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ABSTRACT

Thirty-three low achieving regular class (RC) and 46 educable mentally retarded special class (SC) adolescents from a white, low-income, urban district were administered the learning potential measure and were interviewed to determine difference in attitude toward school and status as students. Results indicated that more RC than SC Ss saw a relationship between schooling and future lives, expected to finish high school and continue education and felt responsibility for failures in hypothetical locus of control question though SC Ss blamed selves for actual school failures; that Ss in both groups saw themselves as equal to or poorer students than their siblings, similar aged peers, friends and classmates; that more SC Ss saw themselves as better academically than friends and classmates; that SC Ss reported expending much effort in school work and regarding the work as their best; and that RC Ss expressed more lackadaisical attitudes toward school work. Also results showed that learning potential status within the SC sample was related to the academic variables, that more able learning potential SC Ss related school to future adult job situation, exhibited less discrepancy between academic aspirations and expectations, reported being given more responsible roles in hypothetical classroom situations, exhibited an internal locus of control in both success and failure situations, reported expending more effort in school work, and exhibited no differences in self-perception of school ability. Findings supported the hypothesis that the more able students by the learning potential criterion who are IQ-defined as mildly retarded are educationally but not mentally retarded. (Author)

STUDIES IN LEARNING POTENTIAL

Attitudes Toward School of Special and Regular Class Adolescents

by

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Summary and Abstract

Low achieving regular class and educable mentally retarded special class adolescents from a white,low-income, urban district were administered the learning potential measure and were interviewed to determine differences in their attitudes toward school and their status as students.

The results indicated that a) fewer special than regular class students saw a relationship between their present schooling and their future lives; b) while the majority of both groups aspired to finish high school and continue their education, more regular class Ss expected to do so; c) more regular than special class Ss tended to take personal responsibility for their failures in hypothetical locus of control questions, while special class Ss tended to blame themselves for their actual school failures; d) while most of the adolescents in both groups saw themselves as equal to or poorer students than their siblings, CA-peers, friends, and classmates, more special class Ss saw themselves as better academically than their friends and classmates; e) special class Ss tended to say thay expend much effort in their school work and saw their school work as being the best they can do while the regular class students expressed more lackadaisical attitudes toward their school work.

Learning potential status within the special class sample was related to these academic variables. Like their regular class peers, the more able learning potential students a) related school to their future adult job situation; b) exhibited less discrepancy between their academic aspirations and expectations; c) reported being given more responsible roles in hypothetical classroom situations; d) exhibited an internal locus of control in both success and failure situations; and e) reported putting more effort in their school work. There were no differences in their self-perceptions of their school ability. The results provide further support for the hypothesis that the more able students by the learning potential criterion, who are IQ-defined as mildly retarded are educationally but not mentally retarded.

ATTITUDES TOWARD SCHOOL OF SPECIAL AND REGULAR CLASS ADOLESCENTS

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Historically, special classes for educable mentally retarded children (EMR) were established to reduce heterogeneity among these children deemed unable to profit from the academic curriculum. It was assumed that segregating groupings of slow learners would allow for specialized instructional services for children who profit minimally from the traditional program. These classes would also provide a more comfortable and secure environment where the children could learn without the prospect of continuing failure and peer rejection that they had experienced in the regular grades.

However, the literature relating to the academic performance and social adjustment of mildly retarded children in special and regular classes indicates the relationship between these variables and class placement is very complex. Special class EMRs do not represent a homogeneous population either in academic learning characteristics (Snyder, 1966) or in socio-psychological characteristics (McCoy, 1963). Lambeth (1966) found high intra-individual variability among special class EMRs who reported unrealistically high self-confidence for attaining distant, hypothetical goals and very low assurance of achieving immediate ones. The great variability among IQ-defined special class students has clouded much of the research regarding the characteristics of these chil-

dren. Improving the diagnostic criteria as they apply to mild mental retardation should reduce this variability and result in more precise statements regarding other characteristics which are associated with retardation.

Budoff (1969) and his colleagues have described an assessment procedure for special class students which demonstrates considerable spread in ability to profit from systematic training on a reasoning task among this supposedly homogeneous IQ-defined population. In this procedure a nonverbal reasoning task (an enlarged version of Kohs Block Designs) is administered prior to and following training on principles relevant to solution of the problems. Three patterns of response are evident among students whose scores fall within the EMR IQ range (50 - 79 IQ). Some Ss (high scorers) demonstrate excellent understanding on the trial prior to training, figuring out the problems as they proceed from easy to harder instances, and performing at levels typical of higher IQ children. Other Ss (gainers) perform poorly on the pretest administration, but do improve their scores markedly following instruction. The third group of Ss (nongainers) performs poorly initially and does not profit from the instructional procedure.

Various data indicate that the improved ability displayed on the reasoning task is not task-specific, but that Ss differing in learning potential status demonstrate consistently different levels of competence on other psychometric and learning tasks (Budoff, 1967; Budoff & Pagell, 1968), in their educational capability, (Budoff, Meskin, & Harrison, 1971) and distinctive patterns on some motivational scales (Harrison & Budoff, 1972).

The pattern of these differences among psychometrically defined EMR populations suggests that the high able learning potential (LP) children (high scorers and gainers) represent instances of severe educational handicap, while the uniformly poor performance of nongainers, even following training, may functionally define them as mentally handicapped.

The present study had two objectives. The first was to compare low income white special and regular class adolescents on a broad range of attitudes toward school. A majority of the regular class students had experienced considerable school failure.

The second objective was to extend the predictive validity of the learning potential assessment procedure by examining its ability to predict differentially the school related attitudes of special class and low achieving regular grade students. If, in fact, children whom we classify as more able by the LP criterion (gainers and high scorers) are educationally, as opposed to mentally retarded, it would follow logically that such children would manifest motivational behaviors which are more similar to their low achieving regular class peers than to their nongainer classmates.

Method

Subjects

The details of sample selection and composition are presented elsewhere (Feldman & Budoff, 1971). In brief, the samples consisted of all the non-brain damaged Ss in three EMR special classes

(N = 46) and regular class controls (N = 33) drawn from the low academic tracks of the same urban, low income junior high school serving predominantly white children. Special and regular class Ss differed significantly in IQ (mean = 69.97 and 92.31, respectively), and CA (mean = 14.42 and 13.18, respectively). Learning potential groups also differed significantly in IQ, in accordance with previous findings on large EMR samples (Budoff, 1970). High scorers and gainers had higher IQs than nongainers. The groups did not differ significantly in social class background when the principal wage earner's occupation was rated. Evidence for the academic difficulties of the low achieving, regular class sample are reflected by their low grade point average for their four major academic subjects ($<$ 2.0 when A = 4, B = 3, C = 2, D = 1, F = 0).

Insert Tables 1 and 2 about here

The special and regular class students were administered the learning potential procedure using the Kohs Block designs. This procedure involves three individual administrations of sixteen test and five coaching designs: prior to coaching, one day and one month following coaching. Individual tuition is interpolated between the first two administrations (for details of the procedure, see Budoff and Friedman, 1964). Students were considered gainers when they met the criterion of solving at least four or more designs on the post-coaching sessions than on the pretest; nongainers included all those coached Ss whose

Table 1

Means and Standard Deviations for Retarded and Nonretarded Samples for IQ, CA, and Occupational Rating of Principal Wage Earner

Interviewed students	N	IQ $\bar{X}$	IQ SD	CA $\bar{X}$	CA SD	Mean occupational rating $\bar{X}$	Mean occupational rating SD
Educable retarded							
High scorers	12	72.83	9.89	175.42	5.27	2.25	.75
Gainers	19	66.31	7.95	171.16	11.77	2.11	1.33
Nongainers	15	72.33	3.16	173.47	11.69	2.00	.85
Nonretarded							
High scorers	17	94.24	11.41	158.94	12.11	2.35	1.32
Gainers	8	85.63	8.63	160.25	11.47	1.38	1.51
Nongainers	8	94.88	6.71	154.37	11.66	1.88	1.81

Table 2

Summary of Analyses of Variance for Retarded and Nonretarded Samples for IQ, CA, and Occupational Rating of Principal Wage Earner

Source	df	F	F	F
EMR status	1	132.63**	34.73**	0.15
LP status	2	6.09*	0.43	1.13
EMR X LP	2	0.20	0.79	0.72
Residual mean square	73	72.30	122.30	1.57

*$p < .01$

**$p < .001$

pre- to posttest score change was less than four designs; high scorers successfully solved one of the difficult 9 or 16 block problems in the upper half of the test series prior to tuition.

The Interview

All Ss were interviewed individually in a one hour session. The questions relating to the academic area, presented in Appendix A, were administered as part of a larger interview. Each question was read aloud by the interviewer and repeated if required.

Attitudes toward school were tapped by questions which related to:

1. Perceived Value of School. The school value score was obtained by asking S about the importance to his own goals of such school-related activities as studying, getting good grades and attending school. The responses were scored as to whether the reasons given were intrinsically or extrinsically motivated, and present or future oriented.

2. The student's level of academic aspiration and expectation were indicated by the level of schooling he aspired to and the level he expected to attain.

3. Concept of Academic Role. Two hypothetical and one real classroom role situations were posed to explore the extent to which the student was willing to assume responsibility in the classroom. In the first situation, the more responsible roles required him to assist the teacher in disciplining the class. The second one required the student to assume a teaching role, i.e., explain the lesson to the class and put the work on the

board. The first role required S to be cooperative but put no premium on his knowledge, whereas the second role stressed knowledge of the material. In the third situation S was asked which student his present teacher would choose if she were seeking a student assistant.

4. Academic Locus of Control was determined by the degree to which S takes responsibility for his academic successes and failures. A modified version of Crandall's Locus of Control Scale (LC) was administered (Crandall, 1965). In this scale, ten hypothetical situations related to academic success and academic failure (five each) were presented. These responses were scored for internal or external ascription of responsibility.

5. Academic Self Concept. The student's concept of himself as a student was queried separately by asking him to compare his academic ability to that of his friends, classmates, siblings and peers separately, i.e., was it below, the same, or better. Friends were defined as those individuals with whom S spent his free time; peers as those who were the same chronological age.

6. School Effort. The students were asked to rate their school effort, i.e., is it less than they are capable of, average, or best they can do, and to compare their efforts with those of their classmates.

The data for the special versus regular class comparisons are presented first, followed by the results for the special class Ss subdivided by learning potential status. Learning potential data was available for the regular class students but there were

few differences among these groups and the results are not presented.

Statistics

The X^2 statistic was employed for all analyses, special versus regular class and the nongainer X gainer X high scorer comparisons being based on one and two degrees of freedom, respectively. The comparisons among the three LP groups were analyzed by one of two methods: the two degrees of freedom were subdivided into their linear (HS and G versus NG) and quadratic (G versus HS and NG) components, each based on one df. Gainers were combined with either NG or HS depending on the variable in question, and compared with the remaining group. These analytic methods increase the sensitivity of the X^2 test in that while an overall X^2 may not be significant, it may have significant components which ordinarily would be overlooked.

Results

A. Special and regular Class Sample Comparison

1. Perceived Value of School. As indicated in Table 3A the majority of both groups responded that studying and getting good grades were important, and gave intrinsic reasons for studying, getting good grades, and relating school to their future lives. Regular class Ss tended to view the meaningfulness of their present education in terms of future possible benefits, while many special class Ss responded in terms of immediate rewards - getting on the honor roll, going on to the next grade, etc., ($X^2 = 2.30$, $p < .15$).

2. There were no differences in academic aspirations. The majority of both samples aspired to graduate from high school; many aspired to post-high school training (see Table 4A). However, more regular than special class students expected to complete high school and continue their education, while special class Ss realistically lowered their aspirations ($X^2 = 3.85$, $p < .05$).

3. Concept of Academic Role. Table 5A indicates there were no differences between the special and regular Ss in their concept of their academic role. The majority of both groups reported they would be chosen and desired to be chosen for the most responsible role in the situation which did not demand academic competence. However, a minority of both groups reported that they would be chosen for the role in which some academic competence was required, or that they would be chosen first to assist their teacher. Approximately half of both groups desired more responsibility than they thought they would be given by the teachers.

4. Academic Locus of Control. There were no differences between the samples on Total Academic Locus of Control Score. The proportions presented in Table 6A indicate that for each question the majority of each group answered in terms of internal locus of control. When the scores for each of the five success and five failure situations were analyzed separately, the same proportion of the regular and special class samples took responsibility for their successful school performance (ILC). Signifi-

cantly fewer special than regular class Ss were willing to assume responsibility in the hypothetical failure situations. A large proportion of the special class Ss blamed their failures on poorly written books, poor teachers, constantly dissatisfied parents, people who refused to help them in time of need, etc.

The Locus of Control scores based on the student's best and worst subjects indicated slightly different results. Over 75% of both samples ascribed their success to their own efforts. There was no difference in the proportions of special and regular class students who took personal responsibility for the failure situation.

5. Academic Self Concept. As indicated in Table 7A, there were no differences by regular or special class status when S was asked to compare himself academically to his siblings and his peers. But many special class students saw themselves as more able than their own classmates and their friends. The regular class Ss tended to see themselves about the "same" or "worse" students than their classmates and friends. When asked about how able they wished they could be, the majority of both groups desired a better academic self concept.

6. School Effort. Regular class students tended to see their work output and effort as average while more special class Ss reported their work output as the best they can do. Fewer regular class Ss reported they were working hard, and fewer still believed it is the best they can do. There were no differences

between the samples when asked how their effort compared with that of their classmates (see Table 8A).

B. Comparisons by Learning Potential Status within the Special Class Sample.

1. Perceived Value of School. The special class Ss differed considerably by learning potential status with regard to the perceived value of school (see Table 3B). The more able (LP) Ss, (gainers and high scorers), saw school as positively related to their adult lives and gave intrinsic reasons for studying, getting good grades, and in relating school to their future lives. Most particularly, like his regular class peer, the high scorer was able to view studying in terms of obtaining more knowledge, eventually allowing him to go further in school, obtain better jobs, earn more money, etc. By contrast, more than half of the nongainers, and many gainers, viewed the rewards for studying as being extrinsic and time limited, pleasing their parents, making the honor roll, allowing them to go on to the next grade, or getting out of school. The inability to relate their present education to their adult life was most noticeable in the nongainer. Only 50% of the nongainers gave a simple "yes" response to the question, "Is your present schooling related to your future life?" There was a significant negative linear relationship between LP status and the number of special class students who gave "dk" or "no" responses when asked to give a reason for their positive response (40% NG, 25% G, 0% HS, $\underline{X}^2_{\underline{1df}} = 4.41$, $\underline{p} < .05$).

Insert Tables 3 and 4 about here

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2. Academic Aspirations. There was little difference among the special class LP groups in academic aspirations and expectations. Most aspired to complete high school and continue their education but most did not expect to realize this goal. Hence, the markedly lower academic expectations of the entire special class sample (see Table 4B).

3. Concept of Academic Role. The nongainer tended to differ from his classmates. Fewer nongainers stated they would be chosen for the role which required a discipline function and more nongainers saw themselves in the teaching role ($p < .20$). A large proportion of all the students wanted more responsibility than they felt is accorded them. By contrast, the gainers, high scorers and regular class students were able to view their strengths (being a disciplinarian) from their weaknesses (competent student) more realistically than the nongainer, and chose accordingly (see Table 5B).

Insert Table 5 about here

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4. Academic Locus of Control. The majority of special class Ss in each LP group gave internal locus of control responses to each of the hypothetical items. When the scores were summed across the ten question, the distribution of scores indicated that more gainers than nongainers and high scorers assumed

Table 3

School Value

3 A Special and Regular Class Comparison

Variable	Percent Retarded	Percent Non-retarded	X^2	p
Studying is Important (yes)	.96	.97	-	NS
Grades are Important (yes)	.96	.94	-	NS
School Related to Future (yes)	.70	.87	2.30	.15
Total Positive School Value (100% Positive Responses)	.67	.78	-	NS
Intrinsic Reason for Studying	.62	.62	-	NS
Intrinsic Reason for Grades	.64	.89	3.68	.06
Intrinsic Relation Between School and Future	.57	.75	2.18	.15
Total Intrinsic School Value (upper quarter)	.44	.56	-	NS

3 B Special Class Student and Learning Potential

Variable	Percent Non-gainer	Gainer	High scorer	X^2	p
Studying is Important (yes)	1.00	.93	.92	-	NS
Grades are Important (yes)	.95	.93	1.00	-	NS
School Related to Future (yes)	.50	.86	.83	6.42[a]	.05
Total Positive School Value (100% Positive Responses)	.45	.86	.83	6.71[a]	.05
Intrinsic Reason for Studying	.65	.54	.82	-	NS
Intrinsic Reason for Grades	.47	.58	.83	3.77[b]	.05
Intrinsic Relation Between School and Future	.46	.50	.80	2.48[b]	.12
Total Intrinsic School Value (upper quarter)	.30	.43	.66	3.99[b]	.05

cont. of Table 3

3 A Special and Regular Class Comparison

Variable	Percent Retarded	Percent Non-retarded	X^2	p
Studying is Important for Future	.46	.66	3.03	.09
Grades are Important for Future	.62	.81	3.22	.08
School is Important for Future	.54	.75	2.88	.10
Total Future School Value (upper half)	.54	.72	2.76	.10

3 B Special Class Student and Learning Potential

Variable	Percent Non-gainer	Percent Gainer	Percent High scorer	X^2	p
Studying is Important for Future	.45	.31	.64	-	-
Grades are Important for Future	.47	.58	.75	2.30[b]	.15
School is Important for Future	.48	.56	.60	-	NS
Total Future School Value	.45	.57	.67	-	NS

a. 2 df

b. 1 df, Linear Relationship

Table 4

Academic Aspirations and Expectations

4 A Special and Regular Class Comparison

Variable	Percent Retarded	Percent Non-retarded	X^2	p
Academic Aspirations (High School and Beyond)	.78	.88	-	NS
Academic Expectations (High School and Beyond)	.50	.72	3.85	.05

4 B Special Class Student and Learning Potential

Variable	Non-gainer	Gainer	High scorer	X^2	p
Academic Aspirations (High School and Beyond)	.80	.71	.83	-	NS
Academic Expectations (High School and Beyond)	.45	.57	.50	-	NS

Table 5

Academic Role

5 A Special and Regular Class Comparison 5 B Special Class Student and Learning Potential

Variable	Percent Retarded	Non-retarded	X^2	p	Percent Non-gainer	Gainer	High scorer	X^2	p
Academic Role (Discipline) (upper half)	.65	.67	-	NS	.45	.79	.83	5.77[a]	.02
Desired Academic Role Discipline (upper half)	.74	.76	-	NS	.65	.86	.75	-	NS
Academic Role (Teach) (upper half)	.35	.39	-	NS	.45	.29	.25	-	NS
Desired Academic Role - Teach (upper half)	.57	.53	--	NS	.65	.43	.58	-	NS
Teacher's Helper 1st choice	.22	.22	-	NS	.20	.21	.27	-	NS
Desired to be Teacher's Helper	.82	.87	-	NS	.80	.86	.82	-	NS

a. Nongainer x Gainer + High scorer

responsibility for both their successes and failures (X^2, 1df = 4.21, $p < .05$, see Table 6B).

The majority of the students accounted for their actual academic failure by "not doing the work" or "not being interested in the subject". More nongainers tended to give no response or an ELC reason. Analysis of the reasons given for academic success were similar. Fewer nongainers than gainers and high scorers accounted for their success by "working harder" and "being interested in the subject". The rest of the nongainers gave no response or said the subject was easy.

Insert Table 6 about here

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5. Academic Self Concept. Just as there were no differences between special and regular class Ss when S compared himself to his peers and siblings, there were also no differences within the special class sample. There were also no differences among LP groups on the friend comparison, although in comparison to regular class students, a higher proportion of all three groups rated themselves as "better" than their friends academically. The significant special versus regular class difference on classmate comparison was due to the high scorers, more of whom rated themselves as "better". None rated themselves "below" their classmates. While this more positive self image is most noticeable in the high scorer, all three LP groups equally desired a more positive academic self image as is evident from the percentages for desired self concept (see Table 7B).

Table 6

Academic Locus of Control - Hypothetical Situations

6 A Special and Regular Class Comparison 6 B Special Class Comparison x Learning Potential

Variable	Percent Retarded	Non-retarded	X^2	p	Percent Non-gainer	Gainer	High scorer	X^2	p
ILC - Success I	.61	.54	-	NS	.80	.71	.68	-	NS
II	.85	.76	-	NS	.85	.86	.83	-	NS
III	.74	.64	-	NS	.80	.79	.58	-	NS
IV	.63	.61	-	NS	.55	.78	.58	1.93[b]	.18
V	.85	.58	-	NS	.75	.93	.92	-	NS
Total ILC - Success (median split)	.63	.57	-	NS	.60	.79	.50	2.04[b]	.19
ILC - Failure I	.74	.82	-	NS	.80	.71	.68	-	NS
II	.72	.91	3.27	.07	.55	.86	.83	-	NS
III	.50	.76	4.31	.05	.40	.64	.50	-	NS
IV	.56	.82	4.48	.05	.56	.64	.58	-	NS
V	.54	.73	2.03	.15	.65	.50	.42	-	NS
Total ILC - Failure (median split)	.34	.75	8.47	.005	.30	.50	.33	-	NS
Total ILC	.56	.69	-	NS	.45	.79	.50	4.21[b]	.05

cont. of Table 6

Academic Locus of Control - Real Situations

6 A Special and Regular Class Comparison

Variable	Percent Retarded	Non-retarded	X^2	p
ILC - Success	.76	.84	-	NS
ILC - Failure	.67	.58	-	NS

6 B Special Class Comparison x Learning Potential

Variable	Percent Non-gainer	Gainer	High scorer	X^2	p
ILC - Success	.65	.79	.92	3.04[a]	.10
ILC - Failure	.55	.71	.83	2.46[a]	.12

a. Linear Component, 1 df

b. Quadratic Component, 1 df

Insert Table 7 about here

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6. School Effort. A sizeable proportion of nongainers stated that their work was the best they could do, that they put little effort into their school work, and that this effort was less than that of their special classmates. While 35% and 25% of the gainers and high scorers, respectively, reported putting more effort into their school work than their classmates, not one nongainer reported doing so (see Table 8B). When each of the three scores making up the summary score was analyzed separately, unlike the academic self concept scores, which exhibited a linear component (high scorers felt themselves to be more able than nongainers), the school effort score demonstrated a quadratic component: a larger percentage of gainers viewed their school work as average rather than poorer or the best they can do. Also, when asked to compare his effort to his classmates, only 29% reported putting in the same amount of effort as compared to 65% of the nongainers and 50% of the high scorers who reported doing so; 35% of the gainers as compared to 25% of the high scorers and 0% of the nongainers stated they worked harder than their classmates.

Insert Table 8 about here

Table 7

Academic Self Concept

7 A Special and Regular Class Comparison

Variable	Percent Retarded	Non-retarded	X^2	p
Self Concept Compared With				
Friends:				
1. Below	.30	.21	4.98[a]	.03
2. Same	.52	.76		
3. Better	.18	.03		
Classmates:				
1. Below	.11.	.25	3.96[b]	.05
2. Same	.63	.62		
3. Better	.26	.13		
Sibs:				
1. Below	.36	.36	-	NS
2. Same	.36	.36		
3. Better	.28	.28		

7 B Special Class Students x Learning Potential

Variable	Percent Non-gainer	Gainer	High scorer	X^2	p
Self Concept Compared With					
Friends:					
1. Below	.35	.29	.25	-	NS
2. Same	.50	.57	.50		
3. Better	.15	.14	.25		
Classmates:					
1. Below	.10	.21	0.00	2.54[c]	.11
2. Same	.75	.50	.58		
3. Better	.15	.29	.42		
Sibs:					
1. Below	.42	.29	.33	-	NS
2. Same	.32	.29	.50		
3. Better	.26	.43	.17		

cont. of Table 7

7 A Special and Regular Class Comparison

Variable	Percent Retarded	Non-retarded	X^2	p
Self Concept Compared With Peers:				
1. Below	.44	.30	-	NS
2. Same	.50	.67		
3. Better	.06	.03		

7 B Special Class Students x Learning Potential

	Percent Non-gainer	Gainer	High scorer	X^2	p
Self Concept Compared With Peers:					
1. Below	.40	.50	.42	-	NS
2. Same	.50	.50	.50		
3. Better	.10	0.00	.08		

a. Same x Better, 1 df

b. Below x Better, 1 df

c. Nongainer x High scorer on Below x Better, Linear x Linear Component, 1 df

Table 8

8 A Special and Regular Class Comparison

Variable	Percent Retarded	Percent Non-retarded	X^2	p
School Work				
1. Poorer than can do	.37	.39	3.10[a]	.08
2. Average	.33	.48		
3. Best they can do	.30	.15		
Effort in School				
1. Little	.20	.15	2.96[b]	.09
2. Average	.26	.46		
3. Lot	.54	.39		
Effort Compared to Classmate				
1. Less	.33	.18		
2. Same	.50	.67	-	NS
3. More	.17	.15		
Total Effort Score (upper half)	.33	.39	-	NS

8 B Special Class Students and Learning Potential

Variable	Percent Non-gainer	Percent Gainer	Percent High scorer	X^2	p
School Work					
1. Poorer than can do	.40	.29	.42	2.24[c]	.13
2. Average	.25	.50	.25		
3. Best they can do	.35	.21	.33		
Effort in School					
1. Little	.30	.07	.16		
2. Average	.25	.36	.17	-	NS
3. Lot	.45	.57	.67		
Effort Compared to Classmate					
1. Less	.35	.36	.25		
2. Same	.65	.29	.50	4.25[c]	.05
3. More	0.00	.35	.25		
Total Effort Score (upper half)	.30	.57	.50	2.64	.10

a. Average x best, 1 df

b. Average x lot, 1 df

c. Nongainer + High scorer x Gainer on Less + More x Same (quadratic x quadratic component) 1 df

Discussion

Special and Regular Class Differences

Most remarkably, few differences on the school-related variables were evident between these low income white special and low achieving regular class students. The differences may be ascribed to the effects of a stigmatized status resulting from placement in a segregated class. The student who is placed in special class will tend not to see school as relevant to his future, nor expect to satisfy his aspirations to attain high school graduation or post high school training. He will not expect to be given responsibility by a teacher, though he may wish it. The placement may make him even more sensitive to his potential for further school failure. While the regular class students are free to admit that their own lackadaisical involvement is similar to the other students , some special class students defensively assert their superiority. Their response that their work output is the best they can do seems to reflect the edict formalized by the placement. Also, their desire for high school graduation is realistically lowered to accord with their poor academic skill level, and their personal experience of persisting school failure. The authors assumed more marked differences between these samples would be evident in the academic areas almost by definition. But the contrast with a low achieving low income peer group appeared to minimize the gulf in self-perceptions of school. Clearly the gulf between the low achieving white slum children and the special class children is not great

even in the academic area.

The significance within the special class sample by learning potential status clarify the meaning of the few special - regular class student differences.

There were clear differences in response within the special class sample across learning potential levels in this sample. The high scorers, in particular, exhibited the pattern most typical of their regular class peers. They saw the relevance of school to their future, and like the regular class students, said they don't work very hard in school. In general, they tended to respond realistically, e.g., didn't expect to attain their aspired graduation or post high school training, saw their strength in the academic role situations in the nonacademic alternatives, saw themselves as more able than their class mates, tended to be intrinsically motivated in the hypothetical academic situations, and tended to accept more personal responsibility for their successes and failures.

The least able students (the nongainers), tended to be more unrealistic in their academic attitudes, perceived school as irrelevant to their adult lives, tended to avoid responsibility for their failures by blaming them on others, and said they expended the least effort in school. More frequently than any other of these students, they either failed to respond or when they gave the socially desirable response, were unable to give supporting reasons. They reported they were given less responsibility by peers, parents and teachers than any other special

class group. Their verbalized academic aspirations were unrealistic in relation to past performance, though they did not expect to attain them.

Gainers represented an intermediate position in this continuum. They tended to group with the high scorers though they seemed to verbalize responses that often paralleled the expectations of adults.

The trend of the results lend further support to the hypothesis that students who profit from the learning potential assessment are educationally, not mentally retarded, regardless of their IQ score. The more able (LP) students' responses tended to parallel those given by the low achieving regular class students. In similar fashion, the more able (LP) students demonstrated greater vocational maturity than the nongainers (Folman & Budoff, 1971).

One justification for special class placement is that an environment with few demands and little inter-child competition should reduce opportunities for failure and improve the child's self concept. The present findings suggest that these effects, if they exist, may not extend beyond the subject's immediate classroom environment.

The special class students expressed their awareness of their stigmatized state. When questioned regarding their academic aspirations, many special class pupils stated that they were not allowed to go beyond junior high school. Similarly, when questioned on job aspirations (Folman & Budoff, 1971), they reported that few employers want to hire individuals who have "retarded" written on their records. Have many of them learned

from their segregated school experience to internalize the implications of the segregated placement and to expect failure and rejection?

The findings that more special than regular class Ss exhibited an external locus of control on the hypothetical failure situations support Bialer and Cromwell's theory that the lower the mental age, the more the individual's locus of control will be externalized, and Crandall et al.'s (1965) findings that a defensive and maladaptive (non-realistic) level of aspiration is positively correlated with an external locus of control. When the results were analyzed by learning potential status, the least able students, the nongainers ascribed responsibility for their behavior more frequently to forces which they could not control.

Academic locus of control is concerned with where the child perceives responsibility for his work in school lies. If it lies within himself, he will be more able to accept his failures and will try to continue to learn. If responsibility for failure is externalized, the child will be harder to motivate in learning situations. Since the more able (LP) students tend to respond with some sense of responsibility for their successes and failures, they might best be maintained within general education, supplementing their education with remedial help and with minimally verbal teaching techniques to maximize their learning and their sense of competence (Budoff, Meskin, & Harrison, 1971). The less able (LP) students, who also tend not to take responsibility for their school work and see little relation between school and later life, may require specialized

learning situations such as might be found in segregated classes which emphasize fewer academic goals and which might stress pre-academic and motivational strategies that seek to provide an academic base and also engage him in constructive learning. However, some nongainers may be so alienated from school work that they also fail to respond positively to the opportunities to learn offered in the learning potential procedure and the special class. Successful and educational interventions in the context of a regular class program that can also provide suitable specialized supportive services may alter this sense of alienation. The regular class placement may be critical since this child may be able to perceive a relationship between his own efforts to learn and a more salutary outcome than a usual permanent consignment to the special class.

Thus, it may be that learning potential status may partially reflect general ability to learn and reason, and a willingness to learn in school. While the group pattern displayed by the non-gainers most closely describes behavior typically ascribed to the mentally retarded, it is likely that there are false positive cases included who failed to respond to the opportunity to learn on the learning potential procedure. Engaging these children in positive learning experiences may make them more amenable to learning and this lessened alienation may be reflected in their subsequent performance on the learning potential measure. Like the IQ test, learning potential assessment is probably sensitive to motivational factors. Though the training opportunity allows

the child to learn how to perform on the task, he must be willing. The learning potential measure must be considered as descriptive of the child's ability to profit from experience, a proclivity which may be very susceptible to decreased alienation from learning in school. Learning potential and motivational measures which tap attitudes toward school and school learning, and one's own competence in these areas, in combination, may provide a multi-factor criterion by which one can determine greater potential for educability when the child's IQ score is low, i.e., the traditional score predicts a low probability of succeeding academically.

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APPENDIX A

ACADEMIC INTERVIEW QUESTIONS

Suppose you were getting a new teacher and inorder to help her it was decided that a list should be made grouping the children according to the way they usually behave in class. In one group she put the names of those children who besides doing their class work, are usually in charge of the class, seeing to it that all the children have their work and answering any questions thay might have. In another group were the children who besides doing their class work, usually help by giving out papers and books. In another group were those children who usually didn't help but did their work at their seats and listened to what the teacher was teaching and still another group were those children who sometimes did their class work and at other times didn't take part in the lesson at all.

161. In which group would you be put?

In the group of children that sometimes did their class work and sometimes didn't take part in the lesson at all.	_____1
In the group of children that usually didn't help out, but did their work.	_____2
In the group of children that usually give out books and papers.	_____3
In the group of children that is usually in charge of the class.	_____4

162. In which group would you like to be put?

_____1

_____2

_____3

_____4

3. Now when you do well on a test at school is it more likely to be because you studied for it or the test was especially easy?

4. If a teacher says to you "your work is fine", is it something teachers usually say to encourage pupils or because you did a good job?

5. When you have trouble sometimes understanding something in school, is it usually because the teacher didn't explain it clearly or because you didn't listen carefully?

6. Suppose you became very successful in your work. Do you think this would happen because other people helped you when you needed it or because you worked very hard?

7. When you read a story and can't remember much of it, is it usually because the story wasn't well written or because you weren't interested in the story?

8. Suppose your parents say you aren't doing well in your school work. Is it likely to happen more because your work isn't very good or because they're in a bad mood?

9. Suppose you did better than usual in a subject at school. Would it probably happen because you tried harder or because someone helped you?

10. If a teacher passes you to the next grade, would it probably be because she liked you or because of the work you did?

11. When you find it hard to do certain problems in school is it because you didn't study well enough before you tried them or because the teacher gave problems that were too hard?

12. Suppose you study to become a secretary (mechanic) and you fail. Do you think this would happen because you didn't work hard enough or because you needed some help and other people didn't give it to you?

13. What two subjects do you like best?

14. What two subjects do you like least?

15. What two subjects do you do best in?

16. What two subjects do you do worst in?

17. Why do you think you do well in _____ and _____?

18. Is it because it's easy for you to work extra hard in them?

19. Why do you do poorly in _____ and _____?

20. Is it because they're hard or because you don't study for them?

21. Do you think it's important to study hard in school?

22. Why? (Why not?)

23. Is it important to get good grades?

24. Why (Why not?)

25. How would you rate yourself in school ability compared with your close friends?

Below _____1
Same _____2
Better _____3

26. How would you rate yourself in school ability compared with your classmates?

_____1

_____2

_____3

27. How would you rate yourself in school ability compared with your brother(s) and sister(s)?

_____1

_____2

_____3

28. How would you rate yourself in school ability compared with people your age?

_____1

_____2

_____3

29. How would you like to be rated?

_____I

_____2

_____3

30. Do you think the work you do in school is:

The best work you can do _____1
About average work for you _____2
Much poorer work than you are able to do _____3

31. How hard do you find that you have to work in school?

Hard _____1
Average _____2
Not hard at all _____3

32. How hard do you have to wrk in school compared with other students in the class?

Harder than any of them _____1
As hard as most of them _____2
Not as hard as any of them _____3

33. Do you think what you do in school now will make any difference when you grow up?

34. How?

35. If you were free to go as far as you wanted in school, how far would you go?

36. Sometimes what we would like to do isn't the same as what we expect to do. How far in school do you expect you will really go?

Suppose a movie was to be made about your class by the children and in order to do this a couple of children were needed to play the teacher - to explain the lesson to the class, some children to take part in the lesson by putting the class work on the board, some children to take part in the lesson by writing their answers quietly at their desks, and some children to be in the audience's part.

37. What would you be chosen to do?

Play the part of the teacher and explain the lesson to the class	_____1
Take part in the lessons by putting the class work on the board	_____2
Take part in the lesson by doing the class work at the desks	_____3
Be part of the audience	_____4

38 What would you like to be chosen to do?

_____1

_____2

_____3

_____4

39. If your teacher needed someone to be her helper whom would she choose?

ME _____1
Classmate _____2