

## DOCUMENT RESUME

ED 466 835

JC 020 512

AUTHOR Maack, Stephen C.  
TITLE Final Analysis of Academic Assistance System.  
INSTITUTION Rio Hondo Coll., Whittier, CA.  
PUB DATE 2001-10-25  
NOTE 30p.  
PUB TYPE Numerical/Quantitative Data (110) -- Reports - Descriptive (141)  
EDRS PRICE EDRS Price MF01/PC02 Plus Postage.  
DESCRIPTORS Academic Advising; \*Academic Failure; Community Colleges; \*Dropout Prevention; Dropout Programs; \*Early Identification; \*Early Intervention; High Risk Students; \*Potential Dropouts; Tutoring; Two Year College Students; Two Year Colleges  
IDENTIFIERS \*Rio Hondo College CA

## ABSTRACT

The Academic Assistance System (AAS) at Rio Hondo College in California is the early academic warning system that flags students in academic trouble. The AAS aims to assist these at-risk students through counseling, time management/study skills workshops, tutoring, and other programs. Students who received early warning letters and who responded by seeing a counselor were counted for the final analysis of the fall 2000 and spring 2001 terms (the only terms for which computerized information concerning the AAS was available). This analysis of the AAS reports that the number of students referred through the AAS increased 10.4% between fall 2000 and spring 2001, from 1,385 to 1,529. The percentage of all students served also increased from 10.2% to 10.9% of all students enrolled each term. These increases could indicate either an increased need for these services or an increased faculty awareness of students in trouble. Of all students who received AAS letters in the fall, 43.5% dropped referred courses (11.8% before receiving the letter and 31.7% on or after the date the letter was sent). Of all students who received AAS letters in the spring, 47.2% dropped referred courses (10.0% before receiving the letter and 37.2% on or after the date the letter was sent). (Contains 11 tables.) (Author/NB)

# Final Analysis of Academic Assistance System

Stephen C. Maack

Rio Hondo College  
Whittier, California

October 25, 2001

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

✓ This document has been reproduced as  
received from the person or organization  
originating it.

Minor changes have been made to improve  
reproduction quality

Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

J. Carreon

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

# Memorandum

**To:** Nilsa Rivera  
**CC:** Joe Ramirez  
*Stephen C. Maack*  
**From:** Stephen C. Maack  
Director, Institutional Research  
**Date:** October 25, 2001  
**Re:** FINAL ANALYSIS OF ACADEMIC ASSISTANCE SYSTEM

## EXECUTIVE SUMMARY

- The number of students referred through the Academic Assistance System (AAS) increased 10.4 % between Fall 2000 and Spring 2001, from 1,385 to 1,529.
- The percentage of all students served by AAS increased from 10.2 % to 10.9 %.
- Students were usually referred from one course (about 95 %), but 4 % to 5 % were referred from two or more courses.
- The volume of referral reasons grew 10.7 % from 3,180 to 3,521 with about 2.3 reasons per person. Most of the time (69 % to 73 %) there were two referral reasons.
- About one in ten AAS students withdrew completely from Rio Hondo College – 1.7 % to 1.4 % withdrew about 18 days before they were sent AAS letters, and 9.6 % to 8.0 % on average 24 to 34 days after being sent the letters.
- Dropping courses for which students got an AAS letter was an even more frequent response. 11.8 % to 10.0 % of AAS students had dropped the referred course about 18 or 19 days before being sent AAS letters, and 31.7 % to 37.2 % about 22 to 31 days after the AAS letters were mailed.
- Only 45.2 % of the AAS students in fall 2000 and 43.4 % in spring 2001 remained in their referred courses to the end of the term.
- AAS succeeded in identifying students in academic difficulty, but had uneven results in helping those students.

JCO 2051 2

- Students who withdrew completely from Rio Hondo before or after receiving AAS letters were significantly more likely to be part-time students, carrying an average load of 6 or 7 units. Withdrawing consisted of dropping one or two courses.
- AAS students who did not withdraw from Rio Hondo were equally likely to have carried the same average number of maximum units at some point in the term, and to be split evenly between part-time and full-time student status.
- Students who dropped referred courses before getting AAS letters averaged 4.9 or 4.6 units, and completed an average of 4.6 or 3.6 units, depending on the term.
- The average GPAs of those who dropped referred courses before getting AAS letters was 1.630 in the fall and 1.364 in the spring, with 52.4 % above 2.0 in the fall and 42.5 % above 2.0 in the spring.
- AAS students who dropped referred courses on average 22 to 31 days after AAS letters were sent did worse academically than those who dropped their referred courses before receiving the letters. The average units attempted, units completed, and semester GPAs of those students who dropped referred courses after getting AAS letters were significantly lower than those students who dropped referred courses before getting AAS letters.
- The average GPAs of those who dropped referred courses after getting AAS letters was 1.118 in the fall, with only 33 % above 2.0, and 1.149 in the spring, with only 34.4 % above 2.0. The average ending units attempted for these students was about 3.9 in the fall and 4.0 in the spring, and the average ending units completed was about 2.7 in the fall and 3.1 in the spring – or about one to two courses attempted and one completed. Dropping the referred courses did not help this group succeed in others.
- AAS students who stayed in their referred courses did significantly better academically than either of the groups that dropped their referred courses. Students who stuck with their referred courses ended up attempting an average 7.7 or 7.5 units, and completing an average of 7.3 or 6.7 units, depending on the term.
- While the average semester GPAs of AAS students who stayed in their referred courses was only 1.903 in the fall and 1.775 in the spring, over half did have GPAs above 2.0 each term (60.4 % in the fall and 53.6 % in the spring terms).
- The AAS students who stuck with referred courses to the end succeeded (i.e., got a “C” or better or Credit) in those courses 57.9 % of the time in the fall and 53.4 % in the spring.
- Overall, students tended to be referred most often for general reasons, (e.g. “to counseling”) and because of class attendance problems, then for class performance reasons, and much less often because of apparent lack of basic skills.

- There were weak to moderately strong, but statistically significant differences in the distributions of referral reasons among the different AAS student subgroups.
- Students who withdrew or dropped courses before getting letters were referred for:
  - a) **general reasons 43 to 47 % (to counseling – 37 to 42 %); b) class attendance 36 to 42 % of all reasons (no longer attending class – 22 to 25 %, irregular class attendance 7 to 17 %); c) general class performance 11 to 14 % (improve test/quiz performance 5 to 9 %); d) basic skills/study skills reasons 2 to 7 %.**
- Students who withdrew or dropped courses after being sent letters were referred for:
  - a) **general reasons 42 to 43 % (to counseling – 34 to 40 %); b) class attendance 27 to 36 % of all reasons (no longer attending class – 10 to 17 %, irregular class attendance 11 to 15 %); c) general class performance 15 to 22 % (improve test/quiz performance 7 to 15 %); d) basic skills/study skills reasons 6 to 9 %.**
- Students who stayed with their referred courses were referred for these reasons:
  - a) **general reasons 44 to 42 % (to counseling – 37 to 35 %); b) general class performance 32 to 28 % (improve test/quit performance 17 to 19 %); c) class attendance 17 % (irregular class attendance 12 %); d) basic skills needs 7.5 to 12 % (distribution within basic skills varying by term).**
- About 22 % of all teaching faculty participated each term, but the distribution across course departments was uneven. Vocational department faculty were especially likely to not participate.
- About 13 % of all teaching faculty who participated in the spring had participated in the fall as well. About 40 % of the faculty referring students to AAS each term participated only one term.
- Math faculty made over 20 % of the referrals each term, and English or Reading faculty made 10 to 19 % of all referrals each term. The referrals from mathematics came from basic skills courses more often than from advanced mathematics courses.
- The AAS program might benefit from clearer assumptions, objectives, and target goals, as well as a check-off form that allows faculty to communicate more specific information to counselors about student problems.
- Reducing the number of AAS letters sent to students who had already dropped referred courses would improve program efficiency.
- Encouraging students to stick with courses and seek help in them appears to yield better results for students than encouraging or allowing students to reduce their course loads to a bare minimum. Counselors and staff have about a three to four week period available to work with referred students before some will drop courses to their detriment. More research into the effectiveness of interventions is appropriate.

## OVERVIEW

Computerized information concerning the Academic Assistance System (AAS) is only available for two terms: Fall 2000 and Spring 2001. Only students who were sent early warning letters through the Academic Assistance System (AAS) program and who responded by seeing a Counselor were counted for the final analysis. The number of individual students referred through and responding to the Academic Assistance System increased 10.4 % from 1,385 to 1,529 between the fall and the spring semesters. The percentage of all students served also increased (from 10.2% to 10.9 % of all individual students enrolled each term). In both terms most students were referred from only one course (95.0 % in the fall and 93.6 % in the spring). However, 5 % of the students in the fall and 6.3 % in the spring were referred from two courses, and one student in the spring was sent letters for three different courses. The volume of reasons for referrals grew 10.7 % between Fall 2000 and Spring 2001, from 3,180 to 3,521. The average number of reasons for referrals was about the same each term, 2.29 in the fall and 2.34 in the spring. Almost three-quarters of the fall students (73.0 %) and seven out of ten spring students (69.3 %) were given two reasons for referrals.

These increases could indicate either an increase in need for the Academic Assistance System (i.e., more students identified early as having difficulty), or an increase in faculty awareness and “buy-in” to the program. The number of faculty who participated increased by only three, from 106 to 109. The number of courses from which faculty referred one or more students to the Academic Assistance System increased just one, from 186 to 187. The number of sections served by AAS remained the same at 243. The distribution of referrals was uneven across course departments. This will be discussed more fully later.

## WITHDRAWAL AND COURSE DROPPING AS PRIMARY OUTCOMES

Primary outcomes for AAS students were withdrawal from the College, or dropping referred courses. In fall 2000 about 11.3 % of the AAS letter recipients withdrew completely from Rio Hondo College – 1.7 % before even getting the AAS letter, but 9.6 % after receiving it. In spring 2001 about 9.4 % of the AAS letter recipients withdrew completely from Rio Hondo College – 1.4 % before even getting the AAS letter, and 8.0 % after receiving it. It is too early to tell whether the lower number and percentage of AAS students who withdrew in the spring is an indication of a trend. A positive interpretation might be that the word was getting out among students (and faculty?) that the AAS letter is an offer of early help to students having trouble, not a sign of irreversible failure.

Even when one puts aside the Rio Hondo withdrawals, however, students often dropped one or more courses for which they received AAS letters. Of all students who got AAS letters in the fall, 43.5 percent dropped referred courses – 11.8 % before even getting the AAS letter and 31.7 % on or after the date that the letter was sent. The story in the spring was similar. Of all students who got AAS letters in spring 2001, 47.2 percent dropped referred courses – 10 % before even getting the AAS letter and 37.2 % on or after the date that the letter was

sent. One cannot tell from this data whether students are being advised or deciding themselves to withdraw rather than hang in and try to do better in courses in which they are having difficulty. The high percentages of withdrawals from Rio Hondo and the course dropping suggests that AAS and the faculty have done early identification of students who are having trouble or who are likely to have trouble successfully completing specific courses.

## **RETENTION AND AAS STUDENT SUCCESS**

On the other hand, the purpose of the Academic Advising System is to help students move toward success in their courses. To succeed, a student has to be retained until the end of the course, so the high rate of withdrawal is not a sign that the program has been particularly effective to date. Using retention to the end of courses as one measure of success, the AAS intervention succeeded in helping retain only 45.2 % of all fall students contacted, and 43.4 % of all spring students contacted. Excluding those who withdrew completely from Rio Hondo, the success rate goes up slightly, to just over half (50.9 %) of fall letter recipients who stayed in college, but only 47.9 % of spring AAS letter recipients who stayed in college.

The 626 students who stayed in College and in the courses to the end of the fall term were taking 655 courses for which they had received an AAS letter. That amounts to 45.2 % of all AAS students and 45.0 % of all courses taken by AAS students. More than half (57.9 %) of the 655 grades in the courses taken by the 626 students indicated success ("CR" (credit) or "C" or better). About 41.4 % of the grades of the students indicated no success -- grades of D, F, or NC. Only 0.7 % took an incomplete.

Another way of stating the same data is that 1,385 students received AAS letters concerning 1,454 courses. The AAS program only helped students succeed in just over one-quarter (26.1 %) of all student-course referrals. On the other hand, there were 18.6 % D, F, or NC grades, 0.3 % Incompletes, and over half (55 %) withdrawal or W grades for all the students at the end of the fall term.

The spring 2001 results were similar. The 664 referred students who did not drop out of Rio Hondo or out of their referred courses were taking 700 course sections from which they had received referrals. That amounts to 43.4 % of all referred students, and 43.0 % of all referred sections in that term. More than half (53.4 %) of the 700 grades in the courses taken by these 664 students indicated success ("CR" credit or "C" or better). About 45.0 % of the students demonstrated no success -- grades of D, F, or NC. Just 1.5 % had an incomplete or a faulty "RD" grade.

Another way of stating the spring 2001 data is that 1,529 students received AAS letters concerning 1,628 courses. The AAS program helped students succeed in under one-quarter (23.0 %) of all student-course referrals. On the other hand, there were 19.3 % D, F, or NC grades, 0.7 % Incompletes, and over half (57.0 %) withdrawal or W grades for all the students at the end of the spring term.



## NUMBER OF REFERRALS AND REASONS FOR REFERRALS

As stated earlier, there were 3,180 reasons for referrals in fall 2000 and 3,581 in the following spring, with an average of 2.29 reasons in the fall and 2.34 in the spring per student. The distribution of numbers of reasons for referrals is as follows:

**TABLE 1. STUDENTS REFERRED THROUGH ACADEMIC ASSISTANCE SYSTEM BY NUMBER OF REFERRAL REASONS**

Number of Referral Reasons	Fall 2000 Students Referred	Percentage of Fall 2000 Students Referred	Spring 2001 Students Referred	Percentage of Spring 2001 Students Referred
One	10	0.7 %	20	1.3 %
Two	1,011	73.0 %	1,060	69.3 %
Three	310	22.4 %	356	23.3 %
Four	54	3.9 %	93	6.1 %
Total Students	1,385	100 %	1,529	100 %

Each student referred through AAS usually has two reasons identified by faculty for referrals. This might imply two types of intervention being needed.

The distribution of the reasons for referrals is shown in Table 2 on the next pages:



**TABLE 2. REASONS FOR REFERRALS**

<b>Referral Reasons</b>	<b>Fall 2000 (Count of Referral Reasons)</b>	<b>Fall 2000 (Percent of Referral Reasons)</b>	<b>Spring 2001 (Count of Referral Reasons)</b>	<b>Spring 2001 (Percent of Referral Reasons)</b>
<b><u>For Basic Skills Improvement</u></b>				
<b>Need Study Skills</b>	64	2.0 %	125	3.5 %
Need Math Skills	53	1.7 %	100	2.8 %
Need Reading Skills	42	1.3 %	18	0.5 %
Need ESL Skills	23	0.7 %	36	1.0 %
Need Writing Skills	18	0.6 %	70	2.0 %
<b>Basic Skills Sub-total</b>	<b>200</b>	<b>6.3 %</b>	<b>349</b>	<b>9.8 %</b>
<b><u>For General Class Performance Reasons</u></b>				
<b>Improve Test/Quiz Performance</b>	424	13.3 %	560	15.6 %
<b>Improve Assignment Preparation</b>	188	5.9 %	185	5.2 %

**TABLE 2. REASONS FOR REFERRALS (Continued)**

<b>Referral Reasons</b>	<b>Fall 2000 (Count of Referral Reasons)</b>	<b>Fall 2000 (Percent of Referral Reasons)</b>	<b>Spring 2001 (Count of Referral Reasons)</b>	<b>Spring 2001 (Percent of Referral Reasons)</b>
Improve Class Participation	110	3.5 %	75	2.1 %
Improve Attention Span	27	0.9 %	15	0.4 %
<b>General Class Performance Sub-total</b>	<b>749</b>	<b>23.6 %</b>	<b>835</b>	<b>23.3 %</b>
<b><u>General Referrals</u></b>				
To Counseling	1,226	38.6 %	1,283	35.8 %
To Learning Assistance Center for Tutoring	158	5.0 %	235	6.6 %
<b>General Referrals Sub-total</b>	<b>1,384</b>	<b>43.5 %</b>	<b>1,518</b>	<b>42.4 %</b>
<b><u>For Class Attendance Reasons</u></b>				
Irregular Class Attendance	389	12.2 %	445	12.4 %
No Longer Attending Class	366	11.5 %	345	9.6 %
Never Attended Class	92	2.9 %	89	2.5 %

**TABLE 2. REASONS FOR REFERRALS (Concluded)**

<b>Referral Reasons</b>	<b>Fall 2000 (Count of Referral Reasons)</b>	<b>Fall 2000 (Percent of Referral Reasons)</b>	<b>Spring 2001 (Count of Referral Reasons)</b>	<b>Spring 2001 (Percent of Referral Reasons)</b>
<b>Class Attendance Sub-total</b>	<b>847</b>	<b>26.6 %</b>	<b>879</b>	<b>24.5 %</b>
<b>TOTAL REFERRAL REASONS</b>	<b>3,180</b>	<b>100 %</b>	<b>3,581</b>	<b>100 %</b>

The pattern of referral reasons is the same in both terms. General referral reasons are the most frequent (42 to 43 % of the total reasons), led by “to counseling” (about 36 to 38 % of all reasons). If that were the only reason given (which it usually is not), it would provide little communication from faculty to students or counselors about what might be going wrong for the students.

The next most frequent set of referral reasons concern class attendance (about one-quarter of all reasons – led by “irregular class attendance,” around 12 %, and then “no longer attending class.”). While a little more informative, and certainly indicative of likely current or future problems in class performance, class attendance reasons provide little more information than a careful analysis of attendance roster patterns would.

After that, class performance reasons amount to just under one-quarter of all reasons. Here the faculty most often relay something they can readily observe, students learn what they likely already know (and the Counselors soon learn) that the students have done poorly on quizzes or tests (13 to 15 % of all reasons).

Finally, the least frequently given reasons for referral relate to needed basic skills improvements (including ESL) or general college survival skills. Basic skills needs accounted for 6 to 10 % of all referral reasons. The most frequently given need here is for study skills (2 to 3.5 % of all reasons), followed closely by mathematics skills (1.7 to 2.8 % of all reasons). In the fall term students were more often identified as needing reading skills, while in the spring term the order shifted in favor of writing skills.

In order to understand the information from AAS referrals better, it is helpful to look at what is happening with individual sub-groups of students, as defined by withdrawal and course success patterns.

## STUDENTS WHO WITHDREW OR DROPPED COURSES BEFORE RECEIVING AAS LETTERS

The first sub-group consists of students who should perhaps not have received an AAS letter at all, since they had already withdrawn from the course or from Rio Hondo College.

**TABLE 3. CHARACTERISTICS OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES BEFORE AAS LETTERS WERE SENT**

	Withdrew from RHC Fall 2000 before AAS letter was sent	Withdrew from RHC Spring 2001 before AAS letter was sent	Dropped Referred Course Fall 2000 before AAS letter	Dropped Referred Course Spring 2001 before AAS letter
Students	23 (1.7 %)	21 (1.4 %)	164 (11.8 %)	153 (10.0 %)
Average Days left RHC or Course Before AAS Letter Was Sent	Left RHC on average 17.6 days before sent AAS letter	Left RHC on average 18.3 days before sent AAS letter	Dropped course on average 18.8 days before sent AAS letter	Dropped course on average 18.3 days before sent AAS letter
N of Courses for which student was referred	1 (23 students)	1 (21 students)	1 (156 students) 2 (8 students)	1 (146 students) 2 (6 students) 3 (1 student)
Average Semester GPA			1.630 52.4 % $\geq$ 2.000	1.364 42.5 % $\geq$ 2.000
Average Semester Units Attempted			Mean 4.92 Median 4	Mean 4.62 Median 3
Average Semester Units Completed			Mean 4.63 Median 3	Mean 3.63 Median 3
Maximum Units Signed Up for in the Semester	Mean 6.30 Median 5	Mean 5.91 Median 4	Mean 11.71 Median 12	Mean 11.77 Median 13

These students account for 11 to 13 percent of all students contacted through AAS. On average they were contacted about 17 or 18 days after they had dropped the course or left Rio Hondo completely. Those who withdrew completely from Rio Hondo were on average taking significantly fewer units maximum units during the term than any other group ( $F = 66.251$  in fall,  $F = 55.170$  in spring,  $p < .001$  both terms). Withdrawing from the College may have been equivalent to dropping one or two courses attempted, and for which the students were referred to AAS.

Students who dropped a referred course, before receiving the referral letter, but stayed at Rio Hondo signed up for many courses – half or more for a full-time load – at some point in the semester. This was, however, on average not a significantly greater maximum course load than that of those who dropped later, or those who stayed with referred courses all term.

In the end, though, on average those who dropped referred courses before receiving referral letters, but stayed in College, attempted and completed only part-time loads. These attempted and completed part-time loads were significantly larger part-time loads than the loads of those who dropped referred courses after being sent AAS letters, but were significantly smaller loads than those of students retained in referred courses to the end of the term. Dropping courses early did appear to help these students complete slightly more units, on average – but for this group the dropping of courses was not a result of AAS intervention.

The students who dropped referred courses but stayed enrolled at RHC did follow up on their AAS letters by seeing counselors. While no longer relevant to the courses for which the students were referred, the follow-up may have helped some of these students succeed in the remaining courses in which they were enrolled. While many still failed, in the fall 52.4 % (and in the spring 42.5 %) of the AAS identified students in this sub-group did earn a 2.0 or better GPA. Based on t-test results, the average GPAs of those who dropped referred courses before being sent AAS letters was not significantly higher than that of those who dropped referred courses after being sent AAS letters. The average GPAs of those who dropped referred courses early, however, was significantly lower each term ( $p < .03$ ) than that of those who stayed with their referred courses to the end of the term. In other words, dropping referred courses did not help GPA levels compared to sticking with the courses. Dropping before getting AAS letters did, however, provide a little help for unit completion.

AAS might be able to improve program efficiency if some procedures could be developed so that faculty did not refer students who had already dropped their courses. Alternatively, students who were referred through AAS but had dropped the referred courses could simply not be sent AAS letters.

**Reasons for Referral of Students Who Withdrew or Dropped Courses BEFORE being sent AAS letters.** The reasons that faculty referred this group through the AAS process are shown in Table 4. These reasons would have given Counselors and others little information before talking to the students. Given that the students had already dropped the courses and/or

left Rio Hondo College before receiving the AAS letters, it is not surprising that about 40 % of the students in this sub-group were sent a letter for class attendance reasons. Usually the reason given was “No longer attending class” (one-fifth to one-fourth of the total reasons).

About 38 to 42 % of the stated reasons were from the general category “To Counseling.” As stated earlier, this reason provides little further information concerning the nature of the problems. It is possible that faculty observed poor class attendance, and so decided that simply sending the student to see a counselor might help (the correlation among reasons for the same student has not been checked statistically, but could be done if necessary). Of course since this subgroup of students had already dropped the courses, sending the students to counseling would be unlikely to result in improved class attendance, unless a counselor could provide other kinds of help and also convince the students to re-enroll.

**TABLE 4. REASONS FOR REFERRAL OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES BEFORE AAS LETTERS WERE SENT**

<b>Reasons for Referral</b>	<b>Withdrew from RHC Fall 2000 before AAS letter sent</b>	<b>Withdrew from RHC Spring 2001 before AAS letter sent</b>	<b>Dropped Referred Course Fall 2000 before AAS letter sent</b>	<b>Dropped Referred Course Spring 2001 before AAS letter sent</b>
Need Study Skills		2 (4.4 %)	4 (1.1 %)	6 (1.7 %)
Need Math Skills	1 (1.9 %)	1 (2.2 %)	3 (0.8 %)	5 (1.4 %)
Need Reading Skills			4 (1.1 %)	1 (0.3 %)
Need ESL Skills			4 (1.1 %)	2 (0.6 %)
Need Writing Skills			1 (0.3 %)	2 (0.6 %)
<b>Basic Skills Sub-total</b>	<b>1 (1.9 %)</b>	<b>3 (6.6 %)</b>	<b>16 (4.4 %)</b>	<b>16 (4.6 %)</b>

**TABLE 4. REASONS FOR REFERRAL OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES BEFORE AAS LETTERS WERE SENT (Continued)**

<b>Reasons for Referral</b>	<b>Withdrew from RHC Fall 2000 before AAS letter sent</b>	<b>Withdrew from RHC Spring 2001 before AAS letter sent</b>	<b>Dropped Referred Course Fall 2000 before AAS letter sent</b>	<b>Dropped Referred Course Spring 2001 before AAS letter sent</b>
Improve Test/Quiz Performance	3 (5.8 %)	4 (8.9 %)	21 (5.7 %)	27 (7.7 %)
Improve Assignment Preparation			12 (3.3 %)	11 (3.1 %)
Improve Class Participation	3 (5.8 %)	1 (2.2 %)	8 (2.2 %)	1 (0.3 %)
Improve Attention Span	1 (1.9 %)			
<b>General Class Performance Sub-total</b>	<b>7 (13.5 %)</b>	<b>5 (11.1 %)</b>	<b>41 (11.2 %)</b>	<b>39 (11.1 %)</b>
<b>To Counseling</b>	<b>21 (40.4 %)</b>	<b>17 (37.8 %)</b>	<b>154 (42.1 %)</b>	<b>146 (41.6 %)</b>
<b>To Learning Assistance Center for Tutoring</b>	<b>2 (3.8 %)</b>	<b>4 (8.9 %)</b>	<b>8 (2.2 %)</b>	<b>7 (2.0 %)</b>
<b>General Referrals Sub-total</b>	<b>23 (44.2 %)</b>	<b>21 (46.7 %)</b>	<b>162 (44.3 %)</b>	<b>153 (43.6 %)</b>



**TABLE 4. REASONS FOR REFERRAL OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES BEFORE AAS LETTERS WERE SENT (Concluded)**

<b>No Longer Attending Class</b>	<b>12 (23.1 %)</b>	<b>10 (22.2 %)</b>	<b>92 (25.1 %)</b>	<b>87 (24.8 %)</b>
<b>Irregular Class Attendance</b>	<b>9 (17.3 %)</b>	<b>3 (6.7 %)</b>	<b>37 (10.1 %)</b>	<b>35 (10.0 %)</b>
<b>Never Attended Class</b>		<b>3 (6.7 %)</b>	<b>18 (4.9 %)</b>	<b>21 (6.0 %)</b>
<b>Class Attendance Sub-total</b>	<b>21 (40.4 %)</b>	<b>16 (35.6 %)</b>	<b>147 (40.1 %)</b>	<b>143 (40.7 %)</b>
<b>TOTAL REFERRAL REASONS</b>	<b>52 (100.0 %)</b>	<b>45 (100.0 %)</b>	<b>366 (100.0 %)</b>	<b>351 (100.0 %)</b>

The next most frequent set of reasons for referral of these sub-groups concerned class performance (about 11 % of all reasons) – usually poor test or quiz performance. Since students had dropped the course or left the College on average 18 days before the AAS letter was sent, one might deduce that test or quiz results had been available to some of those students earlier than 18 days previously. Since faculty quiz their students at different intervals, it might be difficult to tie the sending of AAS letters to availability of results of the first quizzes, as long as a uniform letter mailing date is used. AAS staff might explore with faculty whether tying the mailing of warning letters closer to the time that first quiz or test results became available, might make more of a difference. If that approach were taken, it would require mailing AAS letters on a staggered basis, on faculty request.

Finally, fewer than 5 percent of the reasons for referring this group of students related to basic skills concerns. Either faculty simply did not perceive the problems of these students who dropped as due to insufficient basic academic skills, or the students hadn't attended class enough for the faculty to tell much at all about their abilities.

## **STUDENTS WHO WITHDREW OR DROPPED REFERRED COURSES AFTER AAS LETTERS WERE SENT**

The second sub-group consists of students who withdrew from Rio Hondo College or from an AAS referred course after AAS letters were sent. It is not clear from this data that students are being actively advised to drop courses or to withdraw from College after getting an AAS letter. Rather, they could be deciding on their own that because they have received an early academic warning, dropping the course is their best course of action in order to avoid failure. Avoiding failure (an "F" or "NC" on the transcript) in a specific course is arguably a desirable outcome from the perspective of some students.

However, this outcome is not a desirable one for the effectiveness of the Academic Assistance System, unless the students are being deliberately advised to withdraw from Rio Hondo for the moment, or to drop a course now, and encouraged to try again later. If students are being deliberately advised to drop courses or withdraw from Rio Hondo, then there is clearly a tension between encouraging student success via an early academic warning system and another College goal of retaining students to the end of the term. If the students were not encouraged to drop, then the high course dropping rates might indicate that needed help was not provided, not effective, or that the students did not follow through to take advantage of help that was offered. Any of those outcomes indicate potential program problems that need further exploration beyond the scope of this analysis.

On average this sub-group of students stayed with their courses and their Rio Hondo College education for three weeks to a month after the date of the early academic warning system letter. This is an indication of commitment and suggests that there may be a three or four week window of time to make a difference in the academic lives of these students.

About 52 % of the sub-group who dropped a referred course in the fall term, and about 56 % in the spring term had been full-time students signed up for 12 or more units at some point in the term, but that was not significantly different than the course loads of other groups of AAS students who did not withdraw from college.

This pattern is similar in one respect to that of students who withdrew from the College or dropped courses before being sent AAS letters. That is, the students who stick it out in College average significantly more maximum course units in a term than those who withdraw. Those who withdraw from College took fewer maximum units, so withdrawal is easier (just drop one or two courses). This conclusion is also consistent with retention literature that has determined repeatedly that students who sign up for more units tend to be more committed to staying in College.

**TABLE 5. CHARACTERISTICS OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES AFTER AAS LETTERS WERE SENT**

	<b>Withdrew from RHC Fall 2000 after AAS letter was sent</b>	<b>Withdrew from RHC Spring 2001 after AAS letter was sent</b>	<b>Dropped Referred Course Fall 2000 after AAS letter was sent</b>	<b>Dropped Referred Course Spring 2001 after AAS letter was sent</b>
<b>Students</b>	<b>133 (9.6 %)</b>	<b>122 (8.0 %)</b>	<b>439 (31.7 %)</b>	<b>569 (37.2 %)</b>
<b>Average Days left RHC or Course After AAS Letter Was Sent (including date of the letter)</b>	<b>Left RHC on average 23.3 days later</b>	<b>Left RHC on average 33.8 days later</b>	<b>Dropped course on average 21.8 days later</b>	<b>Dropped course on average 30.7 days later</b>
<b>N of Courses for which student was referred</b>	<b>1 (125 students) 2 (8 students)</b>	<b>1 (114 students) 2 (8 students)</b>	<b>1 (414 students) 2 (25 students)</b>	<b>1 (529 students) 2 (40 students)</b>
<b>Average Semester GPA</b>			<b>1.118 33.0 % <math>\geq</math> 2.000</b>	<b>1.149 34.4 % <math>\geq</math> 2.000</b>
<b>Average Semester Units Attempted</b>			<b>Mean 3.86 Median 3</b>	<b>Mean 4.01 Median 3</b>
<b>Average Semester Units Completed</b>			<b>Mean 2.66 Median 0</b>	<b>Mean 3.07 Median 2</b>
<b>Maximum Units Signed Up for in the Semester</b>	<b>Mean 7.02 Median 6</b>	<b>Mean 7.64 Median 7</b>	<b>Mean 11.12 Median 12</b>	<b>Mean 11.61 Median 12</b>

The AAS program did identify students who were truly in trouble. But AAS identification did not result in successful help for all of them. By the end of the semester the average units attempted by this sub-group were only about 4 units (one or two courses). The students completed 3 or fewer units, on average (perhaps one course). In other words, this group of students on average in the end attempted and completed fewer units overall than those who dropped their referred courses before even receiving AAS letters. This was true even though they stuck with their courses longer, 3 or 4 weeks after being sent the AAS letters. The differences in units attempted and units completed are significantly different and lower than those AAS students sent letters after they had already dropped the referred courses.

About one-third of the students who stayed in College, but dropped referred courses succeeded in earning a 2.00 or better GPA, but the average semester GPA for the group was around 1.1, or at potential probation level. That is not significantly different than the GPA levels of those who dropped courses before being sent AAS letters, but is significantly lower than the GPAs of AAS students retained in referred courses to the end of the term.

The good news here, then, is that the AAS program succeeded in identifying academically troubled students. The bad news is that those students did not succeed overall, even though they dropped courses identified through AAS as causing them problems. The hope is that those running the AAS program can figure out how to take better advantage of that three to four week window between identification of problems (as evidenced by sending out an AAS letter) and the students giving up and dropping the course, or completely withdrawing from College. Some insights may come from looking at the reasons these students were referred.

**Reasons for Referral of Students Who Withdrew or Dropped Courses AFTER AAS letters Were Sent.** As shown in Table 6 below, the most frequent reason for faculty to refer this sub-group of students through AAS was a general referral "To Counselor" (about 39 % of all reasons). This is only slightly lower than the percentage of the same response for students who had dropped their course(s) before receiving the AAS letter.

Class attendance problems made up another 26 to 36 % of reasons, with "No Longer Attending Class" generally mentioned more often than "Irregular Class Attendance". For the same class attendance responses, the percentages for this sub-group were generally lower than they were for the sub-group of students who dropped courses before receiving the AAS letter. Note that the "Never Attended Class" response makes up 2.5 to 4.5 percent of all responses, even though the students in this sub-group had not yet dropped the courses for which they were referred.

General class improvement referrals remain the third most frequently mentioned type of referral for this sub-group. That type of referral totaled about 15 to 23 % of all referrals, depending on the term and whether the student had withdrawn from Rio Hondo or just dropped a course. The percentages giving these reasons are uniformly higher than for the sub-group of students who had dropped courses before the AAS letter was even sent. Improving test/quiz performance remains at the top of the list for this type of referral reason.

**TABLE 6. REASONS FOR REFERRAL OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES AFTER AAS LETTERS WERE SENT**

<b>Reasons for Referral</b>	<b>Withdrew from RHC Fall 2000 After AAS letter sent</b>	<b>Withdrew from RHC Spring 2001 After AAS letter sent</b>	<b>Dropped Referred Course Fall 2000 After AAS letter sent</b>	<b>Dropped Referred Course Spring 2001 After AAS letter sent</b>
Need Study Skills	4 (1.3 %)	6 (2.1 %)	21 (2.0 %)	38 (2.8 %)
Need Math Skills	4 (1.3 %)	7 (2.5 %)	20 (1.9 %)	50 (3.7 %)
Need Reading Skills	4 (1.3 %)		10 (1.0 %)	7 (0.5 %)
Need ESL Skills	4 (1.3 %)	1 (0.4 %)	4 (0.4 %)	6 (0.4 %)
Need Writing Skills	2 (0.6 %)	5 (1.8 %)	4 (0.4 %)	21 (1.6 %)
<b>Basic Skills Sub-total</b>	<b>18 (5.8 %)</b>	<b>19 (6.8 %)</b>	<b>59 (5.7 %)</b>	<b>122 (9.0 %)</b>
Improve Test/Quiz Performance	24 (7.7 %)	30 (10.7 %)	134 (13.0 %)	209 (15.4 %)
Improve Assignment Preparation	13 (4.2 %)	14 (5.0 %)	40 (3.9 %)	60 (4.4 %)
Improve Class Participation	9 (2.9 %)	3 (1.1 %)	21 (2.0 %)	32 (2.4 %)
Improve Attention Span	1 (0.3 %)	1 (0.3 %)	5 (0.5 %)	5 (0.4 %)
<b>General Class Performance Sub-total</b>	<b>47 (15.1 %)</b>	<b>48 (17.1 %)</b>	<b>200 (19.4 %)</b>	<b>306 (22.6 %)</b>

**TABLE 6. REASONS FOR REFERRAL OF AAS STUDENTS WHO WITHDREW FROM RIO HONDO COLLEGE OR FROM REFERRED COURSES AFTER AAS LETTERS WERE SENT (CONTINUED)**

<b>Reasons for Referral</b>	<b>Withdrew from RHC Fall 2000 After AAS letter sent</b>	<b>Withdrew from RHC Spring 2001 After AAS letter sent</b>	<b>Dropped Referred Course Fall 2000 After AAS letter sent</b>	<b>Dropped Referred Course Spring 2001 After AAS letter sent</b>
<b>To Counseling</b>	124 (39.9 %)	110 (39.1 %)	395 (38.3 %)	461 (34.1 %)
<b>To Learning Assistance Center for Tutoring</b>	9 (2.9 %)	12 (4.3 %)	45 (4.4 %)	103 (7.6 %)
<b>General Referrals Sub-total</b>	<b>133 (42.8 %)</b>	<b>122 (43.4 %)</b>	<b>440 (42.7 %)</b>	<b>564 (41.7 %)</b>
<b>No Longer Attending Class</b>	54 (17.3 %)	49 (17.4 %)	160 (15.6 %)	141 (10.4 %)
<b>Irregular Class Attendance</b>	45 (14.5 %)	31 (11.0 %)	129 (12.5 %)	187 (13.8 %)
<b>Never Attended Class</b>	14 (4.5 %)	12 (4.3 %)	42 (4.1 %)	34 (2.5 %)
<b>Class Attendance Sub-total</b>	<b>113 (36.3 %)</b>	<b>92 (32.7 %)</b>	<b>331 (32.2 %)</b>	<b>362 (26.7 %)</b>
<b>TOTAL REFERRAL REASONS</b>	<b>311 (100.0 %)</b>	<b>281 (100.0 %)</b>	<b>1,030 (100.0 %)</b>	<b>1,354 (100.0 %)</b>

A speculative interpretation of these results is that faculty were able to more precisely determine the types of problems this subgroup of students were having. The faculty were then able to better communicate with the counselors about the problem areas for these students. Further research with faculty, perhaps through focus groups, might provide more solid information about the observed AAS results.

Finally, basic skills referrals for this sub-group made up 5 to 9 % of all referrals. The percentages were higher in the spring than in the fall for students who did not withdraw from Rio Hondo, but did drop referred courses after receiving an AAS letter. The percentages for this sub-group are not significantly different than for the sub-group of students who withdrew from Rio Hondo or dropped referred courses before (rather than after) the AAS letter was sent. Faculty do not believe that basic skills are so much the problem for these students, so much as class attendance, course subject mastery, and class participation.

### **STUDENTS RETAINED IN REFERRED COURSES AFTER BEING SENT AAS LETTERS**

This is the sub-group that might be expected to exhibit best the impact of the AAS program. While comprising less than half of all AAS students (45.2 % in the fall, 43.4 % in the spring), it is a large group that increased in absolute numbers from 626 to 664. Even though the students had been identified through AAS as having problems, they came to see counselors and stuck with the problematic (for them) courses through the end of the semester. Whether they actually took advantage of resources to which counselors referred them cannot be told from this set of data. These students did, however, have the longest and best chance to have taken advantage of any and all available resources. How do they compare to other groups?

Half or more of this sub-group of students were full-time students at some point in the semester, but that was not significantly different from the students who dropped referred courses but stayed at Rio Hondo. As was also true of the other groups remaining at Rio Hondo, the retained group of students signed up for significantly more maximum units than those AAS students who withdrew from the College. About 94 or 95 % of the students in the retained sub-group had problems with only one course, based on AAS referrals, but that was also equally true of the other groups.

While not dropping the courses for which they were referred, many in this sub-group, like the others, did reduce their course loads. At the end of the term, however, the mean number of course units attempted by students in this sub-group was 7.7 or 7.6, significantly greater than any other AAS subgroup, and the median was 7. That means that on average students in this sub-group carried two to three courses each until the end of the semester. The students completed on average 7.3 or 6.7 courses – nearly as many as they attempted, and also significantly higher than any other sub-group. These figures are about double the units attempted and completed course loads of the other sub-groups.

The semester GPA of students retained in their referred courses to the end of the term was also significantly higher than that of any other sub-group that stayed in College all semester ( $F = 47.577$  in the Fall,  $F = 36.212$  in the Spring,  $p < .001$  each term). As shown in Table 7, however, not everyone succeeded in all his or her courses. In fact, in the fall the average GPA for this sub-group was 1.903, and in the spring it was 1.775 – both below passing. While these average GPAs were low, one should recall that these students were identified as having difficulty in one or more courses. What is more, over half (60.4 %) of the fall 2000 AAS students in this sub-group and of the spring AAS students (53.6 %) in this sub-group



did achieve a passing semester GPA of 2.0 or above. Given that these were students in difficulty in at least one of their two or three attempted courses, the GPA findings provide evidence that the AAS program may have had a beneficial impact for over half of the sub-group. Since no target goals have been set (yet) for what proportion of AAS students might be expected to succeed, one cannot tell whether course success for what amounts to 23 to 27 % of all AAS students who talked to counselors is sufficient.

**TABLE 7. CHARACTERISTICS OF AAS STUDENTS WHO WERE RETAINED IN REFERRED COURSES AFTER AAS LETTERS WERE SENT**

	<b>Retained in Referred Fall 2000 Courses after AAS letters</b>	<b>Retained in Referred Spring 2001 Courses after AAS letters</b>
<b>Students</b>	<b>626 (45.2 %)</b>	<b>664 (43.4 %)</b>
<b>N of Courses for which student was referred</b>	<b>1 (598 students)</b>	<b>1 (621 students)</b>
	<b>2 (28 students)</b>	<b>2 (43 students)</b>
<b>Average Semester GPA</b>	<b>1.903</b>	<b>1.775</b>
	<b>60.4 % <math>\geq</math> 2.000</b>	<b>53.6 % <math>\geq</math> 2.000</b>
<b>Average Semester Units Attempted</b>	<b>Mean 7.7</b>	<b>Mean 7.6</b>
	<b>Median 7</b>	<b>Median 7</b>
<b>Average Semester Units Completed</b>	<b>Mean 7.3</b>	<b>Mean 6.7</b>
	<b>Median 7</b>	<b>Median 7</b>
<b>Maximum Units Signed up for in Semester</b>	<b>Mean 11.1</b>	<b>Mean 11.1</b>
	<b>Median 12</b>	<b>Median 12</b>

Looking at the issue of success another way, the 626 fall AAS students in this sub-group stayed in 655 referred courses until the end of the semester, and the 664 spring AAS students in the sub-group stayed in 700 referred courses until the end of the semester. What were their grades in the courses in which faculty had identified them as having trouble?

**TABLE 8. FINAL GRADES OF AAS STUDENTS IN REFERRED COURSES WHO STAYED IN THOSE COURSES AFTER AAS LETTERS WERE SENT**

Course Grade	Retained in Referred Fall 2000 Courses	Retained in Referred Spring 2001 Courses
A	41 (6.3 %)	38 (5.4 %)
B	109 (16.6 %)	109 (15.6 %)
C	150 (22.9 %)	175 (25.0 %)
CR	79 (12.1 %)	52 (7.4 %)
Succeeded	379 (57.9 %)	374 (53.4 %)
D	68 (10.4 %)	75 (10.7 %)
F	160 (24.4 %)	193 (27.6 %)
NC	43 (6.6 %)	47 (6.7 %)
Did Not Succeed	271 (41.4 %)	315 (45.0 %)
I (Incomplete)	5 (0.7 %)	9 (1.3 %)
RD		2 (0.3 %)
Total Courses	655 (100.0 %)	700 (100.0 %)

As shown in Table 8, the AAS students succeeded in about 58 % of the courses in which they had been having trouble in the fall, and about 53 % of the troublesome courses in the spring. Again, without target goals, or comparative information about what would have happened to the students without AAS intervention, it is not possible to clearly state whether these figures represent adequate or good AAS program success or not. They are at least benchmarks against which to measure future AAS efforts.

**Reasons for Referral of AAS Students Retained in Referred Courses.** The distribution of reasons for referrals in Table 9 suggests that the AAS program may have been able to help this group of students somewhat more because faculty and counselors had and communicated more information about the factors preventing the students from succeeding.

**TABLE 9. REASONS FOR REFERRAL OF AAS STUDENTS WHO STAYED IN REFERRED COURSES AFTER AAS LETTERS WERE SENT**

<b>Reasons for Referral</b>	<b>Stayed in Referred Course Fall 2000 After AAS letter sent</b>	<b>Stayed in Referred Course Spring 2001 After AAS letter sent</b>
Need Study Skills	35 (2.5 %)	73 (4.7 %)
Need Math Skills	25 (1.7 %)	37 (2.4 %)
Need Reading Skills	24 (1.7 %)	10 (0.6 %)
Need ESL Skills	11 (0.8 %)	27 (1.7 %)
Need Writing Skills	11 (0.8 %)	42 (2.7 %)
<b>Basic Skills Sub-total</b>	<b>106 (7.5 %)</b>	<b>189 (12.2 %)</b>
Improve Test/Quiz Performance	242 (17.0 %)	290 (18.7 %)
Improve Assignment Preparation	123 (8.7 %)	100 (6.5 %)
Improve Class Participation	69 (4.9 %)	38 (2.5 %)
Improve Attention Span	20 (1.4 %)	9 (0.6 %)
<b>General Class Performance Sub-total</b>	<b>454 (31.9 %)</b>	<b>437 (28.2 %)</b>

**TABLE 9. REASONS FOR REFERRAL OF AAS STUDENTS WHO STAYED IN REFERRED COURSES AFTER AAS LETTERS WERE SENT (Continued)**

<b>Reasons for Referral</b>	<b>Stayed in Referred Course Fall 2000 After AAS letter sent</b>	<b>Stayed in Referred Course Spring 2001 After AAS letter sent</b>
<b>To Counseling</b>	532 (37.4 %)	549 (35.4 %)
<b>To Learning Assistance Center for Tutoring</b>	94 (6.6 %)	109 (7.0 %)
<b>General Referrals Sub-total</b>	<b>626 (44.0 %)</b>	<b>658 (42.4 %)</b>
<b>No Longer Attending Class</b>	48 (3.4 %)	58 (3.8 %)
<b>Irregular Class Attendance</b>	169 (11.9 %)	189 (12.2 %)
<b>Never Attended Class</b>	18 (1.3 %)	19 (1.2 %)
<b>Class Attendance Sub-total</b>	<b>235 (16.6 %)</b>	<b>266 (17.2 %)</b>
<b>TOTAL REFERRAL REASONS</b>	<b>1,421 (100.0 %)</b>	<b>1,550 (100.0 %)</b>

While general referrals still led with 44.0 and 42.4 % of all reasons (especially “to counseling” 37.4 and 35.4 %), general class performance reasons formed the second most frequently mentioned group with 31.9 and 28.2 % of all reasons. When told by faculty in an AAS referral that a student needs test/quiz improvement (17.0 and 18.7 % of the referral

reasons), or improvement in assignment preparation (8.7 and 6.5%), a Counselor can better focus advice to the student.

Although still mentioned as a problem in one of every six reasons, class attendance problems are more than three times more likely to be “irregular class attendance” (about 12 % of referrals) than “no longer attending class” (3.4 to 3.8 %). If class attendance is a proxy for student effort, these students may already have been trying harder by doing the right thing of making it to class, at least some of the time. Here again a Counselor is able to offer more specific time management skills and perhaps work better with these students to encourage them to hang in with the class by attending lectures or labs, and increase their efforts so that they become more regular attendees.

Finally, basic skills problems are mentioned more frequently for this sub-group than for any other sub-group, each term. Again, Counselors can recommend specific interventions for basic skills improvements. The percentage of basic skills referral reasons went up in the spring to 12.2 % for students who never dropped referred courses, just as basic skills referrals increased from 5.7 % to 9.0 % for students who did drop referred courses after the AAS letters were sent. However, it was only in this sub-group in the spring that the need for writing skills ranked higher in percentage than the need for math skills. Study skills still led the list, as it did in every sub-group other than spring students who dropped referred courses after receiving AAS letters.

The differences in referral reasons were statistically significant, but weak to moderate in strength, across the sub-groups: withdrew from college; dropped referred courses before AAS letters were sent, dropped referred courses after AAS letters were sent, and stayed in courses to the end of the term. The latter sub-group had the most success, modest as it was, and faculty gave the most specific information to Counselors for that group. It appears, then, that the AAS program may be more effective when faculty can and do communicate more specific information to counselors about what is problematic for the students. Faculty are more likely to know this when the student has been in class on a fairly regular basis. With that in mind, this analysis turns to information about the faculty participating in AAS.

## **FACULTY PARTICIPATION IN THE ACADEMIC ASSISTANCE SYSTEM**

While the number of students referred through AAS increased in the spring term, the number of faculty using the system remained nearly constant. Only 106 of 481 faculty who taught courses in Fall 2000 referred any students through the Academic Assistance System process, who actually went to see counselors. Similarly, only 109 of 496 faculty taught in Spring 2001 referred students through this program.

In both instances that amounted to 22 % of all teaching faculty. There were, however, 63 faculty who referred students through AAS each term, indicating that about 13 % of the teaching faculty were repeating users of the program. That also means that 41 % of the fall faculty who referred students did not do so in the spring, and 42 % of the spring faculty were referring students for the first time. There are a variety of possible explanations for this,

including faculty teaching in the fall but not the spring (especially so for part-time faculty), and faculty finding no appropriate students to refer from some sections. Further research may be needed into why some faculty who did teach both semesters might use the AAS program one term and not the other. These findings do suggest that the AAS program needs to keep working at informing faculty that it is available, since different faculty may teach each term. Each term there will be new opportunities to recruit additional participation.

Faculty referred one or more students through AAS in 14 % of all sections taught each term. However “all sections” includes some sections (e.g., virtual college, PE, LIB, etc.) from which one would not necessarily expect any AAS referrals. The distribution of subject areas from which students are referred is very skewed. The skew might reflect several factors:

- 1) the proportion of faculty from a subject area who are participating in the program;
- 2) the number of sections that the referring faculty teach;
- 3) an uneven distribution of students that need academic assistance across the curriculum and across courses;
- 4) varying familiarity of faculty with the AAS program across academic units; and
- 5) varying faculty ability to identify potential AAS student across academic units.

It is not possible from the data analyzed for this research to distinguish among these factors. However, these points can be illustrated by examining the two tables at the end of this report. For example, in Fall 2000 all faculty teaching in the following subject areas both participated in AAS and referred students from 100 % of the sections taught in those areas: Chinese, French, Japanese, and Vocabulary. However, between them the six faculty involved provided only 4.6 % of all student-course referrals to AAS. Not determined here is whether the 64 students referred from the 10 Chinese, French and Japanese sections was a larger proportion of all students in those sections than the three students referred from two Vocabulary sections. While the only Geography instructor in the fall did participate in the program, that faculty member referred 18 students from only two of the four GEOG sections taught. Presumably the students in the other two sections were not in need of AAS help.

On the other hand, 56 % of the mathematics instructors referred 360 students – almost a quarter of all student-section referrals – from 53 % of the 104 MATH sections taught in the fall. While a high proportion of all referrals, the proportion of all mathematics students who were referred through AAS might have been lower than the proportion of foreign language students referred. Even within mathematics, most of the referrals came from basic skills math courses (MATH 020 -- 76 referrals, MATH 030 -- 93 referrals, MATH 050 -- 45 referrals, MATH 070 – 53 referrals). Much more difficult mathematics courses, such as Calculus (MATH 190 – 13 referrals by two faculty from two sections, MATH 191 –1 referral from 1 section) both because fewer students attempt more difficult math courses, and it is likely that only more adept community college mathematics students would even attempt Calculus.

With these cautions about unexplored assumptions and expectations of where AAS program impact should be occurring, and from where students should be referred, one can observe the following patterns in where the impact has actually occurred:

**TABLE 10. FALL 2000 FACULTY PARTICIPATION IN AAS**

Course departments with 100 % faculty participation (using Course abbreviations): CHIN, FR, JAPAN, VOCAB, and GEOG

Course departments with half to two-thirds faculty participation: READ, HUMAN, MATH, MGMT, BIOL, ANTHR, CHEM

Course departments with 30 % to 49 % faculty participation: ACCT, SPAN, SPCH, BUSL, GIS, MUSIC, ART, ED, SOC

Course departments with 16 % to 29 % faculty participation: DRAF, ENGL, LIT, ECE, PHIL, ARCH, ECON, AJ, CIT

Course departments with 1 % to 15 % faculty participation: POLYS, FTECH, PSY, HIST

All other course departments had no faculty participating in any of the sections that were taught in fall 2000, and so no students referred through AAS.

Course departments with over 20 % of all AAS student-course referrals: MATH

Course departments with 10 % to 19 % of all AAS student-course referrals: READ

Course departments with 5 % to 9 % of all AAS student-course referrals: ENGL, BIOL, ART, SOC

Course departments with 2.5 % to 4.9 % of all AAS student-course referrals: CIT, SPAN, HIST, SPCH, BUSL

All other course departments mentioned earlier each contribute less than 2.4 % of all AAS referrals.



## **TABLE 11. SPRING 2001 FACULTY PARTICIPATION IN AAS**

Course departments with 100 % faculty participation (using Course abbreviations): MRKT, ANTHR, FR

Course departments with half to two-thirds faculty participation: HUMAN, MATH, LIT, CHIN, AUTOT, ED

Course departments with 30 % to 49 % faculty participation: READ, ENGL, ART, BUSL, SPCH, BIOL, PSY, HIST, AJ

Course departments with 16 % to 29 % faculty participation: PHIL, ACCT, CHEM, DRAF, MASSC, ARCH, SPAN, MGMT, SOC, ECON

Course departments with 1 % to 15 % faculty participation: MUSIC, POLYS, FTECH, CIT, ECE

All other course departments had no faculty participating in any of the sections that were taught in spring 2001, and so no students referred through AAS.

Course departments with over 20 % of all AAS student-course referrals: MATH

Course departments with 10 % to 19 % of all AAS student-course referrals: ENGL

Course departments with 5 % to 9 % of all AAS student-course referrals: BIOL, ART

Course departments with 2.5 % to 4.9 % of all AAS student-course referrals: PSY, READ, POLYS

All other course departments mentioned earlier as having faculty participating in spring 2001 each contributed less than 2.4 % of all AAS referrals.

## **CONCLUSIONS**

Based on the analyses in this evaluation, the AAS program might benefit from clarification of its assumptions and setting of more specific goals or targets. First, is the high rate of withdrawal of students from referred courses an expected and desirable outcome for the AAS program? What would an appropriate target level of course retention to the end of the term be for AAS students? Second, considering that the purpose of the AAS program is early identification of students in academic trouble, what target levels are expected for course success and semester GPA levels for AAS participants? Finally, given that the program depends on faculty participation, what are the assumptions and targets for faculty participation from different course departments and for different levels of courses? Which faculty might be expected to not participate at all, and why?

Concerning students who persist to the end of the term, either in the referred courses or in some courses, the analysis suggests that faculty are identifying students who are at risk, as

measured by semester GPAs and grades in referred courses at the end of the term. Large proportions of the referred students are already in basic skills courses – particularly in mathematics – that is itself a sign of academic risk. When the students stay in the AAS referred courses, over half of those who see a counselor do succeed in the course. Not enough information was available during this evaluation to determine whether students who did succeed, as opposed to those who did not, had followed up on counselor recommendations. It is therefore not clear how much of the success can be attributed to participation in the program, outside the visit to a counselor. Nor is it clear whether an overall course success rate around 25 % for all AAS participants is sufficient.

Faculty who participate in the program are often using the more general, less informative check off boxes (e.g., those concerning class attendance and the general “To Counseling”) to communicate with the counselors concerning the problems that the students appear to be having. Yet the sub-group of students participating in AAS who succeeded the best was the one that had the largest proportions of specific referral reasons. AAS staff might consider whether consultation with faculty might yield a more specific and more useful set of check off categories that would allow the faculty to communicate their observations of student problems more closely to the counselors. It might be possible to develop categories more specific than “to counseling” that made sense to both faculty and counselors.

Although large numbers of students were referred to the program from basic skills classes, particularly in mathematics, relatively few students were identified through AAS as having basic skills problems. This is perhaps an indication that basic skills needs are being addressed through other Rio Hondo College programs, apparently successfully enough that the AAS program is not used much to communicate about basic skills needs. In fact, faculty were more likely to refer students for general college skills needs (e.g., study skills) and measured class outcome difficulties (e.g., test/quiz performance) than for basic skills needs.

The faculty who do participate in the program are very unevenly distributed across course departments, in terms of their proportions of all teaching faculty, the sections for which they refer students, and the numbers of students they refer. Counseling staff may want to follow-up with some qualitative research as to faculty reactions to the AAS program, and exploration of reasons for the observed distribution. Key questions might be the following. What are faculty observations and expectations of what courses or types of courses are most likely to have students in need of early academic warning referrals, and why? How can larger proportions of faculty, including part-time faculty, in more course departments be encouraged to participate? Are faculty discouraged or pleased by the high rate of withdrawal from their classes of students referred through the AAS program?

Finally, the analyses have yielded areas for potential future research, both qualitative and quantitative, once assumptions and relationships between factors are further clarified, and target levels are set.



*U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)*



## **NOTICE**

### **Reproduction Basis**

**X**

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").