This paper reports the results of the evaluation study of the Integrated Program, a special education teacher preparation model at Fitchburg State College. Course content is presented during formal learning seminars scheduled at schools in the communities. Students observe professional personnel teaching children and follow up their observations through discussion with a college faculty member. The students are also provided with a supervised teaching experience based on the theoretical framework they are learning. The evaluation focuses on the overall objectives of the program, which state that a student will be able to (a) list the strengths and weaknesses of any evaluation instrument, (b) assess children's needs through the administration of specific evaluation instruments, (c) write behavioral objectives, (d) design an instructional strategy, and (e) identify himself as a member of a professional team. The control group consisted of students who had completed special education methodology courses prior to initiating the experimental integrated program. Tests were constructed to measure attainment of program objectives and were administered to experimental and control group participants. Results of the tests show no significant differences in the attainment of any objectives and suggest that when the experimental integrated program is refined, it will produce more capable special education teachers. (HND)
The Evaluation of a Special Education Teacher Preparation Model, The Integrated Program
1973-1974

Prepared by
Dr. Rosemarie Giovino, Associate Professor
Department of Special Education
Fitchburg State College
Fitchburg, Mass.

Assisted by
Dr. Lee Orlandi, Evaluation Consultant
Heuristics, Inc.
850 Providence Highway
Dedham, Mass.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>PROGRAM DESCRIPTION</td>
<td>3</td>
</tr>
<tr>
<td>General Requirements</td>
<td>3</td>
</tr>
<tr>
<td>Structure</td>
<td>3</td>
</tr>
<tr>
<td>Content</td>
<td>5</td>
</tr>
<tr>
<td>Objectives</td>
<td>6</td>
</tr>
<tr>
<td>Elementary School - Staff and Students</td>
<td>10</td>
</tr>
<tr>
<td>NCATE Standards</td>
<td>10</td>
</tr>
<tr>
<td>EVALUATION DESIGN</td>
<td>12</td>
</tr>
<tr>
<td>PROGRAM OUTCOMES</td>
<td>19</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>28</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>29</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>31</td>
</tr>
</tbody>
</table>
INTRODUCTION

The experimental integrated program is the initial phase of a teacher preparation model developed for the first semester College junior whose career goal is to be a special educator. The Integrated Program was designed by the faculty of the Special Education Department of Fitchburg State College. The major focus of the program was the effort to move the preparation model from the college to the elementary schools in the community.

Traditionally, junior students entered the professional block of their college education during the first semester and enrolled in the following methods courses given at the college:

- Reading in Special Education
- Identification and Diagnosis of Learning Disabilities (elective)
- Language Arts
- Curriculum in Special Education
- Methods and Materials in Special Education

Student teaching was completed in the second semester.

The experimental integrated program, in contrast, employs a different strategy. The underlying assumption is that better preparation of teachers will occur if college students and college faculty are located in the educational settings in the communities. Course content is presented during formal learning seminars scheduled at the schools in nearby communities. Students observe professional personnel teaching children, and follow up their observations through discussions with a college faculty team member who is also present during observational periods. Further, the college students
are provided with supervised teaching experience based on the theoretical framework they are learning. Student teaching occurs during the final phase of the teacher preparation model.
PROGRAM DESCRIPTION

General Requirements

At the end of the sophomore year Special Education College Students have completed some of the general education requirements of the college. In addition, they must have an overall average of 2.0 or above to be admitted to the experimental program. Included in the completed requirements are the following professional courses:

- Nature and Needs of Exceptional Children
- General Psychology
- Child Psychology
- Tests and Measurements (if possible)

The remaining general education requirements and elective courses may be completed during first and/or second semester senior year. Student Teaching is done in the second semester junior year or first semester senior year. Students may elect to enter the experimental integrated program in the second semester junior year. If they choose the latter course, they continue to take general education and elective courses in the first semester, junior year, enter the integrated program second semester junior year, and complete student teaching in the first or second semester of the senior year.

Structure

The experimental integrated program was introduced during a three-week orientation program held on the college campus. The major emphasis of this first phase was on reading and language development (18 lecture hours). The design also included an introduction to the following areas: Organizational design and
planning (6 hours); observational systems (3 hours); group dynamic techniques (6 hours); learning styles (3 hours); instructional media (3 hours); social studies (3 hours); creative arts (3 hours); math methods (14 hours); behavioral management (6 hours). The entire faculty of the Special Education Department taught during orientation, along with faculty members from other departments in the college.

In the second phase four teams, each made up of fifteen students, and two faculty members from the Special Education Department worked in four elementary schools, located in Leominster (3) and Fitchburg (1), Monday through Thursday from 8:30 to 12:00. (Faculty members alternated days so that they were free to teach elective courses at the college and to supervise student teachers. See Figure 1 in Appendix.) Each team operated out of a classroom provided for that purpose. The students learned theory during formal learning seminars, observed children in academic and social interactions, and taught individual and small groups of children under direct supervision from college faculty and/or elementary school personnel. In this way, the content presented during orientation was developed further. Major emphasis was placed on reading and language development, math skills, affective education, individual diagnosis, prescriptive programming, individually guided instruction, and group teaching experiences. In addition, on Friday, the program participants attended planned workshops in math, physical education, home arts, etc., held either at the college or at various locations in the communities.
Content

During formal seminars the reading/language content was presented sequentially beginning with the pre-reading period. This included defining reading as a physical process, a neurological process, a language, a social and a cognitive process. Emphasis was placed on reading as skill development and reading as it related to the other communication arts. The college student analyzed the elementary students' learning styles and diagnosed behaviors in relation to each component of the reading sequence. The college student then developed and taught individual programs based on this analysis. A structured communication system between the college student, the college faculty team member, and the classroom teacher permitted formal carry-over of skill development and successful learning experiences for the child during the integrated day.

The psychological education content included a study of self-image building, self-concept in relation to group interaction, value clarification, achievement motivation, group dynamic techniques, and organizational strategies to program for such learning within the specific content area of reading and math. The college student studied the theories related to these areas and experienced a number of techniques within the team itself, as well as operationalizing these techniques while working with the elementary students.

Upon completion of one semester of the experimental integrated program the college student developed at least two prescriptive programs, one for a primary age child and one for an intermediate age child. During this educational experience, the college student observed the children in various academic and recreational settings.
assessed academic and social needs through formal and informal
tests and observations, designed programs based on assessment data,
implemented teaching strategies for a three-month period, and de-
signed a six-month program for these elementary students.

In addition to the above, the college students developed and
taught a learning experience packet for a group of six to eight
elementary age students. The packet was based on the academic and
social interests of these children. Some of the packets included
experiences in the areas of:

- Creative Listening
- Story Plays
- Music
- Community Involvement
- Buying
- Black Studies
- Physical Safety
- Creative Art
- Social Skill Development
- Science

Classroom management strategies and small group interaction processes
were assessed and analyzed by the college students and the faculty
team.

Objectives

The training/learning environment in the community schools
is central to the pursuit of the objectives of the special education-
teacher preparation program. Traditionally, these objectives were
accomplished through formal methodology courses and through student
teaching. The experimental integrated program attempts to achieve
the objectives through academic, observational and participatory
experiences in the elementary school and through student teaching.

The specific objectives of the professional block are as
follows:

Objective 1. Students will be able to list the strengths and weak-
nesses of any evaluation instrument in terms of:
Objective 2. Students will be able to assess children's physical, socio-emotional, perceptual, academic, language, intellectual, and psychomotor needs through either the administration of or examination of the results of specific evaluation instruments including tests, rating scales, and systematic observations.

a. Students will be able to list the stages of growth in the development of:

- Language
- Motor Skill
- Speech
- Cognitive functioning

b. Students will be able to administer and interpret the results of the following tests:

**Academic**
- Stanford Diagnostic Math & Reading Test
- Gates-MacGinitie Reading Test
- Gates-McKillop Reading Diagnostic Tests
- Diagnostic Reading Scales by George Spache
- The Listening-Reading Series by Donald Durell

**Physical**
- Henia Scale of Speech Development

**Socio-Emotional**
- Myklebust Pupil Behavior Rating Scale

**Perceptual**
- Frostig-Development Test of Visual Perception
- Neuman Test of Auditory Discrimination

**Attitudes and Interests**
- Reading Interest Inventory

**Linguistic**
- ITSA
- Meeting Street School Screening Test
Motor Purdue Perceptual Motor Survey

c. Students will be able to interpret the results of the following tests, records, rating scales:

Academic
  Standardized Achievement Tests
Physical
  Massachusetts Vision Test
  Audiometric Examinations
  Health Records
Intellectual
  WISC
Motor
  Lincoln-Oseretsky Motor Test
  Doll Adaption
Socio-Emotional
  Vineland Social Maturity Scale
  Pupil Behavior Inventory (Winter et al)
Cognitive
  The Concept Assessment Kit-Conservation, Piaget Tasks
Attitudes
  San Diego County Inventory of Reading Attitude

d. Students will be able to state the level of growth of a child with special needs in each domain (affective, perceptual, cognitive, psychomotor) through the administration and analysis of or by the examination of the results from specific evaluative instruments and rating scales.

Objective 3. The students will be able to write behavioral objectives based on assessment data for specific tasks in reading, math, oral and written language skill development.

Objective 4. The students will be able to design an instructional strategy to achieve these objectives.

a. The students will be able to specify the advantages of various management techniques for specific kinds
Objective 1. The student will be able to identify him/herself as a member of a professional team, e.g., willingness to contribute quality information (e.g., about a child's problems, progress, etc.) to appropriate teams by respecting confidentiality of this information he or she possesses.

Objective 5. The student will serve as a member of professional teams by contributing quality information (e.g., about a child's style of learning) and the student will be able to adapt tasks according to a visual or auditory style of learning.

b. The student will be able to write lesson plans, block plans, plan book, a unit, a case study and individual prescriptive programs in reading, math, and language in accordance with the child's strong learning style.

d. The student will be able to define task analysis and adapt the student will be able to adapt tasks accordingly.

Objective 6. The student will be able to identify him/herself as a member of a professional team, e.g., willingness to contribute quality information (e.g., about a child's problems, progress, etc.) to appropriate teams by respecting confidentiality of this information he or she possesses.
to share ideas, willingness to listen to others' viewpoints, willingness to initiate activities. Competency in the above objectives is essential to the special education teacher.

Elementary School-Students and Staff

The elementary students participating in the program were from ages six to fourteen years. They were identified as needing special help by the unit leaders and the classroom teacher. The referrals to the integrated program were based on teacher judgment and initial screening instruments. An in-depth analysis of learning needs and the development of prescriptive programs were planned by the college students. Since the children were integrated into regular classes for a part of the school day they were in contact with not only the special educator but also with other school personnel, including the principal, vice-principal, special education coordinator, guidance counselor, bilingual educator, instructional media specialists, speech therapist, unit leaders, curriculum specialist, and classroom teacher. An important part of the college student's preparation as a special educator was to learn how to work with other school personnel who had roles in the total educational process of the child.

NCATE Standards

The Integrated Program, as developed, appears to be in accord with the criteria established for the professional studies component of the NCATE Standard of 1973, sections 1.31 through 1.3.4.
"...Standard 1.3.3. - Teaching and Learning Theory with Laboratory and Clinical Experience - 'The professional studies component of each curriculum includes the systematic study of teaching and learning theory with appropriate laboratory and clinical experience.' The study of teaching and learning theory requires laboratory experience through which the student may conceptualize principles and interpret their application to practical problems.

Certain kinds of problems such as planning, selection of learning resources, motivation, presentation, diagnosis of learning difficulties, individualization of instruction, classroom management, and evaluation, represent recurring types of classroom situations. Clinical teaching involves the student in the diagnosis and 'treatment' of the individual problem, under the guidance of an experienced teacher. Because it is now possible to simulate many of these situations or to display a selection of real problems electronically - and because the prospective teacher's efforts can be recorded, viewed, and reviewed it is now feasible to give much effective clinical experience outside the school classroom."

Standard 1.3.4. - Practicum - "The professional studies component of each curriculum for prospective teachers includes direct substantial participation in teaching over an extended period of time under the supervision of qualified personnel from the institution and the cooperating school..."
EVALUATION DESIGN

Evaluation of an education program may involve tasks concerned with needs assessment, program planning, program implementation, process evaluation, and outcome evaluation. The Experimental Integrated Program offered to students enrolled in the Special Education program of Fitchburg State College was concerned with an assessment of program outcomes, i.e., summative evaluation, and, to this end, an evaluation plan was designed. The design, unfortunately, was not developed until the program was near the end of its first year of operation, and was developed with this constraint in mind. In some respects, though, this limitation was turned to its advantage.

As it turned out, a number of students did not participate in the Experimental Integrated Program this year. These students were already enrolled in or had completed the special education methodology courses prior to initiating the experimental integrated program. The faculty did not consider the non-participants different from the participants in any important ways. Although the non-participants did not meet the stringent requirements of a true control group, as is necessary in pure research, they appeared similar enough to the participants to serve as members of a comparison group in a summative evaluation study. Consequently, performance of the non-participants (who proceeded through the regular traditional program for Special Education students prior to the introduction of the integrated program this year) was compared with that of participants, in the expectation that results would provide some indication of the
effects of the Experimental Integrated Program, as it operated this past year.

The design of the evaluation, then, takes advantage of the fact that some student teachers participated in the traditional school program rather than in the Integrated Program. The paradigm for the evaluation design is in Figure 2.

\[ \begin{array}{ccc}
E & X^* & T_2 \\
C & X^{**} & T_2 \\
\end{array} \]

*Integrated Program
**Traditional Program

The summative evaluation design focuses, of course, on the overall objectives of the program since those objectives are envisioned as the final outcomes. The objectives were the result of a long period of study involving members of the entire department. The objectives, then, may be interpreted as criteria for judging effective performance of a student teacher in special education as established at Fitchburg State College, whether or not a student teacher was a part of the Integrated Program.

The summative evaluation procedures for each objective are presented below. Instruments are included in the appendix.

Objective 1. A sample of students in the experimental and control groups were asked to list the strengths and weaknesses of a selected evaluation instrument. The results
Objective 2.  
(a) A sample of students in the experimental and control groups were asked to list and describe the stages of growth in the development of language and motor skill. The results were scored and analyzed in the same way as for Objective I. 
(b) A sample of students in the experimental and control groups were observed and rated (i.e., scored) on their administration of selected tests. The students were also scored on their interpretation of selected test results. The scoring and statistical analysis were the same as described in Objective I. 
(c, d) A sample of students in the experimental and control groups were presented with a complete case study presentation of a child including a variety of test results, personal background information, physical information, results of observation, rating scales, etc. On the basis of this case study, the students were asked to list the child's strengths and weaknesses in cognitive, perceptual, psychomotor, affective areas. The scoring and statistical analysis were the same as described in Objective I. 

Objective 3. A sample of students in the experimental and control groups were presented with records (see 2c, d) of a...
Objective 4

(a) A sample of students in the experimental and control groups were asked to specify the advantages and disadvantages of various individual and group management techniques for the child in the case study. The scoring and analysis were the same as for Objective I.

(b,c,d) A sample of students in the experimental and control groups were presented with the case study records (see 2,d) of a child and asked to prepare a lesson plan using task analysis techniques for an auditory learner. All the essential components of a lesson plan had to be included.

Objective 5

Designated cooperating school personnel rated a sample of students in the experimental and control groups on:

(a) The quality of information they contributed to appropriate recipients;
(b) their management and respect for confidential information;
(c) and teaching ability.

Objective 6

Designated cooperating school personnel rated a sample of experimental and control group students on characteristics of participation on a professional
On May 31, 1974 the student teachers assembled at Fitchburg State College to take the tests described in the evaluation procedures. Thirty students had participated in the experimental integrated program and 39 had participated in the traditional program prior to their student teaching experience. Students in each group (i.e., Experimental and Traditional) were randomly divided into two pairs (e.g., 15 and 18; 15 and 21). One of the two pairs was randomly selected to respond to questions on the case study (i.e., items 4, 5, 7); the other pair responded to questions 1, 2, and 6.

The cooperating teachers rated the students on the Test Administration Competence Scale, the scale on Participation on a Professional Team, and the Student Teacher Evaluation Form.

All instruments were developed as part of the evaluation. Within the time limits available, it was not possible to validate or determine the reliability of the instruments. The instruments were prepared, however, with the assistance of a professional evaluator, and their content was thoroughly scrutinized by members of the special education department. Evaluation plans for the future include provisions for refining the instruments in accordance with accepted principles of measurement.

Two members of the special education department scored the test items. Each first made up correct answers separately; they then compared notes, and constructed composite answers. Values were assigned to each of the points that should have been included.
in answers to each question. (Each answer added up to 100%.)

Each student's paper was coded so that there was no knowledge of names, and each scorer independently scored each test item on each student starting with item number one (see Figure 3).

Interscorer agreement was computed on each test question by using the Pearson Product-moment correlation coefficient. There was a high degree of agreement between the scorers as indicated in Table 1.

**TABLE 1**

Interscorer Agreement as Determined by the Pearson Product Moment Correlation Coefficient

<table>
<thead>
<tr>
<th>Scorer</th>
<th>Question</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>#1</td>
<td>.71</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>#2</td>
<td>.94</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>#6</td>
<td>.79</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>#4</td>
<td>.97</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>#5</td>
<td>.87</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>#7</td>
<td>.80</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>Question #1</td>
<td>Question #2</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>Scorer A</td>
<td>Scorer A</td>
</tr>
<tr>
<td>#1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 3. Scoring format of test items.
PROGRAM OUTCOMES

Results of comparisons between experimental and traditional groups on each objective have been reported below in accordance with the evaluation procedures described earlier.

Objective 1, Question 1:

Results on Objective 1 --- listing strengths and weaknesses of a selected evaluation instrument --- have been included in Table 2.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>7.93</td>
<td>10.84</td>
<td>-2.68</td>
<td>.73</td>
<td>NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>18</td>
<td>10.61</td>
<td>9.22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that there was no significant difference between the two groups. Students in both groups performed very poorly on the item, showing little knowledge of basic measurement principles.

Objective 2a, Question 2:

Results on Objective 2a --- listing and describing the stages of growth and the development of language and motor skill --- are reported in Table 3.

Each question has a maximum score of 100 and a minimum score of 0.
TABLE 3
Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 2; Question 2.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>66.66</td>
<td>22.11</td>
<td></td>
<td>.55</td>
<td>.07</td>
</tr>
<tr>
<td>Traditional</td>
<td>18</td>
<td>66.11</td>
<td>18.89</td>
<td></td>
<td></td>
<td>NS</td>
</tr>
</tbody>
</table>

The results indicate that there was no significant difference between the two groups. Both groups performed much better than on the previous question.

Objectives 2b, 2c, and 2d: Rating Scale and Question 4:

Objectives 2b, 2c, and 2d were concerned with administering and interpreting selected tests and assessment instruments. The part of Objective 2b dealing with the administration of tests was evaluated through ratings by cooperating teachers. On many items cooperating teachers were unable to rate students because they did not observe them under the designated conditions. Only "Yes" or "No" responses were included in the analysis.

Results were to be analyzed by the Fisher Exact Probability Test. Since teachers, however, responded with a YES (i.e., student teacher displays the behavior) to almost all rated students, it was unnecessary to conduct the tests. There were clearly no significant differences between the two groups, and both groups scored highly on the rated items.

Results on Objective 2c and 2d --- interpreting the results of selected tests and assessment instruments and listing the child's
strengths and weaknesses in the affective, cognitive, perceptual, and psychomotor domains --- are reported in Table 4.

**TABLE 4**

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objectives 2b, 2c, and 2d; Question 4.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>46.53</td>
<td>18.75</td>
<td>3.49</td>
<td>.53</td>
<td>NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>21</td>
<td>43.04</td>
<td>18.90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that there was no significant difference between the two groups. The experimental group, however, had a higher mean score than the traditional group on this task. 

Objective 3 and Objective 4b, Question 5.

Results on Objective 3 --- writing behavioral objectives based on assessment data for reading and math skill development and results on Objective 4b --- assessing the strong learning style of the child by interpreting test results --- are reported in Table 5.

**TABLE 5**

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 3, and Objective 4b; Question 5.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>52.00</td>
<td>39.86</td>
<td>-2.04</td>
<td>.15</td>
<td>NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>21</td>
<td>54.04</td>
<td>40.75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results indicate that there was no significant difference between the experimental and the traditional groups on this task.

**Objective 4c, and 4d; Question 6.**

Objectives 4c and 4d were concerned with writing a lesson plan in accordance with a child's strong learning style and using task analysis to adapt a reading skill to an auditory style of learning. The results are presented in Table 6.

**TABLE 6**

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 4c, and 4d; Question 6.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>66.00</td>
<td>21.84</td>
<td>-.11</td>
<td>.01</td>
<td>NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>18</td>
<td>66.11</td>
<td>26.06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that there was no significant difference between the two groups. The mean scores were similar for both groups showing an adequate degree of competency for both experimental and traditional groups.

**Objective 4a, Question 7**

Results on Objective 4a --- listing the advantages and disadvantages of various individual and group behavioral management
techniques for a specific learner --- have been indicated in Table 7.

**TABLE 7**

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 4a, Question 7

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>48.00</td>
<td>11.07</td>
<td></td>
<td>6.34</td>
<td>1.39 NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>21</td>
<td>41.66</td>
<td>15.45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was no statistical difference between the experimental and the traditional groups on this task.

**Objective 5. Student Teacher Evaluation Scale**

Objective 5 was concerned with the student teacher's performance during her student teaching experience regarding serving as a member of a professional team by contributing quality information to appropriate recipients. This was evaluated through ratings by cooperating teachers and the results are included in Tables 8a, 8b, 8c, 8d, 8e, 8f, 8g.
### TABLE 8a
Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Subtest 1, Academic Knowledge

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>11.40</td>
<td>2.72</td>
<td></td>
<td>.572</td>
<td>.685 NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>10.82</td>
<td>3.29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 8b
Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Subtest 2, Instructional Skills

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>22.48</td>
<td>6.36</td>
<td></td>
<td>.238</td>
<td>.122 NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>22.24</td>
<td>7.63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 8c
Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Subtest 3, Management of Learning Environment

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>11.08</td>
<td>3.46</td>
<td></td>
<td>.333</td>
<td>.348</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>11.41</td>
<td>3.42</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 8d
Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Subtest 4, Teacher-Staff Relationship

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>19.08</td>
<td>6.53</td>
<td></td>
<td>.183</td>
<td>.099</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>18.89</td>
<td>6.77</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 8e
Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Subtest 5, Teacher-Pupil Relationship

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>16.40</td>
<td>6.86</td>
<td></td>
<td>1.22</td>
<td>.666</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>17.62</td>
<td>6.23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 8f

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Subtest 6, Professional Characteristics

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>24.08</td>
<td>7.55</td>
<td></td>
<td>.023</td>
<td>.0106 NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>24.10</td>
<td>8.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 8g

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 5, Student Teacher Evaluation Scale, Total Score

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>103.68</td>
<td>29.63</td>
<td></td>
<td>.997</td>
<td>.115 NS</td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>104.67</td>
<td>33.86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was no statistically significant difference between the experimental and the traditional groups on each subtest and on the total score on the Student Teacher Evaluation Scale. The mean scores of both groups were high indicating that both were rated equally highly on the tasks.

Objective 6, Participation on a Professional Team Scale

Objective 6 was concerned with the student teacher's competency for participating on a professional team. This was evaluated through ratings by cooperating teachers. The results are indicated in Table 9.
TABLE 9

Summary of Uncorrelated t Test Between Experimental and Traditional Groups on Objective 6, Participation on a Professional Team Scale

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>4.080</td>
<td>.778</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>29</td>
<td>4.191</td>
<td>.794</td>
<td>.1106</td>
<td>.5971</td>
<td>NS</td>
</tr>
</tbody>
</table>

The results show that there was no statistically significant difference between the experimental and the traditional groups on Participation on a Professional Team.
CONCLUSIONS

The evaluation design had important shortcomings, particularly the use of a control group which had not been randomly assigned. An assumption was made that the control group was similar to the experimental group prior to receiving the past year of instruction. The control group had, in fact, taken more coursework in the areas involved, giving it some advantage over the experimental group. Within the limitations of this design, the data appear to support the conclusion that the experimental group did not differ significantly from the traditional group on any of the specific objectives measured. It should be noted, however, that this evaluation did not measure change in attitude toward school and learning on the part of the college student or on the part of the elementary school child worked with. Also the study did not evaluate attitude change on the part of elementary school teachers toward the child with special needs. Further the study did not assess the gains made by the elementary school children in skill development in reading and math. Possibly these topics could be considered for analysis in the future.

In the final analysis, it is important to note that the experimental program, in its first year of operation, yielded results comparable to the traditional program. As the program is refined after several cycles, it is probable that the experimental program will result in superior performance on the part of the students. Certainly the evaluation has identified several areas in which the educational program is deficient, and obviously requires further review.
SUMMARY

There are many points of view in the education of children with special needs and in the education of teachers of these children. The Department of Special Education at Fitchburg State College believes that the personal and professional growth of the college student deserves a major emphasis along with the development of the children with whom they will be interacting. The conclusions of this study indicate that we do not have an answer as to the best way to implement this emphasis, but we do have an alternative approach, namely, that if students are preparing to teach children with special needs who are integrated into the regular school program, they should be taught in a learning environment that is responsive to their needs and interests and to the needs and interests of the children with whom they are working.

Our approaches in combining theory and practice in the integrated program ranged from structured daily seminars in content, guided individual and group observations, group meetings, group dynamic sessions, supervised teaching of individual children and of small groups and so on. In place of traditionally separate courses and content, the regular daily seminar meeting covered content that might have normally been covered as part of the regular course structure along with topics that were directly related to the daily work with the children. The integrated program developed the belief that affective and cognitive growth should go together and the college student was encouraged in each. The integrated program emphasized an interactive approach
to learning in which being a member of a group could aid the student in the development of skills as well as offering the student an opportunity to share his resources with others along with benefiting from others' resources. In addition the program encouraged meetings with faculty team members to share affective reactions to content and teaching processes. Finally, although not analyzed in this study, was the progress of the elementary children worked with in the integrated program in reading skill development as expressed by the classroom teacher. Regardless of the specifics, however, it seems, from the conclusions of this study, that there are many ways to communicate to students the value of their own growth and development and that of the children with whom they are working. The Department of Special Education at Fitchburg State College offers the Experimental Integrated Program as one alternative model for the preparation of Special Education Teachers.
Objective 1

Question 1. Examine the test record form, the manual, and the review from Buros' Mental Measurements Yearbook. List the strengths and weaknesses of the following test in terms of:

- reliability
- validity
- objectivity

Stanford Diagnostic Reading Test, Level II.
Objective 2a

NAME ____________________________

Question 2. List and describe the stages of growth in the development of:
   a) language (receptive and expressive)
   b) motor skills
Begin with age 3 months and continue until 4 years.
Objective 2b

NAME

Cooperating teachers will rate students in test administration. A rating scale will be used to assess competency in test administration.
Objective 2c, 2d

NAME ____________________________

Question 4. On the basis of this case study, list the child's strengths and weaknesses in such areas as the following:

- cognitive
- perceptual
- psychomotor
- affective
Objective 3, 4b

NAME ____________________________

Question 5. On the basis of this case study, write a behavioral objective appropriate to this child: (a) in the area of reading skill development, and (b) in the area of math skill development.
Objective 4c, 4d

NAME __________________________

Question 6. Using a task analysis technique, prepare a lesson plan for an auditory learner for the task below. Please be sure to include all the essential components of a lesson plan.

**Task**
Circle words that begin with the same sound as the picture.

- ball
- doll
- dog
- bat
- hat
Question 7. Based on this case study, specify the advantages and disadvantages, if any, of the following individual and group procedures for behavioral management for this child:

positive reinforcement - (pleasurable stimuli presented during or after desired behavior)
withdraw reinforcers - (make child leave activity or situation)
token system - (reward desired behavior through tangible means)
response cost - (require child to give up some positive event which he has in his possession. His inappropriate behavior cost him, e.g. tokens, recess, crayons, etc.)
time-out - (sitting in section where child gets no input)
satiation - (engage in a bothersome behavior over and over again until he tires of it)
group dynamic techniques - (tools to structure activities to meet an identified personal (and) or social growth need)
transactional analysis - (analyze ego states through which individuals interact)
Objective 5

Cooperating teachers will complete a rating scale on the student teacher regarding academic knowledge, instructional skill, management of learning environment, teacher pupil relationships.
Objective 6

Cooperating teachers will complete a rating scale on the student teacher regarding the student teacher's competency for participating on a professional team.