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Jacqueline M. Hale & Nathaniel J. Bray

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## THE IMPACT OF REGISTRATION TIMING ON STUDENT PERFORMANCE

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**Jacqueline M. Hale**

Academic Counselor, Holmes Community College, Goodman,  
Mississippi, USA

**Nathaniel J. Bray**

Higher Education, The University of Alabama, Tuscaloosa, Alabama, USA

*This study compares the impact of timing of registration on the student learning outcomes of students taking courses at three rural community colleges in the southeastern U.S. during the school years 2001–2003. Findings from this study indicate that early registration has a positive influence on students' grades and course completion rates. Also contributing to differences in student outcomes were student race, Pell Grant status, gender, program of study, and age.*

From the beginning, the mission of American community colleges evidenced a commitment to helping students achieve a variety of education and career goals (Cohen & Brawer, 2003). Today, in order to meet this responsibility effectively, community colleges fulfill a complex set of roles and have extensive knowledge of their campuses and how students learn. Institutions must know how students learn while they are attending school and how the schools themselves influence student development and student learning (Cohen, 1975; Cohen & Brawer, 2003; Deegan & Tillery, 1985). Community colleges are committed to multiple missions that include workforce training, general academic education, open access, and flexibility in instruction

Address correspondence to Nathaniel J. Bray, Box 870302, ELPTS, The University of Alabama, Tuscaloosa, AL 35487. E-mail: nbray@ua.edu

methods that enable all students to be successful (Cohen & Brawer, 2003; Higgins & Katsinas, 1999). Currently, new problems challenge these goals. Funding issues, retention issues, and increased community college accountability have all become important for colleges around the country. An increased attrition rate for students has also become an increasing problem over the last several years (Brawer, 1996, Cohen & Brawer, 2003). Research into attrition rates at the community college level was limited until the 1990s. It was during this time that schools began to see the importance of reducing attrition rates and increasing the retention of students.

According to the limited research that has been done on the impact of the registration process at the community college level, retention rates and attrition rates can be linked to the registration process due to the strong relationships between advisors and students (Andrews, 2003; Angelo, 1990; Tinto 1997; Weiss, 1999). Reason, Terenzini, and Domingo (2006) and Pascarella and Terenzini (2005) have all studied the impact of strong advising on students and their ability to navigate the higher education system, especially for first-time students. These students are especially in need of support from their advisors in deciding what classes to take and what important dates they must pay attention to in order to keep on their program of study.

Research has shown that community college faculty and staff spend more time with their students than university professors because research hours are not required at the community college (Cohen & Brawer, 2003). Students who feel a connection to someone on campus, or feel that they are a part of a community of people within the same school, do better than students with few friends or faculty mentors (Pascarella & Terenzini, 2005). The main focus of community college instructors is the instruction of students, and this allows them to get to know their students on a more personal level (Cohen & Brawer, 2003; Pascarella & Terenzini, 2005; Tharp, 1998; Tinto, 1997). The increase in technology and online registration has helped to increase the amount of time that faculty advisors are available to their advisees. Instructors and students can build strong relationships that allow for more direction for students and increased access to information about advising, university transfer, and graduation.

While there is initial evidence of the values of advising and registration at community colleges, high levels of student attrition is still a big concern among college administrators (Cohen & Brawer, 2003; Metzner, 1989). Students who register early and get the schedule that best fits their needs are more satisfied with their course work

than students who register late and only get the classes that are still available (Tinto, 1997; Wilder, 1981). The impact of timing of registration on student grades and course completion, therefore, has the potential for improving our understanding of student attrition. Dissatisfaction with courses before the term begins can lead to increased levels of student departure. We need to know if retention is linked directly to registration patterns. While the link has been implied, it has not been studied in sufficient detail to inform and impact current registration practices. If all students registered early or during regular registration times, would retention rates and student success rates go up? Understanding why students leave school will help community colleges face this important challenge and to better serve their student populations and increase student retention rates (Bean, 1982; Bean & Metzner, 1985; Cohen & Brawer, 2003; Metzner, 1989).

### ***STUDIES OF REGISTRATION TIMING EFFECTS***

While student access is very important, student success has also become very important to community colleges. If students who register late are more likely to quit school before the end of the semester, as the research indicated at Sinclair Community College, what can schools do to help retain students throughout the semester? Studies on student retention usually focus on social and academic variables, economic factors, and student background (Bean, 1982; DiMaria, 2006; McArthur, 2005; Roman, 2007; Spady, 1970, 1971; Tinto, 1997). John Braxton, Jeffrey Milem, and Anna Sullivan have taken the extensive work of Tinto and focused on four of its propositions.

Student entry characteristics affect the level of initial commitment to the institution. These student entry characteristics include family background characteristics, individual attributes and pre-college schooling experiences. The initial level of commitment to the institution influences the subsequent level of commitment to the institution. This subsequent level of institutional commitment is also positively affected by the extent of a student's integration into the social communities of the college. The greater the level of subsequent commitment to the institution, the greater the likelihood of student persistence in college. (Braxton, Milem, & Sullivan, 2000, p. 570)

Limited research has been done on the impact of late registration on student retention rates and persistence rates. "While late

registrants are often economically at the margin and therefore produce higher net revenue, the administration incurs added costs in processing late registrants. Further, if late registrants persist in smaller numbers, the long-term cost may be high for both the students and the institution” (Bryant, Danley, Fleming, & Somers, 1996, p. 2). Smith, Street, & Olivarez (2002) conducted a study that focused on the effects of early, regular, and late registration on student learning outcomes, although it did not control for known effects of student outcomes. The study reported that students who registered late were less likely to register again for the next semester and complete their courses. Their research also indicated that students who register during early and regular registration periods had higher retention and course completion rates than students who register late. The lack of a complete study on the impact of timing of registration on grades and course completion—and the increased importance of keeping students in school once they register—is another indication of why more extensive research on this topic is needed.

The University of Arkansas used a different approach when trying to determine the impact of late registration on retention and persistence. Students were interviewed to find out why they registered late. Several themes emerged from the interviews. The first was that career and financial advancement was a motivation to attend college. The second was that family support had a positive influence on when students registered and if they chose to attend school. Third, students who registered late often had little academic integration or success with their postsecondary education careers. Perhaps this was due in part to arriving after classes began and new social groups had already formed; or it may be due to the limited time for introduction to faculty members. The most dominant theme was that “life was a continuing story of mishaps and bad luck” (Bryant et al., 1996, p. 4). The majority of the students who registered late in this study reported that they had every intention of registering for classes earlier, but time and circumstances prevented them from registering on time. There was no single cause for late registration, but many of the students were nontraditional, on academic probation, or more isolated socially and academically from the other students (Bryant et al., 1996).

The retention of students during their college years has been studied over and over again. An investigation on the impact of timing of registration on student learning outcomes has been done on a limited basis. The studies by Bryant et al. (1996) and the study by Smith et al. (2002), were a good beginning but they failed to fully explore the impact of the timing of registration on student grades and course

completion. This study will be an investigation of the registration practices at three different colleges within the state of Mississippi, and it will provide important information to community college educators and administrators in terms of the registration process and its impact on grades and course completion. The first examples of research in the areas of registration indicated that late registration did not have a positive impact on student learning outcomes. Chilton (1965) and Parks (1974) found that college students who registered late did not perform as well academically as students who registered during the early and regular registration periods. In another study, however, Angelo (1990) found the opposite to be true. He studied close to 4000 community college students and found that there was no significant difference in the academic performance of students who registered late when compared to students who registered during the early and regular registration periods. Currently, there is limited research comparing the academic performance of students in all three phases of registration and the impact of registration on student grades and course completion.

Registration at Mississippi community colleges generally follows three basic time periods: early registration, regular registration, and late registration. Previous research has focused primarily on the late registration process. This study researched the impact of early, regular, and late registration practices on student learning outcomes. Student learning outcomes were measured in terms of grades and course completion. The research that has been done over the last several years concerning registration timing and student success has been done at the university level or at schools that are located in large cities (Mason, 1998; Tharp, 1998).

### **CONCEPTUAL MODEL**

Reason et al. (2006) recently developed a comprehensive model of influences on student learning and persistence. Their model centers around students' college experiences and their direct impact on student retention and success. The college experience includes the organizational context and the peer environment that both impact students during their time in college. Reason et al. (2006) directly connected their model to students' precollege experiences and to students' learning and persistence outcomes. The precollege experiences are all of the personal and social traits that students bring with them to school. Studies have shown that certain precollege characteristics, such as ACT scores and high school grade-point averages, can help to

predict student success at the postsecondary level (Cohen & Brawer, 2003; Reason et al., 2006). They argue these characteristics interact with college experiences to shape student learning outcomes at college.

Reason, Terenzini, and Domingo argue we need to consider more carefully and creatively the manner in which on-campus experiences can impact student learning. On-campus environment consists of student experiences in the classroom, out of the classroom, and in other group activities. All three of these factors come together to form the environment that students live in during their time at college. If any one of these experiences becomes negative, this could have an impact on a student's ability to pass and matriculate towards graduation. (Pascarella & Terenzini, 2005; Reason et al., 2006).

Personal freedom goes hand in hand with college life. Students also face increased personal responsibility when it comes to registering for the next semester, meeting with their advisor to make sure they are taking the correct classes, and passing their classes with satisfactory grades. At most four-year and two-year institutions, students can usually find a convenient time to register for classes. Many students, however, make the choice to put off registration and, therefore, may end up with classes they don't want or need. Even though registration starts early for the next semester, many students find themselves registering late. This could be the result of the "hedonism" that college life promotes, or it could be that students form few attachments to the college or university and do not know when registration begins or ends (Astin, 1984). Student development during the college years hinges on the ability of students to become invested in their school, social groups, and academic programs. If students do not form strong ties with their college community, they are at higher risk of dropping out of school prior to graduation (Astin, 1984; Pascarella & Terenzini, 2005).

It is important for administrators at community colleges, particularly those involved in making enrollment policies, to begin looking at the different admission and registration policies and how those policies impact retention rates, persistence rates, and student success (Weiss, 1999). Are the policies effective in keeping students in school and matriculating towards a degree? Do students who register late achieve the same success as students who register during early and regular registration? What can be done to encourage students to register early? Using the model of influences on student learning and persistence by Reason et al. (2006), new studies can research all of the different variables that may or may not impact student learning outcomes. Student precollege characteristics and experiences

along with the college experience impact student learning and persistence. Research into the importance of all of these factors—as well as timing of registration—could help to expand the current literature on retention, persistence, and attrition (Reason et al., 2006).

## **METHODOLOGY**

This quantitative study is concerned with the link between registration patterns and student learning outcomes as well as the persistence rate of students based on when they registered. This study sought to answer the following questions: Is there a relationship between student characteristics and registration behaviors? Controlling for student characteristics, does timing of registration predict student-learning outcomes in terms of semester grade-point average and course completion?

In order to answer these questions, existing registration data and student records from community colleges were gathered from three community colleges in the state of Mississippi that were all located in rural communities and had similar student demographics. All of the community colleges in Mississippi are classified as rural colleges (Katsinas, 2003). The community colleges had to be similar in size and had to follow a registration policy that consisted of different registration periods. All three schools in this study were given pseudonyms. South Community College is one of 15 state-supported community colleges in the state of Mississippi. The enrollment for South Community College was approximately 4,200 students for the 2004 school year, with the majority of students (65%) enrolled full-time. West Community College serves five different counties in Mississippi. The enrollment for West Community College is approximately 3,000 students for the 2004 school year with full-time students making up 88% of the population. East Community College serves five different counties in Mississippi and it started out as an agricultural high school. The enrollment for East Community College was approximately 4,500 students for the 2004 school year, and again the majority of students (65%) were enrolled full-time.

This study collected data for four separate years, but only two years (four semesters) of data were used due to collection issues. When the schools were originally selected, it was requested that all three schools have three separate registration times. After the data was collected, West Community College indicated that they only had regular and late registration times. Even with the lack of early registration at West Community College, it was determined that with



the large data set, the study could still determine the effect of timing of registration on grades and course completion rates.

The total population of the students was used in the study. Students were divided into when they registered: early, regular, or late. The grades and course completion rate were also evaluated in terms of letter grade, pass rate, and course completion. If students completed the course, they had a letter grade of A, B, C, or D. A letter grade of F was considered failure to successfully complete the course. If student withdrew from class they received a W, WP, or WF. If they withdrew during the time that students were allowed to drop courses with no grade penalty, they received a W. If, however, they waited until the end of the semester to withdraw from the course, they received a WP or WF. The WP means that the student was passing the class at the time of the withdrawal, and the student received no penalty towards their grade-point average. The WF means that the student was not passing the class at the time of the withdrawal, and the student received no quality points towards their grade-point average. A WF and a grade of F were both counted against a student's grade-point average. Raw numbers and descriptive statistics are given for demographic summaries, while multiple regression is used to answer the last research question.

## ***LIMITATIONS***

There are several limitations associated with this study. First, success in this study was defined by semester grades and course completion rates. This study only looked at what the grades were at the end of the semester, course completion, and timing of registration. Other factors that may have influenced semester grades and persistence rates were not taken into account. Given the relatively low variance explained in the final regression models, it is clear that other variables can and should be considered. A second limitation involved the definition of early, regular, and late registration. At the beginning of this study, all three community colleges were contacted to make sure they all had registration policies that included three different registration times. Once the data was collected, one of the colleges indicated they only had two registration times (regular and late).

## ***FINDINGS***

The data covered four different semesters. A fall and spring semester over a two-year period of time included the years 2001–2002 and

**Table 1. Descriptive data of three community colleges (data sets)**

Community College	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Total
South Community College	25855	27530	30067	32797	37327
West Community College	15150	16101	17535	19223	117812
East Community College	1944	2021	2200	2321	16129

2002–2003. South Community College had a total of 37,327 data entries in the study. West Community College had a total of 117,812 data entries in the study. East Community College had a total of 16,129 data entries in the study (see Table 1 for percentage breakdowns). As the research questions were answered, the groups were broken down into specific demographic categories. This was done in order to understand if gender, age (traditional or nontraditional), ethnicity, socioeconomic (Pell Grant), and program of study had any impact on timing of registration and student learning outcomes in terms of grades and course completion. All three community colleges had similar geographic locations and had student populations that closely mirrored each other.

In terms of ethnicity, the data was subdivided by timing of registration. The number of data entries for African American students who registered during early registration was 12,177, 37,620 for regular registration, and 7,764 for late registration, for a total of 57,561. The number of data entries for Caucasian students who registered during early registration was 24,571, 78,123 for regular registration, and 8,050 for late registration, for a total of 110,744. The number of data entries for Asian students who registered during early registration was 110, 458 for regular registration, 84 for late registration, for a total of 652. The number of data entries for Hispanic students who registered during early registration was 96, 549 for regular registration, and 62 for late registration, for a total of 707. Finally, the number of data entries for American Indian students who registered during early registration was 31,141 for regular registration, and 52 for late registration, for a total of 224 (see Table 2 for percentages).

In terms of gender, the data was subdivided by timing of registration. The number of data entries for students who registered early in terms of gender was 22,738 women and 14,589 men for a total of 37,327. The number of data entries for students who registered during the regular time in terms of gender was 70,206 women and 47,606 men for a total of 117,812. Lastly, the number of data entries for students who registered late in terms of gender was 9,009 women and 7,120 men for a total of 16,129 (see Table 3 for percentages).

**Table 2. Ethnicity and timing of registration percentages (171,400 data entries)**

Timing of registration	African American	Caucasian	Asian	Hispanic	American Indian	Total
Early registration	21.1%	21.1%	16.8%	13.5%	13.8%	21.7%
Regular registration	65.3%	70.5%	70.2%	77.6%	62.9%	68.8%
Late registration	13.4%	7.2%	12.8%	8.7%	23.2%	9.4%
Total	33.8%	65.1%	.3%	.4%	.1%	99.9%

The data also indicated that the majority of students at the three community colleges received some type of federal financial aid. The number of data entries for students who registered early who did not receive Pell Grants (federal financial aid) was 7,000; the number of data entries for students who did receive Pell Grants was 30,327. The number of data entries for students who registered during the regular time who did not receive Pell Grants was 20,800; the number of data entries for students who did receive Pell Grant was 51,224. The number of data entries for students who registered late who did not receive Pell Grants was 3,615; the number of data entries for students who did receive Pell Grants was 9,407 (see Table 4 for percentage summary).

Program of study was broken down into academic students, technical students, and vocational students. The majority of data entries

**Table 3. Gender and timing of registration percentages (171,400 data entries)**

Timing of registration	Males	Females	Total
Early registration	21%	22.2%	21.7%
Regular registration	68.6%	68.8%	68.7%
Late registration	10.2%	8.8%	9.4%
Total	59.5%	40.4%	99.8%

**Table 4. Pell grant and timing of registration percentages (171,400 data entries)**

Timing of registration	No Pell Grant	Pell Grant	Total
Early registration	18.5%	23.5%	30.5%
Regular registration	74.5%	65.5%	58.8%
Late registration	6.8%	10.8%	10.6%
Total	25.6%	74.3%	99.9%

**Table 5. Program of study and timing of registration percentages (171,400 data entries)**

Timing of registration	Academic	Technical	Vocational	Total
Early registration	21.2%	32.9%	5%	21.7%
Regular registration	69%	57.5%	87.6%	68.7%
Late registration	9.6%	9.4%	7.2%	9.4%
Total	71.5%	18.3%	10.1%	99.8%

for students at the three community colleges were for academic students. The total number of academic student entries was 122,530 with 26,087 entries during early registration, 84,558 entries during regular registration, and 11,885 entries during late registration. The total number of data entries for technical students was 31,411 with 10,360 entries during early registration, 18,068 entries during regular registration, and 2,983 entries during late registration. The total number of data entries for vocational students was 17,321 with 880 entries during early registration, 15,180 entries during regular registration, and 1,261 entries during late registration (see Table 5 for percentages).

Two different regression equations were used to answer the main research question. For the first equation, the dependent variable was timing of registration. The independent variables included the following: institution, gender, African American, Caucasian, Asian, Hispanic, American Indian, academic, technical, Pell Grant, age, and semester grade (see Table 6). The amount of variance that the model explained in terms of timing of registration was 8.5% (see Table 7). This is not particularly high, which means that other factors not accounted for in the model may also be at work. But as the model is exploratory, it is not bad as a start. Male students in this study were dummy coded a one and females were dummy coded a zero. The standardized regression coefficient for gender was .016. Based on the positive relationship of this variable, male students were more likely to register later than female students. Racial differences in terms of timing of registration were dummy coded individually,

**Table 6. Regression model summary for timing of registration (change statistics)**

Model	<i>R</i>	<i>R</i> Square	Adj. <i>R</i> Square	<i>F</i> value
1	.292	.085	.085	950.841***

\*\*\* $p \leq .001$ .

**Table 7. Regression on timing of registration (total sample of 171,400)**

Variable	Raw regression coefficient	Standardized regression coefficient	F stat
Institution	-.137	-.225	-75.533***
Gender	.020	.016	5.597***
African American	.014	.011	.663
Caucasian	-.058	-.047	-2.863**
Asian	.082	.008	2.379*
Hispanic	.083	.008	2.450*
American Indian	-.016	-.001	-.266
Academic	-.038	-.028	-4.170***
Technical	-.100	-.070	-10.615***
Pell Grant	-.096	-.069	-23.039***
Age	.004	.054	19.001***
Semester grade	-.033	-.080	-28.705***

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$ .

and the ethnic division of "other" was left out. The standard regression coefficient for Caucasian students was  $-.047$ . Based on the directionality of this result and its negative relationship, Caucasian students were less likely to register late. The standard regression coefficient for Asian and Hispanic students was  $.008$ . Based on the directionality of this result and its positive relationship, Asian and Hispanic students were more likely to register late.

Program of study was divided into vocational, technical, and academic students. Technical and academic students were dummy coded individually, and vocational students were left out. The standardized regression coefficient for academic students was  $-.028$ ; for technical students it was  $-.070$ . Both of these variables showed a negative relationship and indicated that both groups registered later for classes the next semester. Because both of these groups registered later in the semester, this must mean that vocational students were less likely to register during late registration. Students who received Pell Grants were dummy coded a one and students who received no financial aid were coded a zero. The standardized regression coefficient for Pell Grant was  $-.069$ . Due to the negative relationship of the variable, students who received Pell Grants registered earlier than students who received no federal financial aid.

Traditional students were dummy coded with a one and nontraditional students were coded with a zero. The standardized regression coefficient for age was  $.054$ . This positive relationship indicated that traditional students registered later than nontraditional students. Finally, the standardized regression coefficient for semester grades

was  $-.080$ . This negative relationship indicated that students who received the lower grades registered later than students who received higher grades. Overall, the results from this test showed that timing of registration had a significant impact on grades, and that there was a strong relationship between these two variables (see Table 8).

For the second equation, the dependent variable was grades. The independent variables included institution, gender, African American, Caucasian, Asian, Hispanic, American Indian, academic, technical, Pell Grant, age, and timing of registration. The amount of variance that the model explained in terms of semester grades was  $.052$  (see Table 8). This amount of variance is lower this time but still helpful as a start. The standardized regression coefficient for gender was  $-.046$ . Based on the negative relationship of this variable, female students had higher grades than male students. For African American students, the standard regression coefficient for was  $-.174$ . Based on the directionality of this result and its negative relationship, African American students received lower grades when compared to the other ethnic groups in this study. The same type of relationship was also found for American Indian students. The standard regression coefficient for American Indian students was  $-.008$ , which indicated that American Indian students received lower grades than the other ethnic groups in the study.

The standardized regression coefficient for academic students was  $-.097$ ; for technical students it was  $-.038$ . Both of these variables showed a negative relationship and indicated that both groups received lower grades than vocational students, which was the variable that was left out. The standardized regression coefficient for age was  $.085$ . This positive relationship indicated that traditional students received higher grades than nontraditional students. Finally, the standardized regression coefficient for timing of registration was  $-.083$ . This negative relationship indicated that students who registered earlier received higher grades than students who registered late. Again, the results from this test showed a significant relationship between timing of registration and grades (see Table 9).

**Table 8. Regression model summary for semester grades (change statistics)**

Model	<i>R</i>	<i>R</i> square	Adj. <i>R</i> square	<i>F</i> value
1	.229	.052	.052	562.190***

\*\*\* $p \leq .001$ .

**Table 9. Regression on semester grades (total sample of 171,400)**

Variable	Raw regression coefficient	Standardized regression coefficient	F stat
Institution	-.026	-.017	-5.512***
Gender	-.142	-.046	-15.926***
African American	-.536	-.174	-10.392***
Caucasian	.017	.006	.335
Asian	.088	.003	1.008
Hispanic	-.099	-.004	-1.165
American Indian	-.446	-.008	-2.865**
Academic	-.327	-.097	-14.410***
Technical	-.133	-.038	-5.567***
Pell Grant	-.019	-.006	-1.815
Age	.017	.085	29.493***
Timing of registration	-.206	-.083	-28.705***

\*\* $p \leq .01$ , \*\*\* $p \leq .001$ .

### **Summary**

When looking exclusively at timing of registration, the multiple regression tests indicated that students who registered during early and regular registration times had higher semester grades than students who registered during late registration. There were higher course completion rates among students who registered during early and regular registration. If the letter grade did not give the students credit (for example, F, W, WF, WP), the students were counted as not completing their course for the semester and received a zero. The only way that students were counted as having completed the course for the semester was if they received a letter grade of A, B, C, or D. Grades and course completion rates were both under the heading of student learning outcomes. Both outcomes showed that if students registered early or at the regular time periods, they had higher grades at the end of the semester and completed their courses at higher rates than students who registered late.

### **CONCLUSIONS**

There was a significant difference between student characteristics and timing of registration. Women registered earlier than men and non-traditional students registered most often during early and late registration. Caucasian students registered early more than all other ethnic groups, and students who received Pell Grants most often registered

during early or regular registration. Vocational students registered during early and regular registration in higher numbers when compared to career and academic students. East Community College had the majority of their students registered before the start of the semester, and South Community College had the largest number of late registrants and the longest time period for late registration.

Students who registered during early and regular registration had significantly higher semester grades compared to students who registered during late registration. Students who registered during early and regular registration had significantly higher course completion rates compared to students who registered during late registration. After controlling for students' characteristics, it was found that students who registered during early and regular registration had significantly higher semester grades and course completion rates compared to students who registered late. As for the students who registered late and still persisted throughout the semester, they still had significantly lower grades than students who registered early and during the regular period. Overall, the results from this study consistently showed that students who registered early and during the regular period had significantly higher semester grades and course completion rates when compared to students who registered late.

### ***IMPLICATIONS FOR PRACTICE***

Adelman (1999) found grades to be statistically significant in terms of predicting college persistence. Therefore, if community colleges are looking for ways to keep students in school—as well as helping them to succeed in school—semester grades need to be a consideration in any policies concerning registration. Because the data in this study indicated that late registrants had statistically significantly lower grades than students who registered early and during the regular time, community colleges need to consider either limiting late registration time. Doing so will improve semester grades for late registrants. Or, improving support for those students who do register late should also benefit these students. Free tutoring services that target late registrants or international students might be a way that community colleges could help late registrants catch up with the rest of the class. International students could benefit from the extra help to overcome any language barriers that may or may not exist.

Community colleges could also assign advisors based on who is a late registrant and not just a student's program of study. Currently, students are assigned advisors based on their majors. Faculty members



who teach science classes are assigned students who are interested in degrees associated with science, and math instructors are assigned students who are interested in degrees associated with math. Colleges could take all of the late registrants and assign them advisors that could advise them throughout the semester and make sure that they stay on track in terms of grades and persistence. Having an advisor that understands the impact of late registration on grades and having the support needed to help students catch up and keep up with the students who registered during the early and regular periods could go a long way in helping to improve the grades of students who register late. Having a proactive program that helps late registrants and advisors that encourage and help students is one of the steps that colleges need to make, especially if they want to continue a policy of late registration.

Even though advising is one of the most important ways that faculty members can influence students, there are other alternatives that community college faculty can consider in terms of helping students achieve higher grades and persistence rates. Based on the results from this study, community college faculty need to realize the detrimental effects that late registration has on semester grades and that late registrants represent a high risk group in terms of student success. Faculty members know that when students come into their class after the beginning of the semester they need to take a direct interest in helping such students to catch up to the rest of the class. This may mean some extra time after class or an appointment during office hours. Even though this may mean extra work for the already over-worked faculty, it is extremely important to help the late registrants catch up to the rest of the class.

If colleges want to change policy concerning registration, specifically late registration, then they must look not only at support services but also into changing the practice of late registration altogether. Some schools, such as Sinclair Community College, have ended late registration and have seen a dramatic increase in student retention and persistence (Sinclair Community College, 2002). However, making the decision to change a major policy like registration can be very difficult if there is not faculty and staff support for the change (Lucus, 2000). Colleges also need to be prepared to have lower enrollment rates in the first couple of semesters during the transition away from late registration.

During current tight budgets, community colleges may be reluctant to implement policies that may reduce enrollment. Nevertheless, administrators need to look at the long-term benefits of creating a system that encourages success over enrollment numbers. Alternatives may be to only register one or two days after the start

of classes or to limit this registration to students who have a certain grade-point average and who are not on any type of academic probation. Another alternative may be to require all late registrants to meet with their advisor more often than other students. More frequent meetings could help them catch up with the other students and ensure that they know when registration begins for the next semester.

Realistically, however, this will probably not be a risk that community colleges are willing to take. Even though, as in the case of Sinclair Community College, the benefits of eliminating late registration may benefit the college in terms of persistence rates in the long run. Late registration policies will most likely prevail at the majority of community colleges throughout the United States. The trick will be for colleges to find alternative ways to encourage students to register before the beginning of classes and to reduce the number of late registrants as much as possible. This can be achieved through faculty advising and effective student services (Person, Rosenbaum, & Deil-Amen, 2006).

## REFERENCES

- Adelman, C. (1999). *Answers in the toolbox: Academic intensity, attendance patterns and bachelor's degree attainment*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Andrews, H. (2003). *Enrollment trends in community colleges*. Los Angeles, CA: ERIC Clearinghouse for Community Colleges. Retrieved from ERIC Document Reproduction Service (EDO JC0 305).
- Angelo, D. (1990). The relationship between late registration and student persistence and achievement. *College and University*, 65(4), 316–327.
- Astin, A. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297–308.
- Bean, J. (1982). Conceptual models of student attrition: How they can help the institutional researcher. In E. Pascarella (Ed.), *New directions for institutional research: Studying student attrition* (pp. 17–33). San Francisco, CA: Jossey-Bass.
- Bean, J., & Metzner, B. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540.
- Brawer, F. (1996). *Retention-attrition in the nineties*. Los Angeles, CA: ERIC Clearinghouse for Community Colleges. Retrieved from ERIC Document Reproduction Service.
- Braxton, J., Milem, J., & Sullivan, A. (2000). The influence of active learning on the college student departure process. *The Journal of Higher Education*, 71(5), 569–590.
- Bryant, D., Danley, J., Fleming, S., & Somer, P. (1996). "The dog ate it" and other reasons why students delay registration. *College and University*, 71(4), 2–8.
- Chilton, B. (1965). Better never than late. *College and University*, 41(1), 77–79.
- Cohen, A. (1975). *College responses to community demands*. San Francisco, CA: Jossey-Bass.

- Cohen, A., & Brawer, F. (2003). *The American community college* (4th ed.). San Francisco, CA: Jossey-Bass.
- Deegan, W., & Tillery, D. (1985). *Reviewing the American community college: Priorities and strategies for effective leadership*. San Francisco, CA: Jossey-Bass.
- DiMaria, F. (2006). Keeping our engaged, at-risk kids in college. *Education Digest*, 72(2), 52–57.
- Higgins, S., & Katsinas, S. (1999). The relationship between environmental conditions and transfer rates of selected rural community colleges: A pilot study. *Community College Review*, 27(2), 1–26.
- Katsinas, S. (2003). Two-year college classifications based on institutional control, geography, governance, and size. *New Directions for Community Colleges*, 122, 17–28.
- Lucus, A. (2000). *Leading academic change*. San Francisco, CA: Jossey-Bass.
- Mason, H. (1998). A persistence model for African American male urban community college students. *Community College Journal of Research & Practice*, 22(8), 751–761.
- McArthur, R. (2005). Faculty-based advising: An important factor in community college retention. *Community College Review*, 32(4), 1–19.
- Metzner, B. (1989). Perceived quality of academic advising: The effects on freshman attrition. *American Educational Research Journal*, 26(3), 422–442.
- Parks, K. (1974). *An investigation of selected variables in regard to regular and late college registration*. Dissertation Abstracts International, 4204A, 35.
- Pascarella, E., & Terenzini, P. (2005). *How college affects students* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Person, A., Rosenbaum, J., & Deil-Amen, R. (2006). Student planning and information problems in different college structures. *Teachers College Record*, 108(3), 374–396.
- Reason, R., Terenzini, P., & Domingo, R. (2006). First things first: Developing academic competence in the first year of college. *Research in Higher Education*, 47(2), 149–175.
- Roman, M. (2007). Community college admission and student retention. *Journal of College Admission*, 194, 18–23.
- Sinclair Community College. (2002). *Paradigm shift to emphasize student success: Eliminating late registration after classes start*. Dayton, OH: Author.
- Smith, A., Street, M., & Olivarez, A. (2002). Early, regular, and late registration and community college student success: A case study. *Community College Journal of Research and Practice*, 26, 261–273.
- Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, 1, 64–85.
- Spady, W. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2, 38–62.
- Tharp, J. (1998). Predicting persistence of urban commuter campus students utilizing student background characteristics from enrollment data. *Community College Journal of Research and Practice*, 22(3), 279–295.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education*, 68(6), 599–623.
- Weiss, D. (1999). Forces that influence late-admitted students. *Community College Review*, 27(2), 26–51.
- Wilder, J. (1981). Academic advisement: An untapped resource. *Peabody Journal of Education*, 58(4), 188–192.