

CSP Academic Achievement

Academic Achievement of Comprehensive Studies Program Students Enrolled in
Fall Term 1992

William Collins

Comprehensive Studies Program

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CSP Academic Achievement

The Comprehensive Studies Program (CSP) is an academic, advising and student support office within the College of Literature, Science and the Arts (LSA). CSP was established in 1983 through the merger of two existing University of Michigan programs: the Opportunity Award Program which began in 1963 and provided scholarship support and academic advising to "economically disadvantaged" students; and the Coalition for the Use of Learning Skills, an academic support program started in 1970 which offered intensive sections of English and Mathematics courses to minority students and which emphasized collaborative learning and the development of effective study habits and strategies. CSP continues its emphasis on special student populations, but actually serves any undergraduate student within the University, including students from schools and colleges other than LSA. Current CSP programs and services include:

- The Summer Bridge Program - an extended orientation and academic development program offered to about 55 in-coming freshmen during the summer prior to first full-time enrollment at Michigan.

- Intensive Course Instruction - CSP course sections in a variety of introductory-level disciplines provide the opportunity for more intense interaction with course instructors as well as an emphasis on collaborative learning and study skills development. CSP sections meet more often than other course sections and are available in English, Mathematics, Spanish, Accounting, Economics, Biology, Chemistry, Physics and History.

- Academic Advising and Counseling - CSP students are assigned academic advisors who are available to work with them throughout their undergraduate careers.

- Tutorials - individual or small group academic assistance can be provided to CSP students upon the recommendation of their academic advisors.

- Mentorship Program - CSP students may participate in the CSP Mentorship Program which pairs them with faculty, staff or alumni who offer advice, support, and guidance on a personal basis.

Currently over 1,800 students at The University of Michigan are designated as CSP students and participate in varying degrees in CSP programs and services. The academic programs have a focus on underclass students, while upperclass students are served primarily through the advising programs.

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This report concerns the academic achievement of CSP students who completed the 1992 Fall Term. The purpose of the report is to establish baseline data on CSP student academic achievement as measured by Grade-Point Average (GPA). A significant portion of CSP students enter the University with high potential for success, but with academic qualifications that are less competitive than many of their peers at Michigan. This fact constitutes part of the rationale which underlies the provision of academic services through CSP. Simply put, students with an academic disadvantage relative to their peers may benefit from the kinds of academic services that a CSP can provide. The nature of this problem can be illustrated by a comparison of academic qualifications and academic achievement for a class of entering freshmen such as in Table 1.

Insert Table 1 about here

Table 1 illustrates that with the exception of Asian students, minority students enter Michigan with strong academic qualifications, but qualifications that are below the mean for all entering students. The last column in Table 1 shows that minority students perform quite satisfactorily as a group, but with a mean first-term GPA that is lower than that for all entering freshmen. The bulk of minority students admitted to LSA are admitted as CSP students and so their academic achievement should approximate the findings for entering freshmen as a whole. But a related important question concerns not just mean academic achievement, but how GPA is distributed for CSP students.

Data

The data for this report consist of information from students' academic records. The data were downloaded from University files into the Comprehensive Studies Program Information System (CSPIS). A data verification procedure was employed to compare information in CSPIS against student transcripts. A ten percent sample comparison resulted in a concordance value of 98.9% between the CSPIS data and data on actual student transcripts. (For two cases GPA differed by .01 of a point between the CSPIS entry and the actual transcript entry.) Thus, the data in CPSIS are essentially identical to

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the data on student transcripts. For purposes of this study, data files were created from CSPIS for variables of interest.

Variables

The Dependent Variable for this study was CSP Student Academic Achievement defined as cumulative Grade-Point average at the end of Fall Term 1992. Thus, first-year students would have completed only one semester of study at that juncture. To the extent that minority students face more of an adjustment challenge than other students at Michigan, this can be expected to affect disproportionately the GPA of first-term students.

Independent variables were:

Ethnicity (Black, Asian, Hispanic, Native American and White)

Gender (Male, Female)

and **Class Standing** (Fresh, Sophomore, Junior, Senior).

For some analyses, individual GPA's were grouped into the following categories:

Poor: GPA=0.0-0.999

Weak: GPA=1.0-1.699

Marginal: GPA=1.7-1.999

Good: GPA=2.0-2.999

Very Good: GPA=3.0-4.00

Subjects

All subjects in this study were designated CSP students, either at the time of admission or later through formal application for affiliation with CSP. A total of 1,820 students form the basis for the analyses which follow. All students were officially enrolled for classes in Fall Term 1992. These students were all full-time students with class standing as either freshmen, sophomores, juniors, or seniors. Part-time or other special status students who

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were designated as CSP were excluded from this study (such special status students totaled 26 in number). Table 2 summarizes the numbers of CSP students in the study categorized by gender, ethnicity and class standing.

Insert Table 2 about here

The total number of students with a given class standing is seen to rise each year from freshmen through senior year. This is due to two factors. First, continuing students who "drop-out" for a variety of reasons may return at a later date and their class standing is determined by the number of credits that have been completed at that time. The number of minority students admitted has increased in recent years, so the returning students are being added to a growing base. Also, students who have earned 85 or more credits are classified as seniors, even if they have been enrolled for more than four years, so the number of seniors is relatively large in comparison to other classifications. Secondly, students who were not designated as CSP upon entry may elect to affiliate with the program after first matriculation. Formal acceptance as a CSP Student Affiliate tends to occur when the student is a sophomore or above in class standing. Thus, the number of CSP continuing students who are above the freshman level can be seen to increase for reasons other than the number of CSP students who are admitted as freshmen in a given year. Nonetheless, most "under-represented" minority students admitted in a given year are admitted as CSP students.

Table 3 shows the first-time enrollment figures for "underrepresented" minority students admitted for fall term 1992, the most recent year for which statistics are available. The table shows the number and percent of first-time enrollees who were designated as CSP and reveals that more than two-thirds of black students were admitted as CSP; more than a third of Hispanic and more than a quarter of Native American students were admitted as CSP students.

Insert Table 3 about here

Gender Differences in Academic Achievement

As Table 2 indicates, there are considerably more females participating in CSP than males. A total of 1,085 females are designated as CSP students, while 735 males are so designated. As a group, both females and males performed well academically with females performing slightly better, earning a mean GPA of 2.63 (89% with a GPA of 2.0 or higher), while males earned a mean GPA of 2.54 (88.4% with GPA of 2.0 or higher). Table 4 shows the attained GPA's for males and females according to class standing. Higher GPA's were attained by students who were freshmen or seniors, while sophomores and juniors had cumulative GPA's that were somewhat lower, perhaps indicative of a sophomore slump or participation in fewer CSP intensive courses after the freshman year.

Academic Achievement

CSP student academic achievement is summarized in Table 4 which shows the Means, Standard Deviations, and N's for student attained GPA at the end of Fall Term 1992. The Grand Mean GPA was 2.597 with a standard deviation of .507 (N=1820). Freshmen and Seniors had the highest GPA (2.66 and 2.67 respectively), while the GPA for Sophomores and Juniors was slightly lower in comparison (2.51 and 2.55 respectively).

Insert Table 4 about here

Although the GPA means reveal that overall as well as within selected groupings, the study subjects are performing well academically, a more graphic picture of academic achievement can be seen by examining the distribution of GPA. Figure 1 provides a Cumulative Frequency Distribution of GPA for study subjects which reveals the percent of students who attained a GPA at a given level. Thus, roughly 89 percent of CSP students in the study can be seen to have to have performed at a "good academic standing" level of 2.0 or higher. Similarly, Figure 2 shows the proportion of CSP students

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who earn a GPA of a given value between the range of .30 and 4.0, the minimum and maximum GPA, respectively, observed among the study subjects.

Student grade-point averages were grouped further into five categories based on academic achievement level. Student academic achievement was categorized as ranging from "poor" to "very good" based on the following scale:

Poor: GPA<1.0

Weak : GPA=1.0-1.699

Marginal : GPA=1.7-1.999

Good : GPA=2.0-2.999

Very Good : GPA>3.0

These categories were selected to reflect an evaluation of student academic achievement consistent with the following rationales:

Poor: students whose overall level of achievement is less than "D" work and whose chances of ultimately graduating are considered poor.

Weak: students whose overall level of achievement is at the "D" level and whose chances of graduating are weak.

Marginal: students whose overall level of academic achievement is less than that required for "good standing" but who are in a position to achieve "good standing" by a marginal improvement in grades.

Good : students whose overall level of academic achievement places them in "good academic standing" and as a result are considered to have good chances of graduation.

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Very Good: students whose overall level of academic achievement is above a "B" average and who are in "good academic standing" who are considered to have very good chances of graduation.

Figures 3, 4, and 5 show the distributions of students across these five categories of academic achievement according to student gender, ethnicity or class, respectively. So few CSP students fall in the categories of "Poor" and "Weak" that they can be combined and account for less than four percent of all CSP students. Less than eight percent of CSP students perform at a level that can be described as marginal, while 66.4 percent are in the "Good" academic achievement category and 22.4 percent in the "Very Good" academic achievement category of 3.0 or higher.

Discussion

According to the Undergraduate Admissions Office, enrollment of underrepresented minority students at Michigan has increased by 76.7% over the last five years. Most of these students are admitted into CSP and participate in its programs and services. Their academic qualifications (e.g., SAT or ACT scores) exceed national averages, but are lower than the averages for their counterparts who enroll at Michigan. Despite substantially lower scores on admissions criteria, CSP students perform quite well academically as a group, even if not at exactly the same level as Michigan students overall. The GPA grand mean for 1,820 CSP students was 2.59; for first-term freshmen the mean GPA was 2.66. For white students at Michigan, the mean first-term GPA is about 3.03. By comparison, the 55 white students in CSP (freshmen through seniors) earned a mean GPA of 3.06 suggesting that white CSP students perform at a level comparable to white students as a whole.

The distribution of GPA provides a more complete picture of student academic performance than mean scores. An examination of GPA distribution shows that 89% of CSP students are in "good academic standing" defined as a GPA of 2.0 or higher. In fact,

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over 20% of CSP students have GPA's of 3.0 or higher. About 3.5% of CSP students earned a GPA below 1.7. By comparison, a report from the LSA Office of Academic Affairs (1992 Annual Report) shows that roughly 3.5% of all LSA students were dismissed for academic reasons in 1991-92 (487 out of about 14,000 LSA undergraduates). Thus, at the lower end of the GPA distribution, CSP student performance appears to be no worse than for the College as a whole. This, however, is merely an estimate and can only be determined for sure by an examination of the grade-point average distribution for the College as a whole. Nevertheless, "good-academic standing" is defined as a GPA of 2.0 or higher, a level attained by 89% of CSP students, leaving about eleven percent to be reviewed for academic discipline based academic achievement defined by GPA. Moreover, students are not dismissed for earning a GPA of less than 2.0, rather they are placed on probation for some period of time until their GPA is raised to an acceptable level. In general, students may be dismissed for earning a GPA of less than 1.0 in a given term, or a GPA of less than 2.0 for two consecutive terms. It is also reasonable to expect that some students who earn a GPA of less than 2.0 in a given term will raise their GPA in the next term, particularly students with GPA's between 1.7 and 1.999 who might be thought of as "near-misses" with respect to attaining good academic standing. That is, a marginal improvement in only one course could result in a GPA of 2.0 or higher for these students (e.g., earning a grade of "C" instead of "C-" in a single course). A review of academic discipline cases for the term subsequent to Fall 1992 may serve an illustrative purpose. In Winter 1993, a total of 230 CSP students were reviewed for academic discipline based on academic achievement; that is, for having earned a term and/or cumulative GPA of less than 2.0. Of this group, 66 earned a term GPA of 2.0 or higher and raised their cumulative GPA to 2.0 or higher. However, 52 students performed poorly enough to be dismissed for academic reasons at the end of Winter term 1993 (that is, less than 3.0% of the CSP total). The remaining 112 students from this group (about 6% of the CSP total) would have been on "academic probation" or have had their probation continued because their semester or cumulative GPA was less than 2.0.

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A comparison of the distribution of GPA for CSP minority students with CSP white students and with the College-wide GPA suggests that the real differences in academic achievement occur at the upper end of the GPA distribution. That is, although the proportions of students who perform poorly enough to be dismissed for academic reasons is basically the same and quite small, more white students earn GPA's above 3.0 than do minority students. This is true both for white students in CSP and for the College as a whole. Moreover, mean GPA was lower for minority students who were sophomores and juniors than for those who were freshmen and seniors, suggesting a "sophomore slump," less academic support during the sophomore year, or perhaps that entering the major could be a particularly difficult time for CSP students. Perhaps closer contact with faculty through mentoring or advising programs during the sophomore and junior years might help students at precisely the moment in their college careers when formal academic support is less available to them and the need to establish informal sources of support is greater.

APPENDIX

Table 1. Mean Academic Qualifications for Selected Entering Freshmen - 1992

Table 2. Numbers of CSP Students by Gender, Ethnicity and Class Standing

Table 3. First-time enrollment of "underrepresented" minority students - Fall 1992

Table 4. Academic Achievement Means, Standard Deviations and Ns for Selected Categories of CSP Students.

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Table 1. Mean Academic Qualifications for Selected Entering Freshmen - 1992.

	<u>HSGPA</u>	<u>HSPR</u>	<u>SAT V+M</u>	<u>ACT-C</u>	<u>U-M GPA</u>
Black	3.27	83.8%	1005	23.1	2.55
Hispanic	3.32	84.9%	1073	24.9	2.65
Nat. Amer.	3.39	83.1%	1136	25.8	2.87
Asian	3.64	91.3%	1225	27.8	3.00
White	3.63	90.5%	1187	27.7	3.03
ALL	3.58	89.7%	1173	27.2	2.98

source: University Admissions Office

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Table 2. Numbers of CSP Students by Gender, Ethnicity and Class Standing.

		Frosh	Soph	Junior	Senior	Total
M A L E	Black	87	103	131	145	466
	Asian	0	2	5	14	21
	Hispanic	62	29	55	62	208
	Native Am.	7	4	4	4	19
	White	1	5	6	9	21
	<i>Sub-Total</i>	<i>157</i>	<i>143</i>	<i>201</i>	<i>234</i>	<i>735</i>
		Frosh	Soph	Junior	Senior	Total
F E M A L E	Black	172	245	196	211	824
	Asian	3	8	9	9	29
	Hispanic	33	43	36	48	160
	Native Am.	5	11	8	14	38
	White	2	2	5	25	34
	<i>Sub-Total</i>	<i>215</i>	<i>309</i>	<i>254</i>	<i>307</i>	<i>1085</i>
Total		372	452	455	541	1820

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Table 3. First-time enrollment of "underrepresented" minority students - Fall 1992.

	<u>U-M Total</u>	<u>CSP Total</u>	<u>CSP Percent</u>
Black	377	259	68.7%
Hispanic	270	95	35%
Native American	44	12	27%
Underrepresented Minority Total	691	366	53%

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Table 4. Academic Achievement Means, Standard Deviations and Ns for Selected Categories of CSP Students.

	Frosh	Soph.	Juniors	Seniors	All
Black					
mean GPA	2.69	2.49	2.49	2.56	2.56
s.d.	.623	.502	.433	.417	.497
n	259	348	327	356	1290
Asian					
mean GPA	2.82	2.79	2.99	2.83	2.87
s.d.	.758	.510	.545	.481	.510
n	3	10	14	23	50
Native American					
mean GPA	2.45	2.42	2.59	2.67	2.54
s.d.	.623	.409	.386	.431	.464
n	12	15	12	18	57
Hispanic					
mean GPA	2.59	2.52	2.602	2.798	2.64
s.d.	.589	.499	.455	.431	.504
n	95	72	91	110	368
White					
mean GPA	3.09	3.10	3.11	3.04	3.06
s.d.	.757	.415	.485	.496	.485
n	3	7	11	34	55
ALL					
mean GPA	2.66	2.51	2.55	2.67	2.597
s.d.	.617	.504	.458	.44	.507
n	372	452	455	541	1820