation findings used to identify improvements needed in QEI programs?

The answers to each question are summarized below.

Process evaluations. The process evaluations designed by the 21 individual QEI programs were rated on a series of items. Individual items

rated the quality of the process evaluation designed and carried out for the different key program elements that should be addressed as part of a high quality process evaluation (i.e., program planning, staff training, student selection and/or placement, implementation of key program components, monitoring of program implementation, and adoption of the model in other locations). High ratings indicated that specific objectives were set and substantive data presented for each key programmatic component, low ratings indicated the reverse. Analyses of these ratings revealed that the majority of QEI programs (17 of 21, or 81.0 percent) did not establish evaluation objectives for at least half of the six program elements. When objectives were established for any of the six program elements, the process evaluations generally relied on non-specific objectives and impressionistic data (47 out of 61 objectives, or 77.0 percent). Specific objectives were set only related to student identification and placement by six programs and in all six of these cases, impressionistic data also were reported.

Outcome evaluations. Fourteen generic areas were identified by the 21 QEI programs for potential impact. Most of these focused on student outcomes, including achievement, developmental status, attendance, failure or retention rate, receipt of instruction in regular classrooms, and referral to special education or Chapter 1 programs. The quality of the evaluations designed for each identified outcome were rated on a scale similar to that used to judge the process evaluations discussed above. The outcome evaluations almost always included specific objectives (52 out of 56 objectives, or 92.9 percent). Of the 52, 15 reported substantive data, 22 either relied on impressionistic data or reported no substantive data in impressionistic terms, and 15 included no data at the time the PDOs and PROs were submitted (because collected data had not yet been analyzed). QEI evaluations tended to report substantive data on outcomes which could be documented with fairly simple counts, such as student failure or retention rates, student referrals to special education or Chapter 1, and student placement in regular classrooms for academic instruction. Not surprisingly, QEI evaluation that emphasized outcome areas more difficult to measure tended to rely on impressionistic data or unvalidated measures to report on student, parent, or teacher progress.

Program improvements based on evaluation findings. The third component of the evaluation system asked QEI programs to identify improvements that they would make based on the process and outcome evaluation findings reported in the PDOs and PROs. A rating scale was used to examine these improvements, a high score meant that program improvements were identified and their connections to evaluation findings were explicit. Almost one-fourth (23.8 percent) of the programs were able to achieve some success in using evaluation data to identify necessary program improvements. Another 57.1 percent were able to identify needed changes, but did not link these changes to any evaluation data. Almost one-fifth (19.1 percent) were unable to identify changes for the coming year.

#### Meta-Evaluation of QEI Findings

To structure the second set of analyses, the following three questions were asked:

- Are the QEI programs successfully implementing the various models?

- Are the QEI programs achieving their intended outcomes for students, teachers, and parents?
- What are the critical programmatic features in the QEI models for them to be successful?

In order to answer these three questions, RBS relied entirely on the data presented by the 21 programs in their PDOs and PROs. As might be expected from the evaluation system results presented above, too often the program-supplied data were impressionistic or incomplete to allow for any additional analysis. Substantive data were reported for only 15 of the 56 possible student, teacher, or parent outcomes identified by QEI programs (26.8 percent). In most of these cases, the data reported included pre- and posttest measures for program students only; seldom were control or comparison data available.

Given these circumstances, meta-evaluation analyses to answer the above three questions seemed futile. RBS instead coded each objective as having been fully met, partially met, not met, or unknown. Approximately two-thirds of the QEI programs (66.2 percent) reported that they had accomplished all of their process evaluation objectives. Programs acknowledged some problems for about one-fifth of the process objectives, but never noted any serious problems that prohibited them from implementing the particular QEI model as intended. Slightly more than two-fifths (42.6 percent) of the programs reported complete success in achieving their outcome objectives and another 18.7 percent noted partial success. Over one-third of the programs did not yet have their data and so the results for the QEI outcome evaluations may improve once missing data are analyzed. The final meta-evaluation question was not addressed given the paucity of data available.

#### QEI Evaluation Findings and Recommendations

The initial set of analyses indicate that process and outcome evaluations of various scope and quality are being carried out by QEI programs. When the ratings for the process and outcome evaluations are compared, it is clear that QEI programs are much more skilled at the latter. In general, they are able to develop specific evaluation objectives and measures to track program effects. This is especially the case in terms of student achievement, developmental status, attendance and referral, placement, and failure rates. They are less skilled in documenting student progress in other areas, or program effects on teachers or parents, often because they lack psychometrically sound measures to document progress.

The QEI process evaluations tended to be less sophisticated than the outcome evaluations. For some programs, this may be due to a lack of understanding of how to conduct a high quality process evaluation. For other programs, process evaluations may be less valued because they may not provide any new information to small program staffs who know their programs extremely well.

The abbreviated meta-evaluation analyses suggest that the QEI programs are being implemented with some fidelity and are having some desirable impact on students, teachers, and parents. QEI programs reported that they achieved two-thirds of their process objectives and two-fifths of their outcome

objectives. These percentages are likely to increase once programs complete all of their analyses of program implementation and outcome data. In addition, the narrative reports submitted by QEI programs along with their PDOs, PROs, and PIOs were very complimentary.

In spite of the positive impressions created by the individual programs' evaluations, more substantive data are necessary before the merits of QEI can be evaluated with any certainty or key features identified. In particular, substantive and comparable data are needed across some (or all) programs. Such data will enable analyses to establish the effects of a single program or model, the relative effectiveness of various models, and the identification of key programmatic elements. Until such data are collected and analyzed, it will be impossible for PDE to determine the success of QEI with any systematic certainty.

In order for the current QEI evaluation system to meet any of these three needs, the following changes are recommended:

- the key process and outcome evaluation objectives have to be identified by PDE
- additional training should be provided to QEI programs on how to conduct evaluations on these key process and outcome evaluation objectives
- a common pool of instruments should be developed to assess program impacts on students, teachers and/or parents
- PDE should include examination of the evaluations of the QEI programs as part of their ongoing, routine monitoring.

## Introduction

In 1989-90, the Pennsylvania Department of Education (PDE) contracted with Research for Better Schools (RBS) to develop an evaluation system as part of its Quality Education Initiative (QEI). PDE intended the evaluation system to be used by school districts or intermediate units (IUs) to monitor and report their progress. In addition, PDE expected to use the resulting findings to evaluate the overall initiative and identify key QEI program elements.

The QEI evaluation system has three parts -- a Program Documentation Outline (PDO), a Program Reporting Outline (PRO), and a Program Improvement Outline (PIO). Copies of these three forms are included in Appendix A. The PDO is completed at the start of each year and lays out the program's objectives, measures (or instruments) for monitoring progress on these objectives, a timeline, and expectations (or levels) of performance anticipated for each objective. PDOs include both process and outcome evaluation objectives. PROs are completed at the end of the year and indicate the progress made by the program for each objective included on the PDO. Space is also provided to explain why an objective was accomplished or not. The PIO is filled in once all of the data for the PRO are analyzed and discrepancies known between the intended and actual performance of the program; the PIO describes what improvements will be made so that the program achieves the objectives in the future.

As part of the QEI, 104 programs or sites (i.e., school districts or intermediate units) were funded in 1989-90. These 104 programs involved 14 different models for addressing special needs of students. During the first year of this effort, staffs from 57 QEI programs were trained by RBS staff on the use of the evaluation system. Following this initial training, staff have completed the cycle twice, each time completing PDOs, PROs, and PIOs. These forms are submitted to PDE at the end of each funding year.

This report is intended to serve three purposes. First, it describes the progress made by QEI programs in using the evaluation system. Particular attention is given to their understanding of the three forms and the quality of the evaluations designed by QEI program staff. Second, the evaluation data reported by the individual programs are summarized and a meta-evaluation of the 1990-91 QEI programs is presented. Third, the report provides overall findings and recommendations related to the continued use of the QEI evaluation system in Pennsylvania.

## QEI Evaluation System

This section of the report focuses on the use of the evaluation system by 21 QEI programs who submitted their evaluation system forms at the end of 1990-91. These programs are listed below.

- Appalachia Intermediate Unit 8 Project MELD (Mainstream Experience for Learning Disabled)

- Berks County Intermediate Unit 14 Project MELD
- Spring Cove School District Project MELD
- School District of Philadelphia Project SEED
- School District of Philadelphia Valentine Behavior Disorder Discipline Model
- Daniel Boone Area School District ODDM (Outcomes-Driven Developmental Model)
- South Side Area School District ODDM
- Montgomery County Intermediate Unit CBAID (Curriculum-Based Assessment for Instruction Design)
- ARIN Intermediate Unit 28 CBAID
- School District of Philadelphia CBAID
- Riverview School District Home School Liaison Project
- BLaST Intermediate Unit 17 Preschool Integration Program
- Keystone Central School District Preschool Integration Program
- School District of Lancaster Preschool Integration Program
- Danville Area School District Preschool Integration Program
- Middletown Area School District Preschool Integration Program
- Commodore Perry School District Preschool Integration Program
- Tuscarora Intermediate Unit 11 Preschool Integration Program
- Farrell Area School District Preschool Integration Program
- Hollidaysburg Area School District Preschool Integration Program
- Steelton-Highspire School District Preschool Integration Program

These 21 represent seven of the 14 QEI models funded by PDE. Another six programs submitted incomplete evaluation information and so were excluded from these analyses. Thirty programs did not respond to requests from PDE for their evaluation results.

In order to assess QEI programs' understanding and use of the evaluation system, the 1990-91 PDOs, PROs, and PIOs were carefully reviewed, along with any other supplementary documentation provided by each program. In most cases this included a short, one or two page narrative, sample program information forms, and sometimes sample student records or test results. The unit of

analysis thus focused on the individual program, or site, not the particular QEI model being implemented. The analyses focused on three questions:

- Were high quality process evaluations designed and conducted by individual programs?
- Were high quality outcome evaluations designed and conducted by individual programs?
- Were evaluation findings used to identify improvements needed in QEI programs?

Rating scales were devised to answer each of the above questions. The rating scales and resulting ratings are presented below.

### Process Evaluations

Process evaluations are conducted primarily to determine whether programs are implemented as planned. Process evaluations of QEI programs should consequently focus on such key program elements as program planning (for implementation), staff training, student selection and/or placement, implementation of key program components, monitoring of program implementation, and adoption of the model in other IU/district locations. The PDOs and PROs for the 21 QEI programs were examined to determine the quality of the process evaluations proposed and conducted for each of these major program elements. Particular attention was paid to the delineation of specific objective(s) for each program element as well as the collection, analysis, and reporting of substantive data on each element. The process evaluation carried out for these six program elements, as presented in the program's PDO and PRO, was rated on the following six-point scale:

- 1 no objective set, no data presented
- 2 non-specific objective set, no data presented
- 3 non-specific objective set, impressionistic data presented
- 4 specific objective set, no data presented
- 5 specific objective set, impressionistic data presented
- 6 specific objective set, substantive data presented.

An objective was considered specific if it referred to a particular feature of the program (e.g., the selection of developmentally delayed children using the Batelle Developmental Inventory). If the objective called for the identification of students without naming the instrument or selection process, it was considered a non-specific objective. Similarly, evaluation data and results were considered to be substantive if the measure was named and the data were defined in explicit terms (e.g., 95 percent of the targeted children made 8 or more months progress on the Batelle Developmental Inventory). If the evaluation results were less specific (e.g., the teachers reported that most of the students made gains), they were classified as impressionistic.

The aggregated process evaluation ratings are presented in Table 1 below. (See Appendix B for ratings for the individual QEI programs.) The analyses of process evaluation quality revealed that the majority of QEI programs (17 of 21, or 81.0 percent) did not establish evaluation objectives for at least half of the above six program elements. The majority did not set objectives for program planning, monitoring of program implementation, or adoption of the model in other locations. In contrast, most QEI programs set objectives for staff training, student identification and/or placement, and implementation of key program components. When objectives were established for any of the six program elements, the process evaluations generally relied on non-specific objectives and impressionistic data (47 out of 61 objectives, 77.0 percent). This was especially the case in evaluating staff training (15 out of 16 programs) and implementation of key program components (13 out of 16 QEI programs). Specific objectives were set only related to student identification and placement by six programs and in all six of these cases, impressionistic data also were reported.

### Outcome Evaluations

Outcome evaluations are conducted to determine whether programs achieve the expected results. QEI outcome evaluations should accordingly focus on students who participate in or receive program services. In addition, some QEI programs expected to have an impact on the teachers or parents of students participating in the program. Fourteen generic areas were identified by the 21 QEI programs for potential impact:

- student achievement
- student developmental status
- student attendance
- student failure or retention rate
- student behavior or discipline
- student self-esteem or affective/emotional development
- student interpersonal skills
- student self-directed learning
- student completion of homework
- student receipt of instruction in regular classroom
- student referral to special education/Chapter 1
- parent involvement
- teacher perception of student
- teacher skills.

Table 1  
Quality of Process Evaluation Ratings

Rating	Planning		Staff Training		Student ID		Implementation of Key Elements		Monitoring Implementation		Adoption	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
1	16	76.2	5	23.8	10	47.6	5	23.8	13	61.9	16	76.2
2	1	4.8	1	4.8	1	4.8	3	14.3	2	9.5	0	0.0
3	4	19.0	15	71.4	4	19.0	13	61.9	6	28.6	5	23.8
4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Note: Ratings were assigned on the following six-point scale: 1-no objective set, no data presented, 2-non-specific objective set, no data presented, 3-non-specific objective set, impressionistic data presented, 4-specific objective set, no data presented, 5-specific objective set, impressionistic data presented, 6-specific objective set, substantive data presented

The number of outcomes identified by QEI programs ranged from one to five, with seven programs reporting one outcome, six programs identifying two or three, and eight programs four or five. The PDOs and PROs were examined to assess the quality of the outcome evaluations proposed and conducted for the particular set of outcomes identified by the project. Ratings were assigned for each outcome, using the same rating scale that was used in assessing the quality of the process evaluation. Similar to those analyses, the delineation of specific objectives and the collection, analysis, and reporting of substantive data were particularly important.

The outcome evaluation ratings of quality are presented in Table 2 below. (Appendix C contains the individual program ratings for the outcome evaluations.) The QEI outcome evaluations almost always included specific objectives (52 out of 56 objectives, or 92.9 percent). Of the 52, 15 reported substantive data, 22 either relied on impressionistic data or reported substantive data in impressionistic terms, and 15 included no data at the time the PDOs and PROs were submitted (because the data analyses had not yet been completed). In marked contrast to the process evaluations, the QEI outcome evaluations were more focused and sophisticated in their design.

The majority of the QEI outcome evaluations focused on tracking student progress. All but two of the 21 QEI programs identified either improved student achievement or developmental status as a potential impact area; 18 of these 19 also identified specific objectives and measures to track student progress. QEI evaluations tended to report substantive data on outcomes which could be documented with fairly simple counts, such as student failure or retention rates, student referrals to special education or Chapter 1, and student placement in regular classrooms for academic instruction. Not surprisingly, QEI evaluations that emphasized outcome areas more difficult to measure by simple counts, such as student affective development, parent involvement, or teacher attitudes or skills, tended to rely on impressionistic data or unvalidated measures to report on student, parent, or teacher progress.

#### Program Improvements Based on Evaluation Findings

The third component of the evaluation system asked QEI programs to identify improvements that they would make based on the process and outcome evaluation findings reported in the PDOs and PROs. The PDOs, PROs, and PIOs were examined together to determine whether individual programs were able to complete the task. The following four-point rating scale was developed to structure this examination:

- 1 program improvements not identified
- 2 program improvements identified, no connection made to evaluation findings
- 3 program improvements identified, connections to evaluation findings sometimes explicit
- 4 program improvements identified, connections to evaluating findings explicit.

**Table 2**  
**Quality of Outcome Evaluation Ratings**

Rating	Achievement		Development Status		Attendance		Failure Rate		Behavior		Affective Development		Interpersonal Skills		Self-Directed Learning		Homework		Instruction in Regular Class		Referred to Spec. Ed./Ch. 1		Parent Involvement		Teacher Perceptions		Teacher Skills		Total		
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N		
1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
3	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
4	5	55.6	2	20.0	2	50.0	1	20.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2	28.6	1	33.3	1	33.3	0	0.0	1	33.3	4
5	3	33.3	3	30.0	2	50.0	1	20.0	2	100.0	1	50.0	3	75.0	1	100.0	1	100.0	0	0.0	1	14.3	2	66.7	1	33.3	1	33.3	0	0.0	15
6	1	11.1	4	40.0	0	0.0	3	60.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0	4	67.1	0	0.0	0	0.0	1	33.3	1	33.3	15
<b>Total</b>	<b>9</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>7</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>56</b>

**Note:** Ratings were assigned on the following six-point scale: 1-no objective set, no data presented, 2-non-specific objective set, no data presented, 3-non-specific objective set, impressionistic data presented, 4-specific objective set, no data presented, 5-specific objective set, impressionistic data presented, 6-specific objective set, substantive data presented

Table 3 below summarizes the resulting ratings for the 21 QEI programs (see Appendix D for the individual program ratings).

Table 3

Ratings of Connections Made  
Between Evaluation Findings and Improvements

<u>Rating</u>	<u>Number</u>	<u>Percent</u>
1	4	19.1
2	12	57.1
3	5	23.8
4	0	0.0

Almost one-fourth (23.8 percent) of the programs were able to achieve some success in using evaluation data to identify necessary program improvements. Another 57.1 percent were able to identify needed changes, but did not link these changes to any evaluation data. Finally, almost one-fifth were unable to identify changes for the coming year.

Meta-Evaluation of QEI Findings

The second purpose of this report is to provide feedback to PDE on the success of QEI programs. This section of the report is thus organized to answer three questions:

- Are the QEI programs successfully implementing the various models?
- Are the QEI programs achieving their intended outcomes for students, teachers, and parents?
- What are the critical programmatic features in the QEI models for them to be successful?

In order to answer these three questions, RBS relied on the evaluation findings presented by the 21 programs listed at the beginning of the report. Our answers to these questions thus depend entirely on the validity and completeness of the data presented by the programs in their PDOs and PROs. As might be expected from the evaluation system results presented in the first section of this report, too often the program-supplied data were impressionistic (e.g., the teachers noted that students made marked gains in reading during the course of the school year) or incomplete to allow for any meta-analysis. Substantive data were reported for only 15 out of the 56 possible student, teacher, or parent outcomes identified by QEI programs (26.8 percent). In most of these cases, the data reported included pre- and posttest measures for program students only; seldom were control or comparison student data available.

Given these circumstances, meta-analyses to answer the above three questions seemed futile. RBS instead decided to code each objective listed in

a program's PDO and PRO (both process and outcome) as having been fully met, partially met, not met, or unknown. (The unknown category was used when data analyses had not been completed and so achievement of the objective could not be determined.) RBS relied entirely on the judgments made by projects themselves in classifying objectives as having been accomplished or not. These data are presented in Table 4 below. (The individual QEI program ratings are included in Appendix E.)

Table 4

Number of Process and Outcome Objectives  
Met by QEI Programs

<u>Objectives</u>	<u>Process</u>		<u>Outcome</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Fully Met	100	66.2	32	42.6
Partially Met	30	19.9	14	18.7
Not Met	0	0.0	2	2.7
<u>Unknown</u>	<u>21</u>	<u>13.9</u>	<u>27</u>	<u>36.0</u>
Total	151	100.0	75	100.0

As indicated in Table 4, approximately two-thirds of the QEI programs reported that they had accomplished all of their process evaluation objectives. Programs acknowledged some problems for about one-fifth of the process objectives, but never noted any serious problems that prohibited them from implementing the particular QEI model as intended.

On first glance, the results for the outcome evaluation objectives seem somewhat less optimistic. Slightly more than two-fifths (42.6 percent) of the programs reported complete success, in contrast to the two-thirds (66.2 percent) noted for the process objectives. However, closer examination shows that results were not yet available for over one-third (36.0 percent) of the outcome objectives and so it is impossible to predict whether programs met these objectives or not.

The final meta-evaluation question sought to identify the critical features necessary for QEI models to be successful. Given the paucity of data available, such identification seems premature. Until there is more substantive evidence to document the effectiveness of any of these programs, it is impossible to reliably determine which programmatic factors are essential to the effective implementation of QEI programs.

QEI Evaluation Findings and Recommendations

The initial set of analyses indicate that process and outcome evaluations of various scope and quality are being carried out by QEI programs. When the ratings for the process and outcome evaluations are compared, it is clear that QEI programs are much more skilled at the latter. In general, they are able to develop specific evaluation objectives and

measures to track program effects. This is especially the case in terms of student achievement, developmental status, attendance and referral, placement, and failure rates. They are less skilled in documenting student progress in other areas, or program effects on teachers or parents, often because they lack psychometrically sound measures to document progress.

The QEI process evaluations tended to be less sophisticated than the outcome evaluations. For some programs, this may be due to a lack of understanding of how to conduct a high quality process evaluation. For example, one common approach was to state one over-arching process evaluation objective, implement key elements of the program, without ever noting what the critical components were or reporting data on the implementation of these individual components. In other cases, programs adopting the same QEI model would often use the same structure for designing their process evaluation and submit essentially the same PDOs and PROs, thus failing to tailor the process evaluation to match the particular conditions or nuances at their individual schools.

Another reason for the differences found between the process and outcome evaluations may be that the differences are an artifact of the relatively small size of many of these programs. QEI programs typically involved only a handful of professional staff in each school or district. In many of these programs, one can assume that the individual responsible for the evaluation was often intimately involved in the program on a day-to-day basis and so knew first-hand the ups-and-downs of the program's implementation. Under these conditions, the process evaluation is not likely to shed any new light on the program, at least from the perspective of the program staff. The process evaluation, consequently, becomes less important, takes up valuable time needed elsewhere, and is completed mainly to satisfy the funding agency.

Given these two scenarios, it's not surprising to discover that QEI programs were more proficient at conducting outcome than process evaluations. However, the solutions for dealing with these two circumstances are very different. In the case of the former, additional training, or one-on-one coaching is probably needed. In the latter instance, additional training won't help, and may actually be resented.

The abbreviated meta-analyses suggest that the QEI programs are being implemented with some fidelity and are having some desirable impact on students, teachers, and parents. QEI programs reported that they achieved two-thirds of their process objectives and two-fifths of their outcome objectives. These percentages are likely to increase once programs complete all of their analyses of program implementation and outcome data. In addition, the narrative reports submitted by QEI programs along with their PDOs, PROs, and PIOs were very complimentary.

In spite of the positive impressions created by the individual programs' evaluations, more substantive data are necessary before the merits of QEI can be evaluated with any certainty or key features identified. In particular, substantive and comparable data are needed across some (or all) programs. Such data will enable analyses to establish the effects of a single program or model, the relative effectiveness of various models, and the identification of key programmatic elements. Until such data are collected and analyzed, it

will be impossible for PDE to determine the success of QEI with any systematic certainty.

In order for the current QEI evaluation system to meet any of these three needs, the following changes are recommended.

- The key process and outcome evaluation objectives have to be identified by PDE.

The current evaluation system allows individual QEI programs to decide on the specific process and outcome objectives their evaluations will address as long as the PDO-PRO-PIO framework is used. Although this flexibility provides a strong incentive to programs to conduct their evaluations, it also works against PDE's interest of gathering some uniform data so that models and programs can be studied as a group. RBS therefore suggests that some common process and outcome objectives be required so that the state's interests are also served.

- Additional training should be provide to QEI programs on how to conduct evaluations on these key process and outcome evaluation objectives.

In reviewing the PDOs-PROs-PIOs submitted by the programs, it was clear that few of them had mastered the evaluation system designed for QEI. Therefore, it seems wise for PDE to provided additional training to these programs, and to focus this training on those elements of the evaluation system most critical to PDE and QEI. Some large group training may be appropriate to make sure that all of the programs share a common focus and understanding of the QEI evaluation system. However, given the variance in the evaluation skill levels of the individual program staffs, some of the training ought to be tailored to meet different skill levels. This could be accomplished in small group training sessions or individual coaching. In either case, the additional follow-up training ought to build on the evaluations designed by these programs during the previous years (e.g., 1989-90, 1990-91) so that the evaluations are on-target this school year.

- A common pool of instruments should be developed to assess program impacts on students, teachers, and/or parents.

If meta-analyses are to be conducted to examine the relative success of individual QEI models or programs, it would be extremely helpful if similar data were collected across programs. This is especially the case for student outcomes. RBS recommends that PDE encourage individual QEI programs striving for similar student outcomes to discuss and share instruments, and perhaps reach some agreement on which instruments to use to assess particular outcomes. Without some formal or informal understandings among individual programs, any meta-analyses of relative effects will be compromised. Such sharings may also have the by-product of helping some programs identify more psychometrically sound measures for assessing particular outcomes.

- PDE should include examination of the evaluations of the QEI programs as part of their ongoing, routine monitoring.

During the year, PDE officials make periodic monitoring visits to QEI programs to review and discuss program operations with their staff members. During these monitoring visits, PDE officials should extend their attention beyond program operations and services to include the status of evaluation activities and preliminary results. By engaging local district/school or IU staff in discussions about the evaluation on an ongoing basis, PDE will communicate its commitment to and the importance attached to the QEI evaluation effort. This, in turn, will promote the evaluation activities carried out by district/school or IU staff.

**Appendix A**  
**QEI Evaluation System Forms**





# PROGRAM IMPROVEMENT OUTLINE

NAME OF PROGRAM: \_\_\_\_\_ REVISED: \_\_\_\_\_

(A) OBJECTIVES	(G) IMPROVEMENTS	(H) RATIONALE
<p style="text-align: center;">16</p> <p style="text-align: center;">27</p>		<p style="text-align: center;">28</p>

## Appendix B

### Ratings of Process Evaluation Objectives for QEI Programs

Project	Planning	Staff Training	Student ID	Implem. of Program Elements	Monitoring Implem.	Adoption
001	1	3	3	1	3	1
002	1	3	3	1	3	1
004	1	3	3	1	3	1
005	3	3	1	3	1	1
006	3	3	1	3	3	3
008	1	1	1	1	1	3
009	1	3	1	2	2	1
010	1	3	1	3	1	3
011	3	3	3	3	1	3
012	3	3	1	3	1	1
013	1	1	1	1	1	1
014	1	3	5	3	3	1
015	1	1	5	2	1	1
016	1	3	5	3	1	1
017	1	3	5	3	3	3
018	1	3	5	3	1	1
019	1	1	2	2	1	1
020	1	3	5	3	1	1
021	1	1	1	3	1	1
022	1	2	1	3	2	1
023	2	3	1	3	1	1

**Note:** Ratings were assigned on the following six-point scale: 1-no objective set, no data present, 2-non-specific objective set, no data presented, 3-non-specific objective set, impressionistic data presented, 4-specific objective set, no data presented, 5-specific objective set, impressionistic data presented, 6-specific objective set, substantive data presented

## Appendix C

### Ratings of Outcome Evaluation Objectives for QEI Programs

Project	Achievement	Development Status	Attendance	Failure Rate	Behavior	Affective Development	Interpersonal Skills	Self-Directed Learning	Homework	Instruction in Regular Class	Referred to Spec. Ed/Ch. 1	Parent Involvement	Teacher Perceptions	Teacher Skills
001	4	1	4	4	1	1	1	1	1	1	4	1	1	1
002	4	1	4	6	1	1	1	1	1	1	6	1	1	1
004	4	1	5	5	1	1	1	1	1	1	5	1	1	1
005	4	1	1	1	1	1	1	1	1	1	1	1	1	1
006	1	1	1	1	5	1	1	1	1	1	1	1	1	1
008	5	1	1	1	1	5	5	5	1	1	1	1	1	1
009	4	1	1	1	1	4	1	1	1	6	4	1	4	1
010	5	1	1	1	1	1	1	1	1	1	6	1	1	5
011	1	1	1	6	1	1	1	1	1	6	1	1	1	1
012	6	1	1	1	1	1	1	1	1	1	1	1	1	6
013	5	1	5	1	5	1	1	1	5	1	1	5	1	1
014	1	5	1	1	1	1	3	1	1	1	1	1	3	3
016	1	5	1	1	1	1	1	1	1	1	6	1	1	1
018	1	6	1	1	1	1	1	1	1	1	1	5	1	1
017	1	6	1	1	1	1	1	1	1	1	1	1	1	1
018	1	6	1	6	1	1	5	1	1	1	6	1	5	1
019	1	4	1	1	1	1	1	1	1	1	1	1	1	1
020	1	6	1	1	1	1	1	1	1	1	1	1	1	1
021	1	4	1	1	1	1	1	1	1	1	1	1	1	1
022	1	5	1	1	1	1	5	1	1	1	1	4	1	1
023	1	3	1	1	1	1	1	1	1	1	1	1	1	1

**Note:** Ratings were assigned on the following six-point scale: 1-no objective set, no data presented, 2-non-specific objective set, no data presented, 3-non-specific objective set, impressionistic data presented, 4-specific objective set, no data presented, 5-specific objective set, impressionistic data presented, 6-specific objective set, substantive data presented

## Appendix D

### Ratings of Connections Made Between Evaluation Findings and Improvement for QEI Programs

<u>Project</u>	<u>Rating</u>
001	2
002	2
004	2
005	1
006	3
008	1
009	2
010	3
011	2
012	3
013	3
014	2
015	?
016	1
017	2
018	2
019	2
020	1
021	2
022	3
023	2

Note: Ratings were assigned on the following four-point scale: 1-program improvements not identified, 2-program improvements identified, no connection to evaluation findings made, 3-program improvements identified, connections to evaluation findings sometimes explicit, 4-program improvements identified, connections to evaluation findings explicit

Appendix E

Number of Process and Outcome Objectives  
Met by QEI Objectives

Program Number	<u>Process Objectives</u>				<u>Outcome Objectives</u>			
	Not Met	Partially Met	Fully Met	Unknown	Not Met	Partially Met	Fully Met	Unknown
001	0	2	4	0	0	0	0	4
002	0	0	3	3	1	0	2	1
003	0	0	6	0	0	0	3	1
005	0	0	5	0	0	0	0	1
006	0	1	4	0	0	1	1	0
008	0	0	2	0	0	0	4	0
009	0	2	2	0	1	0	2	4
010	0	10	10	0	0	3	2	0
011	0	6	18	0	0	0	2	0
012	0	0	3	0	0	0	4	0
013	0	0	0	0	0	6	0	0
014	0	0	2	2	0	1	2	0
015	0	0	4	0	0	0	2	0
016	0	2	5	0	0	0	1	0
017	0	2	4	0	0	0	2	0
018	0	0	5	0	0	1	2	0
019	0	0	0	14	0	0	0	8
020	0	2	4	0	0	0	1	0
021	0	1	10	0	0	0	0	8
022	0	2	4	2	0	2	1	0
023	0	0	5	0	0	0	1	0