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ABSTRACT

Results of comprehensive needs assessments conducted in 1980 and 1988 were compared relative to appropriate physical education for handicapped students as mandated by PL 94-142. A direct, self-report methodology was used covering various dimensions of teacher needs. Although there was a significant improvement of the teachers who had served on a multi-disciplinary staff for developing Individualized Education Programs, teachers' misunderstandings of PL 94-142 in 1980 were confirmed in 1988. While there was greater interest in teaching handicapped students, it was no better than "neutral/mixed". A majority of the teachers in 1980 and 1988 indicated a general need for assistance in motor behavior assessments. A majority of the teachers received encouragement and support from their administration in 1980, however, in 1988 there was a decline in support. Both in 1980 and 1988, over 75 percent of the teachers believed that handicapped students are excluded from participation in physical education due to the "nature of the handicap" and "functional ability." Results confirmed that teachers still lack the instructional capacities necessary to conduct physical education in the least restrictive environment. (JD)

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A COMPARATIVE ANALYSIS OF PHYSICAL EDUCATORS'  
NEEDS (1980 AND 1988) FOR TEACHING  
HANDICAPPED STUDENTS

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A COMPARATIVE ANALYSIS OF PHYSICAL EDUCATORS'  
NEEDS (1980 AND 1988) FOR TEACHING  
HANDICAPPED STUDENTS

Background

All handicapped children can be insured of a free, appropriate education which includes special education and any related services that are necessary to meet their unique needs. Professional educators and schools, in general, have had since 1978 to comply with the Education for All Handicapped Children Act (PL 94-142). Often overlooked or neglected in this provision has been the fact that physical education (motor development) is to be a part of each handicapped child's education. In fact, physical education is the only curricular area specifically delineated in both legislative mandates. In PL 94-142, special education was defined as specially designed instruction to meet the unique needs of a handicapped child including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions.

The concept of appropriate instructional methodology resulted in the emphasis on the Individualized Education Program (IEP) which specifies that a program must be designed to meet an individual's unique needs. Therefore, physical education (motor development) is considered a legitimate need, with its own goals and objectives, and not simply a method or means to an end.

In 1980, a comprehensive needs assessment was conducted in the state of Ohio (Loovis & Melograno, 1981; Melograno & Loovis, 1982) relative to the provisions for appropriate physical education programming incident to PL 94-142. More specifically, the study attempted to ascertain the educational needs of elementary and secondary public school physical education teachers. Several dimensions of perceived teacher needs in relation to physical education for learners with handicapping conditions were studied.

The results and conclusions from this study revealed several issues and problems regarding the continuous professional development of Ohio's physical educators relative to providing programs for handicapped students. Foremost among these problems was the need to clarify and identify the contribution of physical education to the IEP process (i.e., multi-disciplinary staffing). In general, physical educators seemed to lack a comprehensive understanding of PL 94-142 resulting in misunderstandings about their responsibilities. This aspect of the study was sufficient evidence to warrant continued emphasis on the rules and regulations of PL 94-142 as part of inservice activities. In regard to a vehicle for delivery of information about handicapped students in physical education, the data clearly established the use of activities other than graduate and continuing education courses.

In terms of job-related competencies, teachers generally acknowledged that they needed information about assessment

techniques, specific handicaps, and behavior management techniques. The teachers, as a group, reported a positive attitude toward providing education programs for handicapped students. However, the transformation from positive attitudes to the effective integration (inclusion) of handicapped students into regular class activities seemed unattainable. Teachers were basing the exclusion of students on the nature of the individual's handicap, functional ability, and activity chosen.

Recently, the Education of the Handicapped Act Amendments of 1986 (PL 99-457) was passed which authorized discretionary programs under the Act. As with its predecessor, the new act defines special education as including instruction in physical education. Additional impetus for mandated physical education has been provided by PL 99-457 with special attention given to secondary education and transitional services for handicapped youth. Among other program priorities, emphasis will be directed toward: "Specifically designed physical education . . . programs to increase the potential of handicapped youths for community participation" (Section 626, B, 10).

Given the previous findings and the passage of PL 99-457, these investigators felt that it was timely to conduct a follow-up study similar in nature to the original 1980 study. The previous study confirmed the fact that teaching professionals did not possess the curricular and instructional competencies which are necessary to effectively implement the IEP.

The purpose of this follow-up study (Loovis & Melograno, 1988; Melograno & Loovis, in press) was identical to the original study; that is, to conduct a comprehensive, follow-up needs assessment relative to the provisions for appropriate physical education programming for handicapped students incident to PL 94-142 and now PL 99-457. Results from the 1988 needs assessment revealed that several issues and problems persist in the continuous professional development of Ohio's physical educators. These problems included, but are not limited to the following:

- Teachers lack a comprehensive understanding of the federal laws resulting in numerous misunderstandings about responsibilities.
- Teachers are not involved in the multi-disciplinary staffing process for developing the Individual Education Program (IEP).
- Teachers need information about assessment techniques, procedures for organizing and conducting adapted physical education programs, and behavior management techniques.
- Teachers exclude students based upon the nature of students' handicap, functional ability, and activity chosen.

### Methods

The 1980 and 1988 studies examined dimensions of perceived teacher needs in relation to physical education for learners with handicapping conditions. In order to conduct a meaningful needs assessment, one that would yield the kind of information required to address teacher's needs, a direct self-report methodology was utilized.

In 1980, the mail questionnaire (direct self-report) consisted of 36 items that included approximately 150 sub-items. The survey instrument appears in Appendix A. In 1988, the questionnaire developed for the 1980 study was used, as revised to the extent warranted in accordance with PL 99-457. It consisted of 26 items that included approximately 131 sub-items. The survey instrument appears in Appendix C. Various aspects were covered including: (1) experience in teaching learners with special needs, (2) existing abilities of teachers, (3) attitudes of teachers toward handicapped learners, (4) status of physical education programming for handicapped learners, (5) expressed needs, and (6) limitations on handicapped learners. Other areas were incorporated in relation to learners with special needs such as knowledge of the laws, curriculum offerings, instructional strategies, facilities, and equipment as these aspects relate to the implementation of PL 94-142 and PL 99-457.

In 1980, a random, statewide sample with oversampling in Northeast Ohio was selected representing urban, suburban, and rural school districts. The sample was drawn from 30 counties

and 35 school districts. The questionnaire was mailed to a total of 950 physical education teachers. Completed questionnaires were returned by 241 teachers for a return rate of 25%. A single stage follow-up procedure was employed consisting of a postcard reminder.

In 1988, the random, statewide sample with oversampling in Northeast Ohio was drawn from the same counties and school districts that participated in the 1980 survey. Twenty-one of the counties and 22 of the school districts were represented. The questionnaire was mailed to a total of 813 physical education teachers. In an attempt to increase response rate, a single stage follow-up procedure was employed consisting of a postcard reminder. In addition, all respondents were eligible for a "prize" determined by draw. Completed questionnaires were returned by 242 teachers for a return rate of 30%.

The 1980 and 1988 comprehensive statewide needs assessments were identical in two significant aspects. First, the samples were drawn from the same of counties and school districts. Second, the same basic questionnaire (some items were eliminated or slightly altered) was used. Therefore, this eight year time period can be analyzed and general conclusions can be drawn without the confounding effects of different samples and instruments .

With the completion of the 1988 statewide needs assessment, another important aspect of this systematic evaluation was available. It involved comparison of existing practice in 1988

with what was determined to be prevalent practice in 1980. In this way, the authors can move beyond description of the status of physical education for handicapped students in the years studied to a more statistical portrayal of the differences between 1980 and 1988. Simply stated, has physical education for students with handicapping conditions improved, stayed the same, or become worse?

Collected data were computer-analyzed in consultation with the Cleveland State University Computer Center. Survey data were coded on a personal computer and transferred to a mainframe computer for analysis utilizing an appropriate statistical package. Basic frequency and percentage data were calculated for each questionnaire item. In addition, two-way analyses were calculated across three categories; namely: sex (male/female), educational setting (urban/suburban/rural), and educational experience (5 year increments from 1 to 26 and over). A dependent t-test was calculated for comparing the various items of the 1980 and 1988 surveys. Significance was established at the .05 level of confidence.

### Results and Conclusions

The descriptive characteristics of the subjects are presented in Table 1. Teachers in 1988 were slightly older and had more years of experience than the teachers in 1980. In addition, the 1988 sample was represented by a greater proportion of females and teachers from urban settings than in 1980.

Several results are relevant to those involved in professional development (inservice training) and professional preparation (preservice training). These results are organized according to the various aspects of the needs assessment that were previously identified. Specific frequency and percentage data are presented along with the comparative analyses of the 1980 and 1988 needs assessments. The 1988 questionnaire item number from which these data were derived is indicated in parentheses. Item raw data for 1980 and 1988 appear in Appendices B and D, respectively. The comparative data for selected survey items are presented in Table 2. These items also correspond in number to the 1988 questionnaire.

#### Experience in Teaching Learners with Special Needs

Generally, physical educators have had more experience teaching handicapped students. In 1980, 59% of the teachers reported they had experience teaching handicapped students, while 81% of the teachers in 1988 indicated a similar level of experience (Item 11). This result is difficult to interpret since there was an increase from 39% to 52% during this period

Table 1  
Descriptive Characteristics of Subjects

Variable	1980 (n = 241)	1988 (n = 242)
Age (mean)	36.5 years	38.0 years
Years Experience (mean)	13.0 years	14.3 years
Sex:		
Male (%)	113 (46.9%)	115 (47.5%)
Female (%)	102 (42.3%)	122 (50.4%)
No Response (%)	27 (10.8%)	5 ( 2.1%)
School Setting:		
Urban (%)	153 (63.1%)	194 (80.2%)
Suburban (%)	39 (16.2%)	21 ( 8.7%)
Rural (%)	22 ( 9.1%)	22 ( 9.1%)
No Response (%)	27 (11.2%)	5 ( 2.1%)
School Enrollment:		
1 - 200 (%)	5 ( 2.1%)	5 ( 2.1%)
200 - 500 (%)	34 (14.1%)	64 (26.4%)
500 - 1000 (%)	101 (41.9%)	87 (35.9%)
1000 - 1500 (%)	52 (21.6%)	52 (21.5%)
1500 - 2000 (%)	17 ( 7.1%)	17 ( 7.0%)
2000+ (%)	9 ( 3.7%)	9 ( 3.7%)
No Response (%)	23 ( 9.5%)	8 ( 3.3%)

Table 2  
Response of 1980 and 1988 Teachers to Selected Survey Items  
in Needs Assessment ( $\bar{X} \pm SD$ )

Item	1980	1988	p
(1) What is the total number of handicapped students who participate in all of your physical education classes?	3.01 $\pm 1.4$	3.53 $\pm 2.11$	<.01
(3) What is your feeling toward teaching physical education for students with handicapping conditions?	2.12 $\pm 0.93$	2.03 $\pm 0.94$	NS
(5) PL 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:			
Identifying federal and state legislative requirements associated with individualized education programs.	2.81 $\pm 0.90$	2.62 $\pm 0.92$	<.05
Developing an individualized education program for the handicapped student.	2.25 $\pm 0.74$	2.10 $\pm 0.79$	<.05
Demonstrating appropriate instructional strategies in the classroom with handicapped students.	2.29 $\pm 0.78$	2.09 $\pm 0.77$	<.05
Effectively using commercial and teacher-made instructional materials.	2.06 $\pm 0.78$	1.91 $\pm 0.78$	<.05
Identifying federal and state legislative requirements associated with the principle of nondiscriminatory evaluation.	2.87 $\pm 0.90$	2.56 $\pm 0.86$	<.01
Identifying federal and state legislative requirements associated with the principle of mainstreaming.	2.50 $\pm 0.91$	2.43 $\pm 0.90$	NS
Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.	2.59 $\pm 0.83$	2.40 $\pm 0.87$	<.01

(7) Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?

Knowledge of PL 94-142	0.21 ±0.40	0.33 ±0.47	<.01
Understanding the nature of specific handicaps	0.54 ±0.50	0.64 ±0.48	<.05
Techniques of motor assessment	0.41 ±0.49	0.49 ±0.50	NS
Awareness of existing curricular material	0.32 ±0.47	0.40 ±0.49	NS
Knowledge of medical terms	0.42 ±0.49	0.52 ±0.50	<.05
Hands on experience with handicapped students	0.41 ±0.49	0.61 ±0.49	<.01
Procedures for organizing and running adapted physical education programs	0.37 ±0.48	0.47 ±0.50	<.05
Knowledge of class placement alternatives (i.e., special, adapted, and so on)	0.22 ±0.42	0.36 ±0.48	<.01
Understanding of behavior management techniques	0.33 ±0.47	0.51 ±0.50	<.01
(8b) Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?	1.07 ±0.26	1.15 ±0.36	<.01
(10) What is your feeling toward providing physical education programs for students with handicapping conditions?	1.79 ±0.85	1.70 ±0.86	NS
(16) Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students?	0.85 ±0.36	0.33 ±0.47	<.01
(19) To what extent do you interact with the medical and allied medical (i.e., physicians, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?	0.33 ±0.47	0.50 ±1.58	NS
(20) How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?	1.52 ±0.50	0.17 ±0.71	<.01

for teachers who indicated that handicapped students do not attend their school. In 1980, 4% of the teachers responded that handicapped students attended their school but did not participate in physical education. In 1988 this figure decreased to slightly more than 3% (Item 15).

The total number of handicapped students who participate in physical education classes increased significantly (Table 2) during the period under investigation. While the increase, on the average, was from approximately 8 to 10 students, 67% and 54% of the teachers indicated they had no more than 10 students in their program in 1980 and 1988, respectively (Item 1).

In 1980, only 7% of the teachers had served on a multi-disciplinary staff for the purpose of developing an individualized education program (IEP) for handicapped students in physical education (Item 8b). Although a significant (Table 2) improvement was indicated by 1988 (14%), this increase is misleading. What is significant is that in 1980, 93% of the teachers had not served in this capacity. By 1988, 86% of the teachers still had not served on a multi-disciplinary staff. In both years, no difference was found between males and females, but teachers from rural school settings served on IEP staffs to a greater extent than had teachers from urban and suburban school settings. In response to these findings, two conclusions seem probable. First, physical education has been neglected by the "powers-to-be" in terms of involvement in the multi-disciplinary staff process. Second, physical educators have been remiss in

becoming involved in the process. Both parties are accountable and share equally in this act of negligence.

### Existing Abilities of Teachers

When discussing the present abilities of career physical educators in Ohio, it is with more than just passing interest to examine the extent to which adapted physical education courses were taken during undergraduate preparation. In 1980, 37% of the teachers reported having completed only a portion of a course or no course at all. Although the figure was reduced to 29% in 1988, this still represents a large percentage of teachers who have not even completed one course in adapted physical education (Item 21). This further illustrates the need for more comprehensive preparation of teachers as well as for more purposeful, continuous professional development activities.

When asked to respond either "yes" or "no" to six interpretive statements pertaining to PL 94-142, only 36% of the teachers, on an average, answered all items correctly in 1980. Although knowledge of the law had improved by 1988, still only 51% of the teachers, on an average, answered all items correctly (Item 4). In both years, two statements which should have been answered "no" but received "yes" responses more frequently, were indicative of the teachers' misunderstandings. The statements were:

- Mainstreaming means educating all handicapped children in the regular classroom.
- Adapted physical education must be provided for each handicapped student.

Teachers were asked to rate their perceived capability to execute seven responsibilities associated with PL 94-142 (Item 5). Teachers' perceived capability increased significantly (Table 2) between 1980 and 1988 for six of the seven responsibilities. On the average, 50% and 62% of the teachers, respectively rated themselves at least "somewhat capable."

Teachers were asked, "Have you taken any steps to increase your knowledge . . . in order to teach physical education to handicapped students more effectively?" (Item 7) Nine areas were presented to the teachers. In 1980, only 35% of the respondents had made any attempt to increase their knowledge and/or skills. By 1988, it was 46%. This overall positive change was significant (Table 2) in the case of seven of the nine areas. The only areas in which there were no significant changes were "techniques of motor assessment" and "awareness of existing curricular material."

#### Attitudes of Teachers Toward Handicapped Learners

Teachers' attitudes toward handicapped students were virtually the same in 1988 as they were in 1980 as revealed by a number of different survey items. Although not significant (Table 2), there were less favorable responses in terms of

feelings toward teaching physical education to handicapped students (Item 3). In 1980, 67% of the teachers reported they were at least "favorably" inclined. The percentage diminished to 63% in 1988. In 1980, "very favorable/favorable" feelings were higher for males (70%) than for females (61%). These feelings changed in opposite directions in 1988 for males (63%) and for females (65%).

The number of at least "favorable" responses was 77% in 1980 and 78% in 1988 when the question was generally stated to include feelings about providing physical education for handicapped students (Item 10). Response by males (80% and 77%) and females (77% and 81%) was nearly the same in the "very favorable/favorable" categories in both 1980 and 1988.

In 1980, respondents' positive attitude was evident when, as a group, 63% of the teachers felt at least "favorable" toward teaching students with a variety of handicapping conditions (Item 12). This item covered 12 handicaps including a range of learning and behavioral disorders, physical impairments, sensory impairments, and other health related conditions. In 1988, 48% of the teachers responded at least "favorable." It becomes obvious, however, that these moderately positive attitudes are diminished since only 36% (1980) and 35% (1988) of the teachers were at least "somewhat interested" in teaching handicapped students compared to teaching nonhandicapped students (Item 20). It should be stated, however, that overall response to this item in 1988 was significantly (Table 2) different from that in 1980.

That is, teachers' "interest" was more favorable in 1988.

This overall, greater "interest" may too be misleading. In 1980, slightly more than 12% of the teachers chose not to respond to this item; only 3% declined to answer the question in 1988. This figure reflects the magnitude of the increase seen in the "neutral/mixed" category (29% to 39%) in 1980 and 1988, respectively. In the final analysis, nearly one-fourth of all teachers may be "somewhat uninterested" or "very uninterested" in teaching handicapped learners; interest of most teachers (62%) may be no better than "neutral/mixed."

#### Status of Physical Education Programming

Teachers were given a list of 12 standard handicapping conditions; namely: amputation, arthritis, blind/visually handicapped, cardiac disorders, cerebral palsy, deaf/hearing impaired, severe behavior handicap, learning disabilities, mental retardation, muscular dystrophy, wheelchair-bound, and multihandicapped. They were asked if they needed additional information in order to work more effectively with each type of student (Item 13). In 1980, most teachers (69%) suggested they had such a need, on the average. The figure remained somewhat constant when, in 1988, 67% of the respondents reported similar needs. As to why teachers felt that they had a need for more information in order to teach more effectively, the most common reasons across categories in both 1980 and 1988 were "lack of program content" and "lack of specialized training."

In 1980, a majority of teachers (57%) had received encouragement and support from their administration to provide physical education for handicapped students (Item 16). By 1988, a majority of teachers (51%) had not received such encouragement and support. This difference was found to be statistically significant (Table 2). It points out the continuing lack of emphasis placed on physical education for handicapped students by district and building administrators.

Response to this item was also analyzed for the cross-tabulation categories (sex, educational setting, and educational experience). In 1980, teachers from suburban school settings (67%) and teachers with 21-25 years experience (62%) received the most encouragement and support from their administration. Males and females received "equal" encouragement from administration whereas less than half of urban teachers received encouragement and support. In 1988, the only teachers receiving strong encouragement and support from their administrators were those with 26 or more years experience (72%). The majority of male teachers (55%), suburban (58%) and rural teachers (52%), and teachers with 11-15 years experience (52%) received encouragement and support. By comparison, less than half of female teachers (42%) and urban teachers (42%) received encouragement and support from the administration along with the other educational experience categories.

### Expressed Needs

In 1988, when potential areas of need were specified and teachers were asked to respond as to their needs, 73% of the respondents, on the average, indicated need for information across all items (Item 6). The data indicated that of the nine possible areas of concern "knowledge of PL 94-142" continues as the number one need (Item 9). In 1980, the remaining three areas of greatest need (in descending order of need) were:

understanding the nature of specific handicaps, techniques of motor assessment, and understanding of behavior management techniques. Some shifting of priorities occurred in 1988. After "knowledge of PL 94-142, the three areas of greatest need (in descending order of need) were: understanding of behavior management techniques, procedures for organizing and running adapted physical education programs, and techniques of motor assessment.

In terms of "techniques of motor assessment", a majority (57%) of the teachers indicated a general need for assistance in this area in 1988 (Item 8a). This is an increase over the 1980 needs assessment wherein 52% of the teachers had indicated such a need. Not only is the percent increase noteworthy, but the actual number of teachers, which the percentage represents, is also considerable since the provision for assessment prior to placement in the least restrictive environment is one of the explicit guarantees in PL 94-142.

Teachers were asked to reveal the extent to which they

interact with medical and allied medical professionals relative to providing physical education for handicapped students (Item 19). No significant (Table 2) change was found between 1980 and 1988. Of those responding, 52% and 60% of the teachers, respectively, indicated that they never engage in this form of consultation.

### Limitations on Handicapped Learners

Teachers were asked to indicate the limits on handicapped students from participation in regular physical education classes (Item 17). The majority of teachers in both surveys specified the following limitations (in descending order of greatest limitation):

- Nature of the individual's handicap
- Functional ability of the individual
- Activity chosen
- Availability of facilities/equipment.

Significant is the fact that in 1980, 78% of the teachers, on the average, felt that these limitations were the primary reason for exclusion from regular classes. In 1988, only 67% of the respondents expressed these same feelings. Although a change in this direction and of this magnitude is no doubt desirable, it is still disheartening to think that two-thirds of the physical educators in the state of Ohio believe that these are legitimate reasons for exclusion.

A collateral concern in physical education programs which

include handicapped students is the reactions of nonhandicapped peers. Teachers were asked if nonhandicapped students demonstrate behaviors characterized as hostility, ridicule, and/or resentment (Item 18). In 1980, nearly half of the teachers (42%) reported that almost no negative reactions were discernable, while 26% indicated that "some" negativism was present. In 1988 over half of the teachers (52%) reported no negative reactions, while 23% indicated that "some" negativism was present. Interpretation of these data indicate that negative attitudes and behavior have diminished during the period since completion of the first needs assessment. This is an expected outcome of implementing the least restrictive environment and could be the result of a better social climate in schools generally.

### Discussion

In an attempt to summarize the current status of physical education for handicapped students, overall results were analyzed with a view toward the majority of responses across items. Thus, the profile of the 1988 physical educator, male or female, is that he/she:

- is 38 years of age with 14 years of teaching experience.
- has taken only one undergraduate course in teaching physical education to handicapped students.
- has a total of 0-10 handicapped students who participate in his/her program.
- teaches at a school where most handicapping conditions are not represented.
- does not receive encouragement and support from his/her administration to provide physical education for handicapped students.
- feels at best "somewhat capable" in carrying out PL 94-142.
- misunderstands PL 94-142; thinks that an adapted physical education placement must be provided for each handicapped student.
- needs more information on all aspects of physical education for handicapped students, particularly: knowledge of PL 94-142, understanding of behavior management techniques, and understanding the nature of

specific handicaps.

- feels a need to expand his/her knowledge across a range of handicapping conditions.
- has taken some steps to increase his/her knowledge.
- has at least a "favorable" feeling toward teaching handicapped students and providing physical education programs, but only a "neutral/mixed" interest in teaching handicapped students compared to teaching nonhandicapped students.
- feels at least "favorable" toward teaching a range of handicapping conditions except severe behavior handicap and multihandicapped.
- has not served on a multi-disciplinary staff for developing IEPs.
- limits the full participation of handicapped students in regular physical education on the basis of "nature of the individual's handicap," "functional ability of the individual," and "activity chosen."
- does not interact with the medical and allied medical professions relative to providing physical education for handicapped students.

Given this profile, it is clear that the status of physical education for handicapped students has generally remained the same during the period of time since 1980. If, in 1980, the State of Ohio had been performing admirably or, at least, had been making strides toward more admirable performance, then the

status quo would be more acceptable. However, the 1980 needs assessment results were anything but complementary. Consequently, the determination in 1988 that substantive change had not occurred leads to the definitive conclusion that the status of physical education for handicapped students in the state of Ohio is one of **noncompliance** with federal regulations. Teachers indicate that handicapped students are present in their buildings but not in the physical education program - this is **noncompliance!** Teachers indicate that they are not involved in testing handicapped students prior to placement in least restrictive environments - this is **noncompliance!** Students are placed in either regular physical education programs or special/adapted physical education classes without the benefit of motor assessment; therefore, placement decisions are being made on purely subjective criterion - this is **noncompliance!**

The results of this comparative analysis also lead to several recommendations that relate directly to the above profile. Physical education has been neglected by the "powers-to-be" in terms of involvement in the multi-disciplinary staff (IEP process) and physical educators have been remiss in becoming involved. Both parties are accountable and share equally in this act of negligence. **RECOMMENDATION 1: Clarify and identify the contributions of physical education in the IEP process.**

In general, physical educators appear to lack a comprehensive understanding of PL 94-142 resulting in misunderstandings about their responsibilities. The profession

is, at best, split on the issue of whether it has the knowledge and/or skills to effectively teach handicapped students.

RECOMMENDATION 2: Emphasize the rules and regulations of PL 94-142 as part of professional preparation and inservice activities.

Physical education teachers, as a group, reported a positive attitude toward providing programs for handicapped students. However, the transfer from positive attitudes to the effective integration (inclusion) of handicapped students into regular motor development activities seems less clear. Teachers revealed a greater "interest" in non-handicapped students, and they still base the exclusion of students on the nature of the individual's handicap and functional ability. RECOMMENDATION 3: Acknowledge (insist) that handicaps do not exclude learners, but teachers and curricula do.

Professionals should possess (or acquire) the knowledge, skills, attitudes, and values needed to implement the IEP process in the most effective means possible within the least restrictive environment. All handicapped students should (must) be in some physical education placement. RECOMMENDATION 4: Require that motor behavior assessment be conducted and interpreted by persons qualified to do so.

District and building administrators have been remiss in providing encouragement and support for the motor development component of handicapped students' education. The commitment to motor programs does not begin and end with the physical educator

RECOMMENDATION 5: Insure that administrators are fully involved and committed to an "appropriate" education including motor development.

A more focused and intense effort is needed on the part of school boards, superintendents, principals, teachers, parents, and citizens to achieve even the simplest change. Only through such effort will any improvements be made in the quantity and quality of services provided to handicapped learners in physical education before the next needs assessment.

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APPENDIX A  
Survey Instrument - 1980

**ALL RESPONSES WILL BE HELD IN STRICT CONFIDENCE**

Date \_\_\_\_\_

County \_\_\_\_\_ School District \_\_\_\_\_

Title of Person Completing This Form \_\_\_\_\_

Please check the box or circle the appropriate responses to the questions below. Feel free to add your comments on any question either on this form or on a separate sheet of paper. Please check an answer for all questions. Give the answer which is closest to your view if no response applies exactly.

LEAVE BLANK

- 1) About how many handicapped students participate in your physical education classes?  
 1. None     2. 1-5     3. 6-10     4. 10-14     5. 15-19     6. 20-39     7. 40+
- 2) Of the handicapped students who participate, what number are:  
 1. \_\_\_\_\_ integrated into regular classes    2. \_\_\_\_\_ segregated into special classes  
 3. \_\_\_\_\_ both    4. \_\_\_\_\_ other (Please describe: \_\_\_\_\_)
- 3) What is your feeling toward teaching physical education for students with handicapping conditions?  
 1. Very favorable     2. Favorable     3. Neutral/Mixed     4. Unfavorable     5. Very unfavorable
- 4) How interested are you in expanding your knowledge of physical education programming for handicapped students through participating in conferences, workshops, school inservice programs and the like?  
 1. Very interested     2. Interested     3. Neutral/Mixed     4. Uninterested     5. Very uninterested     6. Haven't thought about it
- 5) How interested are you in enrolling in graduate courses which emphasize theoretical and practical considerations of physical education programming for handicapped students?  
 1. Very interested     2. Interested     3. Neutral/Mixed     4. Uninterested     5. Very uninterested     6. Haven't thought about it
- 6) Which of the following does the Education for All Handicapped Children Act of 1975 (P.L. 94-142) provide for?
- |   |                                 |                                |
|---|---------------------------------|--------------------------------|
| a) Mainstreaming all handicapped children in the regular classroom.   | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| b) Funds at the local level to provide teachers with inservice activities designed to help them teach handicapped students.   | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| c) An individualized education program for each handicapped student.  | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| d) Adapted physical education placement for each handicapped student.   | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| e) Assessment of students' abilities with valid and reliable test instruments.  | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| f) Parents' participation in the development of the individualized education program, including placement of the student in the appropriate physical education class. | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
- 7) P.L. 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:
- |  |  |  |  |  |
|--|--|--|--|--|
| a) Identifying federal and state legislative requirements associated with individualized education programs.             | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| b) Developing an individualized education program for the handicapped student.   | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| c) Demonstrating appropriate instructional strategies in the classroom with handicapped students.                        | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| d) Effectively using commercial and teacher-made instructional materials.  | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| e) Identifying federal and state legislative requirements associated with the principle of zero reject.                  | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| f) Identifying federal and state legislative requirements associated with the principle of nondiscriminatory evaluation. | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| g) Identifying federal and state legislative requirements associated with the principle of mainstreaming.                | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
| h) Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.   | <input type="checkbox"/> 1. Very capable | <input type="checkbox"/> 2. Somewhat capable | <input type="checkbox"/> 3. Somewhat incapable | <input type="checkbox"/> 4. Very incapable |
- 8) Do you feel you need more information on each of the following in order to teach physical education to handicapped students more effectively?
- |   |                                 |                                |
|---|---------------------------------|--------------------------------|
| 1. Knowledge of P.L. 94-142                       | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 0. No |
| 2. Understanding the nature of specific handicaps | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 0. No |
| 3. Techniques of motor assessment                 | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 0. No |
| 4. Awareness of existing curricular materials     | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 0. No |
| 5. Knowledge of medical terms                     | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 0. No |



- 6. Hands-on experience with handicapped students  1. Yes  0. No
- 7. Procedures for organizing and running adapted P.E. programs  1. Yes  0. No
- 8. Knowledge of class placement alternatives (i.e., special, adapted, and so on)  1. Yes  0. No
- 9. Understanding of behavior management techniques  1. Yes  0. No

10. Other \_\_\_\_\_

11. Other \_\_\_\_\_

- 9.) Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?
- 1. Knowledge of P.L. 94-142  1. Yes  0. No
  - 2. Understanding the nature of specific handicaps  1. Yes  0. No
  - 3. Techniques of motor assessment  1. Yes  0. No
  - 4. Awareness of existing curricular material  1. Yes  0. No
  - 5. Knowledge of medical terms  1. Yes  0. No
  - 6. Hands on experience with handicapped students  1. Yes  0. No
  - 7. Procedures for organizing and running adapted P.E. Programs  1. Yes  0. No
  - 8. Knowledge of class placement alternatives (i.e., special, adapted, and so on)  1. Yes  0. No
  - 9. Understanding of behavior management techniques  1. Yes  0. No

10. Other \_\_\_\_\_

- 10a.) In which areas of motor behavior assessment do you need assistance?
- Fundamental Motor Skills/Patterns  1. No  2. Yes
  - Physical/Motor Fitness  1. No  2. Yes
  - Sports Skills Tests (including aquatics and dance)  1. No  2. Yes
  - Perceptual-Motor Development  1. No  2. Yes
  - Other (Specify) \_\_\_\_\_  1. No  2. Yes
  - Other (Specify) \_\_\_\_\_  1. No  2. Yes

- b.) Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?
1. No (Go to question 11)  2. Yes --How many times? \_\_\_\_\_

How rewarding was the experience for you?

- 1. Very rewarding
- 2. Somewhat rewarding
- 3. Not very rewarding
- 4. Very unrewarding

- 11) Of the areas listed in questions 8 and 9, which three areas do you feel you have the greatest need for information about at the present time? Please list in order of greatest to least priority. (Only the number of these three alternatives need be given.)

# \_\_\_\_\_ # \_\_\_\_\_ # \_\_\_\_\_

- 12) What is your feeling toward providing physical education programs for students with handicapping conditions?

- 1. Very favorable
- 2. Favorable
- 3. Neutral/ It depends
- 4. Unfavorable
- 5. Very unfavorable

- 13) Have you ever taught a student with each of the following conditions? If so, approximately how many such students are you currently teaching?

	Ever taught		Currently
1. AMPUTATION	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
2. ASTHMA	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
3. ARTHRITIS	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
4. BLIND/VISUALLY HANDICAPPED	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
5. CARDIAC DISORDERS	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
6. CEREBRAL PALSY	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
7. DEAF/HEARING IMPAIRED	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
8. DIABETES	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
9. EMOTIONAL DISTURBANCE	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
10. EPILEPSY (SEIZURE PRONE)	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
11. LEARNING DISABILITIES	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
12. MENTAL RETARDATION	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
13. MUSCULAR DYSTROPHY	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
14. POSTURAL DEVIATIONS	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
15. WHEELCHAIR-BOUND	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____
16. OTHER (PLEASE SPECIFY)	<input type="checkbox"/> 0. No	<input type="checkbox"/> 1. Yes	How many _____

LEAVE BLANK

14) What is your feeling towards teaching a student with each of the following conditions?

1. AMPUTATION

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

2. ASTHMA

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

3. ARTHRITIS

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

4. BLIND/VISUALLY HANDICAPPED

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

5. CARDIAC DISORDERS

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

6. CEREBRAL PALSY

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

7. DEAF/HEARING IMPAIRED

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

8. DIABETES

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

9. EMOTIONAL DISTURBANCE

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

10. EPILEPSY (SEIZURE PRONE)

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

11. LEARNING DISABILITIES

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

12. MENTAL RETARDATION

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

13. MUSCULAR DYSTROPHY

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

14. POSTURAL DEVIATIONS

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

15. WHEELCHAIR-BOUND

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

16. OTHER \_\_\_\_\_

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

17. OTHER \_\_\_\_\_

- 1. Very favorable
- 2. Favorable
- 3. Neutral/it depends
- 4. Unfavorable
- 5. Very unfavorable
- 6. Don't know

15) Do you feel a need to expand your knowledge of physical education programming for each of the following conditions in order to teach physical education for such students more effectively? If you feel that you need additional information in order to work more effectively with each of the following types of students, what are the reasons that contribute to your need? CHECK ALL THAT APPLY.

1. AMPUTATION

- 1. Yes --
- 2. Can't communicate with them
- 3. Dislike being near them
- 4. Lack of program content
- 5. Fear make condition worse
- 6. Need too much attention
- 7. Lack of specialized training
- 8. Other \_\_\_\_\_

2. ASTHMA

- 1. Yes --
- 2. Can't communicate with them
- 3. Dislike being near them
- 4. Lack of program content
- 5. Fear make condition worse
- 6. Need too much attention
- 7. Lack of specialized training
- 8. Other \_\_\_\_\_



**3. ARTHRITIS**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**4. BLIND/VISUALLY IMPAIRED**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**5. CARDIAC DISORDERS**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**6. CEREBRAL PALSY**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**7. DEAF/HEARING IMPAIRED**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**8. DIABETES**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**9. EMOTIONAL DISTURBANCE**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike dislike near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**10. EPILEPSY (SEIZURE PRONE)**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**11. LEARNING DISABILITIES**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**12. MENTAL RETARDATION**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**13. MUSCULAR DYSTROPHY**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**14. POSTURAL DEVIATIONS**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

**15. WHEELCHAIR-BOUND**

1. Yes --

5. Fear make condition worse

2. Can't communicate with them

6. Need too much attention

0. No

3. Dislike being near them

7. Lack of specialized training

4. Lack of program content

8. Other \_\_\_\_\_

Vertical column on the right side of the page, likely for marking or grading, with horizontal lines.

16. OTHER (PLEASE SPECIFY)

0. No

1. Yes --       2. Can't communicate with them       3. Dislike being near them       4. Lack of program content
5. Fear make condition worse       6. Need too much attention       7. Lack of specialized training       8. Other \_\_\_\_\_

17. OTHER (PLEASE SPECIFY)

0. No

1. Yes --       2. Can't communicate with them       3. Dislike being near them       4. Lack of program content
5. Fear make condition worse       6. Need too much attention       7. Lack of specialized training       8. Other \_\_\_\_\_

16) Of the conditions listed above which have you indicated you need more information on, which three do you need most? Please list in order of greatest to least need. (Only the number of each of these need be given.)

# \_\_\_\_\_ # \_\_\_\_\_ # \_\_\_\_\_

17) Of the following handicapping conditions, what is their current status in your school and physical education program? (Please circle)

	Do not attend the school at which I teach	Attend but do not have P.E. classes	Attend but have separate P.E. classes	Attend and are integrated into regular P.E. classes
1. AMPUTATION	1	2	3	4
2. ASTHMA	1	2	3	4
3. ARTHRITIS	1	2	3	4
4. BLIND/VISUALLY HANDICAPPED	1	2	3	4
5. CARDIAC DISORDERS	1	2	3	4
6. CEREBRAL PALSY	1	2	3	4
7. DEAF/HEARING IMPAIRED	1	2	3	4
8. DIABETES	1	2	3	4
9. EMOTIONAL DISTURBANCE	1	2	3	4
10. EPILEPSY (SEIZURE PRONE)	1	2	3	4
11. LEARNING DISABILITIES	1	2	3	4
12. MENTAL RETARDATION	1	2	3	4
13. MUSCULAR DYSTROPHY	1	2	3	4
14. POSTURAL DEVIATIONS	1	2	3	4
15. WHEELCHAIR-BOUND	1	2	3	4
16. OTHER (PLEASE SPECIFY)	1	2	3	4
_____	1	2	3	4
17. OTHER (PLEASE SPECIFY)	1	2	3	4
_____	1	2	3	4

18) Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students? Please describe.

1. Yes -- What type of encouragement? \_\_\_\_\_
- \_\_\_\_\_
- 0 No -- What encouragement do you need? \_\_\_\_\_
- \_\_\_\_\_

19) If handicapped students are placed in your regular physical education classes, what limits them from participating fully in activities with normal students? (Please circle)

	Yes	No
1. Activity chosen	1	0
2. Total number of students in the class	1	0
3. Functional ability of the individual	1	0
4. Nature of the individual's handicap	1	0
5. Availability of facilities/equipment	1	0
6. Presence of architectural barriers	1	0
7. Other (please specify)	1	0
_____	1	0

LEAVE  
BLANK

20) In your integrated classes, how many of the regular students react to the students with handicaps by being:

0. Do not have integrated classes  
(Go to Question 21)

- a. HOSTILE       1. Almost all     2. Most     3. About half     4. Some     5. Almost none
- b. CURIOUS       1. Almost all     2. Most     3. About half     4. Some     5. Almost none
- c. NEUTRAL       1. Almost all     2. Most     3. About half     4. Some     5. Almost none
- d. ACCOMMODATING     1. Almost all     2. Most     3. About half     4. Some     5. Almost none
- e. OVERLY CONSIDERATE     1. Almost all     2. Most     3. About half     4. Some     5. Almost none
- f. RIDICULING       1. Almost all     2. Most     3. About half     4. Some     5. Almost none
- g. RESENTMENT       1. Almost all     2. Most     3. About half     4. Some     5. Almost none

21) What things do you enjoy about providing physical education to handicapped students?

\_\_\_\_\_

\_\_\_\_\_

22) What things do you not enjoy about providing physical education to handicapped students?

\_\_\_\_\_

\_\_\_\_\_

23) What unique problems with the handicapped students you work with are you experiencing?

\_\_\_\_\_

\_\_\_\_\_

24) Do you need information on how to interact more effectively with the medical and allied medical (e.g., school nurse, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?

1. No     0. Yes — What information? \_\_\_\_\_

25) How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?

- 1. Very interested
- 2. Somewhat interested
- 3. Neutral/Mixed
- 4. Somewhat uninterested
- 5. Very uninterested

26) As an undergraduate, did you have any specialized instruction in teaching physical education to handicapped students?

- 1. None     2. Part of a course     3. One course     4. 2-4 courses     5. 4 or more courses

27) Have you ever had a relative or close friend who was handicapped?     1. Yes     0. No

28) What was your age on your last birthday?    \_\_\_\_\_ Years

29) What is your sex?    1. Male    2. Female

30) For how many years have you been teaching?    \_\_\_\_\_ Years

31) How much education have you completed?

- 1. Grade school only
- 2. Some high school
- 3. High school graduate
- 4. Some college
- 5. College graduate
- 6. Post graduate

32) If you are a college graduate, what is the name of the college where you earned your degree?

0. Not a college graduate \_\_\_\_\_

33) Do you teach at only one school or do you alternate between schools?

- 1. Only one school
- 2. More than one school — How many schools? \_\_\_\_\_

34) What is the approximate total enrollment of the school(s) at which you teach?

- 1. 0-200     2. 200-500     3. 500-1000     4. 1000-1500     5. 1500-2000     6. 2000+

35) Would you describe the school(s) at which you teach as:     1. Urban     2. Suburban     3. Rural

36) Are you currently taking any continuing education courses?

0. No     1. Yes — What courses? \_\_\_\_\_

\_\_\_\_\_



THANK YOU VERY MUCH FOR YOUR COOPERATION.

APPENDIX B

Questions and Question Responses - 1980

TOTAL RESPONDENTS = 241 (100.0%)

Please check the box or circle the appropriate responses to the questions below. Feel free to add your comments on any question either on this form or on a separate sheet of paper. Please check an answer for all questions. Give the answer which is closest to your view if no response applies exactly.

1. About how many handicapped students participate in your physical education classes?

None . . . . .	57	(23.7%)
1-5 . . . . .	77	(31.9%)
6-10 . . . . .	28	(11.6%)
10-14 . . . . .	19	(7.9%)
15-19 . . . . .	14	(5.8%)
20-39 . . . . .	25	(10.3%)
40+ . . . . .	18	(7.5%)
No response . . . . .	3	(1.2%)

2. Of the handicapped students who participate, what number are:

Integrated into regular classes. . . . .	154	(3.3 ave.)
Segregated into special classes. . . . .	28	(3.2 ave.)
Both . . . . .	21	(2.7 ave.)
Other (please describe: _____) . . . . .	9	(2.8 ave.)

3. What is your feeling toward teaching physical education for students with handicapping conditions?

Very favorable . . . . .	69	(28.6%)
Favorable . . . . .	92	(38.2%)
Neutral/mixed . . . . .	63	(26.1%)
Unfavorable . . . . .	13	(5.4%)
Very unfavorable . . . . .	3	(1.2%)
No response . . . . .	1	(0.4%)

4. How interested are you in expanding your knowledge of physical education programming for handicapped students through participating in conferences, workshops, school programs and the like?

Very interested . . . . .	48 (19.9%)
Interested . . . . .	119 (49.4%)
Neutral/mixed . . . . .	53 (22.0%)
Uninterested . . . . .	12 (5.0%)
Very uninterested . . . . .	2 (0.8%)
Haven't thought about . . . . .	7 (2.9%)

5. How interested are you in enrolling in graduate courses which emphasize theoretical and practical considerations of physical education programming for handicapped students?

Very interested . . . . .	29 (12.0%)
Interested . . . . .	67 (27.8%)
Neutral/mixed . . . . .	67 (27.8%)
Uninterested . . . . .	50 (20.7%)
Very uninterested . . . . .	5 (2.1%)
Haven't thought about it . . . . .	22 (9.1%)

6. Which of the following does the Education for All Handicapped Children Act of 1975 (P.L. 94-142) provide for?

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(a) Mainstreaming all handicapped children in the regular classroom	118 (49.0%)	69 (28.6%)*	54 (22.4%)
(b) Funds at the local level to provide teachers with inservice activities designed to help them teach handicapped students	89 (36.9%)*	86 (35.7%)	66 (27.4%)
(c) An individualized education program for each handicapped student	99 (41.1%)	77 (31.9%)*	65 (27.0%)
(d) Adapted physical education placement for each handicapped student	111 (46.1%)	66 (27.4%)*	64 (26.6%)

(Item continued)

\*Correct response



	<u>Yes</u>	<u>No</u>	<u>No response</u>
(e) Assessment of students' abilities with valid and reliable test instruments	110 (45.6%)*	63 (26.1%)	68 (28.2%)
(f) Parents' participation in the development of the individualized education program, including placement of the student in the appropriate physical education class	104 (43.1%)*	75 (31.1%)	62 (25.7%)

\*Correct response

7. P.L. 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:

	<u>Very capable</u>	<u>Somewhat capable</u>	<u>Somewhat incapable</u>	<u>Very incapable</u>	<u>No response</u>
(a) Identifying federal and state legislative requirements associated with individualized education programs.	12 (5.0%)	83 (34.4%)	73 (30.3%)	63 (26.1%)	10 (4.1%)
(b) Developing an individualized education program for the handicapped student.	25 (10.4%)	141 (58.6%)	51 (21.2%)	16 (6.6%)	8 (3.3%)
(c) Demonstrating appropriate instructional strategies in the classroom with handicapped students.	30 (12.4%)	122 (50.6%)	62 (25.7%)	17 (7.1%)	10 (4.1%)
(d) Effectively using commercial and teacher-made instructional materials.	51 (21.2%)	127 (52.7%)	42 (17.4%)	12 (5.0%)	9 (3.7%)
(e) Identifying federal and state legislative requirements associated with the principle of zero reject.	6 (2.5%)	45 (18.7%)	79 (32.8%)	92 (38.2%)	19 (7.9%)
(f) Identifying federal and state legislative requirements associated with the principle of nondiscriminatory evaluation.	12 (5.0%)	71 (29.5%)	76 (31.5%)	66 (27.4%)	9 (6.6%)

(Item continued)

	<u>Very capable</u>	<u>Somewhat capable</u>	<u>Somewhat incapable</u>	<u>Very incapable</u>	<u>No response</u>
(g) Identifying federal and state legislative requirements associated with the principle of mainstreaming.	24 (10.0%)	108 (44.8%)	54 (22.4%)	42 (17.4%)	13 (5.4%)
(h) Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.	15 (6.2%)	97 (40.2%)	79 (32.8%)	34 (14.1%)	16 (6.6%)

8. Do you feel you need more information on each of the following in order to teach physical education to handicapped students more effectively?

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(1) Knowledge of P.L. 94-142	218 (90.5%)	22 (9.1%)	1 (0.4%)
(2) Understanding the nature of specific handicaps	205 (85.1%)	36 (14.9%)	0 (0.0%)
(3) Techniques of motor assessment	198 (82.2%)	43 (17.8%)	0 (0.0%)
(4) Awareness of existing curricular materials	217 (90.0%)	23 (9.5%)	1 (0.4%)
(5) Knowledge of medical terms	187 (77.6%)	53 (22.0%)	1 (0.4%)
(6) Hands-on experience with handicapped students	194 (80.5%)	44 (18.3%)	3 (1.2%)
(7) Procedures for organizing and running adapted P.E. programs	199 (82.6%)	40 (16.6%)	2 (0.8%)
(8) Knowledge of class placement alternatives (i.e., special, adapted, and so on)	210 (87.1%)	24 (10.0%)	7 (2.9%)
(9) Understanding of behavior management techniques	192 (79.7%)	43 (17.8%)	6 (2.5%)
(10) Other _____	11 (4.6%)	0 (0.0%)	230 (95.4%)
(11) Other _____	3 (1.2%)	0 (0.0%)	238 (98.8%)

9. Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?

	<u>Yes</u>	<u>No</u>
(1) Knowledge of P.L. 94-142	48 (19.9%)	186 (77.2%)
(2) Understanding the nature of specific handicaps	128 (53.1%)	108 (44.8%)
(3) Techniques of motor assessment	97 (40.2%)	140 (58.1%)
(4) Awareness of existing curricular materials	75 (31.1%)	161 (66.8%)
(5) Knowledge of medical terms	98 (40.7%)	137 (56.8%)
(6) Hands-on experience with handicapped students	97 (40.2%)	138 (57.3%)
(7) Procedures for organizing and running adapted P.E. programs	87 (36.1%)	149 (61.8%)
(8) Knowledge of class placement alternatives (i.e., special, adapted, and so on)	53 (22.0%)	184 (76.3%)
(9) Understanding of behavior management techniques	77 (31.9%)	155 (64.3%)
(10) Other _____	0 (0.0%)	0 (0.0%)

10a. In which areas of motor behavior assessment do you need assistance?

	<u>No</u>	<u>Yes</u>	<u>No response</u>
Fundamental motor skills/patterns	112 (46.5%)	119 (49.4%)	10 (4.1%)
Physical/motor fitness	126 (52.3%)	105 (43.6%)	10 (4.1%)
Sports skills tests (including aquatics and dance)	112 (46.5%)	119 (49.4%)	10 (4.1%)
Perceptual-motor development	74 (30.7%)	160 (66.4%)	7 (2.9%)
Other (specify) _____	2 (0.8%)	11 (4.6%)	228 (94.6%)
Other (specify) _____	2 (0.8%)	6 (2.5%)	233 (96.7%)

10b. Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?

No . . . . .	219	(90.9%)
Yes . . . . .	17	(7.1%)
No response . . . . .	5	(2.1%)

(If yes) How rewarding was the experience for you?

Very rewarding . . . . .	9	(3.7%)
Somewhat rewarding . . . . .	5	(2.1%)
Not very rewarding . . . . .	2	(0.8%)
Very unrewarding . . . . .	0	(0.0%)
No response . . . . .	225	(93.4%)

11. Of the areas listed in questions 8 and 9, which three areas do you feel you have the greatest need for information about at the present time? Please list in order of greatest to least priority. (Only the number of these alternatives need be given)

#1 Knowledge of P.L. 94-142 . . . . .	24.9%
#2 Understanding the nature of specific handicaps . . . . .	21.2%
#3 Techniques of motor assessment . . . . .	15.4%
#9 Understanding of behavior management techniques . . . . .	14.1%

12. What is your feeling toward providing physical education programs for students with handicapping conditions?

Very favorable . . . . .	101	(42.0%)
Favorable . . . . .	85	(35.3%)
Neutral/it depends . . . . .	36	(14.9%)
Unfavorable . . . . .	5	(2.1%)
Very unfavorable . . . . .	2	(0.8%)
No response . . . . .	12	(5.0%)

40

13. Have you ever taught a student with each of the following conditions? If so, approximately how many such students are you currently teaching?

	<u>Ever Taught</u>		
	<u>No</u>	<u>Yes</u>	<u>No response</u>
(1) Amputation	142 (58.9%)	80 (33.2%)	19 (7.9%)
(2) Asthma	13 (5.4%)	223 (92.5%)	5 (2.1%)
(3) Arthritis	122 (50.6%)	102 (42.3%)	17 (7.1%)
(4) Blind/visually handicapped	127 (52.7%)	102 (42.3%)	12 (5.0%)
(5) Cardiac disorders	88 (36.6%)	142 (58.7%)	11 (4.6%)
(6) Cerebral palsy	134 (55.6%)	92 (38.2%)	15 (6.2%)
(7) Deaf/hearing impaired	81 (33.6%)	149 (61.8%)	11 (4.6%)
(8) Diabetes	74 (30.7%)	154 (63.9%)	13 (5.4%)
(9) Emotional disturbance	53 (22.0%)	174 (72.2%)	14 (5.8%)
(10) Epilepsy (seizure prone)	51 (21.2%)	180 (74.7%)	10 (4.1%)
(11) Learning disabilities	19 (7.9%)	216 (89.6%)	6 (2.5%)
(12) Mental retardation	95 (39.4%)	132 (54.8%)	14 (5.8%)
(13) Muscular dystrophy	182 (75.5%)	43 (17.8%)	16 (6.6%)
(14) Postural deviations	96 (39.8%)	131 (54.4%)	14 (5.8%)
(15) Wheelchair-bound	189 (78.4%)	31 (12.9%)	21 (8.7%)
(16) Other (please specify)	3 (1.2%)	35 (14.5%)	203 (84.2%)

14. What is your feeling towards teaching a student with each of the following conditions?

	<u>Very favorable</u>	<u>Favorable</u>	<u>Neutral/ it depends</u>	<u>U Favorable</u>	<u>Very unfavorable</u>	<u>Don't know</u>	<u>No response</u>
(1) Amputation	53 (22.0%)	93 (38.6%)	60 (24.9%)	17 (7.1%)	2 (0.8%)	11 (4.6%)	4 (1.7%)
(2) Asthma	99 (41.1%)	106 (44.0%)	28 (11.6%)	2 (0.8%)	2 (0.8%)	0 (0.0%)	4 (1.7%)
(3) Arthritis	73 (30.3%)	116 (48.1%)	35 (14.5%)	2 (0.8%)	1 (0.4%)	8 (3.3%)	5 (2.1%)
(4) Blind/visually handicapped	47 (19.5%)	74 (30.7%)	77 (31.9%)	25 (10.4%)	5 (2.1%)	9 (3.7%)	4 (1.7%)
(5) Cardiac disorders	49 (20.3%)	69 (36.9%)	68 (28.2%)	22 (9.1%)	4 (1.7%)	5 (2.1%)	3 (1.2%)
(6) Cerebral palsy	40 (16.6%)	69 (28.6%)	86 (35.7%)	28 (11.6%)	4 (1.7%)	10 (4.1%)	3 (1.2%)
(7) Deaf/hearing impaired	73 (30.3%)	110 (45.6%)	46 (19.1%)	3 (1.2%)	0 (0.0%)	6 (2.5%)	3 (1.2%)
(8) Diabetes	92 (38.2%)	113 (46.9%)	25 (10.4%)	2 (0.8%)	2 (0.8%)	4 (1.7%)	3 (1.2%)
(9) Emotional disturbance	46 (19.1%)	77 (31.9%)	82 (34.0%)	19 (7.9%)	10 (4.1%)	4 (1.7%)	3 (1.2%)
(10) Epilepsy (seizure prone)	59 (24.5%)	101 (41.9%)	52 (21.6%)	17 (7.1%)	5 (2.1%)	3 (1.2%)	4 (1.7%)
(11) Learning disabilities	86 (35.7%)	93 (38.6%)	48 (19.9%)	8 (3.3%)	1 (0.4%)	2 (0.8%)	3 (1.2%)

(Item continued)

	<u>Very favorable</u>	<u>Favorable</u>	<u>Neutral/ it depends</u>	<u>Unfavorable</u>	<u>Very unfavorable</u>	<u>Don't know</u>	<u>No response</u>
(12) Mental retardation	56 (23.2%)	85 (35.3%)	62 (25.7%)	18 (7.5%)	6 (2.5%)	11 (4.6%)	3 (1.2%)
(13) Muscular dystrophy	40 (16.6%)	70 (29.0%)	77 (31.9%)	29 (12.0%)	5 (2.1%)	16 (6.6%)	4 (1.7%)
(14) Postural deviations	64 (26.6%)	104 (43.2%)	44 (18.3%)	13 (5.4%)	3 (1.2%)	9 (3.7%)	4 (1.7%)
(15) Wheelchair-bound	34 (14.1%)	53 (22.0%)	77 (31.9%)	42 (17.4%)	11 (4.6%)	21 (8.7%)	3 (1.2%)
(16) Other _____	7 (2.9%)	4 (1.7%)	4 (1.7%)	2 (0.8%)	1 (0.4%)	1 (0.4%)	222 (92.1%)
(17) Other _____	2 (0.8%)	4 (1.7%)	1 (0.4%)	1 (0.4%)	0 (0.0%)	1 (0.4%)	232 (96.3%)

15. Do you feel a need to expand your knowledge of physical education programming for each of the following conditions in order to teach physical education for such students more effectively? If you feel that you need additional information in order to work more effectively with each of the following types of students, what are the reasons that contribute to your need? CHECK ALL THAT APPLY.

- Can't communicate with them
- Dislike being near them
- Lack of program content
- Fear make condition worse
- Need too much attention
- Lack of specialized training
- Other \_\_\_\_\_

(Item continued)

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(1) Amputation	188 (78.0%)	31 (12.9%)	21 (8.7%)
(2) Asthma	133 (55.2%)	65 (27.0%)	43 (17.8%)
(3) Arthritis	148 (61.4%)	49 (20.3%)	44 (18.3%)
(4) Blind/visually impaired	199 (82.6%)	22 (9.1%)	20 (8.3%)
(5) Cardiac disorders	175 (72.6%)	40 (16.6%)	26 (10.8%)
(6) Cerebral palsy	195 (80.9%)	20 (8.3%)	25 (10.4%)
(7) Deaf/hearing impaired	165 (68.5%)	43 (17.8%)	32 (13.3%)
(8) Diabetes	116 (48.1%)	69 (28.6%)	56 (23.2%)
(9) Emotional disturbance	163 (67.6%)	44 (18.3%)	34 (14.1%)
(10) Epilepsy (seizure prone)	143 (59.3%)	57 (23.7%)	41 (17.0%)
(11) Learning disabilities			
(12) Mental retardation			
(13) Muscular dystrophy	193 (80.1%)	19 (7.9%)	28 (11.6%)
(14) Postural deviations	146 (60.6%)	55 (22.8%)	40 (16.6%)
(15) Wheelchair-bound	198 (82.2%)	19 (7.9%)	24 (10.0%)
(16) Other (please specify)			
(17) Other (please specify)			

16. Of the conditions listed above, which have you indicated you need more information on; which three do you need most? Please list in order of greatest to least need. (Only the number of each of these need be given)

#4 Blind/visually impaired . . . . . 16.6%  
 #7 Deaf/hearing impaired . . . . . 10.4%  
 #13 Muscular dystrophy . . . . . 8.3%

17. Of the following handicapping conditions, what is their current status in your school and physical education program? (Please circle)

	<u>Do not attend the school at which I teach</u>	<u>Attend but do not have P.E. classes</u>	<u>Attend but have separate P.E. classes</u>	<u>Attend and are integrated into regular P.E. classes</u>	<u>No response</u>
(1) Amputation	170 (70.5%)	13 (5.4%)	3 (1.2%)	31 (12.9%)	24 (10.0%)
(2) Asthma	16 (6.6%)	3 (1.2%)	1 (0.4%)	210 (87.1%)	11 (4.6%)
(3) Arthritis	82 (34.0%)	5 (2.1%)	5 (2.1%)	118 (49.0%)	31 (12.9%)
(4) Blind/visually handicapped	140 (58.1%)	10 (4.1%)	7 (2.9%)	65 (27.0%)	19 (7.9%)
(5) Cardiac disorders	61 (25.3%)	30 (12.4%)	4 (1.7%)	119 (49.4%)	27 (11.2%)
(6) Cerebral palsy	140 (58.1%)	12 (5.0%)	9 (3.7%)	51 (21.2%)	29 (12.0%)
(7) Deaf/hearing impaired	97 (40.2%)	6 (2.5%)	6 (2.5%)	108 (44.8%)	24 (10.0%)
(8) Diabetes	47 (19.5%)	5 (2.1%)	3 (1.2%)	161 (66.8%)	25 (10.4%)
(9) Emotional disturbance	61 (25.3%)	8 (3.3%)	10 (4.1%)	145 (60.2%)	17 (7.1%)
(10) Epilepsy (seizure prone)	55 (22.8%)	5 (2.1%)	3 (1.2%)	156 (64.7%)	22 (9.1%)

(Item continued)

	<u>Do not attend the school at which I teach</u>	<u>Attend but do not have P.E. classes</u>	<u>Attend but have separate P.E. classes</u>	<u>Attend and are integrated into regular P.E. classes</u>	<u>No response</u>
(11) Learning disabilities	23 (9.5%)	6 (2.5%)	12 (5.0%)	188 (78.0%)	12 (5.0%)
(12) Mental retardation	111 (46.1%)	3 (1.2%)	6 (2.5%)	97 (40.2%)	23 (9.5%)
(13) Muscular dystrophy	176 (73.0%)	6 (2.5%)	7 (2.9%)	25 (10.4%)	27 (11.2%)
(14) Postural deviations	87 (36.1%)	7 (2.9%)	4 (1.7%)	116 (48.1%)	27 (11.2%)
(15) Wheelchair-bound	160 (66.4%)	16 (6.6%)	10 (4.1%)	18 (7.5%)	37 (15.4%)
(16) Other (please specify) _____	2 (0.8%)	1 (0.4%)	5 (2.1%)	7 (2.9%)	225 (93.4%)
(17) Other (please specify) _____	1 (0.4%)	0 (0.0%)	3 (1.2%)	3 (1.2%)	234 (97.1%)

18. Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students? Please describe.

Yes . . . . . 120 (49.8%)

What type of encouragement? \_\_\_\_\_

\_\_\_\_\_

No . . . . . 91 (37.8%)

What encouragement do you need? \_\_\_\_\_

\_\_\_\_\_

No response . . . . . 30 (12.4%)

61

63

19. If handicapped students are placed in your regular physical education classes, what limits them from participating fully in activities with normal students? (Please circle)

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(1) Activity chosen	158 (65.6%)	55 (22.8%)	26 (10.8%)
(2) Total number of students in the class	106 (44.0%)	102 (42.3%)	31 (12.9%)
(3) Functional ability of the individual	179 (74.3%)	35 (14.5%)	25 (10.4%)
(4) Nature of the individual's handicap	192 (79.7%)	28 (11.6%)	18 (17.5%)
(5) Availability of facilities/equipment	143 (59.3%)	69 (28.6%)	28 (11.6%)
(6) Presence of architectural barriers	72 (29.9%)	128 (53.1%)	40 (16.6%)
(7) Other (please specify) _____	11 (4.6%)	2 ( . 8%)	227 (94.2%)

20. In your integrated classes, how many of the regular students react to the students with handicaps by being:

	<u>Almost all</u>	<u>Most</u>	<u>About half</u>	<u>Some</u>	<u>Almost none</u>	<u>No response</u>
(a) Hostile	1 (0.4%)	2 (0.8%)	4 (1.7%)	53 (22.0%)	124 (51.5%)	44 (18.3%)
(b) Curious	10 (4.1%)	22 (9.1%)	22 (9.1%)	90 (39.3%)	40 (16.6%)	43 (17.8%)
(c) Neutral	36 (14.9%)	55 (22.8%)	33 (13.7%)	45 (18.7%)	10 (4.1%)	48 (19.9%)
(d) Accommodating	43 (17.8%)	77 (31.9%)	15 (6.2%)	46 (19.1%)	7 (2.9%)	39 (16.2%)

(Item continued)

	<u>Almost all</u>	<u>Most</u>	<u>About half</u>	<u>Some</u>	<u>Almost none</u>	<u>No response</u>
(e) Overly considerate	10 (4.1%)	30 (12.4%)	16 (6.6%)	87 (36.1%)	42 (17.4%)	43 (17.8%)
(f) Ridiculing	0 (0.0%)	5 (2.1%)	3 (1.2%)	82 (34.0%)	97 (40.2%)	40 (16.6%)
(g) Resentment	3 (1.2%)	2 (0.8%)	3 (1.2%)	51 (21.2%)	124 (51.5%)	45 (18.7%)

21. What things do you enjoy about providing physical education to handicapped students?

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22. What things do you not enjoy about providing physical education to handicapped students?

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23. What unique problems with the handicapped students you work with are you experiencing?

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24. Do you need information on how to interact more effectively with the medical and allied medical (e.g., school nurse, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?

No . . . . .	94 (39.0%)
Yes . . . . .	101 (41.9%)
No response . . . . .	45 (18.7%)

25. How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?

Very interested . . . . .	28 (11.6%)
Somewhat interested . . . . .	48 (19.9%)
Neutral/mixed . . . . .	69 (28.6%)
Somewhat uninterested . . . . .	39 (16.2%)
Very uninterested . . . . .	26 (10.8%)
No response . . . . .	30 (12.4%)

26. As an undergraduate, did you have any specialized instruction in teaching physical education to handicapped students?

None . . . . .	55 (22.8%)
Part of a course . . . . .	34 (14.1%)
One course . . . . .	85 (35.3%)
2-4 courses . . . . .	39 (16.2%)
4 or more courses . . . . .	3 (1.2%)
No response . . . . .	24 (10.0%)

27. Have you ever had a relative or close friend who was handicapped?

Yes . . . . .	97 (40.2%)
No . . . . .	115 (47.7%)
No response . . . . .	29 (12.0%)

28. What was your age on your last birthday?

N =	213
Mean =	36.5 years
Median =	35.5 years
Range =	22 to 63 years

29. What is your sex?

Male . . . . .	113 (46.9%)
Female . . . . .	102 (42.3%)
No response . . . . .	26 (10.8%)

30. For how many years have you been teaching?

N = 215  
Mean = 13.0 years  
Median = 11.3 years  
Range = 1 to 38 years

31. How much education have you completed?

College graduate . . . . .	85 (35.3%)
Post graduate . . . . .	131 (54.4%)
No response . . . . .	25 (10.4%)

32. If you are a college graduate, what is the name of the college where you earned your degree?

---

33. Do you teach at only one school or do you alternate between schools?

Only one school . . . . .	165 (68.5%)
More than one school . . . . .	59 (20.7%)
No response . . . . .	26 (10.8%)

60

60

34. What is the approximate total enrollment of the school(s) at which you teach?

0-200 . . . . .	5 (2.1%)
200-500 . . . . .	34 (14.1%)
500-1000 . . . . .	1 (.1.9%)
1000-1500 . . . . .	52 (21.6%)
1500-2000 . . . . .	17 (7.1%)
2000+ . . . . .	9 (3.7%)
No response . . . . .	23 (9.5%)

35. Would you describe the school(s) at which you teach as:

Urban , . . . . .	153 (63.1%)
Suburban . . . . .	39 (16.2%)
Rural . . . . .	22 (9.1%)
No response . . . . .	26 (10.8%)

36. Are you currently taking any continuing education courses?

No . . . . .	173 (71.8%)
Yes . . . . .	45 (18.7%)
No response . . . . .	23 (9.5%)

APPENDIX C

Survey Instrument - 1988

ALL RESPONSES WILL BE HELD IN STRICT CONFIDENCE

Date \_\_\_\_\_

County \_\_\_\_\_ School District \_\_\_\_\_

Title of Person Completing This Form \_\_\_\_\_

Please check the box or circle the appropriate responses to the questions below. Feel free to add your comments on any question either on this form or on a separate sheet of paper. Please check an answer for all questions. Give the answer which is closest to your view if no response applies exactly.

LEAVE BLANK

1) What is the total number of handicapped students who participate in all of your physical education classes?
 1. None  2. 1-5  3. 6-10  4. 10-14  5. 15-19  6. 20-39  7. 40+

2) Of the handicapped students who participate, what number are:
1. \_\_\_\_\_ integrated into regular classes
2. \_\_\_\_\_ segregated into special classes
3. \_\_\_\_\_ both
4. \_\_\_\_\_ other (Please describe \_\_\_\_\_)

3) What is your feeling toward teaching physical education for students with handicapping conditions?
 1 Very favorable  2 Favorable  3 Neutral/Mixed  4 Unfavorable  5 Very unfavorable

4) Which of the following does the Education for All Handicapped Children Act of 1975 (P.L. 94-142) provide for?
a) Mainstreaming all handicapped children in the regular classroom  1 Yes  2 No
b) Funds at the local level to provide teachers with inservice activities designed to help them teach handicapped students  1 Yes  2 No
c) An individualized education program for each handicapped student receiving special education.  1 Yes  2 No
d) Adapted physical education placement for each handicapped student  1 Yes  2 No
e) Assessment of students' abilities with valid and reliable test instruments.  1 Yes  2 No
f) Parents' participation in the development of the individualized education program including placement of the student in the appropriate physical education class  1 Yes  2 No

5) P.L. 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:
a) Identifying federal and state legislative requirements associated with individualized education programs
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable
b) Developing an individualized education program for the handicapped student.
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable
c) Demonstrating appropriate instructional strategies in the classroom with handicapped students
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable
d) Effectively using commercial and teacher-made instructional materials.
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable
e) Identifying federal and state legislative requirement associated with the principle of nondiscriminatory evaluation
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable
f) Identifying federal and state legislative requirements associated with the principle of mainstreaming
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable
g) Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.
 1 Very capable  2 Somewhat capable  3 Somewhat incapable  4 Very incapable

6) Do you feel you need more information on each of the following in order to teach physical education to handicapped students more effectively?
1. Knowledge of P.L. 94-142  1 Yes  0 No
2. Understanding the nature of specific handicaps  1 Yes  0 No
3. Techniques of motor assessment  1 Yes  0 No
4. Awareness of existing curricular materials  1 Yes  0 No
5. Knowledge of medical terms  1 Yes  0 No
6. Hands-on experience with handicapped students  1 Yes  0 No
7. Procedures for organizing and running adapted P.E. programs  1 Yes  0 No
8. Knowledge of class placement alternatives (i.e. special adapted and so on)  1 Yes  0 No
9. Understanding of behavior management techniques  1 Yes  0 No

Vertical column of lines for handwritten answers, labeled 'LEAVE BLANK' at the top.

10 Other \_\_\_\_\_
11 Other \_\_\_\_\_



7) Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?

- 1 Knowledge of P.L. 94-142  1 Yes  0 No
- 2 Understanding of the nature of specific handicaps  1 Yes  0 No
- 3 Techniques of motor assessment  1 Yes  0 No
- 4 Awareness of existing curricular material  1 Yes  0 No
- 5 Knowledge of medical terms  1 Yes  0 No
- 6 Hands on experience with handicapped students  1 Yes  0 No
- 7 Procedures for organizing and running adapted P.E. programs  1 Yes  0 No
- 8 Knowledge of class placement alternatives (i.e., special, adapted, and so on)  1 Yes  0 No
- 9 Understanding of behavior management techniques  1 Yes  0 No
- 10 Other \_\_\_\_\_  1 Yes  0 No

8a.) In which areas of motor behavior assessment do you need assistance?

- Fundamental Motor Skills/Patterns  1 No  0 Yes
- Physical/Motor Fitness  1 No  0 Yes
- Sports Skills Tests (including aquatics and dance)  1 No  0 Yes
- Perceptual-Motor Development  1 No  0 Yes
- Other (Specify) \_\_\_\_\_  1 No  0 Yes
- Other (Specify) \_\_\_\_\_  1 No  0 Yes

8b.) Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?

- 1 No (Go to question 9)
- 2 Yes → How many times? \_\_\_\_\_

How rewarding was the experience for you?

- 1 Very rewarding
- 2 Somewhat rewarding
- 3 Not very rewarding
- 4 Very rewarding

9) Of the areas listed in questions 6 and 7, which three areas do you feel you have the greatest need for information about at the present time? Please list in order of greatest to least priority. (Only the number of these three alternatives need be given.)

# \_\_\_\_\_ # \_\_\_\_\_ # \_\_\_\_\_

10) What is your feeling toward providing physical education programs for students with handicapping conditions?

- 1 Very favorable
- 2 Favorable
- 3 Neutral/it depends
- 4 Unfavorable
- 5 Very unfavorable

11) Have you ever taught a student with each of the following conditions?

- 1 AMPUTATION  0 No  1 Yes
- 2 ARTHRITIS  0 No  1 Yes
- 3 BLIND/VISUALLY HANDICAPPED  0 No  1 Yes
- 4 CARDIAC DISORDERS  0 No  1 Yes
- 5 CEREBRAL PALSY  0 No  1 Yes
- 6 DEAF HEARING IMPAIRED  0 No  1 Yes
- 7 SEVERE BEHAVIOR HANDICAP  0 No  1 Yes
- 8 LEARNING DISABILITIES  0 No  1 Yes
- 9 MENTAL RETARDATION  0 No  1 Yes
- 10 MUSCULAR DYSTROPHY  0 No  1 Yes
- 11 WHEELCHAIR-BOUND  0 No  1 Yes
- 12 MULTI-HANDICAPPED  0 No  1 Yes
- 13 OTHER (PLEASE SPECIFY) \_\_\_\_\_  0 No  1 Yes

12) What is your feeling toward teaching a student with each of the following conditions?

	Very Favorable	Favorable	Neutral/It depends	Unfavorable	Very Unfavorable	Don't Know
1 AMPUTATION	1	2	3	4	5	6
2 ARTHRITIS	1	2	3	4	5	6
3 BLIND/VISUALLY HANDICAPPED	1	2	3	4	5	6
4 CARDIAC DISORDERS	1	2	3	4	5	6
5 CEREBRAL PALSY	1	2	3	4	5	6
6 DEAF HEARING IMPAIRED	1	2	3	4	5	6
7 SEVERE BEHAVIOR HANDICAP	1	2	3	4	5	6
8 LEARNING DISABILITIES	1	2	3	4	5	6
9 MENTAL RETARDATION	1	2	3	4	5	6
10 MUSCULAR DYSTROPHY	1	2	3	4	5	6
11 WHEELCHAIR-BOUND	1	2	3	4	5	6
12 MULTI-HANDICAPPED	1	2	3	4	5	6
13 OTHER _____	1	2	3	4	5	6
14 OTHER _____	1	2	3	4	5	6

13) Do you feel a need to expand your knowledge of physical education programming for each of the following conditions in order to teach physical education for such students more effectively? If you feel that you need additional information in order to work more effectively with each of the following types of students, what are the reasons that contribute to your need? CHECK ALL THAT APPLY.

**1. AMPUTATION**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**2. ARTHRITIS**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**3. BLIND/VISUALLY IMPAIRED**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**4. CARDIAC DISORDERS**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**5. CEREBRAL PALSY**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**6. DEAF/HEARING IMPAIRED**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**7. SEVERE BEHAVIOR HANDICAP**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**8. LEARNING DISABILITIES**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**9. MENTAL RETARDATION**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**10. MUSCULAR DYSTROPHY**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**11. WHEELCHAIR-BOUND**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**12. MULTIHANDICAPPED**

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**13. OTHER (PLEASE SPECIFY)**

0. No

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

**14. OTHER (PLEASE SPECIFY)**

0. No

- 1 Yes →
- 5 Fear make condition worse

- 2 Can't communicate with them
- 6 Need too much attention

- 3 Dislike being near them
- 7 Lack of specialized training

- 4 Lack of program content
- 8 Other \_\_\_\_\_

14) Of the conditions listed above which have you indicated you need more information on, which three do you need most? Please list in order of greatest to least need. (Only the number of each of these need be given.)

• \_\_\_\_\_ • \_\_\_\_\_ • \_\_\_\_\_

15) Of the following handicapping conditions, what is their current status in your school and physical education program? (Please circle)

LEAVE  
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	Do not attend the school at which I teach	Attend but do not have P.E. classes	Attend but have separate P.E. classes	Attend and are integrated into regular P.E. classes
1. AMPUTATION	1	2	3	4
2. ARTHRITIS	1	2	3	4
3. BLIND/VISUALLY	1	2	3	4
4. CARDIAC DISORDERS	1	2	3	4
5. CEREBRAL PALSY	1	2	3	4
6. DEAF/HEARING IMPAIRED	1	2	3	4
7. SEVERE BEHAVIOR HANDICAP	1	2	3	4
8. LEARNING DISABILITIES	1	2	3	4
9. MENTAL RETARDATION	1	2	3	4
10. MUSCULAR DYSTROPHY	1	2	3	4
11. WHEELCHAIR-BOUND	1	2	3	4
12. MULTIHANDICAPPED	1	2	3	4
13. OTHER (PLEASE SPECIFY)	1	2	3	4
_____	1	2	3	4
14. OTHER (PLEASE SPECIFY)	1	2	3	4
_____	1	2	3	4

16) Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students? Please describe.

1 Yes → What type of encouragement? \_\_\_\_\_

0 No → What encouragement do you need? \_\_\_\_\_

17) If handicapped students are placed in your regular physical education classes, what limits them from participating fully in activities with normal students? (Please circle)

	Yes	No
1. Activity chosen	1	0
2. Total number of students in the class	1	0
3. Functional ability of the individual	1	0
4. Nature of the individual's handicap	1	0
5. Availability of facilities/equipment	1	0
6. Presence of architectural barriers	1	0
7. Other (please specify)	1	0
_____	1	0

18) In your integrated classes, how many of the regular students react to the student with handicaps by being:

6. Do not have integrated classes

(Go to Question 19)

a. HOSTILE	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none
b. CURIOUS	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none
c. NEUTRAL	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none
d. ACCOMMODATING	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none
e. OVERLY CONSIDERATE	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none
f. RIDICULING	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none
g. RESENTMENT	<input type="checkbox"/> 1 Almost all	<input type="checkbox"/> 2. Most	<input type="checkbox"/> 3. About half	<input type="checkbox"/> 4. Some	<input type="checkbox"/> 5. Almost none

19) To what extent do you interact with the medical and allied medical (e.g., physicians, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?

1 Never  2 1-2 times per year  3 3-5 times per year  4 6-9 times per year  5 10 or more times per year

20) How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?

1 Very interested  2 Somewhat interested  3 Neutral/Mixed  4 Somewhat uninterested  5 Very uninterested

21) As an undergraduate, did you have any specialized instruction in teaching physical education to handicapped students?

1 None  2 Part of a course  3 One course  4 2-4 courses  5 4 or more courses

22) What was your age on your last birthday?

\_\_\_\_\_ Years

23) What is your sex?  1 Male  2 Female

24) For how many years have you been teaching

\_\_\_\_\_ Years

25) What is the approximate total enrollment of the school(s) at which you teach?

1 0-200  2 200-500  3 500-1000  4 1000-1500  5 1500-2000  6 2000+

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APPENDIX D

Questions and Question Responses - 1988

TOTAL RESPONDENTS = 242 (100.0%)

Please check the box or circle the appropriate responses to the questions below. Feel free to add your comments on any question either on this form or on a separate sheet of paper. Please check an answer for all questions. Give the answer which is closest to your view if no response applies exactly.

1. What is the total number of handicapped students who participate in all of your physical education classes?

None . . . . .	44 (18.2%)
1-5 . . . . .	61 (25.2%)
6-10 . . . . .	26 (10.7%)
10-14 . . . . .	25 (10.3%)
15-19 . . . . .	20 (8.3%)
20-39 . . . . .	23 (9.5%)
40+ . . . . .	35 (14.5%)
No response . . . . .	8 (3.3%)

2. Of the handicapped students who participate, what number are:

Integrated into regular classes . . . . .	146 (7.0 ave.)
Segregated into special classes . . . . .	43 (4.7 ave.)
Both . . . . .	32 (2.1 ave.)
Other (please describe: _____) . . . . .	7 (0.4 ave.)

3. What is your feeling toward teaching physical education for students with handicapping conditions?

Very favorable . . . . .	84 (34.7%)
Favorable . . . . .	68 (28.1%)
Neutral/mixed . . . . .	69 (28.5%)
Unfavorable . . . . .	8 (3.3%)
Very unfavorable . . . . .	2 (0.8%)
No response . . . . .	11 (4.5%)

4. Which of the following does the Education for All Handicapped Children Act of 1975 (P.L. 94-142) provide for?

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(a) Mainstreaming all handicapped children in the regular classroom	109 (45.0%)	107 (44.2%)*	26 (10.7%)
(b) Funds at the local level to provide teachers with inservice activities designed to help them teach handicapped students	113 (46.7%)*	98 (40.5%)	31 (12.8%)
(c) An individualized education program for each handicapped student receiving special education	137 (56.6%)*	76 (31.4%)	29 (12.0%)
(d) Adapted physical education placement for each handicapped student	115 (47.5%)	100 (41.3%)*	27 (11.2%)
(e) Assessment of students' abilities with valid and reliable test instruments	143 (59.1%)*	70 (28.9%)	29 (12.0%)
(f) Parents' participation in the development of the individualized education program, including placement of the student in the appropriate physical education class	135 (55.8%)*	79 (32.6%)	28 (11.6%)

\*Correct response

5. P.L. 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:

	<u>Very capable</u>	<u>Somewhat capable</u>	<u>Somewhat incapable</u>	<u>Very incapable</u>	<u>No response</u>
(a) Identifying federal and state legislative requirements associated with individualized education programs.	20 (8.3%)	101(41.7%)	63 (26.0%)	51 (21.1%)	7 (2.9%)
(b) Developing an individualized education program for the handicapped student.	50 (20.7%)	124 (51.2%)	48 (19.8%)	13 (5.4%)	7 (2.9%)
(c) Demonstrating appropriate instructional strategies in the classroom with handicapped students.	48 (19.3%)	128 (52.3%)	48 (19.8%)	11 (4.5%)	7 (2.9%)

(Item continued)

(d) Effectively using commercial and teacher-made instructional materials.	73 (30.2%)	116 (47.9%)	35 (14.5%)	9 (3.7%)	9 (3.7%)
(e) Identifying federal and state legislative requirements associated with the principle of nondiscriminatory evaluation.	22 (9.1%)	95 (39.3%)	83 (34.2%)	35 (14.5%)	7 (2.9%)
(f) Identifying federal and state legislative requirements associated with the principle of mainstreaming.	30 (12.4%)	110 (45.5%)	60 (24.8%)	35 (14.5%)	7 (2.9%)
(g) Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.	30 (12.4%)	110 (45.5%)	64 (26.4%)	30 (12.4%)	8 (3.3%)

6. Do you feel you need more information on each of the following in order to teach physical education to handicapped students more effectively?

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(1) Knowledge of P.L. 94-142	185 (76.4%)	52 (21.5%)	5 (2.1%)
(2) Understanding the nature of specific handicaps	197 (81.4%)	41 (16.9%)	4 (1.7%)
(3) Techniques of motor assessment	182 (75.2%)	56 (23.1%)	4 (1.7%)
(4) Awareness of existing curricular materials	198 (81.8%)	40 (16.5%)	4 (1.7%)
(5) Knowledge of medical terms	165 (68.2%)	71 (29.3%)	6 (2.5%)
(6) Hands-on experience with handicapped students	157 (64.9%)	79 (32.6%)	6 (2.5%)
(7) Procedures for organizing and running adapted P.E. programs	168 (69.4%)	69 (28.5%)	5 (2.1%)
(8) Knowledge of class placement alternatives (i.e., special, adapted, and so on)	179 (94.0%)	57 (23.6%)	6 (2.5%)
(9) Understanding of behavior management techniques	166 (68.6%)	69 (28.5%)	7 (2.9%)
(10) Other _____	12 (5.0%)	0 (0.0%)	230 (95.0%)
(11) Other _____	1 (0.4%)	(0.4%)	240 (99.2%)

7. Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?

	<u>Yes</u>	<u>No</u>	<u>No Response</u>
(1) Knowledge of P.L. 94-142	78 (32.2%)	155 (64.0%)	9 (3.7%)
(2) Understanding the nature of specific handicaps	150 (62.0%)	84 (34.7%)	8 (3.3%)
(3) Techniques of motor assessment	115 (47.5%)	119 (49.2%)	8 (3.3%)
(4) Awareness of existing curricular materials	93 (38.4%)	141 (58.3%)	8 (3.3%)
(5) Knowledge of medical terms	120 (49.6%)	112 (46.3%)	10 (4.1%)
(6) Hands-on experience with handicapped students	142 (58.7%)	92 (38.0%)	8 (3.3%)
(7) Procedures for organizing and running adapted P.E. programs	111 (45.9%)	123 (50.8%)	8 (3.3%)
(8) Knowledge of class placement alternatives (i.e., special, adapted, and so on)	83 (34.3%)	149 (61.6%)	10 (4.1%)
(9) Understanding of behavior management techniques	118 (48.8%)	113 (46.7%)	11 (4.5%)
(10) Other _____	0 (0.0%)	1 (0.4%)	241 (99.6%)

8a. In which areas of motor behavior assessment do you need assistance?

	<u>No</u>	<u>Yes</u>	<u>No response</u>
Fundamental motor skills/patterns	112 (46.3%)	121 (50.0%)	9 (3.7%)
Physical/motor fitness	120 (49.6%)	116 (47.9%)	6 (2.5%)
Sports skills tests (including aquatics and dance)	89 (36.8%)	147 (60.7%)	6 (2.5%)
Perceptual-motor development	64 (26.4%)	170 (70.2%)	8 (3.3%)
Other (specify) _____	1 (0.4%)	1 (0.4%)	240 (99.2%)
Other (specify) _____	1 (0.4%)	0 (0.0%)	241 (99.6%)

8b. Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?

No . . . . .	200 (82.6%)
Yes . . . . .	35 (14.5%)
No response . . . . .	7 (2.9%)

(If yes) How rewarding was the experience for you?

Very rewarding . . . . .	11 (4.5%)
Somewhat rewarding . . . . .	20 (8.3%)
Not very rewarding . . . . .	4 (1.7%)
Very unrewarding . . . . .	0 (0.0%)
No response . . . . .	207 (85.5%)

9. Of the areas listed in questions 6 and 7, which three areas do you feel you have the greatest need for information about at the present time? Please list in order of greatest to least priority. (Only the number of these alternatives need be given)

#1 Knowledge of P.L. 94-142 . . . . .	26.9%
#9 Understanding of behavior management techniques . . . . .	15.3%
#2 Understanding the nature . . . . . of specific handicaps	14.9%
#3 Techniques of motor . . . . . assessment	11.6%

10. What is your feeling toward providing physical education programs for students with handicapping conditions?

Very favorable . . . . .	117 (48.3%)
Favorable . . . . .	71 (29.3%)
Neutral/it depends . . . . .	36 (14.9%)
Unfavorable . . . . .	2 (0.8%)
Very unfavorable . . . . .	3 (1.2%)
No response . . . . .	13 (5.4%)

11. Have you ever taught a student with each of the following conditions?

	<u>No</u>	<u>Yes</u>	<u>No Response</u>
(1) Amputation	145 (55.9%)	84 (34.7%)	13 (5.4%)
(2) Arthritis	81 (33.5%)	151 (62.4%)	10 (4.1%)
(3) Blind/visually handicapped	109 (45.0%)	121 (50.0%)	12 (5.0%)
(4) Cardiac disorder	77 (31.8%)	155 (64.0%)	10 (4.1%)
(5) Cerebral palsy	113 (46.7%)	115 (47.5%)	14 (5.8%)
(6) Deaf/hearing impaired	80 (33.1%)	150 (62.0%)	12 (5.0%)
(7) Severe behavior handicap	66 (27.3%)	165 (68.2%)	11 (4.5%)
(8) Learning disabilities	7 (2.9%)	229 (94.6%)	6 (2.5%)
(9) Mental retardation	85 (35.1%)	145 (60.0%)	12 (5.0%)
(10) Muscular dystrophy	158 (65.3%)	69 (28.5%)	15 (6.2%)
(11) Wheelchair-bound	153 (63.2%)	75 (31.0%)	14 (5.8%)
(12) Multihandicapped	122 (50.4%)	89 (36.8%)	31 (12.8%)
(13) Other (please specify)	2 (0.8%)	20 (8.3%)	220 (90.9%)

12. What is your feeling towards teaching a student with each of the following conditions?

	<u>Very favorable</u>	<u>Favorable</u>	<u>Neutral it depends</u>	<u>Unfavorable</u>	<u>Very unfavorable</u>	<u>Don't know</u>	<u>No response</u>
(1) Amputation	85 (35.1%)	81 (33.5%)	55 (22.7%)	8 (3.2%)	3 (1.2%)	4 (1.7%)	6 (2.5%)
(2) Arthritis	102 (42.1%)	95 (39.3%)	34 (14.0%)	3 (1.2%)	1 (0.4%)	1 (0.4%)	6 (2.5%)
(3) Blind/visually handicapped	65 (26.9%)	77 (31.8%)	65 (26.9%)	15 (6.2%)	7 (2.9%)	5 (2.1%)	8 (3.3%)
(4) Cardiac disorders	68 (28.1%)	76 (31.4%)	67 (27.7%)	11 (4.5%)	8 (3.3%)	4 (1.7%)	8 (3.3%)

(Item continued)

8.2

	<u>Very favorable</u>	<u>Favorable</u>	<u>Neutral it depends</u>	<u>Unfavorable</u>	<u>Very unfavorable</u>	<u>Don't know</u>	<u>No response</u>
(5) Cerebral palsy	59 (28.5%)	74 (30.6%)	51 (21.1%)	22 (9.1%)	6 (2.5%)	11 (4.5%)	9 (3.7%)
(6) Deaf/hearing impaired	88 (36.4%)	84 (34.7%)	44 (18.2%)	9 (3.7%)	3 (1.2)	7 (2.9)	7 (2.9%)
(7) Severe behavior handicap	55 (22.7%)	53 (21.9%)	70 (28.9%)	31 (12.8%)	22 (9.1%)	6 (2.5%)	5 (2.1%)
(8) Learning disabilities	59 (38.0%)	93 (38.4%)	41 (16.9%)	2 (0.8%)	6 (2.5%)	1 (0.4%)	7 (2.9%)
(9) Mental retardation	68 (28.1%)	77 (31.8%)	52 (21.5%)	16 (6.6%)	11 (4.5%)	9 (3.7%)	9 (3.7%)
(10) Muscular dystrophy	63 (26.0%)	63 (26.0%)	69 (28.5%)	18 (7.4%)	7 (2.9%)	13 (5.4%)	9 (3.7%)
(11) Wheelchair-bound	67 (27.7%)	56 (23.1%)	68 (28.1)	19 (7.9%)	12 (5.0%)	12 (5.0%)	8 (3.3%)
(12) Multihandicapped	55 (22.7%)	41 (16.9%)	79 (32.6%)	27 (9.9%)	15 (6.2%)	15 (6.2%)	13 (5.4%)
(13) Other _____	2 (0.8%)	2 (0.8%)	2 (0.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	236 (97.5%)
(14) Other _____	2 (0.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	240 (99.2%)

13. Do you feel a need to expand your knowledge of physical education programming for each of the following conditions in order to teach physical education for such students more effectively? If you feel that you need additional information in order to work more effectively with each of the following types of students, what are the reasons that contribute to your need? CH: ALL THAT APPLY.

- Can't communicate with them
- Dislike being near them

(Item continued)

- Lack of program content
- Fear make condition worse
- Need too much attention
- Lack of specialized training
- Other \_\_\_\_\_

	<u>Yes</u>	<u>No</u>	<u>No Response</u>
(1) Amputation	162 (66.9%)	71 (29.3%)	9 (3.7%)
(2) Arthritis	142 (58.7%)	91 (37.6%)	9 (3.7%)
(3) Blind/visually impaired	174 (71.9%)	59 (24.4%)	9 (3.7%)
(4) Cardiac disorders	161 (66.5%)	72 (29.8%)	9 (3.7%)
(5) Cerebral palsy	177 (73.1%)	56 (23.1%)	9 (3.7%)
(6) Deaf/hearing impaired	153 (63.2%)	79 (32.6%)	10 (4.1%)
(7) Severe behavior handicap	171 (70.7%)	62 (25.6%)	9 (3.7%)
(8) Learning disabilities	113 (46.7%)	119 (49.2%)	10 (4.1%)
(9) Mental retardation	157 (64.9%)	75 (31.0)	10 (4.1%)
(10) Muscular dystrophy	183 (75.6%)	50 (20.7%)	9 (3.7%)
(11) Wheelchair-bound	177 (73.1%)	56 (23.1%)	9 (3.7%)
(12) Multihandicapped	183 (75.6%)	50 (20.7%)	9 (3.7%)
(13) Other (please specify)	3 (1.2%)	3 (1.2%)	236 (97.5%)
(14) Other (please specify)	1 (0.4%)	3 (1.2%)	238 (98.3%)

14. Of the conditions listed above, which have you indicated you need more information on; which three do you need most? Please list in order of greatest to least need. (Only the number of each of these need be given)

- #7 Severe behavior handicap . . . . . 18.2%
- #4 Cardiac disorders . . . . . 11.2%
- #3 Blind/visually impaired . . . . . 9.5%

84x

15. Of the following handicapping conditions, what is their current status in your school and physical education program? (Please circle)

<u>Do not attend the school at which I teach</u>	<u>Attend but do not have P.E. classes</u>	<u>Attend but have separate P.E. classes</u>	<u>Attend and are integrated into regular P.E. classes</u>	<u>No Response</u>
(1) Amputation				
172 (71.1%)	4 (1.7%)	10 (4.1%)	39 (16.1%)	17 (7.0%)
(2) Arthritis				
105 (43.4%)	5 (2.1%)	11 (4.5%)	106 (43.8%)	15 (6.2%)
(3) Blind/visually handicapped				
156 (64.5%)	3 (1.2%)	22 (9.1%)	47 (19.4%)	14 (5.8%)
(4) Cardiac disorders				
87 (35.9%)	18 (7.4%)	14 (5.8%)	104 (43.0%)	19 (7.9%)
(5) Cerebral palsy				
134 (55.4%)	6 (2.5%)	23 (9.5%)	64 (26.4%)	15 (6.2%)
(6) Deaf/hearing impaired				
121 (50.0%)	0 (0.0%)	20 (8.3%)	81 (33.5%)	20 (8.3%)
(7) Severe behavior handicap				
105 (43.4%)	4 (1.7%)	25 (10.3%)	94 (38.8%)	14 (5.8%)
(8) Learning disabilities				
27 (11.2%)	2 (0.8%)	33 (13.6%)	170 (70.2%)	10 (4.1%)
(9) Mental retardation				
124 (51.2%)	3 (1.2%)	25 (10.3%)	69 (28.5%)	21 (8.7%)
(10) Muscular dystrophy				
166 (68.6%)	8 (3.3%)	21 (8.7%)	26 (10.7%)	21 (8.7%)
(11) Wheelchair-bound				
166 (68.6%)	13 (5.4%)	18 (7.4%)	29 (12.0%)	16 (6.6%)
(12) Multihandicapped				
154 (63.6%)	12 (5.0%)	22 (9.1%)	28 (11.6%)	26 (10.7%)

	<u>Do not attend the school at which I teach</u>	<u>Attend but do not have P.E. classes</u>	<u>Attend but have separate P.E. classes</u>	<u>Attend and are integrated into regular P.E. classes</u>	<u>No Response</u>
(13) Other (please specify) _____	2 (0.8%)	1 (0.4%)	2 (0.8%)	9 (3.7%)	228 (94.2%)
(14) Other (please specify) _____	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (1.2%)	239 (98.8%)

16. Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students? Please describe.

Yes . . . . . 101 (41.7%)

What type of encouragement? \_\_\_\_\_  
\_\_\_\_\_

No . . . . . 107 (44.2%)

What encouragement do you need? \_\_\_\_\_  
\_\_\_\_\_

No response . . . . . 34 (14.0%)

17. If handicapped students are placed in your regular physical education classes, what limits them from participating fully in activities with normal students? (Please circle)

	<u>Yes</u>	<u>No</u>	<u>No response</u>
(1) Activity chosen	146 (60.3%)	63 (26.0%)	33 (13.6%)
(2) Total number of students in the class	114 (47.1%)	96 (39.7%)	32 (13.2%)
(3) Functional ability of the individual	179 (74.0%)	36 (14.9%)	27 (11.2%)
(4) Nature of the individual's handicap	183 (75.6%)	35 (14.5%)	24 (9.9%)
(5) Availability of facilities/equipment	136 (56.2%)	80 (33.1%)	26 (10.7%)
(6) Presence of architectural barriers	84 (34.7%)	122 (50.4%)	36 (14.9%)
(7) Other (please specify) _____	13 (5.4%)	1 (0.4%)	228 (94.2%)

18. In your integrated classes, how many of the regular students react to the students with handicaps by being: NOTE: Do not have integrated classes - 31 (12.8%)

	<u>Almost all</u>	<u>Most</u>	<u>About half</u>	<u>Some</u>	<u>Almost none</u>	<u>No response</u>
(a) Hostile	1 (0.4%)	4 (1.7%)	7 (2.9%)	47 (19.4%)	134 (55.4%)	18 (7.4%)
(b) Curious	18 (7.4%)	25 (10.3%)	20 (8.3%)	88 (36.4%)	43 (17.8%)	17 (7.0%)
(c) Neutral	55 (22.7%)	52 (21.5%)	32 (13.2%)	40 (16.5%)	13 (5.4%)	19 (7.9%)
(d) Accommodating	52 (21.5%)	73 (30.2%)	24 (9.9%)	33 (13.6%)	3 (5.4%)	16 (6.6%)
(e) Overly considerate	13 (5.4%)	22 (9.1%)	25 (10.3%)	85 (35.1%)	47 (19.4%)	19 (7.5%)
(f) Ridiculing	1 (0.4%)	8 (3.3%)	7 (2.9%)	72 (29.8%)	104 (43.0%)	19 (7.9%)
(g) Resentment	2 (0.8%)	2 (0.8%)	5 (2.1%)	45 (18.6%)	138 (57.0%)	19 (7.9%)

19. To what extent do you interact with the medical and allied medical (e.g., physicians, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?

Never . . . . .	141 (58.3%)
1-2 times per year . . . . .	65 (26.9%)
3-5 times per year . . . . .	12 (5.0%)
6-9 times per year . . . . .	4 (1.7%)
10 or more times per year . . . . .	12 (5.0%)
No response . . . . .	8 (3.3%)

20. How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?

Very interested . . . . .	27 (11.2%)
Somewhat interested . . . . .	58 (24.0%)
Neutral/mixed . . . . .	95 (39.3%)
Somewhat uninterested . . . . .	30 (12.4%)
Very uninterested . . . . .	26 (10.7%)
No response . . . . .	6 (2.5%)

21. As an undergraduate, did you have any specialized instruction in teaching physical education to handicapped students?

None . . . . .	45 (18.6%)
Part of a course . . . . .	24 (9.9%)
One course . . . . .	102 (42.1)
2-4 courses . . . . .	54 (22.3%)
4 or more courses . . . . .	9 (3.7%)
No response . . . . .	8 (3.3%)

22. What was your age on your last birthday?

N = 232

Mean = 36.0 years

Median = 37.2 years

Range = 23 to 64 years

23. What is your sex?

Male . . . . .	115 (47.5%)
Female . . . . .	122 (50.4%)
No response . . . . .	5 (2.1%)

24. For how many years have you been teaching?

N = 236

Mean = 14.3 years

Median = 14.2 years

Range = 1 to 33 years

25. What is the approximate total enrollment of the school(s) at which you teach?

0-200 . . . . .	5 (2.1%)
200-500 . . . . .	64 (26.4%)
500-1000 . . . . .	87 (35.9%)
1000-1500 . . . . .	52 (21.5)
1500-2000 . . . . .	17 (7.0%)
2000+ . . . . .	9 (3.7%)
No response . . . . .	8 (3.3%)

26. Would you describe the school(s) at which you teach as:

Urban . . . . .	194 (80.2%)
Suburban . . . . .	21 (8.7%)
Rural . . . . .	22 (9.1%)
No response . . . . .	5 (2.1%)