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## ABSTRACT

This paper compares student headcount enrollment and full-time enrollment prior to and following transition to a semester calendar at 75 public colleges in three state systems: Alabama, Georgia, and Utah. Before and after effects on enrollment in the transition colleges are examined and compared with colleges that did not make the transition. In Alabama, transition colleges experienced net enrollment declines of 5.7 percent and 18.7 percent declines in full-time equivalent (FTE) enrollments over two years; during the same period nontransition colleges experienced increases of 2.7 percent and 1.9 percent, respectively. In Georgia, transition colleges experienced enrollment declines of 1.3 percent and FTE declines of 11.8 percent. Utah experienced enrollment declines of 2.6 percent and 5.8 percent FTE declines; the one nontransition college experienced increases of 13.6 percent and 11.3 percent, respectively. Several reasons are hypothesized for the declines. One is the need to cover the added up-front cost of a longer semester. Another factor is that under the quarter system students were accustomed to taking three five-credit courses and were reluctant to change to five three-hour courses under the semester plan. (Contains 30 references.) (CH)

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Transition to Semesters: Effects on Enrollment and FTE Students

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## Transition to Semesters: Effects on Enrollment and FTE Students

### Abstract

Student headcount enrollment and FTE were compared prior to and following the transition to a semester calendar for 75 public colleges in three state systems: Alabama, Georgia, and Utah. Before and after effects on enrollment and FTE for transition colleges were summarized, and compared with colleges in each state that did not transition (control condition). Seventy-one transition colleges converted from quarters to semesters in fall 1998, and four in fall 1999. The results showed striking differences in headcount enrollment, full-time status, student credit load and FTE. The consequences of the transition are described, causal hypotheses provided, and remedies suggested.

## Transition to Semesters: Effects on Enrollment and FTE Students

There are several types of research relating to the academic calendar in higher education. One is concerned with the types and characteristics of academic calendars, another with assessing calendar preferences, a third with the calendar transition process, and a fourth with the institutional after-effects of calendar change.

### Types and Characteristics of Academic Calendars

Larsson (1978) defined five types of college calendars: semester, early semester, trimester, quarter, and four-one-four. In the early semester plan, fall begins in August and concludes before Christmas, with a one-month break between fall and spring. Forty-eight percent of colleges were on this plan in 1977-78. Kaplan (1985) noted a trend toward adoption of the early semester calendar, with 680 schools using this plan in 1970-71 and 1,800 by 1984. She noted that early semesters (as compared to semesters) provide a study-free Christmas and use less heat in December and January. Melnick & Davidovicz (1971) reviewed 17 calendar articles. They noted that some calendar changes were intended to make more efficient use of facilities (such as trimesters and quarters), while others were intended to provide students with increased flexibility (interim calendars with short terms). Academic performance was not an important consideration. Sanders (1979) reviewed the advantages and disadvantages of various calendar plans, but found that research was

inconclusive on their relative merits. Munson (1990) surveyed 1,639 institutions that used the early semester calendar and used frequency distributions to show starting and ending dates of each semester, sources for calendar decision-making, and instructional time. The modal amount of instructional time per credit hour was 750 minutes.

### Calendar Preferences

Regarding calendar preferences, San Joaquin Delta College (1979) found faculty and students showed little interest in moving from a semester to a quarter calendar, and used that as one factor in deciding to maintain the status quo. Matzelle et al. (1995) found that more faculty and students preferred the semester system to the current term system, and faculty believed semesters would benefit students. Department heads believed expenses would be reduced under semesters. These reasons were factors in deciding to switch to semesters.

### Calendar Transition Process

When the UT Knoxville planned to move from quarters to early semesters, they focused on transition management. They developed general principles such as “ensure that students are not harmed in the transition process,” a three-to-two hour credit conversion ratio, a three semester-hour standard, and system calendar uniformity. They made recommendations pertaining to several transition processes, such as curriculum planning, information dissemination, advising, course and space availability and financial impact (University of Tennessee Knoxville, 1984; see also Summerford, 1997a, 1997b).

### Institutional After-Effects of Calendar Change

All studies that collected post-transition enrollment data reported a decline in fall semester full-time equivalent (FTE) students following transition from a quarter system (Coleman, 1984; Larson, 1978; Puyear, 1989; Rugg, 1995; Rosenthal & Curtis, 1999). Recovery was not immediate for most colleges, with the exception of the Virginia Community College System (Puyear).

#### Purpose

The purposes of this study were to determine the effect of the calendar conversion from quarters to early semesters on student headcount enrollment and FTE students, to identify negative consequences, develop causal hypotheses, and to suggest remedies.

#### Method

Student headcount enrollment and FTE data was obtained from the state system offices in Alabama, Georgia, and Utah for the last fall on the quarter calendar (1997) and the first fall on the semester calendar (1998) insofar as it was available (Alabama Commission on Higher Education, 1998, 1999; University System of Georgia, 1997b, 1998c; Utah System of Higher Education, 1997; 1998). Comparable spring data was obtained for Georgia colleges (University System of Georgia, 1998a, 1999a). In toto, 71 public institutions in these state systems converted from quarters to early semesters beginning in fall 1998. Data for the transition colleges within each system was compared to the non-transition colleges (control group). A similar procedure was followed for 4 additional institutions that converted to semesters in fall 1999 (Alabama

Commission on Higher Education, 2000; University System of Georgia, 1999c; Utah System of Higher Education, 1999). Pre-transition summer enrollment data was reviewed for the Georgia Institute of Technology (University System of Georgia, 1997a, 1998b, 1999b). Recent changes in regional college calendars were summarized to track calendar conversions (Rosenthal, 2000).

## Results

### Fall 1998 Transition: First Fall, Second Fall, and Cumulative Two-Year Effects

Alabama. Thirty transition colleges, primarily two-year institutions, experienced declines of -6.8% in headcount enrollment and -18.5% in FTE students in fall 1998 compared to the previous fall. In contrast, the thirteen non-transition colleges (in 1998 and 1999) had an increase of +1.7% in enrollment and small decline of -0.4% FTE students.

In the second fall (1999), transition colleges experienced a modest increase of +1.2% in headcount enrollment and small decline of -0.3% in FTE students compared to the previous fall. In contrast, non-transition colleges had increases of +0.9% in enrollment and +2.3% in FTE.

Over two years, from pre-transition to fall 1999, transition colleges experienced net declines of -5.7% enrollment and -18.7% FTE, while non-transition colleges had net increases of +2.7% enrollment and +1.9% FTE.

Georgia. Thirty-three transition colleges experienced declines of -3.3% in headcount enrollment and -13.2% in FTE students in fall 1998 compared to the previous fall. In contrast, the single non-transition college, Georgia Institute of Technology, had increases of +7.6% enrollment and +8.1% FTE students.

In the second fall (1999), transition colleges experienced increases of +1.9% enrollment and +1.7% FTE. (There were no non-transition colleges in fall 1999.)

Over two years, from pre-transition to fall 1999, transition colleges experienced net declines of -1.3% enrollment and -11.8% FTE.

Utah. Eight transition colleges experienced declines of -9.1% in headcount enrollment and -11.6% in FTE students in fall 1998 compared to the previous fall. In contrast, the single non-transition college, Utah Valley State College, had increases of +13.6% enrollment +11.3% FTE students.

In the second fall (1999), transition colleges experienced increases of +7.1% enrollment and +6.6% FTE students compared to the previous fall, while the single non-transition college had larger increases of +10.4% and +9.4%.

Over two years, from pre-transition to fall 1999, transition colleges experienced net declines of -2.6% enrollment and -5.8% FTE. In contrast, the non-transition college had a substantial net increase of +25.5% enrollment and +21.8% FTE.

#### Fall 1998 Transition: First Spring Effects in Georgia

The 33 transition colleges in Georgia experienced declines of -1.8% in headcount enrollment and -13.2% in FTE students in spring 1999 compared to the previous spring. In contrast, the single non-transition college, Georgia Institute of Technology, had increases of +8.2% enrollment and +8.7% FTE.

### Fall 1998 Transition: Pre-transition and First Summer Effects in Georgia

Thirty-three transition colleges experienced declines of -6.1% in headcount enrollment and -8.4% in FTE students in summer 1998 (pre-transition) compared to the previous fall. In contrast, the single non-transition college, Georgia Institute of Technology, had increases of +10.7% enrollment and +12.7% FTE students.

In the first transition summer (1999), transition colleges experienced decreases of -0.8% enrollment and -27.1% FTE students compared to the previous summer, while the single non-transition college had decreases of -3.9% enrollment and -20.6% FTE. All colleges had decreases in percent of full-time students.

### Fall 1999 Transition: First Fall Effects

Alabama. Three transition colleges experienced declines of -6.8% in headcount enrollment and -19.8% in FTE students compared to the previous fall.

Georgia. One transition college, Georgia Tech, experienced an increase of 0.9% in headcount enrollment and a decline of -0.6% in FTE students compared to the previous fall.

### Summary

As shown above, the transition group of colleges in all three systems suffered enrollment and FTE declines. A large majority of transition colleges had an FTE decline. For many colleges the decline was substantial and created a budgetary shortfall, which led to measures such as hiring freezes and reductions in scholarships offered. FTE declines are consistent with previous empirical

research, which found these effects persisted through the second year (Coleman, 1984; see also Larsson, 1978).

### Discussion

Declines occurred in spite of efforts by many institutions to avoid them. In Georgia, for example, Kennesaw State University had a series of planning and informational initiatives designed to manage the transition and educate their students. While their transition went smoothly, they experienced a 2% enrollment decline and an 11% decline in FTE (Rugg, 1998).

Note that high school graduation rates in these states remained stable or increased during this period (Gerald & Hussar, 1999) and are not likely to be a factor in enrollment declines.

One explanation for these declines is economic. Several authors noted a need for an alternative payment plan to cover the additional up-front cost of a longer semester (UT Knoxville, San Joaquin Delta College (1995), and Matzelle (1995). In addition, students had less opportunity to earn money during the shortened summer term prior to the transition (because the early semester plan begins a month earlier than the quarter system).

Another factor is that, under the quarter system, students were accustomed to taking three courses of five credits each, and were reluctant to take five three-hour courses under semesters. Further, it is more difficult to schedule five courses at once (Rosenthal & Curtis, 1999; Rugg, 1998, and others). This is supported by a net two-year -21.5% decrease in full-time enrollment accompanied by a net +19% increase in part-time enrollment in

transition colleges in Alabama. In contrast, non-transition colleges had a net increase of 3.7% in full-time enrollment and a net decrease of -2.6% in part-time enrollment during the same two-year period.

Institutions experienced accelerated graduation rates during the previous year as students hurried to complete their degree under the quarter system. For example, the Utah public college sector reported an 11.4% increase in bachelor's degrees awarded in 1997-98 compared to the prior year, reducing the number of continuing undergraduate students in the following fall semester (Utah System of Higher Education, 1998c).

The FTE decline is due in part to a decrease in student credit hour loads (see Coleman, 1984), increasing time to graduation. Therefore, it is important to advise students about the semester credit-hour load required to graduate in four years. Similarly, students must familiarize themselves with the semester curriculum so they will know which courses to take. To that end, some institutions have adopted a mandatory advisement policy (Rosenthal & Curtis, 1999).

### References

- Alabama Commission on Higher Education. (1998). Statistical abstract: Higher education in Alabama 1997-98. Montgomery, AL: Office of Financial Affairs.
- Alabama Commission on Higher Education. (1999). Statistical abstract: Higher education in Alabama 1998-99. Montgomery, AL: Office of Financial Affairs.
- Alabama Commission on Higher Education. (2000). Statistical abstract: Higher education in Alabama 1999-00. Montgomery, AL: Office of Financial Affairs (pre-release).
- Coleman, D., Bolte, J. R., & Franklin, L. (1984). Academic calendar impact on enrollment patterns and instructional outcomes. *Research in Higher Education* 20 (2), 155-66.
- Eddy, M. S. (1979, October). Recycling academic calendars. *AAHE-ERIC Higher Education Research Currents*. Washington, D. C.: American Association for Higher Education.
- Gerald, Debra & Hussar, William J. (1999). Projections of education statistics to 2009. Washington, D. C.: National Center for Education Statistics.
- Kaplan, J. (1985, August 18). College calendar is changing. *The New York Times*, p. 24.
- Larsson, R. D. (1978, November). College calendars. Schenectady, New York: Schenectady County Community College.

- Matzelle, R., Grossman, G., Lawlor, M., Rosenberger, B., Smacchi, L. A., & Orr, M. (1995, December). A study of the term and semester calendars in a two-year community college. Reading, PA: Reading Area Community College.
- Melnick, M. & Davidovicz, H. M. (1971). College and university calendars. (Abstracts and Reviews of Research in Higher Education No. 15). New York: Hofstra University, Center for the Study of Higher Education.
- Munson, G. W. (1990). Variations on a theme: The semester. *College and University* 65 (2), 177-202.
- Puyear, D. (1989, August). The effect of converting from quarters to semesters on enrollment and retention in the Virginia Community College System. Richmond, Virginia: Virginia Community College System.
- Rosenthal, D. (2000, March). Regional status of the semester calendar. Auburn, Alabama: Auburn University.
- Rosenthal, D. & Curtis, C. (1999). Quarter-to-semester transition. Annual Conference of the Alabama Association for Institutional Research, Auburn.
- Rugg, Ed. (1998). Strategies for semester conversion at Kennesaw State University. [On-line] Available:  
[www.peachnet.edu/admin/comm/aca/minutes/strategies.html](http://www.peachnet.edu/admin/comm/aca/minutes/strategies.html)
- San Joaquin Delta College. (1979). Report and recommendation of the ad hoc committee to review the college calendar. Stockton, CA.
- Summerford, R. (1997a). Surviving semesters. *AU Report* 30 (1), p. 2. Auburn, Alabama: Auburn University.

- Summerford, R. (1997b). *Surviving semesters: Part II*. AU Report 30 (2), p 2. Auburn, Alabama: Auburn University.
- University System of Georgia. (1997a). *Quarterly enrollment report, summer quarter 1997*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1997b). *Quarterly enrollment report, fall quarter 1997*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1998a). *Quarterly enrollment report, spring quarter 1998*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1998b). *Quarterly enrollment report, summer quarter 1998*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1998c). *Quarterly enrollment report, fall semester 1998*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1999a). *Quarterly enrollment report, spring semester 1999*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1999b). *Quarterly enrollment report, summer semester 1999*. Atlanta, GA: Board of Regents.
- University System of Georgia. (1999c). *Quarterly enrollment report, fall semester 1999*. Atlanta, GA: Board of Regents.
- University of Tennessee Knoxville. (1984). *Report to the chancellor submitted by the UTK semester feasibility study committee*.
- Utah System of Higher Education. (1997). *Summer and fall enrollment reports for 1997*. Salt Lake City, UT: State Board of Regents.

Utah System of Higher Education. (1998). Data book. Salt Lake City, UT: State Board of Regents.

Utah System of Higher Education. (1999). Fall 1999 enrollment report revisions. Salt Lake City, UT: State Board of Regents.



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