Presented is an evaluation of a program designed to provide individualized instruction for 28 seriously emotionally disturbed students in a residential psychiatric program in New York City. Findings are reported to indicate that the program met its objectives in producing significant growth in both reading and math achievement, and additionally produced over 100% improvement in attendance. It is noted that efforts were made by the hospital team to keep and maintain contact with school programs outside of the hospital to which the students would be returning. Listed recommendations include that objectives in reading and math be defined in terms of the historical regression formulas, that instruments used for data collection be improved, and that funding for the program be modified. Data forms are appended. (IM)
Individualized Instructional Program for Emotionally Disturbed Children Unable to Participate in Formal Educational Programs (Title VI)

(School Year 1974-75)

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Program Evaluator

An evaluation of a New York City school district educational project funded under Title VI-B Education of the Handicapped Act and performed for the Board of Education of the City of New York for the 1974-75 school year.

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CHAPTER I - THE PROGRAM

This project was designed to provide individualized instruction for two groups of seriously emotionally disturbed students in the psychiatric programs at Bellevue Hospital in Manhattan and Kings County Hospital in Brooklyn. Originally the program was to provide individually prescribed remedial instruction for forty-eight children, twenty-eight at Bellevue and twenty at Kings County. Before the start of the 1974-75 school year the program was modified to include only those twenty-eight children at the Bellevue site.

The program at Bellevue Hospital serviced forty-two adolescents during the school year, a significant increase from the twenty-eight children proposed in the planning document. Those children were emotionally disturbed adolescents with histories of truancy from school, poor academic achievement, and serious adjustment problems. Each student in the program was chosen by the hospital team to represent a patient who would respond to this highly individualized remedial program.

The Title VI project supported two teachers and two teacher aides. This program was focused on severely truant adolescents. It was one part of the overall school program at Bellevue Hospital which included a much larger number of children than the forty-two served in this project. Some of the students were attending other neighborhood schools for part of the day and spent part of the day at Bellevue in this project. The educational remediation was geared toward helping the student meet the demands of a public school placement while providing the support of the psychiatric program at Bellevue.

Students were referred to this project if it was felt that they
needed this type of highly individualized program. All students enrolled in the program showed serious academic deficits. The mean age in September was Fourteen years - ten months while the mean achievement scores in the September pre-testing were 3.8 in Math, 4.4 in word recognition, and 5.0 in reading comprehension. The students' programs were built as a result of the deficits seen in the diagnostic testing done on a pre-test basis.

The program was in operation for the whole 1974-75 school year. Fourteen students were pre-tested in September, seventeen in October, four in November, two in January, two in February, and two in March. Two of the forty-one students had left the program prior to the post-testing in May of 1975. All of the students in the program received remedial work in reading and mathematics. Contrary to what had occurred in the past year of the project and what had been predicted in the proposal, only a small percentage of the students this year presented perceptual disabilities. Consequently, very few of the forty-one students in the project were given perceptual training, and very few were tested using perceptual tests on a pre and post basis.

CHAPTER II - EVALUATION PROCEDURES

The evaluation procedures were designed to measure three areas of growth and / or behavior, namely attendance, achievement in reading and math, and perceptual disabilities. The instruments used were standardized instruments. Sampling procedures attempted to provide data on as many of the forty-one students as possible, on both a pre and post test basis. As had been indicated earlier, pre-testing was done when the student entered the Bellevue program, and while the
majority of pre-testing was done in September and October, several students were pre-tested in November, January, February and March. Post Testing was completed in late May of 1975. Two students who left the program in March were post-tested prior to their discharge from the hospital at Bellevue.

Specific evaluation data was collected relevant to the four program objectives, which included the following.

Program Objective # 1 focused on the efforts of the staff to increase attendance over the previous year. The objective of this aspect of the program was that seventy-five percent of the students would show a seventy-five percent increase in attendance. School attendance records were made available for the year 1973-74, and the current 1974-75 year. Data on all of the forty-one students was available.

Program Objective # 2 focused on the improvement of reading achievement during the school year. Specifically, this objective called for at least sixty percent of the students enrolled in the program to exhibit a month and a half progress in reading for each month that they participated in the project. The highly individualized nature of the project, hopefully, would help the students make up for the severe deficits in reading. Both subtests of recognition and comprehension on the Gilmore Oral Reading Test were given on a pre and post basis. Data on pre and post testing was available on all forty-one students, although only thirty students were included in the analysis. Eight students pre-tested as non-readers and it was not considered valid to assign a numerical score to these pre tests. Three other students scored off the top of the scale on both the
pre and post test and were not included since the test was not appropriately normed for them.

Program Objective # 3 focused on the students with perceptual handicaps. Specifically it was the objective of this aspect of the program that thirty-five percent of all students who presented perceptual handicaps would show improvement in perceptual skills. The instruments used in measuring perceptual handicaps included the Illinois Test of Psycholinguistic Abilities, the Wepman Test of Auditory Discrimination, and the Detroit Test of Learning Aptitudes. Very little data was collected in this area of perceptual handicaps, due to the fact that the program for elementary children at Kings County was not included in the program and most of the adolescents at Bellevue did not present perceptual disabilities.

Program Objective # 4 focused on growth in mathematical achievement during the school year. Specifically, the objective was to produce growth at the rate of one month for each month a student was enrolled in the program. The instrument used to measure this growth was the Wide Range Achievement Test. All forty-one of the students enrolled in the program were tested on a pre and post basis.

CHAPTER III - FINDINGS

Objective # 1: As a result of participation in the program, seventy-five percent of the participants will show a seventy-five percent increase in school attendance.

Table 1 - Attendance Data on Bellevue Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean Percent Attendance</th>
<th>% Who Increased 75 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>36.4 %</td>
<td>78.0 %</td>
</tr>
<tr>
<td>1974-75</td>
<td>84.2 %</td>
<td></td>
</tr>
</tbody>
</table>
Table 1 indicates that the program more than met this objective. As can be seen, the mean attendance rate for the forty-one students during the 1973-74 school year was 36.4% of the possible days. During the 1974-75 school year the attendance rate was 84.2% of the possible days. Seventy-eight percent (32 students out of 41) did increase their rate of attendance at least seventy-five percent over the 1973-74 school year. As a group the shift from 36.4% attendance to 84.2% attendance represents an increase of 131%. It should be noted that in six cases the attendance in the 1973-74 year was above 65% and the student could not possibly have increased his attendance by seventy-five percent since it would have required the student to attend over 100% of the time. In one sense thirty-two out of a possible thirty-five students increased their attendance by seventy-five percent over the 1973-74 school year.

Objective #2: As a result of participation in the program, sixty percent of the participants will improve by at least 1.5 grade units in reading.

Table 2 - Data on Reading Achievement from the Gilmore Oral Reading Test.

<table>
<thead>
<tr>
<th>Sub-Test</th>
<th>N*</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>% Students Showing 1.5 Units Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Recognition</td>
<td>30</td>
<td>4.43</td>
<td>5.66</td>
<td>62.1%</td>
</tr>
<tr>
<td>Comprehension</td>
<td>30</td>
<td>5.05</td>
<td>6.26</td>
<td>63.3%</td>
</tr>
</tbody>
</table>

* See Chapter II for explanation of discrepancy between 30 and 41.

The data from Table 2 above support the conclusion that the program did produce at least 1.5 units of growth in reading for each month of the program for at least 60% of the students. This evidence would support the claim that this is an effective program in the area of remediation of reading skills in these students.
Objective # 3: As a result of participation in the program, 35% of those pupils having perceptual handicaps will show improvement in perceptual areas.

As was indicated earlier, the unit in the elementary school at Kings County Hospital did not participate in the program as had been originally planned. The unit at Bellevue included adolescents and of the 41 students in that program only five were given any form of perceptual testing or training. Because of the above reasons, this evaluator did not consider it necessary to carry out a formal evaluation of these five students data, since the results would have no meaning. It should be noted that the five students did show some improvement in several of the sub-tests on the I.T.P.A., but again it seemed irrelevant to talk about such data when the objectives were clearly modified when the student population was changed.

Objective # 4: As a result of participation in the program, 60% of the participants will improve by at least one school year in mathematical abilities.

<table>
<thead>
<tr>
<th>Time of Test</th>
<th>N</th>
<th>Mean Math Score</th>
<th>% of Students Showing 1.0 Units of Growth per month.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>41</td>
<td>3.82</td>
<td>90.2%</td>
</tr>
<tr>
<td>Post-Test</td>
<td>41</td>
<td>5.23</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 indicates a clear success in meeting the objective of producing one month of progress for each month the student was in the program in math achievement. Seventy-five percent of those in the program increased their math scores by at least one year. The data also indicated that if the growth is compared with the number of months a student was in the program, then 90% of the students
made at least one month of progress for each month they were in the project. All 41 students in the program were tested on a pre and post test basis in math achievement.

It must be concluded from the review of the above data that the program did, indeed, more than meet the objectives which were set out in the initial proposal. The results in attendance, reading and math achievement are all supportive of the value of this project. These results strongly support the impressions this evaluator received when participating in the on-site visitations to the program during the school year. The project appeared to be a highly structured, well coordinated, and effective program in this psychiatric hospital.

It was the impression that this program was very relevant and meaningful to the needs of the students involved. The materials and facilities which were made available to the project were more than adequate to the needs of the students, teachers, and teacher aides. All but three of the students were achieving on a level at least two years below the level expected from their ages, and these three students presented severe truancy problems.

The evaluation report on this project for the 1973-74 year was very positive. Specific recommendations had been made to increase the program in size and staff. Additional para-professional staff had been recommended. The addition of a highly skilled diagnostic evaluation teacher specialist had also been recommended. In addition a more multi-modality approach had been recommended.

The program appears to have responded to those recommendations from 1973-74 wherever possible. The funding of this Title VI project had been cut as it went into the second year of 1974-75, and will
be cut again in 1975-76 as the program goes into the third year of funding. The staff recommended last year have not been added due to the funding cuts, since the regular school at Bellevue did not have the additional money to pay for these additional staff members.

The recommendations concerning a multi-modality approach have been implemented. Efforts were made to upgrade the diagnostic skills of the present teaching staff since it was impossible to add an additional teacher with highly developed skills in that area. In general, the program has tried to respond to the past evaluation in an appropriate manner.

CHAPTER IV - SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.

This project of individualized instruction for emotionally disturbed children located at Bellevue Hospital, appeared to be a highly successful program. The results were very supportive of the activities which were included in the project. Students at the hospital often present very serious academic handicaps as well as a history of school truancy. The individualized instructional program as an integrated part of the school for adolescent patients at PS 106 apparently provides a model of concentrated services which can and did produce growth in adolescents.

The program met its objectives in producing significant growth in both reading and math achievement. The program also made a significant impact on the attendance records of the students involved, producing over a hundred percent improvement in their attendance. The only objective which was not met, the remediation of perceptual handicaps, was really designed for the elementary school population.
at Kings County Hospital in Brooklyn which was deleted from the
project before September.

Unique to this program was the efforts of the hospital team to
keep and maintain contact with school programs outside of the hospital
to which the students would be returning. A large proportion of the
students spent part of the day or week in the hospital program and
part of the day or week in a neighborhood school. Central to the
program's success was the outreach from Bellevue into the neighbor-
hood schools.

Recommendations for improving the program would include the
following:

1. The objectives in reading and math should be defined in
terms of the historical regression formulas. It was never made
clear to this evaluator why certain percents were established as
the criteria for success, and these 60% or 75% success seemed to
be arbitrary and not really serving any logical purpose.

2. The instruments used to carry out the data collection
could be improved, so that they would produce diagnostic infor-
mation and also give scores for statistical analysis. The Key
Math test or the math sub-test of the Peabody Individual Achiev-
ment Test would be more appropriate than the math test on the
Wide Range Achievement Test.

3. While the Gilmore Oral Reading Test does give a certain
amount of information on the reading abilities of the students, it
would be recommended that either the Woodcock-Fristoe or the
reading sub-tests on the Peabody Individual Achievement Test
be substituted for the Gilmore, and again would serve the dual
purpose of being diagnostic and providing data as well.
4. If the program is going to be reinstated in the Kings County Hospital with elementary school aged children, the perceptual training aspect of the project should be maintained, but if the program will not include an elementary school aged population, the objective relating to the growth in perceptual skills should be deleted from the project. The program at Bellevue has no urgent need for an extensive perceptual training component.

5. A recommendation is being made to try to modify the funding of this project. While these 41 students who participated in the project this year received essential and relevant services, many of them remained on the registers of the neighborhood schools. For this reason, Bellevue, PS 106 received no tax levy support for these children. This distinction of a child being on one register seemed artificial and the funding should have been split, so that Bellevue would be able to carry on this program at full strength.

6. Because of the overwhelming positive data generated from this project, and because the several objectives were met, it is the strong recommendation of this evaluator that this project be continued and be studied as a model for other schools in the city serving an adolescent psychiatric patient population.
Program for Emotionally Disturbed Children Unable to Participate in Formal Educational Programs.

In this table enter all data loss information. Between MIR, item #30 and this form, all participants in each activity must be accounted for. The component and activity codes used in completion of item #30 should be used here so that the two tables match. See definitions below table for further instructions.

<table>
<thead>
<tr>
<th>Component Code</th>
<th>Activity Code</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group I.D.</td>
<td>Test Used</td>
<td>Total N</td>
<td>Number Tested/ Analyzed</td>
<td>Participants Not Tested/ Analyzed</td>
<td>Reasons why students were not tested, or if tested, were not analyzed</td>
</tr>
<tr>
<td>6086172061</td>
<td>Gilmore</td>
<td>41</td>
<td>41</td>
<td>30</td>
<td>11</td>
<td>26.8%</td>
<td>All 41 students were tested, 11 of the</td>
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<tr>
<td></td>
<td>Oral Reading</td>
<td>1968</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>scores were not used. 8 were not used</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>because the pre-test score was 'non-reader'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and this was impossible to compare with</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>a post test score. 3 other students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>scored off the top of the scale on both</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>pre and post tests.</td>
</tr>
</tbody>
</table>

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.

(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.).

(3) Number of participants in the activity.

(4) Number of participants included in the pre and posttest calculations found on item #30.

(5) Number and percent of participants not tested and/or not analyzed on item #30.

(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.
Measures of growth other than Standardized Tests

30D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 30A, B or C, use any combination of items and report on separate pages. Attach additional pages if necessary.

<table>
<thead>
<tr>
<th>Component Code</th>
<th>Activity Code</th>
<th>Objective Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 5 1 6 1</td>
<td>7 2 0</td>
<td>8 2 5*</td>
</tr>
</tbody>
</table>

* Attendance in Program.

Brief Description Attendance in the school program was compared for 1973-74 year and the 1974-75 year. Increase of 75% attendance by 75% of the students was the objective.

Number of cases observed: 41 Number of cases in treatment: 41

Pretreatment index of behavior (Specify scale used): No scale needed. Records of student attendance during the 1973-74 year were examined. The objective of increasing the percentage attended during 1973-74 was calculated for each child.

Criterion of success: 75% of students (31 of 41) must increase their attendance by 75% of that prior year of 1973-74.

Was objective fully met? Yes No

If yes, by what criteria do you know? 32 of 41 students increased their attendance by 75% over the 1973-74 school year (78.0%).

Comments: ____________________________
Measures of growth other than Standardized Tests

30D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 30A, B or C, use any combination of items and report on separate pages. Attach additional pages if necessary.

Component Code Activity Code Objective Code
6 0 8 6 1 7 2 0 8 0 1

Brief Description Pre and Post testing using the Word Recognition sub-test of the Gilmore Oral Reading Test; 60% of participants will show an increase of 1.5 months for each month in the program.

Number of cases observed: 2 9 Number of cases in treatment: 4 1

Pretreatment index of behavior (Specify scale used):

Gray Oral Reading Test.

Criterion of success: 60% of participants will show 1.5 months progress for each month in the program.

Was objective fully met? Yes [X] No [ ] If yes, by what criteria do you know? 18 of 29 students (62.1%) did show an increase of 1.5 months for each month they were in the program.

Comments:
VIII. MACHINE SHOP TRAINING

1. Basic Mechanical Training

Included in this program is training in the use of both hand and power tools. Basic arithmetic training, as required, may also be provided. Training is included in drill press, grinder, bench saw, etc.

2. Machine Shop Training

This program includes the elements of the basic training program as well as more advanced level training, such as the use of measuring instruments, ability to follow sketches and blueprints, and operation of more complex power tools (Shaper, Milling Machine, Turret Lathe, etc.)

IX. INDUSTRIAL TRAINING

1. Stock-Shipping Room Training

This program includes training in both the record-keeping and physical duties involved in shipping room activities. Included, when required, is arithmetic improvement training.

2. Floor Boy - Floor Girl Training

Training is provided in floor activities, including supplying of materials, removal of completed work, and, where applicable, minor record keeping, and related activities.

3. Packaging and Assembly

Training in this area may include not only hand-assembly and inserting, but also operation of hand and foot-operated stapling machines, manual and semi-automatic heat sealing equipment, etc. For those capable of learning more complex operations, training will also be provided in operation of packaging machines, such as blister-pack, shrink packaging, and skin pack equipment.

4. Order Picking

Training is given in this area in both record-keeping (billing, etc.) and packaging duties as relates to employment in either industrial or retail settings. As indicated, experience is also provided in either ticketing and labelling duties, or in packing-shipping duties, or both.
Measures of growth other than Standardized Tests

30D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners.

Where your approved measurement devices do not lend themselves to reporting on tables-30A, B-or-C, use any combination of items and report on separate pages. Attach additional pages if necessary.

Component Code Activity Code Objective Code
6 0 8 6 1 7 2 0 8 0 1

Brief Description Pre and Post testing using the Comprehension sub-test of the Gilmore Oral Reading Test, 60% of the participants will show an increase of 1.5 months for each month in the program.

Number of cases observed: 30 Number of cases in treatment: 41

Pretreatment index of behavior (Specify scale used): Gray Oral Reading Test.

Criterion of success: 60% of participants will show 1.5 months of progress for each month in the program.

Was objective fully met? Yes ☒ No ☐ If yes, by what criteria do you know? 19 of 30 students (63.3%) improved more than 1.5 months for every month they were in the program.

Comments: 20
Measures of growth other than Standardized Tests

30D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 30A, B or C, use any combination of items and report on separate pages. Attach additional pages if necessary.

<table>
<thead>
<tr>
<th>Component Code</th>
<th>Activity Code</th>
<th>Objective Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>60961</td>
<td>720</td>
<td>801</td>
</tr>
</tbody>
</table>

Brief Description: Pre and Post testing using the Wide Range Achievement Test, Math sub-test, 60% of participants will show an increase of 1.0 months for each month in the program.

Number of cases observed: 141
Number of cases in treatment: 141

Pretreatment index of behavior (Specify scale used): 1965 edition of the Wide Range Achievement Test.

Criterion of success: 60% of participants will show 1.0 months progress for each month in the program.

Was objective fully met? Yes [x] No [ ] If yes, by what criteria do you know? 90.2% of the students (37 of 41) progressed at least 1.0 months for each month they were in the program in math.

Comments: