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A More Stringent Criterion for Mental Disability Verification: Implications for Iowa and the Green Valley Area Education Agency

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**A More Stringent Criterion for Mental Disability Verification:
Implications for Iowa and the Green Valley Area
Education Agency**

**An Ed.S. Field Project
Presented to the
Department of Psychology
and the
Faculty of the Graduate College
University of Nebraska
In Partial Fulfillment
of the Requirements for the Degree
Educational Specialist
University of Nebraska at Omaha**

by

Tim R. Maher

July 1995

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ED.S. FIELD PROJECT ACCEPTANCE

Acceptance for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree (Educational Specialist in
School Psychology), University of Nebraska at Omaha.

Committee

<u>Norman H. Hamm</u>	<u>Psychology</u>
Name	Department/School
<u>James M. Thornes</u>	<u>Psychology</u>
<u>J. C. A.</u>	<u>Special Education</u>
_____	_____
_____	_____

Chairperson Norman H. Hamm

Date 7/10/95

Abstract

This applied research project focused on the following: 1. The rationale for Iowa's I.Q. criterion for a M.D. diagnosis. 2. The possible ramifications of a more restrictive M.D. criterion. 3. Qualitative differences in educational services students are likely to receive in a special education program verses a regular education program. Results supported Iowa's higher criterion in that students two standard deviations below the Iowa mean scored one-half of a standard deviation higher than the national norm for students at the same level. Financial ramifications of a more restrictive M.D. criterion along with the percent of M.D. students that would be excluded if the criterion changed varied depending on how restrictive the criterion became. Qualitative differences in the feasibility of implementing adaptations to meet the needs of M.D. students indicated that special education teachers were significantly more likely than regular education teachers to view a particular adaptation as feasible on 15 of 30 adaptations.

**A More Stringent Criterion for Mental Disability Verification:
Implications for Iowa and the Green Valley Area
Education Agency**

With the passage of Public Law 94-142 in 1975, a free and appropriate education was mandated for all school age handicapped children. However, what constitutes a handicap, also referred to as a disability, was not specifically defined by the Federal government. Each state was empowered to enact its own regulations and standards for special education programs. These "Rules for Special Education" determine which students qualify for special services and, subsequently, the amount of federal funding a state receives. This applied research project focused on the rationale for Iowa's intelligence quotient (I.Q.) criterion for a mental disability (M.D.) diagnosis, the possible ramifications of a more restrictive M.D. criterion on education programs, and qualitative differences in educational services students are likely to receive in a special education program verses a regular education program.

Among the fifty states the criteria used to diagnose a mental disability differ greatly. Surveys done by Huberty, Koller, and Ten Brink (1980) and Patrick and Reschly (1982) indicated that the IQ criteria for different states vary from standard scores of 69 to 85. One would reason, based on the normal curve, that states with a maximum M.D. criterion in the

80's would have more students receiving services than those states with an IQ maximum in the 70's. Paradoxically, the study done by Patrick and Reschly (1982) indicated that the maximum IQ criterion of a state was inversely related to prevalence of individuals classified as M.D. This apparent contradiction would suggest that states with a higher cutoff and a lower prevalence rate of mentally disabled students have a higher mean IQ. Iowa has a cutoff of 85 which is the highest of any state (Patrick & Reschly, 1982).

The study that serves as the primary rationale for Iowa's higher criterion was the study done by Reschly, Ross-Reynolds, and Grimes (1981). Results of this research indicated that the mean full scale IQ of Iowa students is one-half of a standard deviation higher than the mean IQ of the national norm. In the Reschly et al. study (1981) the WISC-R was administered to 100 white and 100 black third grade students. These individuals were randomly selected from Area Educational Agencies (AEA) throughout Iowa in accordance with the proportion of students that each AEA represented in Iowa's total student population by race. For example, if AEA 1 had nine percent of the white population, then nine students would be selected from this AEA. The Reschly et al. study (1981) showed that Iowa students had a mean WISC-R score 6 to 8 points higher than the national norm for both white and black

students within their respective samples. This is slightly less than the WISC-R means that were obtained during the normalization procedure that showed Iowa students were one-half to two-thirds of a standard deviation higher than the population mean (Reschly, Ross-Reynolds, & Grimes 1981).

Additional evidence of greater achievement comes from the Iowa Tests of Basic Skills (ITBS). In reviewing the results of the composite scores of average students, it was discovered that a student with a percentile score of 50 in Iowa is at the 70th percentile nationally. Some variations of these percentile differences existed depending on the grade of the child and where the percentile ranks were located. Indeed, Iowa students achieve superior scores on the ITBS.

If we accept that the mean IQ of Iowa students is two-thirds of a standard deviation above that of the national norm, we can hypothesize based on assumptions of the normal curve that an individual with an IQ of 85 would be functioning at the 16th percentile relative to all U.S. students, but at the 5th percentile relative to Iowa students. Thus, if IQ was the only criterion for qualifying a student with a mental disability for special education, we would expect five percent of Iowa students to be receiving services. However, since significant adaptive behavior deficiencies are also required for qualification, it is probable that the number of students being

served due to a mental disability would be less than five percent.

The research done by Patrick and Reschly (1982) found that 1.91% of Iowa students were identified as having a mental disability, whereas nationally 1.63% of students were identified. This is still substantially less than 5% expected based on the normal curve with the mean IQ of Iowa students at 110.

If we accept the findings that the mean IQ of Iowa students is substantially higher than the national mean, then it would seem plausible to accept the following contention. An individual with an IQ of 85 in Iowa would have just as much difficulty keeping up, relative to his or her peers, as someone with an IQ of 75 in a state where the mean IQ is near the population average of 100. Thus, we have the primary basis for Iowa's higher criterion.

The rationale for continued use of a minus one standard deviation IQ criterion for qualifying a student as M.D. appears to be supported by the preceding reasoning. Despite the strong rationale for maintaining the current criterion, a summary of Proposed Rules for Special Education provided by the Iowa Department of Education (1994) has indicated that the criterion may be lowered to minus two standard deviations. This criterion would be consistent with recommendations made

by the American Association on Mental Deficiency (AAMD) Manual on Terminology and Classification (Grossman, 1983) and with minimum standards suggested by the Federal Government.

Ramifications of a lowered criterion may be substantial for special education teachers, regular education teachers, and students. As of December 1, 1993, Iowa's Individuals with Disabilities Act, Part B (pub. 3-1-94) indicated 10,858 students between the ages of 0 and 22 in the state of Iowa received special education services due to a mild or moderate mental disability. This accounted for 1.83% of the total students enrolled. Individuals with severe and profound disabilities accounted for .10%. Another .93% of students are classified as non-categorical. It is likely that some of these students have attributes that would qualify them as M.D. in an AEA that used that terminology. A criterion change to 70 would eliminate services for a substantial number of the mildly mentally disabled students currently served that have an IQ between 70 and 85.

If a large number of previously identified students no longer received special education services, there would be a substantial decrease in the amount of funding available for special education programs. In Iowa the amount of funding a school receives for a student is based on a weighting system.

Students receive a weighting based on the amount of time they receive special education services during a school day.

Students in the regular classroom have a weighting of 1. The one indicates the average amount of money that the school spends on students. A typical school in GVAEA spent 3,500 dollars per student per year.

Currently, students who receive support for less than two hours are in the resource teaching program. Their weighting coefficient would be 1.7. The .7 is provided by the government and goes to special education. To educate this student the school is provided an additional 2,450 dollars. Students who are in special education for more than two hours, but still take at least one academic class in the regular education setting, also receive a weighting of 1.7, but the 1 goes to special education. Students who take all academic classes via special education get a weighting of 2.4. The government provides an additional 4,900 dollars to educate these students. Students who are totally educated by special education programs receive a weighting of 3.6. The government provides 9,100 dollars in addition to the 3,500 provided by the schools for the education of these individuals.

It is likely that the reduction of services would have a major impact on students, both with and without a disability. If students with substantially lower abilities were integrated

into the regular classroom with inadequate support, they would likely be denied the opportunity to improve their scholastic achievement and other deficits. One would presume that this occurs when the teacher-to-student ratio is decreased and a program is provided to meet the students individual needs. One would also expect that regular education teachers would have difficulties appropriately serving these students. Not only would these students be denied opportunities, but it is likely that the progress of other students may decline. Teachers would be forced to modify curriculum requirements and would likely be forced to spend a disproportionate amount of time aiding students with lower abilities at the expense of students with marginal or high abilities.

A study completed by Schumm and Vaughn (1991) compared regular education teachers' perceptions of the desirability and feasibility of adaptations for mainstreamed students. Schumm and Vaughn utilized the Adaptation Evaluation Instrument (AEI) that they developed. Results indicated significant differences between mean desirability and feasibility for each of the 30 adaptations. All adaptations were viewed as more desirable than feasible. Few differences were discovered when teachers were compared by grade grouping.

The present study collected data to answer three questions relevant to the local Green Valley Area Education

Agency (GVAEA) 14 and education in Iowa. These questions are related to issues of whether or not a change in criterion for identifying students with a mental disability would be appropriate and educationally sound.

Group 1 questions. Is there support for the contention that Iowa students' ability is one-half of a standard deviation higher than that of the national average? How do Iowa students two standard deviations below the Iowa mean compare with students two standard deviations below the national mean?

Group 2 questions. What is the percentage of individuals in GVAEA 14 who are receiving services due to a mental disability? What proportion of special education services are provided to students identified as having a mental disability? What percentage of M.D. students would be excluded if the IQ needed for qualification as a student with a mental disability dropped by increments of five standard score points? What is the possible financial impact of a more stringent criterion?

Group 3 questions. What qualitative differences are there in the services a student is likely to receive when educated in the

regular education program versus a special education program in terms of the adaptations teachers are willing to make?

Group 1 questions

Method

Participants. All third grade students who completed the Iowa Test of Basic Skills (ITBS) during the 1993-94 school year were included in the calculations. Third grade students were selected because the Reschly et al. study (1981) selected third graders for their study. Their study provides the primary rationale for Iowa's higher M.D. criterion.

The overall sample consisted of three groups: a) students nationally, b) 26,881 Iowa students, and c) a sample of 751 students from the GVAEA 14.

Procedure. Information was obtained from the Iowa Basic Skills Testing Program with the help of assistant director, Dave Frisbie. Normal curve equivalents (NCE) and standard deviations were obtained for the national sample, as well as for Iowa students, and for the sample of GVAEA 14 students.

Results

Nationally, students had a NCE of 50 and a standard deviation of 21.06. In Iowa, the NCE equaled 57.3 with a standard deviation of 19.80. The sample of 751 GVAEA students had a NCE of 56.2 and a standard deviation of 20.70.

This shows Iowa students scored a third of a standard deviation above the national mean with GVAEA 14 students scoring slightly below the mean of Iowa students.

However, since students identified as mentally disabled score substantially lower than average students on both ability and achievement tests, a comparison was undertaken using standard scores two standard deviations below the mean for Iowa students and the national mean of students. Nationally, a student two standard deviations below the mean would have a NCE score of 7.9, whereas an Iowa student who scored two standard deviations below the Iowa mean would have an NCE score of 17.7 based on national norms. A GVAEA student two standard deviations below the GVAEA mean would have an Iowa NCE score of 13.7 and a national NCE score of 14.1.

Discussion.

Question 1 dealt with examining the previous findings (Reschly et al. 1981) that showed that Iowa students had ability scores one-half of a standard deviation higher than the national norm. Those results became the primary rationale for Iowa's higher M.D. criterion. Results of the Iowa Test of Basic Skills (ITBS) would suggest that Iowa students' mean ability is about a one-third of a standard deviation higher than that of the national mean, rather than the one-half of a standard

deviation difference that was expected. The GVAEA sample was slightly less than the Iowa norm.

A difference that should be noted is that the Reschly et al. (1981) study compared the results of ability tests which measure intelligence, instead of the scores on achievement tests utilized in the present study. However, ability and achievement measures are generally highly correlated. Jensen (1979) wrote that at any one point in time a good achievement test will correlate with an I.Q. test at .70 to .80. He states that by using repeated measures the correlation can increase to .90.

Because a change in criterion would impact students whose ability is relatively low, the second question dealt with comparing Iowa students two standard deviations below the Iowa mean on the ITBS with students two standard deviations below the national mean. The Iowa students two standard deviations below the Iowa mean had a NCE score one-half of a standard deviation greater than students who represented the national norm. This comparison provides a stronger rationale for keeping Iowa's criterion higher than other states than the research completed by Reschly et al. (1981) that showed Iowa students had ability one-half of a standard deviation greater than the national mean. To a large extent the difference at the mean is irrelevant since the M.D. criterion has to do with students who score substantially below the mean. The greater

difference in standard scores at the two standard deviation level than at the mean level was due to the fact that the variance was less for Iowa students than the national sample.

Group 2 questions

Method

Participants. Records of students in kindergarten through 12th grade that were receiving special education in GVAEA 14 due to a mental disability were searched. Information was recorded from files that included a measure of ability (IQ). Approximately 40 of the 306 students receiving special education services due to an identified mental disability had files that did not include an ability measure, or they had files that were unavailable.

Materials. Information collected included ability scores and weighting coefficients (students weighting) which are determined by the amount of involvement a student has in special education. The entire data sheet is included in Appendix A.

Procedure. The percentage of MD students was calculated by dividing MD students by total students in GVAEA. Next, the percentage of MD students receiving special education services was calculated by dividing MD students by the total number of students receiving special education services due to a learning,

behavior, or mental disability and multiplying by 100. The number of students with IQ's from 81 to 85, 76 to 80, 71 to 75, 66 to 70, 56 to 60, 51 to 55, and 50 and below were tallied by reviewing student records.

Results

At the beginning of the 1994-95 school year there were approximately 12,971 students; of these, 333 met the criterion for special education services due to a mental disability. All but 27 of the students receiving services were of school age.

The percentage of students identified as having a mental disability was equal to 2.36 percent of the total children in GVAEA 14 schools. Of the total special education population in GVAEA 14, 23.26 percent received services due to a mental disability.

Table 1 provides the following information for each IQ group: the percentile of the total MD students, cumulative percentile, average student weighting, average funds expended, average federal government funds, percent of federal funds for MD students, and cumulative percent of federal funds.

Discussion.

Only 2.36 percent of students in GVAEA 14 received special education services due to a mental disability. This is dramatically less than the 16.67 percent which would have

Table 1

Breakdown of M.D. students by I.Q. increments, and financial impact per I.Q. increment.

I.Q.	Actual N	% of M.D. students	Cumulative Percent	Average Weighting	Average Funds expended	Fed. Govern. Funds, Ave.	Percent of Federal Funds Provided	Cumulative Percent
No dis.	0	0	0	1.00	3500	0	0	0
85 to 81	50	15.77	15.77	1.75	6125	2625	11.94	11.94
80 to 76	70	21.92	37.69	1.77	6195	2695	17.04	28.98
75 to 71	67	20.77	58.46	1.83	6405	2905	17.40	46.38
70 to 66	42	13.08	71.54	1.86	6510	3010	11.35	57.73
65 to 61	28	8.85	80.39	1.91	6685	3185	8.13	65.86
60 to 56	22	6.92	87.31	2.14	7490	3990	7.96	73.82
55 to 51	15	4.62	91.93	2.47	8645	5145	6.85	80.67
50 or less	26	8.08	100.00	3.37	11795	8295	19.32	100.00

been expected if Iowa students' mean ability was equal to the national mean. This continues to support the contention that the mean IQ of Iowa students is greater than the mean IQ of students nationally.

As Table 1 indicates, a substantial number of students would no longer receive special education services if the IQ criterion became more stringent. Inspection of Table 1 indicates the cumulative percent of M.D. students that would be excluded if the I.Q. criterion became more restrictive. If the IQ criterion dropped from 85 to 80, 51 students would no longer be eligible for special education services, whereas a drop of 85 to 70 would exclude 187 students. If the I.Q. criterion changed to 70, schools in GVAEA 14 would lose out on over a half a million dollars worth of federal funds, and an estimated 21 of the 103 special education teachers in GVAEA 14 would likely lose their jobs! The estimated decrease in jobs is based on an average salary of 25,000 dollars per year. This salary level is strictly an estimate.

Those students who no longer received special education assistance would likely miss out on essential instruction that classrooms with smaller student-teacher ratios can provide. Such high quality instruction could be the difference between many of these individuals becoming contributing members of society, or high school drop outs that are a burden to society

for the rest of their lives. Unfortunately, there is little empirical evidence to support the notion that special education improves students long term quality of life. One possible reason for the lack of research on the long term efficacy of special education is that the removal of services would be very difficult to justify ethically if the assumption is accepted that special education services are beneficial.

Group 3 questions

Method

Participants. A randomly selected sample of 100 regular education teachers and all (103) K-12 special education teachers in the 22 school districts of GVAEA 14 were invited to respond to a questionnaire. Hence, two sets of questionnaire data were gathered, one from special education teachers and one from regular education teachers.

Materials. A questionnaire developed by Schumm and Vaughn (1991) and a portion of a questionnaire devised by Whinnery, Fuchs, and Fuchs (1991) was distributed to regular and special education teachers to compare the likelihood that students identified as MD would have their needs met in each setting. Teachers responded to questions that required a desirability and feasibility rating on 30 classroom adaptations. Desirability was addressed because of the need to show that

the adaptations were viewed as potentially useful, and feasibility was addressed to get information regarding the likelihood that these adaptations would be implemented. A Likert type scale was used to assess desirability and feasibility. Ratings varied from 1 to 7 with a score of 7 indicating the adaptation was highly desirable or feasible and a score of 1 indicating the adaptation was not very desirable or feasible. Three other questions were asked to assess how confident, and willing teachers are or would be to serve M.D. students, and to get an indication of their views of greater integration of MD students into the regular classroom. A copy of the complete questionnaire is provided in appendix B.

Relative to data analysis, mean desirability and feasibility ratings were calculated for special and regular education teachers. The Wilcoxon matched-pairs signed-ranks test was used to make comparisons between means of desirability and feasibility ratings for both groups. Since, it was hypothesized based on previous research and reasoning that desirability rating would be greater than feasibility ratings, a one-tailed test of significance was used.

The Mann-Whitney U test was used to compare means of regular and special education teachers on both feasibility and desirability. Since, it was hypothesized that the feasibility of adaptations would be higher in the special education setting

rather than the regular education setting, a one-tailed analysis was used to test for significance.

Results

Thirty-two regular education teachers (32%) and fifty-four special education teachers (52%) completed and returned the questionnaire. Table 2 provides the feasibility and desirability means for both regular and special education teachers. The Wilcoxon matched pairs signed-ranks test performed on each question indicated a significant difference between desirability and feasibility for special and regular education teachers at the .01 level, with desirability in all cases being greater than feasibility.

Results of the Mann-Whitney U test indicated no significant differences between desirability of adaptations when special education and regular education teachers were compared. However, when the feasibility of implementing adaptations was compared, 15 of the 30 adaptations had significant differences at the .05 level, and 4 of those were significant at the .01 level. One would have expected between one and two questions to be significant at the .05 level due to type 1 error. Table 3 provides the means for each question group as well as indicating which questions had significant differences. All adaptations that had a significant difference

were viewed as more feasible by special education teachers than by regular education teachers.

Questions A and B indicated that special education teachers felt significantly more competent and willing to teach M.D. students ($p < .01$).

Discussion

The results of the questionnaire completed by both regular and special education teachers were consistent with those obtained by Schumm and Vaughn (1991). Specifically, in both studies, teachers indicated that making adaptations to serve students with special needs is highly desirable, but often not feasible. The present study differed from the original study in that responses of regular and special education teachers were compared. As shown in tables 2 and 3, all 30 adaptations had desirability means between 6 and 7 for both special and regular education teachers. The absolute value of these ratings indicate that these adaptations were viewed as highly desirable.

Differences between services that can be provided in the special education setting and the regular education setting are crucial for assessing the consequences of potentially 187 students in GVAEA 14 and an estimated 6500 students in the state of Iowa moving to a program where their entire educational program would be in the regular classroom setting.

Table 2

Mean desirability and feasibility for regular and special education teachers.

Results	Reg. Ed. Teachers		Special Ed. Teachers	
	Desirability mean	Feasibility mean	Desirability mean	Feasibility mean
1. Respect M.D. students as individuals with differences	6.81	5.38	6.87	5.93
2. Establish a routine appropriate for M.D. students	6.84	5.66	6.78	5.93
3. Adapt classroom management strategies	6.31	4.47	6.50	5.26
4. Provide reinforcement and encouragement	6.84	6.00	6.78	6.15
5. Establish personal relationships with M.D. students	6.50	5.38	6.67	6.11
6. Help M.D. students deal with feelings	6.31	4.47	6.54	5.22
7. Communicate with M.D. students	6.47	4.03	6.44	4.91
8. Sp.Ed. and reg. ed. teachers communicate often	6.69	5.34	6.80	5.78
9. Communicate with parents of M.D. students	6.72	4.63	6.61	5.15
10. Establish expectations for M.D. students	6.72	5.88	6.69	5.89
11. Adapt long range plans	6.31	4.69	6.53	5.53
12. Adapt daily plans	6.44	4.56	6.50	5.56
13. Plan assignments and activities to allow success	6.47	4.53	6.77	5.68

Changes in Criterion

Table 2 continues on the next page.

14. Teach learning strategies	6.34	4.19	6.46	4.80
15. Adjust physical arrangement of room	6.72	5.48	6.63	6.02
16. Adapt classroom materials	6.50	3.75	6.69	4.72
17. Use alternative materials	6.22	4.06	6.44	5.09
18. Use computers	6.47	4.25	6.43	5.09
19. Monitor the M.D. students' understanding of directions	6.56	4.84	6.72	5.59
20. Monitor the M.D. students' understanding of concepts	6.38	4.44	6.35	4.83
21. Provide individual instruction for M.D. students	6.03	3.34	6.26	4.33
22. Pair the M.D. students with a classmate	6.34	5.25	6.27	5.33
23. Use small group activities	6.50	6.03	6.46	5.67
24. Involve M.D. students in whole class activities	6.50	5.94	6.61	5.80
25. Provide extra time for M.D. students	6.25	3.84	6.44	4.91
26. Adapt pacing of instruction	6.38	4.50	6.74	5.33
27. Keep records to monitor students' progress	6.41	4.75	6.61	5.30
28. Provide ongoing feedback	6.41	4.78	6.67	5.39
29. Adapt evaluations for students	6.28	4.59	6.79	5.50
30. Adapt scoring/grading criteria	6.29	5.23	6.50	5.85

Note. All desirability, feasibility comparisons were significant for both groups at the .01 level on the Wilcoxon signed rank test.

Table 3 Mean desirability and feasibility ratings for regular and special education teachers.

Results	Desirability		Feasibility	
	Reg. Ed. mean	Spec. Ed. mean	Reg. Ed. mean	Spec. Ed. mean
1. Respect M.D. students as individuals with differences	6.81	6.87	5.38 *	5.93
2. Establish a routine appropriate for M.D. students	6.84	6.78	5.66	5.93
3. Adapt classroom management strategies	6.31	6.50	4.47 *	5.26
4. Provide reinforcement and encouragement	6.84	6.78	6.00	6.15
5. Establish personal relationships with M.D. students	6.50	6.67	5.38 *	6.11
6. Help M.D. students deal with feelings	6.31	6.54	4.47 *	5.22
7. Communicate with M.D. students	6.47	6.44	4.03 *	4.91
8. Sp.Ed. and reg. ed. teachers communicate often	6.69	6.80	5.34	5.78
9. Communicate with parents of M.D. students	6.72	6.61	4.63	5.15
10. Establish expectations for M.D. students	6.72	6.69	5.88	5.89
11. Adapt long range plans	6.31	6.53	4.69 **	5.53
12. Adapt daily plans	6.44	6.50	4.56 **	5.56

Table 3 continues on the next page.

13. Plan assignments and activities to allow success	6.47	6.77	4.53	**	5.58
14. Teach learning strategies	6.34	6.46	4.19		4.30
15. Adjust physical arrangement of room	6.72	6.63	5.48		6.02
16. Adapt classroom materials	6.50	6.69	3.75	*	4.72
17. Use alternative materials	6.22	6.44	4.06	*	5.09
18. Use computers	6.47	6.43	4.25	*	5.09
19. Monitor the M.D. students' understanding of directions	6.56	6.72	4.84	*	5.59
20. Monitor the M.D. students' understanding of concepts	6.38	6.35	4.44		4.33
21. Provide individual instruction for M.D. students	6.03	6.26	3.34	*	4.33
22. Pair the M.D. students with a classmate	6.34	6.27	5.25		5.33
23. Use small group activities	6.50	6.46	6.03		5.57
24. Involve M.D. students in whole class activities	6.50	6.61	5.94		5.80
25. Provide extra time for M.D. students	6.25	6.44	3.84	**	4.31
26. Adapt pacing of instruction	6.38	6.74	4.50	*	5.33
27. Keep records to monitor students' progress	6.41	6.61	4.75		5.30
28. Provide ongoing feedback	6.41	6.67	4.78		5.39
29. Adapt evaluations for students	6.28	6.79	4.59		5.50
30. Adapt scoring/grading criteria	6.29	6.50	5.23		5.35

Table 3 continues on the next page.

- A. How competent are you teaching M.D. students? (1 to 5 with 1 being not competent and 5 being highly competent.)
- | | | | | |
|----|----------------------------|------|----------------------------|------|
| ** | Regular education teachers | 3.16 | Special education teachers | 4.40 |
|----|----------------------------|------|----------------------------|------|
- B. How willing are you to teach M.D. students in your classroom? (1 to 5 with 1 being very willing and 5 being unwilling)
- | | | | | |
|----|----------------------------|------|----------------------------|------|
| ** | Regular education teachers | 2.66 | Special education teachers | 1.30 |
|----|----------------------------|------|----------------------------|------|
- C. Greater integration is viewed positively. (1 to 5 with 1 being strongly agree and 5 being strongly disagree)
- | | | | | |
|--|----------------------------|------|----------------------------|------|
| | Regular education teachers | 2.83 | Special education teachers | 2.66 |
|--|----------------------------|------|----------------------------|------|

Note: Ratings completed by regular and special education teachers were compared using the Mann-Whitney U. One asterisk (*) indicates significance at the .05 level and two asterisks (**) indicate significance at the .01 level.

Regular education teachers as a whole appear to be as willing as special education teachers to implement adaptations that are more social in nature or similar to procedures already utilized for all students. Examples of these included the use of small group activities, pairing M.D. students with peers, and providing reinforcement and encouragement to M.D. students. However, significant differences existed between the responses of regular and special education teachers in areas that required extra planning: both long and short term, and the use of an alternative curriculum. Particular items that had the most significant difference between feasibility ratings of special education teachers and regular education teachers, with those of special education teachers being higher, included adapting long range plans, adapting daily plans, planning assignments and activities to allow for success, and providing extra time for M.D. students. It would seem plausible that these adaptations are the ones that would be most essential in meeting the academic needs of students with lower ability. Personal observations of students given assignments that exceed their capabilities often cause substantial frustration or little motivation to complete the assigned task. This is especially true if no extra assistance is given.

As indicated by questions A and B, regular education teachers are only moderately willing to accept MD students into

their classrooms and feel moderately competent to meet the special needs of the mentally disabled students, whereas special education teachers are very willing and feel very competent educating MD students. These results would suggest that with better training and more assistance the feasibility of utilizing adaptations to better serve M.D. students could increase. However, without research to show that this is actually the case, it would be difficult to justify the reduction of services at this time.

General Conclusions

Information gathered supports Iowa's less restrictive mental disability criterion for special education since Iowa students two standard deviations below the Iowa mean score one-half of a standard deviation higher than students two standard deviations below the national mean. A change in the mental disability criterion from one to two standard deviations below the national mean would eliminate special education services for 58% of M.D. students in GVAEA 14 and a comparable percentage of M.D. students in the state of Iowa. In GVAEA 14, students receiving special education services in part due to an I.Q. between 70 and 85 constitute approximately 10% of all special education students. The reduction of federal funds that would occur if the criterion changes from 85 to 70 would reduce the special education staff by an estimated 20%.

It would seem, as indicated by the results of the questionnaire completed by regular and special education teachers, that the quality of the educational programs current M.D. students are receiving could better meet the needs of M.D. students, than an educational program where integration into the regular classroom is the only option. Such a conclusion is based upon a comparison of responses given by both special and regular education teachers, who are actually involved with students who are identified as mentally disabled and would have to educate students if a change in criterion did occur.

Ultimately the rules a state adopts for deciding who does and does not qualify for special education services is a value judgment. Individuals who decide what the rules for special education will be must decide at what point students' special needs are adequately met. Administrators and law makers are forced to balance financial constraints with the best way to serve the children. Deciding what criterion should be used for M.D. eligibility is truly a difficult task, but it must be done so that decisions have guidelines to reduce subjectivity.

The present educational specialist project provides information that could be used by the Iowa Department of Education, GVAEA 14, and other educational agencies to help assess the educational consequences of changing the M.D. criterion. The future of students with special needs could be

greatly influenced by the decisions that have been or will be made in the near future in regards to what educational options are available to meet their needs.

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Appendix A

Student data sheet

Name: _____

School district _____

Grade: _____

Adaptive Behavior _____

Sex: _____

IQ test administered _____

Full Scale IQ _____

VIQ _____

Student Weighting _____

PIQ _____

Achievement Test Scores

Broad Reading _____

Broad Math _____

Broad W.L. _____

Appendix B

Name: _____(Optional) School District:_____ Today's Date:_____

Grades/Subject Taught: _____

Number of students in average class _____Number of years teaching _____

Regular and special education teachers often want to make curricular and procedural adaptations in order to accommodate the individual needs of mentally disabled (M.D.) students. (Students whose ability is at or below the 16% nationally.) Although such adaptations may be desirable, the adaptations may not be feasible due to class size, staffing limitations, planning time, etc. For example, it may be highly desirable to tape-record the chapters, but due to limited teacher planning time it may not be feasible. The following questionnaire will address these issues.

Directions:

Rate each of the adaptations listed below on a 1 to 7 scale (1=low; 7=high) in terms of its desirability (how much you would like to implement the adaptation in your classroom (regular or special education classroom) and its feasibility (how practical it would be to actually implement the adaptation in your classroom).

Desirability

- 1 Low
- 2
- 3
- 4 Moderate
- 5
- 6
- 7 High

Feasibility

- 1 Low
- 2
- 3
- 4 Moderate
- 5
- 6
- 7 High

Adaptation Evaluation Instrument

1. _____ Respect mentally disabled (M.D.) students as individuals with differences, e.g., be aware of their capabilities and problems and make exceptions accordingly; encourage all students to respect M.D. students. _____
2. _____ Establish a routine appropriate for M.D. students (e.g., establish a setting so children know what is expected; be consistent). _____
3. _____ Adapt classroom management strategies that are effective with M.D. students (e.g., time out, point systems). _____
4. _____ Provide reinforcement and encouragement (e.g., encourage effort; provide support if M.D. students get discouraged). _____
5. _____ Establish personal relationships with M.D. students (e.g., get to know students as individuals, determine student interests and strengths). _____
6. _____ Help M.D. students find appropriate ways to deal with feelings (e.g., express feelings through drawing or writing; brief periods of time away from class.) _____

7. _____ Communicate with M.D. students (e.g., plan frequent, short, one-to-one conferences, discuss potential modifications with students). _____
8. _____ Special and regular education teachers communicate regularly (e.g., write notes back and forth and/or talk informally with special education teacher). _____
9. _____ Communicate with parents of M.D. students (e.g., write notes back and forth; talk informally with parents; encourage parents to provide support for students' education). _____
10. _____ Establish expectations for M.D. students (e.g., expect the best from M.D. students). _____
11. _____ Make adaptations for M.D. students when developing long-range (yearly/unit) plans (e.g., establish realistic long-term objectives). _____
12. _____ Make adaptations for M.D. students when developing daily plans (e.g., view plans with an eye for problems that could pose special problems for M.D. students). _____
13. _____ Plan assignments and activities that allow M.D. students to be successful (e.g., structure assignments to reduce frustration). _____
14. _____ Allot time for teaching learning strategies as well as content (e.g., test-taking skills, note-taking skills, etc.). _____
15. _____ Adjust physical arrangement of room for M.D. students (e.g., modify seating arrangements). _____
16. _____ Adapt general classroom materials for M.D. students (e.g., construct study guides, tape-record textbook chapters). _____
17. _____ Use alternative materials for M.D. students (e.g., different textbooks; supplemental workbooks). _____
18. _____ Use computers to enhance learning with M.D. students (e.g., as a tool for writing, as a tool for practicing skills). _____
19. _____ Monitor the M.D. students' understanding of directions and assigned tasks (e.g., ask children to repeat or demonstrate what you have asked them to do; check in with students to be sure they are performing assignment correctly). _____
20. _____ Monitor the M.D. students' understanding of concepts presented in class (e.g., attend to comment on, and reinforce understanding of vocabulary, abstract ideas, key words, time sequences, and content organization). _____

- 21. _____ Provide individual instruction for M.D. students (e.g., plan for one-to-one sessions after school, allocate time for individual instruction during class). _____
- 22. _____ Pair the M.D. students with a classmate (e.g., to provide assistance with assignments; provide models for behavior, academics, and social support). _____
- 23. _____ Involve M.D. students in small group activities (e.g., allow students from different levels to work in small groups)._____
- 24. _____ Involve M.D. students in whole class activities (e.g., include M.D. student in class participation). _____
- 25. _____ Provide extra time for M.D. students (e.g., schedule extra time for skill reinforcement and extra practice). _____
- 26. _____ Adapt pacing of instruction (e.g., break down materials into smaller segments, use step-by-step approach). _____
- 27. _____ Keep records to monitor students' progress (e.g., keep a folder of students' papers, keep a progress chart). _____
- 28. _____ Provide students with ongoing feedback about performance (e.g., meet with students periodically to discuss academic and behavioral performance). _____
- 29. _____ Adapt evaluations for students (e.g., use oral testing, give more time for tests, modify administration procedures). _____
- 30. _____ Adapt scoring/grading criteria for M.D. students (e.g., alter criteria for grades). _____

A. How competent are you in terms of teaching mildly mentally handicapped, students?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
 Not Competent _____ Highly Competent

B. How willing are you to teach mildly M.D. students in your classroom?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
 Very Willing _____ Unwilling

C. Greater integration of students with mental disabilities into the regular classroom is viewed by me as positive.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
 Strongly agree _____ Strongly disagree