The Role of the Specialist in the School Program.


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This study attempts to define the role of the specialist in school districts and to identify the relationship between deployment of specialists and school quality. A time equivalent measure was used (i.e., the percentage of time a specialist spends at a certain function) to quantify the specialist's services. In addition, the recipient of the function, defined as students, desk work, classroom teachers, and members of the community, was also included as a factor of interest in the study. The results showed that the titles of specialists were not descriptive of the tasks they perform. The specialist time equivalent was found to be useful in providing the administrator with a method of some accuracy for measuring the degree to which particular services are provided within the school. A related document is EA 002 623. (Author/LN)
The Role of the Specialist in The School Program

John J. Battles  •  E. Robert Bagley

The Institute of Administrative Research has pursued two avenues of investigation regarding staff deployment. The early research conducted by McKenna, Knox, Mackolin, Walker, and Landerholm studied the various staffing arrangements of school districts. Their collective findings established a positive relationship between the way specialists are deployed and school quality as measured by The Growing Edge, an observation guide for obtaining a quantitative appraisal of a school. Later research by Silvernail, Utter, and Marlowe was designed to analyze the tasks performed by specialists. Their research resulted in the development of the “specialist time equivalent” which permitted a quantification of the degree of services provided by specialists.

The earlier studies stressed the relationship between class size, Numerical Staffing Adequacy, and The Growing Edge scores. McKenna noted the number of staff members employed per thousand pupils—Numerical Staff Adequacy (NSA)—was a better measure of staff input than class size. From this it can be inferred that the non-teaching specialist, not accounted for in the class-size measure, is a significant component in relating measures of staff adequacy to school quality.

Knox, Mackolin, and Walker examined the different choices open to administrators in the deployment of the total staff. These investigators chose to define these choices in terms of class size at the elementary and secondary levels and the number and kinds of non-classroom specialists. From among the many choices in staffing available to the administrator (as these components are varied) it was found that fourteen staffing patterns could be discerned. Further grouping of these patterns resulted in the following divisions:

1. Uniform Specialist Deployment. The school system exhibiting this pattern has chosen to deploy staff resources in such a manner that there

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9 McKenna, op. cit., p. 66.
is a balance between the relative emphasis on non-classroom personnel and regular classroom teachers. Figure 1.

2. *Emphasis on Non-teaching Personnel.* The school system exhibiting this pattern has chosen to use different kinds of specialists in relatively larger numbers to meet particular needs, but has decided to forego smaller classes in order to make this possible. Figure 2.

3. *De-emphasis in Non-teaching Personnel.* The school system exhibiting this pattern has chosen to lower class size in preference to the employment of relatively greater numbers of specialists. Figure 3.

Landerholm¹¹ departed from the practice of considering the specialist as part of the total staffing policy when he chose to focus his study exclusively upon the specialists in forty-one Metropolitan School Study Council schools. He categorized specialists according to their assignment at the elementary, secondary, and systemwide levels. Using *The Growing Edge* scores as a quality criterion, he found the most adaptable schools were employing numerous specialists at the elementary level whereas systemwide deployment of specialists was not related to quality.¹²

Landerholm divided the total school staff into two groups—classroom teachers and non-teaching personnel—which he identified by their titles. For example, he found that personnel with the titles of librarian, psychologist, health specialist, and guidance counselor were deployed in larger numbers in the most adaptable schools. However, there is no certainty that persons with the same titles are performing the same functions in different schools. Later studies sought to look beyond the titles of specialists and analyze the tasks they perform.

Silvernail,¹³ for example, suggested that, “before the contributions that specialists make to educational quality can be objectively measured, it is necessary to describe the tasks that are actually being performed by specialists.”¹⁴ He reasoned that there should be a means of clarifying what functions are associated with each specialist although it was correct that the titles were selected with functions in mind. After extensive interviewing of non-teaching personnel in six selected districts he was able to construct a classification scheme for those functions.

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¹¹ Landerholm, op. cit.
¹² Ibid., p. 70.
¹³ Silvernail, op. cit.
¹⁴ Ibid., p. 2.
Deemphasis on Non-Teaching Personnel

**Figure 3**
Standard Scores

<table>
<thead>
<tr>
<th>Elementary Class Size</th>
<th>Secondary Class Size</th>
<th>Personnel/1000 Non-Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>21.9</td>
<td>23.0</td>
</tr>
<tr>
<td>60</td>
<td>24.6</td>
<td>25.7</td>
</tr>
<tr>
<td>50</td>
<td>27.3</td>
<td>28.4</td>
</tr>
<tr>
<td>40</td>
<td>30.0</td>
<td>31.1</td>
</tr>
<tr>
<td>30</td>
<td>32.7</td>
<td>33.3</td>
</tr>
</tbody>
</table>

*To be uniform in pattern, class size and related measures must be within one standard deviation of each other.

**The measures used in these figures are based on a 1965 APSS survey.
These lines represent hypothetical districts:

**Utter's Concept of Time Equivalents**

Silvernail's classification scheme provided Utter\(^{15}\) with categories of function from which to construct a data collection instrument capable of categorizing the functions performed by a school specialist. In quantifying the amount of time devoted to each function to make possible the comparison of a number of districts, Utter conceived of "per-person time equivalents." This measure provided a means of equating the time spent by a variety of personnel employed in a particular function for the sample of districts studied. The formula for computing the "per person time equivalent" is:

\[
\frac{t_1 + t_2 + t_3 + \ldots + t_n}{P} \times 1000
\]

Where \(t\) is time spent in a function, reported as a percentage of total professional time for specialists 1, 2, 3 \ldots \(n\); and \(P\) is staffing pupil units\(^{16}\) in the school district. The fraction is multiplied by 1000 to provide a figure comparable to NSA (number of total staff per 1000 pupils). The effect of this is to provide a measure of full time equivalency in the functions.

Utter's investigation included gathering data about the "recipients" of the functions, defined as students, desk work, classroom teachers, and members of the community. He found that districts with "specialist time equivalents" of the same magnitude in a function exhibited a surprising dissimilarity in the manner in which they spent their time with recipients. There was, however, general agreement among the specialists as to how they chose to spend their time. Reading specialists agreed uniformly that the principal recipient of their services are students. Both psychological and library specialists distributed their time among students, teachers, and desk work. Guidance specialists reported the greatest differences in how they chose to spend their time with recipients. In some schools guidance personnel worked largely with students, in others they worked at their desk. These four functions accounted for more than half the time equivalents spent in all functions performed by specialists in the Metropolitan School Study Council.\(^{17}\)

Utter also indicated the choice of a recipient to be related to the number of specialists (time equivalents) a district chooses to place in a particular function. To illustrate this, he offered the following example: "The smaller staffs of remedial reading specialists (those below the average in Numerical Staffing Adequacy) work with fewer categories of recipients than do larger staffs. In five of these below average districts, time was reported only for students."\(^{18}\)

Marlowe\(^{19}\) initiated a similar study to examine the role of the specialist services provided by the Boards of Cooperative Educational Services in New York State, a method of providing services collectively in small districts. The results showed that these boards provided sixty per

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\(^{15}\) Utter, op. cit., pp. 81-84.

\(^{16}\) Ibid., p. 42.

\(^{17}\) Ibid., p. 106.

\(^{18}\) Ibid., p. 100.

\(^{19}\) Marlowe, op. cit.
cent of all the services in the following functions: reading, speech therapy, special education, psychiatric, and psychological services and health services. He found that school district size influences the choice of BOCES services. Guidance, health, and library services are provided in large measure by BOCES specialists in small districts, whereas in larger districts the emphasis is directed to the areas of special education and psychological services. Marlowe also found great similarity between BOCES and non-BOCES specialists in their choices of recipients as well as the level (elementary, secondary, and system-wide) at which their functions were performed. An inverse relationship was found between the utilization of BOCES specialists and school district size. As enrollment increases, the functional deployment of BOCES specialists decreases.20

In summary, the titles of specialists are not descriptive of the tasks they perform. The specialist time equivalent has been found to be useful in quantifying the services provided by specialists. The use of this measure provides the administrator with a method of some accuracy for measuring the degree to which particular services are provided within the school. Further, consideration should be given to the recipients of the services. Excessive amounts of time spent by specialists at desk work might be more economically achieved by allocating those tasks to paraprofessionals and clerical workers.

Further study is now attempting to relate particular patterns of specialist deployment to criteria of school quality. The aim of this on-going research in staff deployment by the Institute of Administrative Research is to optimize the deployment of specialists in school districts.

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