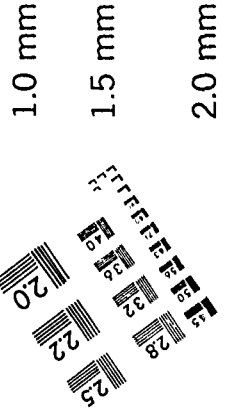
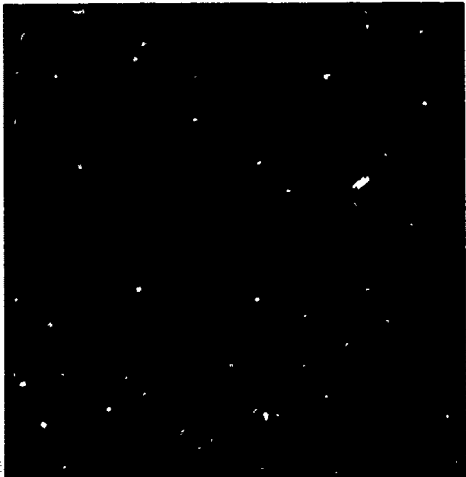
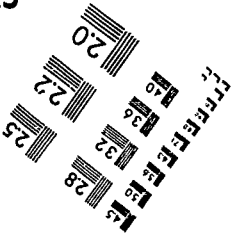


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ABSTRACT

The High School State Incentive Grant was established to improve the quality of instruction given to New York students with handicaps by providing high school special education teachers with an intensive staff development program designed and implemented at the school, district, and citywide levels. The program consisted of three major components: on-site training, boroughwide initiatives (BWI), and central staff development. Among findings of the evaluation report are that all three components were implemented as planned. BWI provided training, curriculum development, and Academy of Basic Skills (ABS) teacher training. Central staff development provided instruction in Computerease, Instrumental Enrichment, the Academy of Basic Skills, and paraprofessional training. More than 50% of participants considered on-site training and ABS instruction, curriculum, and training to be of superior quality. The on-site training component approximated but did not meet its objective of providing 25 hours of training during the 1988-89 school year. The on-site training component effected a positive change in the total level of knowledge of 75% of the teacher-respondents and increased 57% of the respondents' levels of communication with general education personnel. Recommendations include involving teacher-trainees in development of on-site training plans and expanding the ABS program to more schools. (DB)

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# OREA Report

Evaluation Section Report

HIGH SCHOOL SPECIAL EDUCATION  
STATE INCENTIVE GRANT  
(H.S. SIG)

1988-89

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# FINAL EVALUATION REPORT

John E. Schoener, Chief Administrator

December, 1989

## Evaluation Section Report

### HIGH SCHOOL SPECIAL EDUCATION STATE INCENTIVE GRANT (H.S. SIG)

1988-89

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**HIGH SCHOOL SPECIAL EDUCATION  
STATE INCENTIVE GRANT  
(H.S. SIG)  
1988-89  
SUMMARY**

The High School State Incentive Grant (H.S. SIG), funded by a New York State incentive grant and organized by the Special Education Operations Unit of the Division of High Schools, was established to improve the quality of instruction given to students with handicapping conditions by providing high school special education teachers with an intensive staff development program designed and implemented at the school, district, and citywide levels. In 1988-89 the H.S. SIG program consisted of three major components: On-site Training, Boroughwide Initiatives (B.W.I.), and Central Staff Development. OREA's evaluation was expanded from that of the previous year which only covered On-site Training to include all three components of the program. The evaluation did not examine outcomes for the Central Staff Development component.

OREA consultants interviewed or surveyed all executive assistants, or their designees, and assistant principals for special education, special education trainees, general education trainers, and Academy of Basic Skills (A.B.S.) teachers. They also collected data retrieval forms for all A.B.S. students in the sample.

OREA found that the On-site Training, B.W.I., and Central Staff Development components were implemented as planned. B.W.I. provided training, curriculum development, and A.B.S. instruction in all high school districts. Central Staff Development provided Computerease, Instrumental Enrichment, A.B.S., and Paraprofessional Training as planned. More than 50 percent of the respondents considered On-site Training and A.B.S.

instruction, curriculum, and training to be of superior quality.

With regard to program outcomes, OREA found that the On-site Training component approximated but did not meet its objective of providing 25 hours (13 hours per semester) of training. During the fall semester the objective was met at 90 percent of the schools, and in the spring semester, at 82 percent of the schools. (It is important to note that participants also received training through the Central Staff Development and B.W.I. components; thus results presented in this report are estimates of the minimum amount of staff development provided by the program.) OREA also found that the On-site Training component successfully effected a positive change in the total level of knowledge of 75 percent of the teacher-respondents, and increased 57 percent of the respondents' levels of communication with general education personnel. Finally, OREA found that more than 60 percent of students who participated in the Academy of Basic Skills program demonstrated a positive change in their level of achievement.

Based on the findings of this evaluation, OREA made the following recommendations:

- Involve the teacher-trainees in the development of On-site Training plans to reduce the number of scheduling conflicts and more closely meet their training needs;
- Expand the A.B.S. program to all schools that have students who can benefit from the program.

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We also thank the following field consultants who visited sites, interviewed school personnel, and collected other data: William Askins, Bradford Dillman, Julie Friesner, Caryn Luberto, Ruth Margolis, Elizabeth Mathias, Cindy Rosenberg, and Josephine Thorpe. For their many hours of hard work, we are particularly grateful. We would also like to thank Alma Caraballo, who provided extensive assistance to the data analyst with the basic analyses required for this project and to Arnold Simmel, Lynn Mulkey, and Ming-Xin Tang, who worked on the analysis of the A.B.S.-central files outcome data. Finally, we thank Gaylen Moore for her many editorial contributions and Donna Manton for word processing the final draft of this report.

## I. INTRODUCTION

The High School State Incentive Grant (H.S. SIG) was funded by a New York State incentive grant for the purpose of improving the quality of instruction for students with handicapping conditions. An intensive staff development program for high school special education teachers designed and implemented in components at the school, district, and citywide levels. In this report the Office of Research, Evaluation, and Assessment (OREA) presents the findings of its study of H.S. SIG for the 1988-89 academic year, the program's third year of operation.

### PROGRAM DESCRIPTION

For 1988-89, the Special Education Operations Unit of the Division of High Schools (D.H.S.) proposed a continuation and expansion of the H.S. SIG training program which consisted of three major components. The first component was the On-site Training program (also known as the Beattie program) in which general education assistant principals (A.P.G.E.s) or their designees were to provide training in academic content areas of interest to special education teachers at each participating high school for one period a week, totalling 25 hours for the school year.

The second component, Boroughwide Initiatives (B.W.I.s), consisted of specific training programs designed and developed by each of the Executive Assistants for Special Education in consultation with the Division of High Schools, Special Education Operations Unit (D.H.S.E.), and tailored to meet the specific needs of each high school district. Although different in each district, all B.W.I.s included one or more of the following subcomponents: Academy of Basic Skills (A.B.S.), Curriculum Development, and/or Staff Development.

All B.W.I. designs had a substantial A.B.S subcomponent which had been initiated either one or two years previously and which most districts expanded during the 1988-89 school year. This report will be concerned primarily with the A.B.S. subcomponent of B.W.I. The A.B.S. design consisted of an instructional program to address the needs of incoming special education high school students functioning significantly below grade level in the academic areas of math, reading and writing. The program was designed to bring students up to grade level in order to expedite mainstreaming and place them in less restrictive environments. Reading, writing, and computation skills were to be stressed in order to improve the basic skills of student participants. A.B.S. also included career exploration and assessment, vocational training, behavior modification, and a group guidance program. Students were to be instructed in a supportive environment which would rely on the "house model" (students block programmed and working in small groups with teacher coaches) to mediate problems and reduce student anxiety associated with adjusting to high school.

B.W.I. staff development activities were designed to give districts the opportunity to tailor staff training plans to the specific needs of the borough with regard to participant groups, areas of training, number of sessions, and training format. Curriculum development activities were also designed to be flexible in the content areas covered and the number of curriculum drafts produced by each district. These decisions were to depend on the current stage of curriculum development, the resources, and the needs of each district.

The third H.S. SIG component, Central Staff Development (C.S.D.), was organized by the High School Special Education Training and Resource Center (H.S. SETRC). Arrangements were made so that H.S. SETRC, which is generally

responsible for all centrally organized high school special education staff development, would organize and/or present training sessions covering a number of content areas specifically relevant to H.S. SIG: Science Research Associates (S.R.A.) technical assistance and A.B.S. training, paraprofessional training, Instrumental Enrichment, and Computer use.

### SCOPE OF STUDY

OREA's evaluation of H.S. SIG for 1988-89 has been expanded from 1987-88, when the study was limited to an evaluation of the On-site Training component. The 1988-89 study covers the planning and implementation of all three components as well as specific outcome measures for the On-site Training and the A.B.S. program.

### REPORT FORMAT

This report is organized as follows: Chapter II describes the evaluation methodology; Chapter III presents the findings on program implementation and outcomes, and Chapter IV offers conclusions and recommendations based on OREA's findings.

## II. METHODOLOGY

In 1988-89 OREA expanded its evaluation objectives from those of 1987-88 which had exclusively addressed the On-site Training component to examine all three components of H.S. SIG: On-site Training, Boroughwide initiatives, and Central Staff Development.

### EVALUATION QUESTIONS

#### Planning and Implementation

OREA addressed the following program planning and implementation questions:

- What were the original plans for operating the three components of H.S. SIG?
- Were the components implemented as planned?
- How did participants perceive the quality of program implementation?
- What were the strengths and weaknesses of program implementation?
- What were participants' recommendations for improving the program?

#### Outcomes

OREA also addressed the following program outcome questions:

- Did the program succeed in providing the anticipated 25 hours of training for the component?
- Did 75 percent of the participants report an increase in their level of knowledge as a result of training?
- Did participants' level of communication with general education staff increase as a result of training?
- Did student achievement improve as a result of participating in the A.B.S. instructional program?

## EVALUATION PROCEDURES

### Sample

OREA's sample for training assessment consisted of the 20 schools that were chosen in 1987-88 to represent different types of high schools from all districts. Five of these 20 schools were also included in the assessment of A.B.S. sites. OREA selected five additional schools to augment the A.B.S sample, bringing to ten the total number of A.B.S. instructional sites included in this study.

### Data Collection

OREA consultants interviewed high school district Executive Assistants for Special Education or their designees, Assistant Principals for Special Education (A.P.S.E.s), and H.S. SIG trainers, and surveyed special education H.S. SIG trainees in both January and June.

OREA collected data from nearly all A.P.S.E.s, H.S. SIG trainers, and H.S. SIG trainees at the 20 schools in the training sample. OREA staff interviewed 39 A.P.S.E.s in the fall and spring, and interviewed all high school district Executive Assistants for Special Education or their designees about the B.W.I. component. Data were also collected from nearly all A.B.S. coordinators, teachers, and students at the ten schools in the A.B.S. sample.

To address questions about the implementation of the Central Staff Development component, OREA collected information from the H.S. SETRC coordinator concerning attendance, the number of sessions provided, and the topics covered for all staff development sessions. The H.S. SETRC coordinator was responsible for distributing, organizing, and returning the questionnaires which

requested information about participants, the structure of training, training activities, types of training provided, and content areas covered. OREA used these materials to determine the degree of planning and implementation of Central Staff Development activities. However, outcomes for this third component were not addressed.

### Instrumentation

To gather training information, OREA developed teacher-trainee survey forms, trainer interview schedules, and training activities log data sheets. To gather data on students in the A.B.S. program, OREA developed roster forms, student data retrieval forms, and A.B.S. teacher survey forms.

### Data Analysis

OREA field consultants coded responses on student data retrieval forms, staff surveys, and interviews. OREA staff analyzed and aggregated these data to generate information on the process and quality of planning and implementation.

OREA staff determined whether H.S. SIG had achieved its objective of providing 25 hours of training by tabulating data from the general education trainers' interview schedules. OREA also analyzed teacher-trainee responses to six-point Likert scale items to measure the change in trainees' level of knowledge as a result of H.S. SIG training. Finally, OREA analyzed achievement outcomes for A.B.S. students by matching identifying information from A.B.S. student data retrieval forms and retrieving their spring 1988 and spring 1989 Degrees of Reading Power (D.R.P.) scores from Board of Education (B.O.E.) central files. OREA used mid-instructional unit scores of the D.R.P. (indicating the level of text the student understands with a moderate degree of instructional support) to compare student performance on pre- and post-tests.

### III. FINDINGS

This chapter includes a description of the implementation of the expanded 1988-89 H.S. SIG program, a review of participant perceptions of the quality of training, an assessment of the program's strengths and weaknesses, participants' recommendations for program improvement, and an analysis of four evaluation outcomes.

#### PLANNING AND IMPLEMENTATION

##### On-site Training

On-site Training was the most intensive teacher training experience provided by H.S. SIG. It provided individual teachers with the greatest number of sessions. On average, four trainers and seven trainees participated in the program at each of the sample schools in either semester. Planning for training was primarily based on the A.P.S.E.'s perceptions of special education staff needs. Most A.P.S.E.s (62 percent) reported that planning for training was based on their knowledge of the special education staff. Forty-eight percent of the A.P.S.E.s reported that they had planned the training jointly with H.S. SIG trainers (general education personnel). Nearly 31 percent of the A.P.S.E.s reported that they had observed special education teachers in order to determine their training needs. Only ten percent reported that a formal needs assessment had been conducted at their schools. In general, principals and special education teachers were rarely involved in the planning process.

The training needs which the A.P.S.E.s identified most often at their schools were: curriculum adaptation (84 percent) and instructional strategies (29 percent)



which included student motivational techniques. More than 84 percent of the A.P.S.E.s reported that H.S. SIG had addressed all the training needs at their schools.

Only 69 percent of the A.P.S.E.s reported that they or another staff member had been asked to monitor the H.S. SIG program at their school. This presented a problem in the remaining schools where no one staff member was responsible for keeping tabs on the program. Another problem which some A.P.S.E.s (13 percent) identified was the actual monitoring of the program, which most of them found difficult because it was so time-consuming.

According to these qualitative interview data, it appears that overall the training program was implemented as planned, but the planning process itself was not based completely on shared decision-making.

### Boroughwide Initiatives

Borough A. The Borough A Executive Assistant planned to conduct staff development and expand the A.B.S. instructional program from ten sites to a total of 17. Staff development included two days of training offered boroughwide as well as additional training in reading, writing, and math. Much of the B.W.I. funding was channeled into direct services for students through the A.B.S. instructional program.

The Executive Assistants interviewed at this borough were very optimistic about the positive effects the A.B.S. program would have on student achievement. They identified the following positive aspects of this program: it provided a good transition between junior high school and high school; it provided good remediation and guidance; it utilized the "house concept" of instruction, and instruction could be delivered at each school in a variety of ways. Problems they identified were high

teacher turnover rates, the need for multicultural staff development, and the amount of teacher coverage required.

Borough B. The Borough B Executive Assistant planned to conduct staff development in the form of workshops and to expand the A.B.S. program from three sites to a total of five. This district also provided a total of 14 staff development workshops which the Executive Assistants considered very successful insofar as they met participating teachers' interests. The only negative aspect of the workshops noted was that the quality of outside presenters was somewhat uneven. The Executive Assistants also considered the A.B.S. program successful because it promoted a more personal link between students and teachers, and because many students seemed to react well to the structure of its curriculum. The Executive Assistant and his associate thought that there should be an A.B.S. program at all schools with "vulnerable" at-risk students.

Borough C. The Borough C Executive Assistant planned to: conduct staff development workshops for general and special education teachers and supervisors; conduct a full-day workshop in alternative teaching strategies; develop a number of curriculum bulletins; and acquire A.B.S. program materials. Under the auspices of B.W.I., staff developers conducted workshops covering the following areas: strategies to improve physical education for special education students; how teachers and paraprofessionals can work effectively together; preparation for the science and social science Regency Competency Test (R.C.T.); and preparation for the state occupational education proficiency exam. Staff developers provided a total of ten workshops in these areas.

Staff developers also conducted a full-day professional conference covering

alternative teaching strategies for special and general education teachers, and for assistant principals. District staff developed three new curriculum bulletins and completed two others which had been initiated the previous year. B.W.I. funds were also used to support the A.B.S. program implemented at five sites by providing A.B.S.-related materials. The Executive Assistant in this district thought that the B.W.I. activities, particularly the staff development workshops, had worked out very well.

Borough D. In anticipation of a borough-based staff development series scheduled to start in September, 1989, the Borough D Executive Assistant planned to develop curriculum packages in a number of training areas. A committee consisting of A.P.S.E.s, A.P.G.E.s, special education teachers, and crisis intervention teachers was assembled to develop training in each of the curriculum areas. The series of two-hour curriculum development sessions totalled 40 hours. Topics included Basic II, discipline, curriculum adaptation, and physical education. The Executive Assistant's designee reported that the high school district superintendent had made very positive comments about the curriculum packages.

Borough E. The Borough E Executive Assistant planned to expand the A.B.S. program from two to nine sites. The following positive outcomes of the program were identified: teachers and students were able to establish a bond which facilitated student retention and learning; the classroom provided an opportunity for timely counseling of students; and the A.B.S. program was expanded to prepare students more effectively for independent living. Interviewees stated that the program should be made more stimulating for higher functioning students.

## Central Staff Development

The H.S. SIG design also included workshops that were to be organized or directly provided by central staff development teams. These workshops focused on paraprofessional training, Computerease, Instrumental Enrichment, and A.B.S. training. In the past, training provided by this group had focused on the instructional needs of resource room personnel. In 1988-89, however, it emphasized the needs of staff in self-contained classes.

The staff developers conducted paraprofessional training during May and June 1989 in a series of three after-school and weekend conferences. Paraprofessionals volunteered to participate in training and were remunerated on a per-session basis. Training topics included Basic II teaching strategies, study skills, the writing process, curriculum adaptation, communication skills, and mathematics instruction. In addition, the staff developers offered special sessions addressing multicultural issues such as bilingual and English as a second language (E.S.L.) instruction. They presented three Computerease workshops to promote computer literacy among special education teachers, and supplied participants with I.B.M. personal computers for home use during the school year. The developers also provided a series of three training sessions of half- or full-day duration in the Instrumental Enrichment technique.

Finally, the developers provided training for the Academy of Basic Skills in four of the five high school districts. They conducted a series of five two-hour sessions in each of these districts. As an integral part of A.B.S. training, Science Research Associates (S.R.A.), publishers of the A.B.S. reading curriculum, provided additional staff development in the participating high school districts. The first meeting of each series was an optional refresher session for previously trained teacher participants. All

new teachers were required to attend the other four sessions. In addition, the team provided individual schools operating an A.B.S. program with general technical support and training in direct instructional methods on an as-needed basis.

### Perceived Quality of On-site Training and A.B.S.

OREA analyzed special education teachers' responses to survey items regarding their perceptions of the quality of program implementation. Table 1 presents these data for the training component and three major aspects of the A.B.S. program. Overall, at least 50 percent of all respondents in each category considered the program activity to be superior and less than 12 percent considered it poor. Thus the perception of program quality was, on the whole, quite positive.

On-site Training. OREA asked special education teachers who had received training to identify the strengths and weaknesses of this training and to make specific recommendations for improving this component of the program. Respondents identified the following strengths:

- trainers were available for providing feedback (43 percent);
- trainers were qualified, experienced, and knowledgeable (37 percent);
- the training objectives were appropriate (23 percent);
- materials and resources were available (18 percent);
- the training encouraged communication and integration between special and general education personnel (18 percent).

While 22 percent of teacher respondents thought that the program had no weaknesses at all, others identified the following weaknesses:

- training time was insufficient (28 percent);

**TABLE 1**  
**Perceived Quality of Program**  
**Implementation as Reported**  
**by Special Education Teacher Trainees**  
(In Percent)

Rating	A.B.S.			ON-SITE
	Curriculum	Instruction	Training	Training
Poor	4.3	3.2	9.1	11.0
Average	21.7	22.6	40.9	30.5
Superior	73.9	74.2	50.0	58.4
(N) <sup>a</sup>	23	31	22	154

Source: OREA-developed training and A.B.S. teacher surveys

<sup>a</sup> Totals vary because of missing data and because there were ten schools in the A.B.S. sample and 20 schools in the On-site Training sample.

- *At least 50 percent of all respondents in each category rated the program activity as superior.*
- *Less than 12 percent of the respondents in each of the categories rated the program as poor.*

- training was irrelevant or inappropriate (19 percent);
- training was conducted under poor conditions or training guidelines were inadequate (13 percent).

OREA also asked teacher respondents to make specific suggestions for improving the training program. The majority of respondents (63 percent) suggested that staff involved with the H.S. SIG program work with trainers and trainees to improve the scheduling of training; 13 percent suggested that training be made more relevant to their training needs; and ten percent stated that the quality of training should be improved.

In summary, most teachers who received On-site Training regarded it favorably, with the quality and availability of trainers being the most frequently cited strengths. Most of those who found fault with the training felt that training time was inadequate. Over half of the teachers interviewed recommended that training scheduling be improved by better coordination between trainers and trainees.

A.B.S. OREA asked special education A.B.S. teachers to identify the strengths and weaknesses of three facets of the A.B.S. program: the curriculum, the training they received to implement the instructional program, and the program in general.

A.B.S. teachers identified the following strengths of the curriculum:

- the content was appropriate and stressed basic skills (32 percent);
- there was a high degree of structure (29 percent);
- it emphasized positive reinforcement and supported students' self esteem (13 percent).

Respondents identified the following weaknesses of the curriculum:

- content areas covered needed to be more fully developed (25 percent);

- it was uninteresting to some students (25 percent);
- it was too structured and did not allow for independent thinking or learning (20 percent);
- it lacked follow-up activities such as tests or homework (10 percent);
- there was an insufficient amount of student material (10 percent).

Although teachers considered the A.B.S. curriculum to be very appropriate for many of the students involved in the program, it apparently did not meet the needs of higher functioning students who needed more depth in the presentation of content areas, less structure, more independent learning, and more follow-up activities. The respondents' criticisms about A.B.S. may be based more on a mismatch between students and curriculum than on the program content itself. Because A.B.S. was targeted for students with extreme deficiencies in basic skills, school staff appeared to have recruited some students who did not fit the program's selection criteria.

Teacher respondents identified the following strengths of A.B.S. training:

- exchanging ideas and information, and receiving feedback was worthwhile (46 percent);
- it provided a good orientation and clear guidelines for implementation (14 percent);
- the materials and support were useful (14 percent).

Teacher respondents identified the following weakness of A.B.S. training:

- the length and number of sessions were insufficient (40 percent);
- the materials were unavailable or of poor quality (13 percent);
- the presentation of training activities was inadequate;
- some topics were considered irrelevant (10 percent).



In summary, respondents considered A.B.S. training useful because it provided orientation to the program, an explanation of the guidelines, and opportunities to exchange ideas and feedback. In fact, a large percent of the respondents (40 percent) suggested that more training be provided. A small percent of respondents stated that the program could improve the planning and delivery of training. Perhaps this perception was due to the fact that materials and support varied from school to school.

Teacher respondents identified the following strengths of the A.B.S. program in general:

- it increased appropriate behavior in students and improved their self-esteem (21 percent);
- it served to improve communication among students and between students and their teachers (21 percent);
- its structure promoted academic growth (19 percent);
- it promoted the overall progress of students (15 percent).

Teacher respondents identified the following weaknesses of A.B.S.:

- support was insufficient or lacking;
- coordination, staffing, and communication were not optimal (25 percent);
- the content of the curriculum and the topics were unsatisfactory (22 percent);
- the program was overly structured (22 percent);
- students reading at too many different levels were included in the same class (15 percent).

Thus, respondents said that the instructional program had effectively improved participating students' academic and communications skills, behavior, and self-esteem.

However, respondents also felt that the program needed to provide teachers with more support through better communication, coordination, and staffing. Respondents again emphasized the importance of providing a wider range of topics and content for the students, and suggested that the instructional program needed to be more flexible to accommodate the wide range of A.B.S. students' learning styles and reading levels. Without increased flexibility in the instructional program, teachers suggested that it would be necessary to group A.B.S. students more functionally into smaller and more homogeneous learning groups. Again, school staff were critical of the A.B.S. programs' limited usefulness for higher functioning students. However, because the program is intended for students with clear basic skill deficiencies, the school staff probably should not have placed higher functioning students in the A.B.S. program.

## OUTCOMES

OREA analyzed four outcome objectives: the number of training hours provided by H.S. SIG's training component, changes in teacher trainees' levels of knowledge and communication, and changes in A.B.S. students' level of achievement.

### On-site Training

OREA analyzed H.S. SIG on-site trainer responses to determine if the objective of providing 25 hours of training throughout the school year (or 13 hours per semester) had been met. Although the program provided additional training through its central and B.W.I. staff development components, the results presented here are based exclusively on the training provided through the On-site Training component of H.S. SIG. Thus the findings presented in this report are estimates of the minimum amount of staff training provided by the program.

Overall, at least 82 percent of the schools for which data were available met the criteria of providing 13 hours of training per semester. H.S. SIG provided 13 or more hours of training at 90 percent of the schools in the fall and at 82 percent of the schools in the spring.

OREA measured participants' changes in level of knowledge as a result of training by analyzing special education teacher trainees' survey responses. The results are presented in Table 2. For the two semesters, just over 75 percent of the respondents reported that their level of knowledge had increased as a result of H.S. SIG training, thus meeting the program objective.

OREA also analyzed the impact of training on the level of communication between general and special education teachers. OREA consultants asked special education teachers if their level of communication with general education staff had changed as a result of the training. Over 57 percent of the respondents reported that their level of communication had increased. This is considered a significant finding because improved communication between special and general education staff is essential for facilitating mainstreaming. The sharing of knowledge and experience between the two groups also increased the range of skills of teachers who work with special education students.

#### Academy of Basic Skills

OREA analyzed the performance of students in the sample who participated in the Academy of Basic Skills program during the 1988-89 school year. Complete data were available for 152 students. Of these, 60.5 percent improved their level of performance. OREA compared students' mid-instructional D.R.P. scores before and

TABLE 2

Participant's Reports of Change in Level of Knowledge  
as a Result of Training

(In Percent)

Change in Level of Knowledge	Trainees		
	Fall	Spring	Total
Increased	81.0	68.7	75.5
No Change	16.7	26.9	21.1
Decreased	2.4	4.5	3.3
Total (N)	(84)	(67)	(151)

Source: OREA-developed H.S. SIG special education teacher trainee survey

- *In each of the spring and fall semesters over 68 percent of the respondents reported that their level of knowledge had increased as a result of training; the mean for both semesters was over 75 percent, meeting the program objective.*

after their participation in the program and found that the average group mid-instruction unit score in the spring of 1988 was 46 units and in the spring of 1989 it rose to 48 units, a gain that is statistically significant at the  $p \leq .05$  level.

### Summary

OREA analyzed four outcome objectives: number of training hours provided by H.S. SIG's training component, change in teacher trainees' level of knowledge and communication, and change in A.B.S. students' level of achievement. The H.S. SIG training component approximated its objective by providing the minimum number of training hours (13) at 90 percent of the schools in the fall semester and 82 percent of the schools in the spring semester; it did not, however, fully meet this objective. The training component did meet its objective of effecting a change in the level of knowledge of 75 percent of the participating teachers. It also had a positive effect on the level of communication between general and special education personnel. More than 57 percent of the teacher respondents reported an increase in their level of communication.

With regard to A.B.S. student performance, OREA found that more than 60 percent of students who participated in the Academy of Basic Skills program showed a positive change in their level of achievement. Based on these data, OREA concludes that training and A.B.S. instruction successfully effected changes in teacher-trainees' level of knowledge and communication and students' level of achievement.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

In 1988-89, the Special Education Operations Unit of the Division of High Schools proposed a continuation and expansion of the H.S. SIG training program. This program consisted of three major components: On-site Training, Boroughwide Initiatives, and Central Staff Development. OREA expanded its evaluation of H.S. SIG in 1988-89 to include all three components.

OREA found that Boroughwide Initiatives were implemented as planned in all high school districts by providing borough-based training, curriculum development, and A.B.S. instruction. As planned, the Central Staff Development component provided training in the areas of Paraprofessional Training, Computer-aided Instruction, Instrumental Enrichment, and A.B.S. training. With regard to the perceived quality of H.S. SIG, more than 50 percent of the respondents considered that On-site Training and A.B.S. instruction, curriculum, and training were of superior quality.

OREA found that the H.S. SIG training component approximated but did not meet its objective of providing 25 hours (13 hours per semester) of training. During the fall semester the objective was met at 90 percent of the schools and in the spring at 82 percent of the schools. (It is important to note that participants also received training through the staff development and B.W.I. components. Thus, results presented in this report are estimates of the minimum amount of staff development provided by the program.)

OREA found that the training component met its objective of effecting a positive change in participating teachers' level of knowledge and level of communication with general education staff. More than 75 percent of teacher respondents reported an

- increase in their level of knowledge and 57 percent reported an increase in their level of communication with general education personnel. Finally, with regard to A.B.S. student performance, OREA found that more than 60 percent of students who participated in the A.B.S. program and for whom complete data was available demonstrated a positive change in their level of achievement.

Based on the findings of this evaluation, including the suggestions made by program participants to improve the H.S. SIG program, OREA made the following recommendations.

- Involve the teacher-trainees in the development of On-site Training plans to reduce the number of scheduling conflicts and more closely meet their training needs.
- Expand the A.B.S. program to all schools that have students who can benefit from the program.