A survey of 1,165 institutions listed in the 1978 Community, Junior, and Technical College Directory was conducted during the spring semester, 1978, to determine if two-year colleges are becoming a major market for the surplus of holders of Doctorate of Philosophy (Ph.D.'s). Survey results, based on a 65.41% usable return rate, indicate that: (1) 13.04% of the newly hired personnel for the 1977-78 academic year held a Ph.D.; (2) 9.87% of the full-time teaching faculty hired held doctorates; (3) 25.95% of the full-time administrators hired held Ph.D.'s; (4) 20.83% of full-time positions which combined teaching and administrative duties were filled with Ph.D. holders; (5) private colleges hired twice as many Ph.D.'s as public colleges; and (6) single campus districts employed a larger percentage (13.56%) of Ph.D.'s than multi-campus districts (11.89%). Respondents indicated that they would increase the number of full-time faculty holding doctorates if there were an increased need for Ph.D. holders, if the money were available to secure Ph.D.'s, and if more candidates held doctorates in specialized areas such as vocational or technical education. The survey results indicate that though the employment of doctoral degree holders has increased slightly since 1971, two-year colleges will not have an appreciable impact on the Ph.D. surplus. (JP)
A STUDY OF THE TWO-YEAR COLLEGE AND THE PH.D. SURPLUS

Milton L. Smith, Ph. D.
Southwest Texas State University

From the Eighth Annual Report to the
Texas Association of Junior and Community College Instructional Administrators
by the Research Committee

June, 1970
A STUDY OF THE TWO-YEAR COLLEGE AND THE PH.D. SURPLUS
By Milton L. Smith, Ph.D., Southwest Texas State University

The Ph.D. surplus is a fact of life in the academic world. Despite
some indication that the number of doctoral degrees awarded by American
universities is declining slightly, the fact remains that not only is there
an overabundance of doctoral degree holders for the academic positions avail-
able, but that also a majority of the newly-hired faculty are not those who
hold doctoral degrees. In the face of both oversupply and underemployment
of persons with freshly-minted doctoral degrees, some hope has been expressed
that the most rapidly-growing segment of higher education in the nation—the
two-year college—will help to correct the imbalance by increasing the number
of newly-employed doctoral degree holding faculty and administrators from the
obviously available supply.

This hope had been tested in 1971 by a researcher who surveyed 312 pub-
lic two-year institutions in seven states; his findings led him to the conclu-
sion that such hopes are ill-founded. Inasmuch as the number of two-year
institutions has grown by approximately 200 subsequent to the completion of
that study since a survey of all two-year institutions rather than a sample
of them, might reveal different results, it seemed that such a survey was in
order.

THE STUDY

During the spring semester, 1978, a survey instrument was mailed to
each two-year institution in the 50 states and the District of Columbia listed
in the 1978 Community, Junior, and Technical College Directory published by
the American Association of Community and Junior Colleges. There were 1165
instruments mailed in order to elicit responses from the 1235 institutions
listed. The seeming discrepancy is accounted for by the fact that in some
instances one instrument was sent to the central office of a multi-campus dis-

1National Research Council, Commission on Human Resources, Summary Report
1977 Doctorate Recipients from United States Universities.

2Jack Magarelli, "Ph.D.'s Made Up Only 40 Pct. of New Faculty Members
Hired Last Year, Survey Indicates," The Chronicle of Higher Education,
30 May 1978, p.6.

3John W. Huther, "Small Market for Ph.D.'s: The Public Two-Year

4This study was supported by an Organized Research Grant from
Southwest Texas State University, San Marcos, Texas.
The instrument was sent to the president of each institution with the request that either the president or a member of his staff respond to seven questions: (1) How many new (first-time), full-time teaching faculty were employed for the 1977-78 academic year in your institution? (2) How many of that total hold an earned doctorate of some sort (Ph.D., Ed.D., Doctor of Arts, M.D., etc.)? (3) How many new, full-time administrators were employed for the 1977-78 academic year in your institution? (4) How many of that total hold an earned doctorate? (5) How many new, combination teaching faculty-administrators were employed for the 1977-78 academic year in your institution? (6) How many of that total hold an earned doctorate? and (7) Under what conditions would your institution increase the number of doctoral degree holders employed in any of the categories listed above in items 1, 3, or 5? A summary of the number and percentage of instruments returned is shown in Table 1.

Table 1
Return Rate of Instruments Mailed

<table>
<thead>
<tr>
<th>No. Mailed</th>
<th>No. Returned</th>
<th>Per Cent</th>
<th>No. Usable</th>
<th>Per Cent</th>
<th>No. Colleges</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1185</td>
<td>833</td>
<td>71.05%</td>
<td>762</td>
<td>65.41%</td>
<td>786</td>
<td>63.64%</td>
</tr>
</tbody>
</table>

Returns were received from all states except one, a state to which only two instruments were mailed. The resultant usable returns, representing 63.64% of the two-year colleges in the nation, seem to be sufficient in number to allow generalization to the total population.

The Results of the Study

The major finding of the study was that 13.04 per cent of the newly-hired personnel in the two-year colleges for the 1977-78 academic year held an earned doctorate. While this percentage appears to be appreciably higher than that obtained in previous studies, it is partially accounted for by the fact that administrator as well as teaching positions are included in the data.

Data about the three classifications of new positions filled and the number and per cent of those employees holding doctorates are shown in Table 2.

Table 2
Newly-Hired Faculty and Administrators and Doctorates (1977-78)

<table>
<thead>
<tr>
<th>Type of Position</th>
<th>No. States</th>
<th>Total Newly Hired</th>
<th>No. With Doctorates</th>
<th>Per Cent With Doctorates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Teaching</td>
<td>49</td>
<td>4334</td>
<td>428</td>
<td>9.87%</td>
</tr>
<tr>
<td>Full-Time Administrator</td>
<td>49</td>
<td>917</td>
<td>238</td>
<td>25.95%</td>
</tr>
<tr>
<td>Full-time Combination*</td>
<td>38</td>
<td>262</td>
<td>53</td>
<td>20.23%</td>
</tr>
<tr>
<td>Teaching-Administrator</td>
<td>84</td>
<td>307</td>
<td>87</td>
<td>28.50%</td>
</tr>
<tr>
<td>Total All Positions</td>
<td>50</td>
<td>5513</td>
<td>719</td>
<td>13.04%</td>
</tr>
</tbody>
</table>
Full-time Teaching Faculty. The data revealed that there were 49 states in which 4334 new, full-time teaching faculty were employed, 428 of whom had doctorates for a percentage of 9.87. The range of newly-employed teaching faculty reported by the 49 states was from 2 to 512. Only 40 states reported the employment of those holding the doctorate for full-time teaching positions; the range was from 1 to 49.

Of the 4334 newly-hired, full-time teaching faculty, 328 or 7.55% were employed by private colleges; 50 of that total or 17.68% held earned doctorates. By contrast, 4006 or 92.45% were employed by public colleges; however, only 370 of that number or 9.24% held the earned doctorate. While the number of those being employed by a private college was considerable smaller, the percentage of those employed who held a doctoral degree was almost doubled.

Multi-campus districts employed 1407 of the full-time teaching faculty, or 32.46% of these newly-hired teachers. Of that total, 127 or 9.03% held the doctorate. Single campus districts employed 2927 or 67.54% of those newly-hired teachers, of which total 301 or 10.28% held the doctorate. The chances of a doctoral degree holder being employed by a single-campus district were greater than those of being employed by a multi-campus district, a fact which is not generally believed by those seeking employment.

Full-time Administrators. The data revealed that there were 49 states in which 917 new, full-time administrators were employed, 218 of whom had doctorates for a percentage of 25.95. The range of newly-employed administrators reported by the 49 states was from 1 to 98. Thirty-nine states reported the employment of full-time administrators with the earned doctorate; the range was from 1 to 30.

Of the 917 newly-hired, full-time administrators, 118 or 12.86% were employed by private colleges; 26 of that total or 22.03% held earned doctorate. The chances of a doctoral degree holding candidate being employed as an administrator in a public college were only slightly better than chances in a private college.

Multi-campus districts employed 257 of the full-time administrators or 28.0% of these newly-hired administrators. Of that total, 63 or 24.52% held the doctorate. Single-campus districts employed 660 or 71.98% of those newly-hired administrators, of which total 175 or 26.51% held the doctorate. The chances were almost even that a doctoral degree holder employed as a full-time administrator would be employed by a multi-campus or single campus district.

Full-time Combination Teaching-Administrator Positions. The data revealed that there were 38 states in which 262 new, combination teaching faculty-administrators were employed, 53 of whom held a doctorate for a percentage of 20.23. The range of such combination appointments reported by the 38 states was from 1 to 85. Only 24 of the 38 states reported the employment of those holding the doctorate for this combination position; the range was from 1 to 10.

Of the 262 newly-hired, combination teaching faculty-administrators, 26 or 10.08% were employed by private colleges; five of that total or 19.23% held earned doctorates. Public colleges employed 236 of these administrators or 89.92%; 48 of that total or 20.34% held the earned doctorate. This combination
position appears not to be a very popular one among two-year colleges; however, the percentage of those employed who hold the doctorate exceeds that of teaching faculty while it is less than that of full-time administrators.

Private vs. Public Two-Year Colleges. Table 3 presents the data on newly-hired persons among all three types of positions for the 1977-78 academic year in private two-year colleges.

Table 3

<table>
<thead>
<tr>
<th>Type of Position</th>
<th>Total Newly-Hired</th>
<th>No. With Doctorates</th>
<th>Per Cent With Doctorates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Teaching</td>
<td>328</td>
<td>58</td>
<td>17.68%</td>
</tr>
<tr>
<td>Full-Time Administrator</td>
<td>118</td>
<td>26</td>
<td>22.03%</td>
</tr>
<tr>
<td>Full-Time Combination Teaching-Administrator</td>
<td>26</td>
<td>5</td>
<td>19.23%</td>
</tr>
<tr>
<td>Total All Positions</td>
<td>472</td>
<td>89</td>
<td>18.85%</td>
</tr>
</tbody>
</table>

Similar data on newly-hired persons in public two-year colleges are shown in Table 4.

Table 4

<table>
<thead>
<tr>
<th>Type of Position</th>
<th>Total Newly-Hired</th>
<th>No. With Doctorates</th>
<th>Per Cent With Doctorates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Teaching</td>
<td>4006</td>
<td>370</td>
<td>9.24%</td>
</tr>
<tr>
<td>Full-Time Administrator</td>
<td>799</td>
<td>212</td>
<td>26.53%</td>
</tr>
<tr>
<td>Full-Time Combination Teaching-Administrator</td>
<td>236</td>
<td>48</td>
<td>20.34%</td>
</tr>
<tr>
<td>Total All Positions</td>
<td>5041</td>
<td>630</td>
<td>12.49%</td>
</tr>
</tbody>
</table>

While it is clear that the number of persons employed is larger in the public institutions, the percentage of persons employed with an earned doctorate is larger in the private colleges. Of special interest is the fact that the percentage of newly-hired full-time teachers with earned doctorates in the private colleges was almost double that of the public colleges.

Multi-campus vs. Single-campus Districts. Table 5 contains the data on newly-hired persons among all three types of positions for the 1977-78 academic year in multi-campus districts.
Table 5

Newly-Hired Faculty and Administrators and Doctorates in Multi-campus Districts (1977-78)

<table>
<thead>
<tr>
<th>Type of Position</th>
<th>Total Newly-Hired</th>
<th>No. With Doctorates</th>
<th>Per Cent With Doctorates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Teaching</td>
<td>1407</td>
<td>127</td>
<td>9.03%</td>
</tr>
<tr>
<td>Full-Time Administrator</td>
<td>257</td>
<td>63</td>
<td>24.52%</td>
</tr>
<tr>
<td>Full-Time Combination Teaching-Administrator</td>
<td>52</td>
<td>14</td>
<td>26.92%</td>
</tr>
<tr>
<td>Total All Positions</td>
<td>1716</td>
<td>264</td>
<td>15.89%</td>
</tr>
</tbody>
</table>

Similar data on newly-hired persons in single-campus districts are reflected in Table 6.

Table 6

Newly-Hired Faculty and Administrators and Doctorates in Single-campus Districts (1977-78)

<table>
<thead>
<tr>
<th>Type of Position</th>
<th>Total Newly-Hired</th>
<th>No. With Doctorates</th>
<th>Per Cent With Doctorates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Teaching</td>
<td>2927</td>
<td>301</td>
<td>10.28%</td>
</tr>
<tr>
<td>Full-Time Administrator</td>
<td>660</td>
<td>175</td>
<td>26.51%</td>
</tr>
<tr>
<td>Full-Time Combination Teaching-Administrator</td>
<td>210</td>
<td>39</td>
<td>18.57%</td>
</tr>
<tr>
<td>Total All Positions</td>
<td>3797</td>
<td>515</td>
<td>13.56%</td>
</tr>
</tbody>
</table>

A comparison of the tables shows that more than twice the number of persons were employed by single-campus districts than by the multi-campus districts. Of more significance, perhaps, is the fact that a larger percentage of those employed by single-campus districts were holders of earned doctorates. This finding runs counter to the belief held by many that the multi-campus districts are those who seek to employ a larger proportion of doctoral degree holders, especially among administrators.

Comments by Respondents. The seventy questions on the survey instrument asked the respondent to indicate conditions under which the respondent's institution would increase the number of doctoral degree holders employed as full-time teachers, full-time administrators, or full-time combination teacher-administrators. Of the 762 usable returns received, 636 or 83.46% contained comments in response to that question.
The most frequent response, contained on 259 instruments, was a statement which indicated that Ph.D. applicants were treated as all other applicants and would be employed if they were the best candidates. On the other hand, however, there were 87 instruments which indicated that there were no conditions under which Ph.D. holders would be employed. Between these two positions, there were several general categories of responses stating conditions under which additional Ph.D. holders would be employed:

1. Need. There were 146 responses indicating that if there were increased enrollment, additional programs, vacancies in positions now occupied by Ph.D. holders, or mandated accreditation standards requiring Ph.D. holding faculty, additional Ph.D. holders would be employed.

2. Finances. There were 91 responses indicating that if more money were available to pay higher salaries necessary to securing Ph.D. holders, more of them would be employed.

3. Availability. There were 66 responses to the effect that Ph.D. holders were not available for employment; either they did not make application for vacancies, did not have Ph.D. degrees in the areas advertised (such as vocational-technical areas), or did not have necessary work experience for the job.

4. Administration. There were 38 responses indicating that Ph.D. holders would be employed only for full-time administrative positions.

5. Miscellaneous. Several infrequent conditions were stated in response to this item. Eight respondents indicated that if the job descriptions were changed to require the Ph.D., more would be employed. Six responses indicated that Ph.D. holders would be employed only if such employment were consistent with Affirmative Action/EEO practices in the institution. Three respondents indicated that more Ph.D. holders would be employed if they were graduated from better graduate programs, and two respondents said Ph.D. holders would be employed only if there were no Master's degree holders available.

Summary

The results of this study do not support the premise that two-year colleges will become a major market for the surplus of Ph.D. holders. Fewer than 10 per cent of full-time teaching faculty employed in the nation's two-year colleges during the 1977-78 academic year held a doctorate. This percentage has remained rather constant for at least a decade. Presidents of two-year colleges seem disinclined to raise this percentage, primarily for two reasons: the Ph.D. is in their view an inappropriate degree for teaching in the two-year college, and even if it were appropriate, the cost to the institution is too great in terms of salary expenditures necessary for the securing of such faculty members.
Private, single-campus two-year colleges employed a larger proportion of doctoral degree holders as full-time faculty members than did other types of colleges. A possible explanation of this fact is that such institutions normally emphasize the academic programs and do not offer the variety of technical and vocational programs which public colleges offer and therefore are not faced with the lack of doctoral degree holding faculty candidates in those areas.

Holders of the doctoral degree had a much better chance of being employed as a full-time administrator in the two-year college than as a full-time teacher. Of those full-time administrators employed in the 1977-78 academic year, one in four held a doctoral degree. Public, single-campus districts employed more full-time administrators with doctoral degrees than did other types of institutions.

While the combination teaching-administration position seems not to be a very frequent one in the nation's two-year colleges, one out of five such positions is held by a person who has a doctoral degree. The public, multi-campus districts employed a larger proportion of doctoral degree holders for such positions than did other categories of two-year colleges.

Although there is some slight increase in the employment of doctoral degree holders in the nation's two-year colleges, and although there are doctoral programs designed specifically to prepare persons for teaching and administrative positions in the two-year colleges, there does not appear to be reason for much optimism that the two-year college will have an appreciable impact on the nation's Ph.D. surplus.