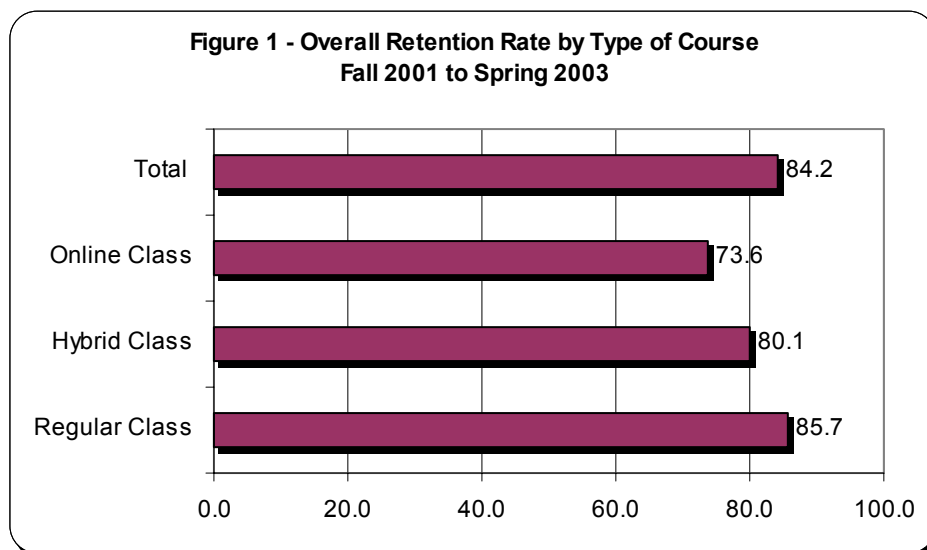# Retention and Success of Regular vs. Online and Hybrid Courses
Fall 2001 through Spring 2003

In a follow up to a study originally reported in July 2002, data were examined to determine the retention[1] and success[2] rates for regular, hybrid, and online courses. Traditional on-campus courses are considered regular courses. Online courses are those in which the majority of course components are online, while hybrid courses utilize a combination of in-class and online instruction.

Data for this study were compiled from ICCIS data via the data warehouse for the semesters fall 2001 through spring 2003. Courses that had at least one hybrid and/or online section were selected for the analyses. A total of 44 courses with 1796 sections were included.

Overall Trends

Overall, regular courses have the highest retention rates, while online courses have the lowest (figure 1). In a statistical sense, regular courses have significantly higher retention rates than both hybrid and online courses. Also, hybrid courses were found to have significantly higher retention rates than online courses. The typical average retention rate for all Mt. SAC courses is around 85%.
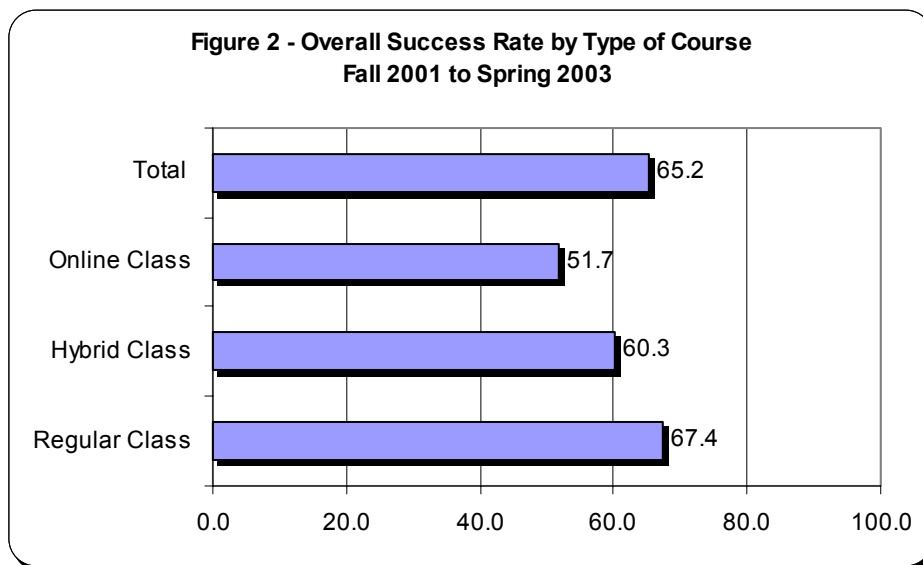

Figure 1 - Overall Retention Rate by Type of Course
Fall 2001 to Spring 2003

Type of Course	Retention Rate
Total	84.2
Online Class	73.6
Hybrid Class	80.1
Regular Class	85.7

[1] Retention refers to those students who have stayed in the course beyond the add/drop date.
   Note: Data is similar to ICCIS report #STS886B2 where retention rate is defined as the number of enrollments with letter grades of A,B,C,D,F,CR,NC, and I divided by the number of enrollments with A,B,C,D,F,CR,NC,W, and I.

[2] Success refers to the percentage of students who receive a grade of 'C' or better (or CR) in the course.
   Note: Data is similar to ICCIS report #STS886B2 where success is defined as the number of enrollments with A,B,C, and CR divided by the number of enrollments with A,B,C,D,F,CR,W, and I.

Source: MIS Data Warehouse via ICCIS
Prepared by Ann Marie West, Research Analyst, RIE
September 3, 2003

As discussed previously for the retention data, the same pattern is found for success rates (figure 2). There is a statistically significant difference between the success rates of regular courses and distance learning courses. The typical average success rate for <u>all</u> Mt. SAC courses is 68%.

**Figure 2 - Overall Success Rate by Type of Course
Fall 2001 to Spring 2003**

Type	Success Rate
Total	65.2
Online Class	51.7
Hybrid Class	60.3
Regular Class	67.4

(Scale: 0.0 to 100.0)

In order to further verify this trend, the same analyses were conducted on only those courses which were offered in all three formats (regular, hybrid, and online). There were nine courses that fit this criterion. Again, it was found that regular courses had significantly higher retention and success rates than hybrid or online courses. No statistically significant differences were found between hybrid and online courses for either retention or success.

Longitudinal Trends

A term by term analysis of retention yields essentially the same findings (table 1). Regular courses were found to have significantly higher retention rates than online courses in all terms studied. With the exception of fall 2001, regular courses were also found to have significantly higher retention rates as compared to hybrid courses. The results are less conclusive concerning the difference between hybrid and online courses. A statistically significant difference was found for only three of the five terms studied (fall 2001, summer 2002, and spring 2003).

Table 1

	Fall 2001	Spring 2002	Summer 2002	Fall 2002	Spring 2003
Regular Class	84.3	85.2	90.1	86.4	86.0
Hybrid Class	80.3	79.6	84.4	77.9	79.1
Online Class	69.7	75.4	77.7	73.3	73.4
Overall	83.0	84.1	87.6	84.5	84.2

Note: Retention rates are typically higher during the summer semesters than either fall or spring.

As seen in figure 3, a comparison over time shows only slight gains in retention (3 to 4%) for online courses between Fall 2001 and Spring 2003. There are no noticeable differences in the retention rates of hybrid courses.

Figure 3 - Retention by Type of Course Fall 2001 to Spring 2003
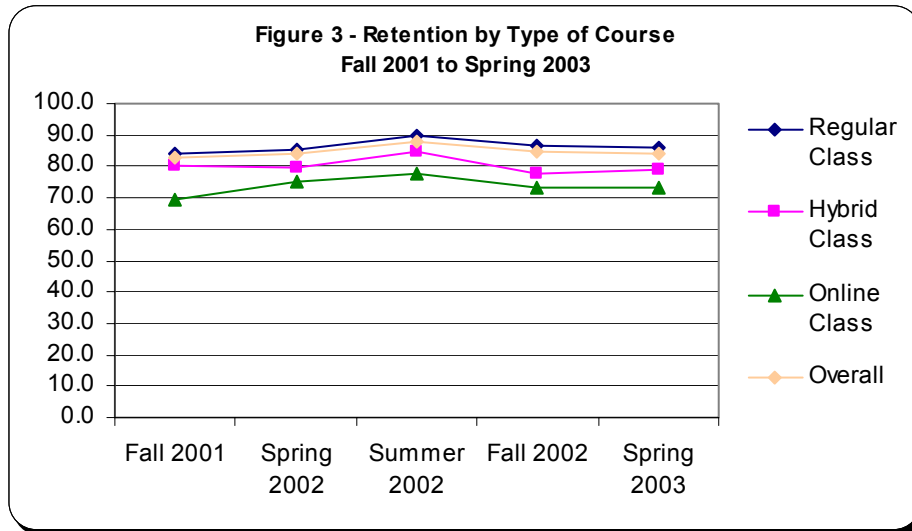
Similar to the results found for retention, the success rates of regular courses are significantly higher than those of online courses for all of the terms studied (table 2). Only three of the five terms studied showed significant differences between the success rates of regular versus hybrid courses. However, these were in the most recent terms (summer 2002, fall 2002, and spring 2003). Two terms showed a significant difference between hybrid and online courses (summer 2002, spring 2003).

Table 2

	Fall 2001	Spring 2002	Summer 2002	Fall 2002	Spring 2003
Regular Class	64.0	64.6	77.6	69.5	69.0
Hybrid Class	56.7	58.9	66.8	57.4	62.0
Online Class	46.7	53.9	55.1	50.9	53.1
Overall	62.4	63.4	73.2	66.8	66.8

Note: Success rates are typically higher during the summer semesters than either fall or spring.

Longitudinally, there have been gains in success rates (5 to 6%) for all three modalities during this time period (figure 4). More time is needed to determine if these are true gains.

Figure 4 - Success by Type of Course Fall 2001 to Spring 2003
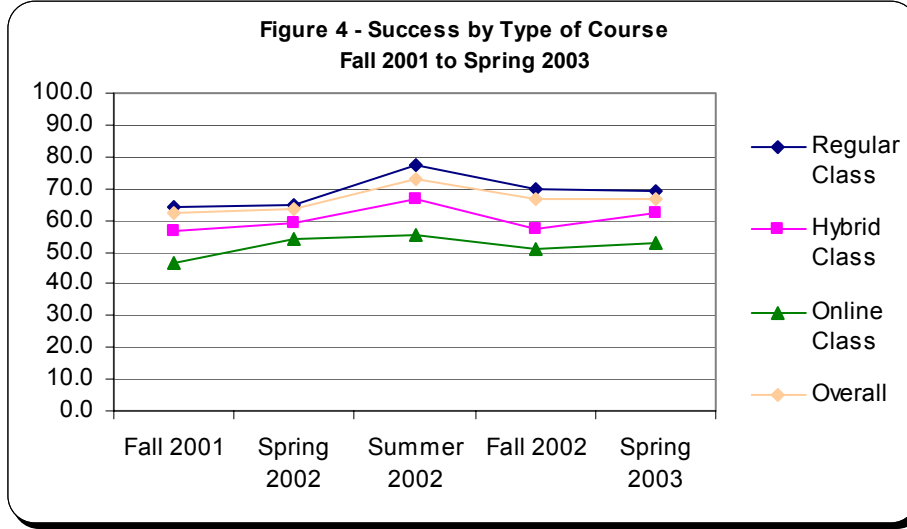
Conclusion

A summary of the major findings of this study is as follows:

- On the whole, online courses yield lower retention and success rates than do regular courses.

- While not statistically true for every term studied, regular courses also have higher retention and success rates than hybrid courses.

- The results are inconclusive regarding observed differences between hybrid and online courses. Overall, hybrid courses have higher retention and success rates. Still, this finding was not statistically borne out in all terms studied, nor was this difference found for those courses which were offered in all three formats.

- Over time, there has been no substantial increase in retention for either hybrid or online courses.

- Since fall 2001, there have been increases in success rates for both hybrid and online courses. However, since regular courses also showed an increase in success, the disparity between these three types of course offerings still exists.

Based on these findings, it is clear that the less time students spend in an actual classroom, the less likely they are to stay enrolled and succeed. While there are exceptions, as seen in a few of the notable examples listed above, this is a problem that needs to be addressed. It is recommended that interventions be put into place to increase retention and success rates to a pre-set benchmark level. While it is up to the individual department to determine that level, one suggestion would be to use the current average levels for that benchmark (e.g. hybrid – 60%, online – 51% for success). Courses falling below the pre-determined levels would be targeted for an intervention.