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ABSTRACT

The purpose of this study was to determine how teachers use group I.Q. test scores for planning instruction. Teachers were surveyed on: 1) use of I.Q. tests, 2) reasons for nonuse of I.Q. tests, and 3) instructional strategies based on test results. The widest use of test scores was in parent teacher conferences. The major reasons for not administering the test were the preference for personally developed tests and the possibility of test bias in the standardized test. Little enthusiasm was shown for using test scores in instructional development. The thirty percent of the teachers who did consider test scores in instructional planning used 21 different methods. (CJ)

How Teachers Use the Group IQ Test Scores

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Running head: Teachers and Test Scores

Abstract

The purpose of this study was to determine how teachers use group I.Q. test scores for planning instruction. Ninety elementary school teachers, grades 2 through 6, in two school districts in Ohio were interviewed. The results indicated little enthusiasm for the use of IQ test scores in planning instruction. The modal response category, in both districts, was the use of IQ scores for discussion in parent conferences. Seventy percent of all 90. teachers did not mention any use of IQ scores planning instructional strategies. The responses of the other 30% of the teachers were varied and classified into 21 different categories.

How Teachers Use the Group IQ Test Scores

Group IQ tests are commonly employed in schools. The objectives of such testing are generally claimed to determine students' readiness and to plan individualized instruction (Klausemeier & Goodwin, 1975). It is not known, however, what the IQ test score does tell a teacher in terms of students' readiness or for planning group or individual instructional strategies. Glaser (1972) had also noted that the concept of IQ and IQ testing has not contributed to the development of instructional strategies. The traditional recommendation of ability grouping has come under much attack recently for segregating students along racial and socio-economic lines (see Esposito, 1973). Goslin (1967) found in a national survey that a relatively small proportion of teachers made use of standardized tests in grading students and those who do so, do so only occasionally. He also noted that a large number of teachers had never used intelligence data for student advisement. Only 11 percent of the public secondary school teachers reported frequent use of IQ for student advisement. However, Goslin did not report any data as to how these 11 percent actually use the intelligence data for student advisement, nor are there many ideas in educational and psychological literature on how to use the group IQ test scores for helping students. The primary purpose of the present survey was to determine, on an extremely modest scale, the current practices of teachers with respect to the use of group IQ test scores in planning for instruction.

Method

Sample. Elementary school teachers, grades 2 through 6, from two

school districts in Ohio participated in the study. For convenience, the school districts will be referred to as districts A and B. The study was first conducted in the district A and then extended to the district B. Forty teachers from 9 schools participated in district A and 50 teachers from 17 schools in district B participated in the study. The 50 teachers in the district B were selected randomly from the entire list of 191 teachers in all of the 17 schools. As six of the teachers obtained in the original sample could not be interviewed, they were replaced randomly by six other teachers. Participation in the study was voluntary. Teachers included in the study had teaching experience that ranged from 2-28 years.

Procedure. Teachers were interviewed individually. The two investigators conducted the interviews independently in the two districts. Interviews were conducted personally in school district A, but by telephone in school district B, due to the distances involved in travelling. Teachers were told the purpose of the study was to find out how they actually used the group IQ test scores and some aspects related to it. In school district A, teachers were also told that the study was being undertaken as a part of the surveyor's graduate studies. In school district B, teachers were simply told that the purpose was to catalogue the various ways teachers use the group IQ test scores. Additionally, all teachers were assured that the data were being gathered for research purposes only and have nothing to do with the school's administration. The interview was structured around four open-ended questions: (1) Have they (teachers) administered the California Mental Maturity Test (since the school districts use this test)? (2) How did they use the results of the test and to give examples. Following an initial response, they were directed to mention any specific instructional strategies they

developed or used for students, taking into consideration the IQ test scores. (3) If they didn't use the IQ test scores - why not?, and (4) How much time in a year did they spend in examining the test scores?

Results

In response to the first question, whether they had administered the California Test, 85% of the teachers in district A and 38% in district B, stated that they had personally administered the test. The second question, how they used the test scores, brought varied responses. Table 1 summarizes the responses and their frequencies.

Table 1 about here

Table 1 shows that 7.5% of the teachers in district A and 48% in district B (30% of all 90 teachers) stated that they made little or no use of the group IQ tests. Their reasons for not using the IQ test scores are summarized in table 2. The two most important reasons given

Table 2 about here

were "tests are unfair" (70% of 27 teachers, in both districts, who indicated little use of the tests) and "that they preferred to make up their own test or to go by what happens in the class" (92% of 27 teachers). The tests were considered unfair in view of problems with validity, reliability, racial and social class bias, testing under inappropriate conditions (freezing temperatures in the classroom) and testwiseness of some students over others.

The modal response in table 1, concerning the use of the group IQ test was the "use of the test in parent conferences" (62.5% of 40

teachers in district A and 28% of 50 teachers in district B, making up a total of 43% of all 90 teachers). The second most frequent response was "to know a student's potential and/or determine ability-motivation discrepancy" (55% teachers in district A and 20% teachers in district B, making up a total of 36% of all teachers). Another frequent response was that of the use of the test scores to "refer the student" to the school psychologist, social worker, or ask for further testing in cases of very high or very low scorers (32.5% teachers in district A and 18% teachers in district B, making up a total of 24.4% of all 90 teachers). Concerning the use of the test scores in planning instruction, 52.5% of the teachers in district A and 18% of teachers in district B (making up a total of 30% of all 90 teachers) stated that they did use the test scores for planning instruction. The varied responses, of 21 teachers in district A and 9 teachers in district B, with regard to the instructional strategies are summarized (21 categories) and tabulated in table 3.

Table 3 about here

Table 3 shows that teachers are likely to treat high IQ and low IQ students differently, for example, 46.7% of 30 teachers felt that they would provide more options/work and assign challenging work to high IQ students, or have them help the teacher to preview films or teach other children (10% of 30 teachers). About 17% of the 30 teachers would use more concrete examples, or a step by step approach with low IQ students. This appears to be based on the reasoning that low IQ scorers reflect difficulty with reasoning. The most frequent general response was to use the test information to plan groups (56.7%

of 30 teachers).

In regards to the last question, "the amount of time spent examining the test scores", in school district A, 33 teachers indicated that they spend less than 2 hours during the entire year, 4 teachers spend between 2-5 hours and 1 teacher spends between 6-10 hours. This datum was not recorded for one teacher in school district A. In school district B, 40 teachers indicated times less than 2 hours, 7 teachers between 2-5 hours, 2 between 6-10 hours and 1 indicated approximately 3 months in a year.

Discussion

The survey, although limited in scope (especially in terms of the generalizability of the results to other school systems) revealed some interesting aspects related to the uses of the group IQ tests. The overall impression, we obtained from the present study, was that there existed a general lack of enthusiasm for the group IQ test scores in both the school districts. It is interesting that only 30% of all 90 teachers interviewed made little or no use of the group IQ tests. This is further supported by the observation that 81.1% of all 90 teachers indicated that they spent less than 2 hours examining the test scores. The most important reason for their lack of enthusiasm appears to be related to their lack of trust in the test scores. Several teachers expressed concern about their lack of validity and reliability in the light of racial and social class bias, improper testing conditions and unrelatedness to the school curriculum. Interestingly, an overwhelming number (92.5% of the 27 teachers who indicated little or

no use of the test scores) of teachers felt their own observation and evaluation is better or more helpful than the IQ test scores in devising strategies for instruction. Many of these teachers felt similarly about some of the achievement tests employed in the schools (e.g. Comprehensive Test of Basic Skills). A survey with respect to the uses of the achievement tests will be useful. Some teachers (22.2% of 27 teachers) were also concerned that their examination of the scores will affect their attitudes towards particular students and hence, they avoided the test scores.

The use of the test scores in "parent conferences" by a number of teachers, in both school districts, was quite unexpected. A note of caution is necessary in the interpretation of these data, in the sense that although a number of teachers did not mention the use of the test scores in parent conferences, there is no implication that they do not use the test scores for discussion in parent conferences. They may, but the surveyor's question did not trigger the response. It is also likely that many teachers did not consider it as a worthwhile response. Discussion with respect to the IQ test scores in parent conferences, according to one teacher was to "share with parents where the kids are", another teacher stated "discuss ability and performance", a third teacher indicated "to clear confusion for children that appear one way and are not (appear slow and are not and vice-versa)", and a fourth teacher stated "I use it only for problem children and/or problem parents". It is not entirely clear from the survey as to what purposes such discussion about IQ test scores serve in parent conferences in terms of what teachers, parents and children gain from it.

Another finding of interest was the response of 35.5% of all 90 teachers (55% in district A, and 20% in district B) who stated that the IQ scores are helpful in "knowing a student's potential and/or determining ability-motivation discrepancy". It is interesting to note here Goslin's (1967) finding that 47.1% of the elementary school teachers (national sample) considered intelligence and scholastic aptitude scores as most accurate measures of a student's intellectual ability. Goslin noted that generally the acceptance of IQ tests as accurate measures of intellectual potential by secondary and elementary teachers was "striking" (p. 52). Goslin had concluded, from his survey, that "teachers and students may be using different sources of information in the formation of ability estimates" (p. 54). The former using the standardized test scores while the latter relying primarily on grades. The situation may be quite similar with the samples in the present study.

Of considerable interest to the present study were the responses of the teachers to the question "how do they use the IQ test scores for planning instruction". It is important to note that while 47.5% of teachers in school district A mentioned using instructional strategies based on information from the group IQ test scores, the response from the school district B was far less enthusiastic; only 18% of the teachers in district B mentioned any instructional strategies. The responses of the teachers shown in table 3 were quite varied. The various responses suggest that the high IQ and the low IQ students are treated differently by the teachers. It appears that the high IQ students are more likely than average or low IQ students to receive challenging work. Whether the practices mentioned like, "assigning chal-

ranging work to high IQ students" or "giving fewer assignments to low IQ students" or "using the high IQ students to help the teacher" are appropriate or not may be debatable. In fact, almost all of the strategies mentioned in table 3 appear worthy of empirical evaluation as to how they ultimately benefit the students. Perhaps individual long-term case studies of teachers who do use IQ test scores for planning instruction may yield valuable data. The case studies may include actual examination of materials used for different IQ groups and their validity, the criteria and assumptions behind grouping, the flexibility of grouping (duration and/or inter-group mobility), and of course, the effect of all such activities on affective and cognitive gains shown by the students.

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Footnotes

The authors are listed in an alphabetical order. This is a revised and extended version of the paper presented at the meeting of the American Psychological Association, Washington, D.C., September, 1976.

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Table 1

Distribution of Responses to the Question "How Do You Group IQ Tests"

Responses	Numbers of Teachers: District A (n = 40)	District B (n = 50)	Total (n = 90)
1. No use at all	3	11	14
2. Make little use of it	0	13	13
3. For parent conferences	25	14	39
4. To know a student's potential and/or determine ability-motivation discrepancy.	22	10	32
5. To determine whether something is wrong with my teaching or the students are not motivated.	0	1	1
6. Compare children in the classroom with other children in the U.S.	0	3	3
7. To check progress from year to year	0	1	1
8. For referral purposes	13	9	22
9. To plan instruction	21	9	30

Table 2

Reasons for Not Using the Results of the Group IQ Tests

Reasons	Numbers of Teachers		
	District A (n = 3)	District B (n = 24)	Total (n = 27)
1. To avoid prejudice or labelling	0	6	6
2. Tests are unfair (invalid; unreliable; based on reading; racial/social class bias; improper testing conditions-insufficient time, freezing temperatures in classroom; some students more testwise than others; unrelated to school work)	1	18	19
3. Tests difficult to interpret (Don't know the time value of the score, too many factors affect IQ scores; test too general to be useful)	1	5	6
4. Reporting methods vary from year to year (Stanines, PR, etc.) which makes it confusing	0	2	2
5. There is too much testing in schools	0	3	3
6. Children are disinteresting in taking tests	0	6	6
7. Prefer personally made diagnostic tests and/or to go by what happens in the classroom	1	24	25
8. Too much paper work	0	1	1

Table 3

Instructional Strategies Mentioned by Teachers

Instructional Strategy	Numbers of Teachers: District A (n = 21)	District B (n = 9)	Total (n = 30)
For High IQ Students (HIS)			
1. Stress intellectual/written/ challenging work	8	6	14
2. Give more options/extra work	2	4	6
3. Expect better work	6	2	8
4. Have them help teacher (pre- view films, teach small groups, play flash card games with low IQ students)	3	0	3
For HIS and Low Performers			
5. Help improve work habits (set time limits for completing assignments)	1	1	2
6. Provide extra attention, indi- vidual help, e.g. after school hours, ask parents or an older brother read everynight	1	4	5
7. Shared test results with HIS poor reader which helped her gain confidence	1	0	1
For Low IQ Students (LIS)			
8. Assign less difficult materials	5	0	5
9. Assign fewer assignments	2	0	2
10. Use tutors	4	1	5
11. Use concrete examples, step by step approach (as low IQ scores re- flect difficulty with reasoning), encourage verbalization, greater repetition, spread assignments over time, make it more entertaining (e.g. use TV), give extra attention	3	2	5
12. Place students in special remedial (summer) reading programs	0	6	6
13. Use smaller groups	1	0	1

Continued

Table 3 Continued

Instructional Strategy	Numbers of Teachers: District A (n = 21)	District B (n = 9)	Total (n = 30)
Other (General)			
14. Use as a guideline in determining what to teach	0	2	2
15. Have conference with students to plan goals	1	0	1
16. Use test information to plan groups	8	9	17
17. Use regular work for average students	4	0	4
18. For LIS and average students work with parents to develop homework contracts	1	3	4
19. Use more group instruction for average students but individualize for HIS and LIS	1	0	1
20. For hetergeneous grouping - pair weak students with strong students	1	0	1
21. Gear instruction to LIS	0	1	1