
The relationship between the use of part-time faculty and student retention was studied at a comprehensive Midwestern university. Of particular interest was the degree to which first-time full-time freshmen were exposed to part-time faculty and whether there are ways to determine if faculty status, defined as part-time versus full-time, have a discernible impact on student retention and student learning outcomes. Data were available for 7,174 students, entering freshmen from fall 1997 through fall 2001. Between 73.1% and 80.9% of all first-time freshmen had at least 75% of their first semester coursework taught by part-time faculty, and between 6.9% and 12.9% had their entire course load taught by part-time faculty. Overall, first-time freshmen took an average 48% of their coursework from part-time faculty, while 40% of undergraduates as a whole were taught by part-time faculty. The analysis shows that students who were retained into the spring semester took a lower proportion of coursework from part-time faculty than did the overall first-time cohort. Implications from these preliminary findings suggest that institutions should give more thoughtful consideration to where part-time faculty are used and the potential effects of such use on students during the freshman year. (Contains 1 figure, 6 tables, and 39 references.)
Caveat Emptor:
Is There a Relationship Between
Part-Time Faculty Utilization and
Student Learning Outcomes and Retention?

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Abstract

One important factor neglected in the literature involves an investigation into whether the increased utilization of part-time faculty has an impact on student retention. Are part-time faculty, who are employed primarily to teach introductory courses, having an adverse affect on student retention? Or, is the dedication of the individuals who teach part-time resulting in a positive impact on student retention in the freshman year? In either case, are universities recognizing and studying the potential issues that might arise when a substantial portion of incoming freshman receive the majority of their instruction from part-time faculty? This paper presents the results of an ongoing study of the relationship between faculty status and student retention at a comprehensive Midwestern university. Of particular interest is the degree to which first-time full-time freshman are exposed to part-time faculty and whether there are ways to determine if faculty status, defined here at part-time versus full-time, has a discernable impact on student retention and student learning outcomes.
Introduction

The growing number of part-time personnel used as teaching faculty in the academy is an issue of increasing concern. The most recent data (NCES, 1999), suggest that in 1997 42.5 percent of the professorate was employed part-time. In 1970, 22 percent were employed in a part-time capacity. The utilization of part-time faculty is increasing at a dramatic rate, and this 25-year trend has serious implications for faculty work and institutional vitality.

Does the mere change in these proportions cause major concern? Should greater attention be focused simply on the number of part-time versus full-time faculty? Or, should we be concerned with the broader issues surrounding the use of part-time faculty?

One important factor neglected in the literature involves an investigation into whether the increased utilization of part-time faculty has an impact on student retention. Are part-time faculty, who are employed primarily to teach introductory courses, having an adverse affect on student retention? Or, is the dedication of the individuals who teach part-time resulting in a positive impact on student retention in the freshman year? In either case, are universities recognizing the potential issues that might arise when a substantial portion of first-time full-time freshman receive the majority of their instruction from part-time faculty?

This paper presents the results of an ongoing study of the relationship between faculty status and student retention at a comprehensive Midwestern university. Of particular interest is the degree to which first-time freshman are exposed to part-time
faculty and whether faculty status, defined here at part-time versus full-time, has a discernable impact on student learning outcomes and student retention.

**Current Knowledge**

The starting point for understanding issues involving part-time faculty is the 1993 study *The Invisible Faculty*, by Judith Gappa and David Leslie. Subtitled, “improving the status of part-timers in higher education”, the authors based their analysis on data from the 1988 National Study of Post-Secondary Faculty (NSOPF) and personal interviews conducted at eighteen campuses across the country during the 1990-91 academic year. As the subtitle indicates, this study represented a call for change; to more fully understand and improve the plight of those described as “unrecognized, unrewarded, and invisible.”

Major changes have taken place since Gappa and Leslie’s initial call to action not all of which may be viewed by academe as positive. First, the use of part-time faculty has continued to increase at a pace surpassing the employment growth among full-time tenure track faculty (NCES, 1999). Furthermore, institutions are finding more and varied ways to justify their reliance on part-timers. Roles and responsibilities once the sole purview of the full-time faculty, including academic advising, remedial instruction, committee assignments, and curriculum development are increasingly being assigned to part-time and temporary faculty.

Concerns over the level of usage of part-time faculty led, in September, 1997, ten academic associations to hold perhaps the first major joint conference on the Growing Use of Part-time and Adjunct Faculty (AAUP, 1998). The resulting joint
policy statement called for limitations on the usage of part-time faculty and issued an appeal for dramatic increases in the number of new tenure-track openings.

That same year, the Alfred P. Sloan Foundation supported a conference on the increasing use of part-time and adjunct faculty. David Leslie, in writing the conference report, coined a new phrase when he posited that part-time and adjunct faculty constituted “a new majority” on America’s college campuses (Leslie, 1998). To reach this conclusion, Leslie grouped full-time but temporary faculty members with part-timers. By adding individuals not eligible for tenure, with part-time and adjunct faculty, Leslie arrives at a combined total of 57%. The heavy use of graduate teaching assistants push this percentage even higher.

The vast majority of the existing research on the subject has concentrated on the number of part-time faculty, their qualifications, and their job market goals and motivations. In considering the principle findings of these various studies and reports, it is clear that, regardless of how one measures or defines part-time faculty, higher education is using more part-time and temporary faculty than full-time faculty to educate students. Yet, little has been done to explore the impact of the use of part-time faculty in higher education on student learning outcomes and retention.

There is a void in the literature relative to the relationship between part-time faculty utilization and student learning outcomes, namely student retention. In a national study being conducted by the authors, issues of where part-time faculty are being utilized is being studied, the researchers posit that institutions most frequently use part-time and adjunct faculty in lower level undergraduate courses, particularly survey courses. Especially heavy part-time utilization is being found in the
disciplines of English Literature and Writing, and Mathematics (Harrington, et. al, 2001). Furthermore, the researchers assert that due to the transitory nature of their academic appointments, part-time faculty are not readily available to provide much needed faculty-student contact outside of the classroom. This contact is especially important for new college freshmen as well as the adult student returning to college. Faculty who teach freshmen must also be able to properly identify at-risk student behavior, but most often part-time faculty do not possess the skills necessary to identify such students. Furthermore, part-time faculty are usually not sufficiently knowledgeable about available institutional services when referrals are warranted. Once on campus, large numbers of at-risk students are increasingly being educated by part-time faculty, a group who historically have few if any formal ties to the institution, and for all intents and purposes teach their courses and then leave campus—no office hours, no contact with students outside of the classroom, no consultation with those teaching remedial courses (be they full-time or part-time), and little if any opportunity for the much-needed professional development requisite to handle the multifaceted and complex challenges that faculty face when remediating students.

Data Analysis

In order to study the relationship between faculty status and student retention, a data set was constructed containing both faculty and student characteristics. The data set included all first-time, freshman who entered a midsized comprehensive Midwestern university in each fall semester from the fall of 1997 to the fall of 2001 (a total of 7174 students). For each entering student information was gathered on their
cohort membership (age, race, gender, and ethnicity), baseline ability or human
capital measures (SAT composite, SAT math, SAT verbal, ACT comp., and course
grades), and their academic profile (school of their declared major, hours attempted in
each semester, hours completed in each semester, course instructor, and the student’s
residency status (on or off-campus)). The student information was then matched with
instructor characteristics (department of residence, and status (full versus part-time)
on a course by course basis.

The first step in analyzing whether faculty status might have an affect on
student retention is to determine the degree to which incoming freshman were
exposed to full and part-time faculty and then to compare that information to student
retention information. Table 1 shows the extent to which the incoming freshman
were exposed to part-time faculty in their first semesters (fall of 1997 through fall of
2001). Preliminary descriptive analysis of the data reveals several interesting results.

Table 1 – Exposure of First-time Freshman to Part-time Faculty in their first semester.

<table>
<thead>
<tr>
<th>Percent of Courses Taught by Part-time Faculty</th>
<th>Cum. %</th>
<th>Cum. %</th>
<th>Cum. %</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 97 Cohort n=1818</td>
<td>Fall 98 Cohort n=1661</td>
<td>Fall 99 Cohort n=1810</td>
<td>Fall 00 Cohort n=1885</td>
</tr>
<tr>
<td>0% (none)</td>
<td>4.7%</td>
<td>3.6%</td>
<td>4.5%</td>
<td>6.3%</td>
</tr>
<tr>
<td>25% or less</td>
<td>22.5%</td>
<td>16.4%</td>
<td>19.6%</td>
<td>24.3%</td>
</tr>
<tr>
<td>50% or less</td>
<td>55.0%</td>
<td>44.3%</td>
<td>53.3%</td>
<td>59.7%</td>
</tr>
<tr>
<td>75% or less</td>
<td>80.9%</td>
<td>73.1%</td>
<td>81.5%</td>
<td>84.5%</td>
</tr>
<tr>
<td>100% (all)</td>
<td>7.5%</td>
<td>12.9%</td>
<td>7.2%</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

First, as Table 1 reveals, between 73.1% and 80.9% of all first-time freshman had at
least 75% of their first semester coursework taught by part-time faculty. More
surprisingly, between 6.9% and 12.9% had their entire course load taught by part-
time faculty during their first semester on campus while only 3.6% to 6.3% of the freshman class faced no part-time faculty. Overall, first-time freshman at the institution took an average of 48% of their first semester coursework from part-time instructors. Campus wide, an average of 40% of undergraduate courses were taught by part-time instructors over the four-year period.

Table 2 – One Semester Retention of First-time Freshman.

<table>
<thead>
<tr>
<th>Retained in the Spring Semester</th>
<th>Fall 97</th>
<th>Fall 98</th>
<th>Fall 99</th>
<th>Fall 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>275</td>
<td>285</td>
<td>308</td>
<td>348</td>
</tr>
<tr>
<td>Yes</td>
<td>1543</td>
<td>1376</td>
<td>1502</td>
<td>1537</td>
</tr>
<tr>
<td>Retention Rate</td>
<td>84.9%</td>
<td>82.8%</td>
<td>83.0%</td>
<td>81.5%</td>
</tr>
</tbody>
</table>

Table 2 reveals that of the 1818 first-time, full-time freshman on campus in the fall of 1997, 275 did not return for their second semester (85% fall to spring retention rate). Similar retention figures are presented for each fall cohort of first-time freshman. Of major interest is whether or not retained and non-retained students faced different proportions of part-time to full-time faculty. Tables 3 and 4 illustrate the first semester exposure to part-time faculty for retained and non-retained students.

Table 3 – Exposure of First-time Freshman who were retained to Part-time Faculty in their first semester.

<table>
<thead>
<tr>
<th>Percent of Courses Taught by Part-time Faculty</th>
<th>Cum. %</th>
<th>Cum. %</th>
<th>Cum %</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% (none)</td>
<td>5.1%</td>
<td>3.5%</td>
<td>4.7%</td>
<td>6.4%</td>
</tr>
<tr>
<td>25% or less</td>
<td>23.3%</td>
<td>17.4%</td>
<td>20.4%</td>
<td>25.0%</td>
</tr>
<tr>
<td>50% or less</td>
<td>57.3%</td>
<td>46.4%</td>
<td>54.9%</td>
<td>61.3%</td>
</tr>
<tr>
<td>75% or less</td>
<td>81.8%</td>
<td>75.7%</td>
<td>82.9%</td>
<td>85.8%</td>
</tr>
<tr>
<td>100% (all)</td>
<td>7.0%</td>
<td>9.7%</td>
<td>6.0%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>
Table 4 – Exposure of First-time Freshman who were NOT retained to Part-time Faculty in their first semester.

<table>
<thead>
<tr>
<th>Percent of Courses Taught by Part-time Faculty</th>
<th>Cum. % Fall 97</th>
<th>Cum. % Fall 98</th>
<th>Cum % Fall 99</th>
<th>Cum % Fall 00</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% (none)</td>
<td>2.6%</td>
<td>3.9%</td>
<td>3.6%</td>
<td>5.7%</td>
</tr>
<tr>
<td>25% or less</td>
<td>18.1%</td>
<td>11.6%</td>
<td>15.6%</td>
<td>21.0%</td>
</tr>
<tr>
<td>50% or less</td>
<td>41.9%</td>
<td>34.0%</td>
<td>45.1%</td>
<td>52.9%</td>
</tr>
<tr>
<td>75% or less</td>
<td>75.9%</td>
<td>60.7%</td>
<td>74.7%</td>
<td>78.7%</td>
</tr>
<tr>
<td>100% (all)</td>
<td>10.4%</td>
<td>28.4%</td>
<td>13.0%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

A comparison of Tables 3 and 4 with Table 1 reveals that students who were retained into the spring semester took a lower proportion of coursework from part-time faculty than did the overall first-time cohort. While 47% of the overall cohort, on average, took at least half of their coursework from part-time faculty (see Table 1), 56.5% of those students who were not retained for the next semester took more than 50% of their coursework from part-time faculty. Moreover, 16% of the non-returning students, on average, took only courses from part-time faculty in their first semester on campus as compared to 8.6% for the entire cohort. Overall, students who were not retained took, on average, 60% of their courses from part-time faculty.

Figure 1 illustrates the various quartiles of first semester exposure to part-time faculty. In three of the four years, the second quartile (26 – 50 % exposure) was the largest. Of particular interest was the increase, following a drop in the second year of the study, in the numbers of students falling into the first quartile and the decrease in the size of the fourth quartile. Apparently, the exposure to part-time faculty, as
measured by proportion of courses taught, is diminishing in relative terms at the study institution.

![Figure 1 - First Semester Exposure to Part-time Faculty -- Quartiles](image)

Table 5 presents the results of crosstabulations between the quartiles of first semester exposure to part-time faculty and whether a student was retained in their second (spring) semester. The null hypotheses for these tests was that there was no relationship between the exposure of students to part-time faculty in their first semester in college (represented in quartile form) and their retention into their second semester.

The results presented in Table 5 show that the null hypothesis of no relationship was rejected for each of the cohorts at the 0.01 level of significance. Furthermore, the Pearson Correlation coefficients reveal that there is a negative and significant relationship between exposure and retention. Higher levels of exposure to part-time faculty in a students' first semester in college lower the retention rate in the students' second semester.
Table 5 – First Semester Exposure in Quartiles to Spring Semester Retention

<table>
<thead>
<tr>
<th></th>
<th>Fall 97 Cohort n=1818</th>
<th>Fall 98 Cohort n=1661</th>
<th>Fall 99 Cohort n=1810</th>
<th>Fall 00 Cohort n=1885</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Sq.</td>
<td>22.51</td>
<td>28.93</td>
<td>14.47</td>
<td>12.83</td>
</tr>
<tr>
<td>d.f.</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>p-value</td>
<td>.000</td>
<td>.000</td>
<td>.002</td>
<td>.005</td>
</tr>
<tr>
<td>Pearson's R</td>
<td>-.091</td>
<td>-.120</td>
<td>-.085</td>
<td>-.075</td>
</tr>
<tr>
<td>Appr. T</td>
<td>-3.87</td>
<td>-4.92</td>
<td>-3.65</td>
<td>-3.29</td>
</tr>
<tr>
<td>p-value</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
</tr>
</tbody>
</table>

A final consideration was to what extent the students’ themselves influenced their quartile membership. How were the students who fell into the first quartile of low exposure to part-time faculty different from those who were members of the fourth quartile? Table 6 shows several basic descriptive statistics for the quartiles taken from the data on students entering in the fall of 2000 (fall 1997 through fall 1999 showed exactly the same characteristics).

Table 6 – Quartile Demographics for the Fall 2000 Cohort (n = 1885)

<table>
<thead>
<tr>
<th></th>
<th>Q1 n=458</th>
<th>Q2 n=668</th>
<th>Q3 n=467</th>
<th>Q4 n=292</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (0=female, 1=male)</td>
<td>0.40</td>
<td>0.37</td>
<td>0.43</td>
<td>0.49</td>
</tr>
<tr>
<td>SAT Comp</td>
<td>1013</td>
<td>975</td>
<td>920</td>
<td>855</td>
</tr>
<tr>
<td>ACT Comp</td>
<td>22.4</td>
<td>20.7</td>
<td>18.9</td>
<td>18.4</td>
</tr>
<tr>
<td>F00 Attempted Hours</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>F00 Earned Hours</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>F00 GPA</td>
<td>2.39</td>
<td>2.46</td>
<td>2.23</td>
<td>1.36</td>
</tr>
</tbody>
</table>
Table 6 reveals that the students who take a higher proportion of courses from part-time faculty in their first semester of college are more likely to be male, have lower SAT or ACT scores and have lower GPAs following the completion of the semester.

**Suggestions**

The implications of these preliminary research findings indicate that institutions should give more thoughtful consideration to where part-time faculty are utilized on their respective campuses, and the potential effects of such usage on students during the freshman year experience. Institutions would be wise to focus on the professional development of their part-time and adjunct teaching faculty, paying particularly attention to the development of those part-timers teaching first-semester introductory courses.

Each academic year, institutions spend millions of dollars on research, restructuring, and professional development of staff, all in the name of student retention. Academic conferences are flush with papers, panels, and other various presentations discussing in detail how institutions engineer new student retention programs in student development, residence life, multicultural, learning communities, honors programs, freshmen year initiatives, adult learners, and the sundry milieu of college student characteristics. Great pronouncements are made about the anticipated levels of success of these programs, however true project effect has been more difficult to identify. Very few retention programs, if any, concern themselves with part-time faculty.
Retention research on part-time faculty may, in fact, be the least expensive and most revealing research that an institution can undertake. The most elementary analysis of part-time faculty on student learning and retention can be completed in a matter of a few short days and with little to no cost.

During their collegiate lifetime, many if not the majority of undergraduate students are exposed to instruction delivered by part-time and adjunct faculty. This exposure to part-timers is particularly acute for first year freshmen, who encounter a higher proportion of part-time instruction in the survey courses in which virtually all freshmen enroll. As is well documented in the literature, the freshman year yields the single greatest impact on individual academic success, as defined by student retention and eventual graduation.

One problem is that part-time faculty may not typically provide the first year student with the academic integration opportunities necessary to permit students to feel connected to faculty. Part-timers usually do not have office hours (or even an office), conduct research with students, meet with students on an informal basis on campus, advise student organizations and groups, or participate in the academic life of the campus. Because of their transient professional lifestyles, part-time faculty can pose a significant challenge to the at-risk student.

For institutions that profess an earnest desire to analyze critically student learning on their campus with an eye toward improved retention rates, a small investment in evaluating the affect of part-time faculty on student retention, particularly during the freshman year, could yield significant dividends. Greater
attention to how institution use and support part-time and adjunct faculty should have a direct, and positive effect on student learning outcomes.
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Caveat Emptor 17


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