The efficacy of voluntary vs. compulsory tutorial programs was investigated. The types of tutorial systems were voluntary, compulsory, and combining voluntary and compulsory tutoring. The sample consisted of all freshmen who participated in the Developmental Education Program in the University of Wisconsin-Oshkosh in the fall semester of 1978. The students were admitted into the program on the basis of a set of social, economic, and educational criteria and all participants were considered underachievers. Results from a one way analysis of variance showed no significant differences in grade point average among recipients of the three different tutorial systems. The low utilization rate of voluntary tutorial services suggests that it might be more practical to offer tutorial services on a compulsory basis to special services program participants.
THE EFFICACY OF VOLUNTARY VS. COMPULSORY TUTORIAL PROGRAM

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ABSTRACT

The purpose of the study was to determine the effect of three types of tutorial systems: voluntary, compulsory, and combined, on the academic performance of special services program participants. Results from a one-way ANOVA showed that there were no significant differences in grade point average between recipients of the three different tutorial systems.

In view of the low utilization rate of voluntary tutorial services, it might be more practical to offer tutorial services on a compulsory basis to special services program participants.
One of the many services offered by special services programs in many universities is a tutorial component. Tutorial services were found to be important determinants of the success or failure of the ability of special services programs to help disadvantaged students (Spaights and Hudson, 1971). However, the various alternative formats in which the services can be offered are not adequately explored.

A tutorial program operated on a voluntary basis, offered outside of class and conducted on a one-to-one basis has been assumed most desirable. However, many investigators questioned the efficacy of such an approach. Spaights and Hudson (1971) found that small group or one-to-one tutorial instruction methods were effective in increasing the grade point averages of low-achieving students only if it was adjunct to regular classroom. In another study, Bryson and others (1978) found that while eighty percent of the students who responded to a survey questionnaire perceived voluntary services as helpful, only thirty-two percent actually utilized this type of tutorial services. The question, thus raised, is whether the voluntary basis of tutorial programs is the best alternative.

The purpose of this paper is to investigate the effect of three different modes of providing tutorial services on the academic performances of students. The three modes are voluntary tutorial services, compulsory tutoring, and combining voluntary and compulsory tutoring.
METHOD

The sample consisted of all freshmen who participated in the Developmental Education Program in the University of Wisconsin-Oshkosh in the fall semester of 1978. The students were admitted into the program on the basis of a set of social, economic, and educational criteria. All participants were considered under-achievers and, therefore, can be assumed homogeneous academically. Due to the small size of the sample, racial and sexual variables were not controlled.

The developmental education program in the University of Wisconsin-Oshkosh offered both in-class compulsory tutoring and outside-of-class voluntary tutoring. Students who were enrolled in the basic English course, the basic Algebra course, the study skills course, or the reading course were required to see a tutor at least once a week for seven consecutive weeks. In addition, a comprehensive tutorial system was set up for all developmental education students including those who were enrolled in the above courses. This system offered tutorial services on a voluntary basis in all academic areas. Both types of tutorial services were staffed by peer tutors and were offered on a one-to-one basis.

Students in this study were categorized into four groups based on the kind of tutorial services received. The first group were students who neither enrolled in any of the basic courses, nor utilized the comprehensive tutorial system. The second group were students who enrolled in one or more of the basic courses and, thus,
received compulsory tutorial services. The third group were students who utilized the comprehensive tutorial system but did not enroll in any of the basic courses. These students, therefore, received tutorial services only on a voluntary basis. The last group were students who enrolled in the basic courses and, at the same time, utilized the comprehensive tutorial system. This group of students, therefore, received both compulsory and voluntary tutorial services.

The semester grade point averages of developmental education freshmen in each of the four groups are compared. To control the variable of class levels, only freshmen are included in the sample. This is because a strong relationship between class levels and grade point averages was found. By comparing only freshmen, the effect of class levels on grade point averages can be eliminated.

The one-way analysis of variance (ANOVA) procedures were used to analyze the differences in grade point averages as results of the different types of tutorial services.

RESULTS

Table 1 presents the descriptive statistics of grade point averages, and Table 2 presents the results of the one-way ANOVA. Students who utilized both the compulsory and the voluntary tutorial services seemed to have achieved the highest grade point averages. Students who were required to be tutored seemed to have achieved a slightly
higher grade point average than those who were tutored on a voluntary basis. However, the actual differences in grade point averages were found to be statistically insignificant (F=1.226, p=0.30).

DISCUSSION

Although academic success is the final goal of a tutorial program, other indicators of program effectiveness such as utilization rate cannot be ignored. As can be observed in Table 1, only eighteen (18) freshmen (the number of "voluntary" plus the number of "combined") utilized the tutorial system that was offered on a voluntary basis. This yields a utilization rate of eleven (11) percent. It shows that the problem of non-utilization is a serious one and should not be ignored.

When grade point increases were used as a criterion of effectiveness, the results indicated that the differences in effectiveness between a voluntary, a compulsory, and a combined method of offering tutorial services was not significant. In view of this information, it may be more practical to offer tutorial services on a compulsory basis in order to eliminate the problem of non-utilization.

The above analysis is based on data from one particular program. Due to the diversity of program structures among special services programs, replication studies are needed to validate the findings.
REFERENCES


TABLE 1

SEMESTER GRADE POINT AVERAGES OF TUTORIAL SERVICES RECEPIENTS

<table>
<thead>
<tr>
<th>Type of Tutorial service received</th>
<th>Mean Semester grade point average</th>
<th>Standard deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Only</td>
<td>1.38</td>
<td>0.782</td>
<td>5</td>
</tr>
<tr>
<td>Compulsory Only</td>
<td>1.64</td>
<td>0.886</td>
<td>74</td>
</tr>
<tr>
<td>Combined</td>
<td>2.01</td>
<td>0.534</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>1.62</td>
<td>0.850</td>
<td>92</td>
</tr>
</tbody>
</table>
**TABLE 2**  
ONE-WAY ANALYSIS OF VARIANCE OF SEMESTER GRADE POINT AVERAGE

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Mean Squares</th>
<th>F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.649</td>
<td>3</td>
<td>0.883</td>
<td>1.226</td>
</tr>
<tr>
<td>Within Groups</td>
<td>114.478</td>
<td>159</td>
<td>0.720</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117.127</td>
<td>162</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$E^2 = 0.02$