

# Summary

## Technology-enhanced and -delivered Classes at Okaloosa-Walton College: A Comparison between Fall 2006 and Previous Fall Semesters

This report examines enrollment, FTE, and student grades as measures of the success of technology-enhanced and -delivered classes at OWC in Fall 2006. The report is abbreviated this semester while the Learning Technologies Department conducts the Desire2Learn pilot and prepares for the full D2L rollout in Fall 2007.

### Student Success

Students who take distance and blended classes succeed at the different rates from those taking traditional classes. However, the delivery method appears to matter less to student success rates than whether or not the class is a Gordon Rule class.

	Gordon Rule	Non-Gordon Rule	Success Rate Difference
Traditional delivery	58.9	90.6	31.7
Blended with online (C6)	100.0*	90.6	9.4
Blended with text (C4)	68.1	74.7	6.6
Text-based distance (C3)	61.9	74.0	13.0
Online distance (C1)	69.5	61.4	8.1
Delivery method difference	10.6	29.2	

\*only one section, not included in calculations

Nevertheless, OWC must improve its distance instruction; OWC's challenge is to improve its distance learning success rates for *all* students; this goal will require changes in pedagogy and improved social and academic support for distance learners.

To increase the success rate in distance classes, we are adopting the following measures:

1. helping students select distance learning more wisely through both an interactive self-assessment (<http://ltech.owc.edu/studentDLchecklist.html>) and an online distance orientation (in development)
2. increasing faculty awareness of effective distance pedagogy through training modules (in development)
3. strengthening the distance class element of program reviews
4. implementing Tegrity and Smarthinking to increase student access to instructional resources.

### Enrollment and FTE

Enrollments in technology-enhanced and -delivered sections have increased steadily and significantly since Fall 2003. Since Fall 2003, distance learning enrollments have increased

approximately 10.8%, and technology-enhanced *and* -delivered enrollments have increased 16.2%. However, in the year from Fall 2005 to Fall 2006, distance learning enrollments posted their first decrease in three years, -7.4%, whereas College enrollments grew 2.0%. Distance learning enrollments made up 10.8% of College enrollments in Fall 2006, and all technology-enhanced and –delivered sections made up 16.2%.

Over the one-year period from Fall 2005 to Fall 2006, distance learning A&P enrollments declined 4.1%, whereas College A&P enrollments dropped 1.9%. College PSV enrollments declined only 0.3%, and distance PSV enrollments declined 18.1%. BAS distance enrollments grew 25.0%, and, since Spring 2006, EPI enrollments, most of which are blended, increased 76.0%.

## **2007-2008 Goals**

- Increase the student success rate of all distance classes to within at least 10 percentage points of comparable traditional classes.
- Continue to increase integration of technology across the curriculum in distance, blended, and traditional classes. This year, Learning Technologies will focus particularly on
  1. maintaining contact with new instructors
  2. implementing podcasting and other Tegrity functions as a resource for text-based students
  3. Implementing Smarthinking tutoring services and Accutrack tracking software in order to increase retention.

## **Recommendations**

- Increase online and blended offerings in selected vocational programs so that a complete vocational program can be offered online.
- Assist division directors in presenting a comparison between success rates in distance, blended, and traditional sections during faculty evaluations. The goal should be no more than a 10% difference in student success rates.
- Reduce the number of sections offered to increase average enrollment per section.

## Key Terms:

Delivery method	Special designator	Description
Online	C1	Class is delivered wholly via WebCT.
Text-based	C3	Class is delivered via textbook, study guides, and assignment feedback, along with two mandatory face-to-face exams. (New quality standards encourage faculty to increase the number and frequency of feedback to students and assessments of their work.)
Text-based with email	C5	Same as text-based but with email at the student's discretion.
Web-supplemented	WS	Class is face-to-face but has enrichment online in a WebCT classroom. No online work can be required by the instructor.
Blended with text	C4	At least 50% of the class time is spent in the classroom; up to 50% is spent in individual assignments, which are structured and assessed.
Blended with online	C6	At least 50% of the class time is spent in the classroom; up to 50% is spent in individual assignments online using WebCT. These assignments are structured and assessed.
F2F		Face-to-face, or traditional, delivery

Note: The terms "enrollment" and "enrollments" always refer to duplicated numbers in this report.

# Technology-enhanced and -delivered Classes at Okaloosa-Walton College: A Comparison between Fall 2005 and Fall 2006 Semesters

## Student Success

- Subject:** Student success in different delivery methods.  
**Question:** What is the difference in success rate between distance, blended and traditional sections?

Table 1 is ordered by the number of successful students (A-C grades) in Fall 2006; Table 2 is ordered first by Gordon Rule classification and then by the number of successful students. Delivery methods are color coded in both tables.

Points to consider when interpreting this data include the following:

- The *blended with online (C6), Gordon rule* category, with 100% A's, contains only 1 section. This result is atypical, and this student success rate cannot be compared meaningfully with other delivery methods for Gordon rule classes.
- In the *blended with online (C6) not Gordon rule* category, five of the seven classes are EPI classes, so this student success rate is heavily influenced by students with baccalaureate degrees.

Following are observations based on this data:

- Delivery method and student success do not appear to be correlated; the numbers in the *blended with online (C6), Gordon rule* category are too small to be reliable (see #1 above).
- Three delivery methods show a steady improvement in non-Gordon rule student success rates across the Spring, Summer, and Fall 2006 semesters: Traditional, Text-based Distance, and Online.

Table 2 provides the student success data broken out by Gordon rule/non-Gordon rule. Generally, students succeeded in non-Gordon rule classes at a higher rate than they did in Gordon rule classes:

- The average student success rate in the Gordon rule classes, disregarding *blended with online (C6), Gordon rule* (see #1 above), is 64.6%.
- The average student success rate in the Gordon-rule classes is 75.1%.

**1 cont. Subject: Student success in different delivery methods**  
**Question: What is the difference in success rate between distance, blended and traditional sections?**

Delivery Methods Ordered by Student Success Rates in Fall 2006  
 Question 1, Table 1

Delivery Method	Spring 2006	Summer 2006	Fall 2006							
	Total A-C	Total A-C	Total A-C	A	B	C	D	F	W	I & X*
Blended with online (C6), Gordon rule (1 section)	N/A	75.4	<b>100</b>	100	0	0	0	0	0	0
Blended with online (C6), not Gordon rule	N/A	94.6	<b>90.6</b>	58.3	28.3	4	0.9	4.6	3.7	0
Traditional, not Gordon rule	76.9	78.5	<b>90.6</b>	58.3	28.3	4	0.9	4.6	3.7	0
Blended with text (C4), not Gordon rule	N/A	86.1	<b>74.7</b>	41	28.7	5	0.7	12.2	11.5	0.7
Text-based (C3 and C5), not Gordon rule	66.9	69.5	<b>74.0</b>	30.5	26.6	16.9	2.8	11.8	11.1	0
Online (C1), Gordon rule	68.7	73.7	<b>69.5</b>	40.8	17	11.7	3.6	10	16.7	0
Blended with text (C4), Gordon rule	N/A	69.1	<b>68.1</b>	35.7	21.1	11.3	4.8	10.5	16.2	0
Text-based (C3 and C5), Gordon rule	63.6	64.9	<b>61.9</b>	10.3	24.5	27.1	3	14.6	20.2	0
Online (C1), not Gordon	57.5	59.6	<b>61.4</b>	29.4	17.7	14.3	4.5	17.4	16.3	0.1
Traditional, Gordon rule	75.3	75.9	<b>58.9</b>	18.1	18.1	22.7	18.1	18.1	4.5	0

Source: OWC's Nexus Q-Class. Data were collected 05/2007, after Fall 2006 Incompletes rolled to F's.

**1 cont. Subject: Student success in different delivery methods**  
**Question: What is the difference in success rate between distance, blended and traditional sections?**

Delivery Methods Ordered by Gordon Rule Classification and Student Success Rates in Fall 2006  
 Question 1, Table 2

	Spring 2006	Summer 2006	Fall 2006							
Delivery Method	Total A-C	Total A-C	Total A-C	A	B	C	D	F	W	I & X*
<b>Gordon Rule</b>										
Blended with online (C6), Gordon rule (1 section)	N/A	75.4	<b>100</b>	100	0	0	0	0	0	0
<b>Online (C1), Gordon rule</b>	68.7	73.7	<b>69.5</b>	40.8	17	11.7	3.6	10	16.7	0
Blended with text (C4), Gordon rule	N/A	69.1	<b>68.1</b>	35.7	21.1	11.3	4.8	10.5	16.2	0
<b>Text-based (C3 and C5), Gordon rule</b>	63.6	64.9	<b>61.9</b>	10.3	24.5	27.1	3	14.6	20.2	0
<b>Traditional, Gordon rule</b>	75.3	75.9	<b>58.9</b>	18.1	18.1	22.7	18.1	18.1	4.5	0
<b>Not Gordon Rule</b>										
Blended with online (C6), not Gordon rule	N/A	94.6	<b>90.6</b>	58.3	28.3	4	0.9	4.6	3.7	0
<b>Traditional, not Gordon rule</b>	76.9	78.5	<b>90.6</b>	58.3	28.3	4	0.9	4.6	3.7	0
<b>Text-based (C3 and C5), not Gordon rule</b>	66.9	69.5	<b>74.0</b>	30.5	26.6	16.9	2.8	11.8	11.1	0
<b>Online (C1), not Gordon</b>	57.5	59.6	<b>61.4</b>	29.4	17.7	14.3	4.5	17.4	16.3	0.1
<b>Traditional, Gordon rule</b>	75.3	75.9	<b>58.9</b>	18.1	18.1	22.7	18.1	18.1	4.5	0

Source: OWC's Nexus report OSS344J1. Data were collected 05/2007, after Fall 2006 Incompletes rolled to F's.

## Distance Learning Enrollment Trends

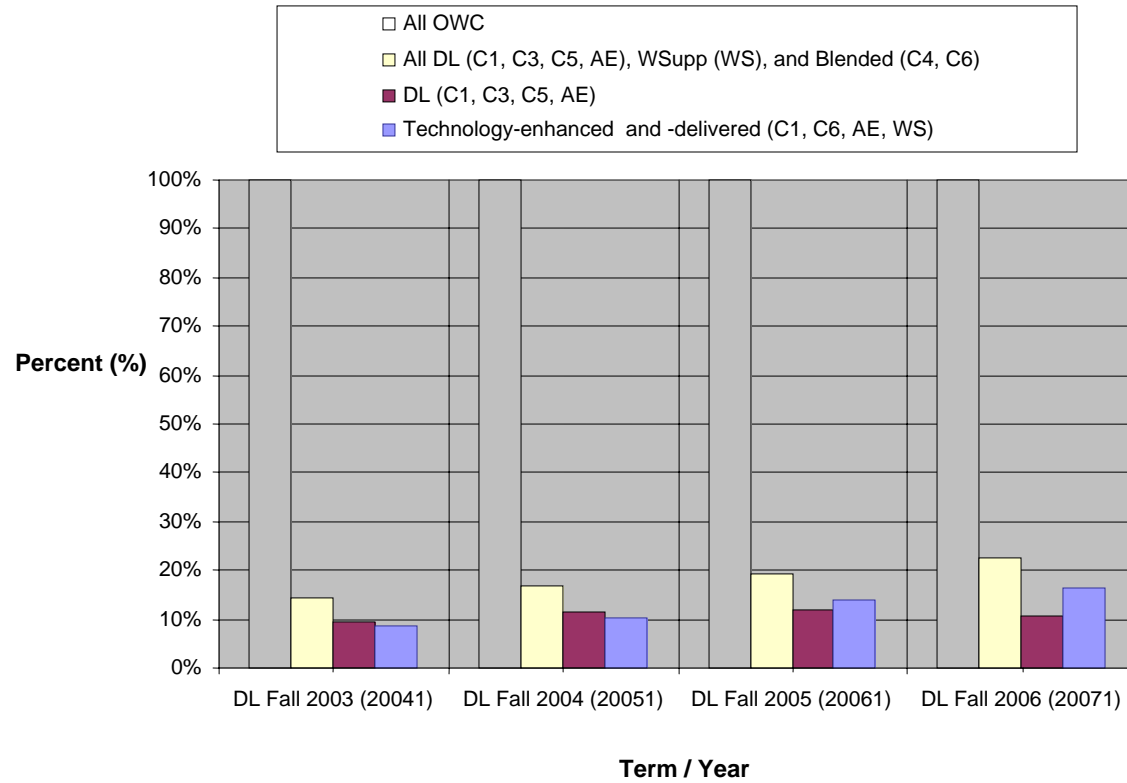
2. **Subject:** Technology-enhanced and -delivered classes as a percentage of OWC enrollments  
**Question:** What percentage of all-OWC enrollments comes from technology-enhanced and-delivered classes?

The table below shows a steady upward trend in the percentage of OWC classes using technology. Since Fall 2003, the percentage of OWC students in technology-delivered or -enhanced classes has increased from 8.8% to 16.2%. The enrollments in pure distance learning (C1, C3, C5, and AE) have increased from 9.5% to 10.8%. For the first time in three years, however, pure distance learning shows a decline over a one-year period.

	DL Fall 2003 (20041) Enrollment as a % of all OWC enrollment	DL Fall 2004 (20051) Enrollment as a % of all OWC enrollment	DL Fall 2005 (20061) Enrollment as a % of all OWC enrollment	DL Fall 2006 (20071) Enrollment as a % of all OWC enrollment
All OWC	100.0%	100.0%	100.0%	100.0%
All DL (C1, C3, C5, AE), Web-supplemented (WS), and Blended (C4, C6) as % of All OWC	14.3%	16.6%	19.4%	22.5%
DL (C1, C3, C5, AE) as % of All OWC	9.5%	11.6%	11.9%	10.8%
Technology-enhanced and -delivered (C1, C6, AE, WS) as % of All OWC	8.8%	10.4%	14.0%	16.2%

Source: OWC's Nexus Q-Class. Data were collected 02/2007.

**OWC Enrollment Trend Analysis**  
**All DL Enrollments as Percent of OWC Enrollment**  
**Fall 2003 (20041) through Fall 2006 (20071)**  
**Question 2, Chart 1**



Source: OWC Nexus mainframe 02/2007.  
 Note: The chart above shows the rate of change, not raw numbers.

**3. Subject: Technology-enhanced and-delivered classes and all-OWC enrollments**  
**Question: What percentage of all-OWC enrollments comes from technology-enhanced and -delivered classes?**

The table below breaks down the data from Question 2 into delivery methods and provides raw enrollment numbers. It also presents the rate of enrollment increases or decreases and illustrates that the importance of technology in students' education has increased each year since Fall 2003. Since then, technology-delivered and -enhanced enrollments have increased 82.5%. In purely distance classes, text-based classes showed the only decrease among technology-delivered and -enhanced classes with an 8.4% drop over this period; online and web-supplemented classes increased 34.7% and 80.1% since Fall 2003. In the year-long period since Fall 2005, however, online classes posted their first decrease in three years. The six-fold increase in blended classes' enrollments may account for this decrease as students were offered more choices in non-traditional delivery methods.

	DL Fall 2003 (20041) Enrollment	DL Fall 2004 (20051) Enrollment	Pct +/-	DL Fall 2005 (20061) Enrollment	Pct +/-	DL Fall 2006 (20071) Enrollment	Pct +/-	% Change in Enrollment since Fall 2003 (20041)
<b>All OWC</b>	23353	22323	-4.4	22674	+1.5	23134	+2.0	-0.9
<b>All DL (C1, C3, C5, AE), Web-Supplemented (WS), and Blended (C4, C6)</b>	3340	3716	+11.2	4401	+18.4	5197	+18.0	+55.5
<b>DL (C1, C3, C5, AE)</b>	2208	2588	+17.2	2698	+4.2	2496	-7.4	+13.0
<b>Technology-enhanced and -delivered (C1, C6, AE, WS)</b>	2056	2315	+12.5	3168	+36.8	3754	+18.5	+82.5
<b>Specific Delivery Methods</b>								
<b>DL - Text-Based (C3, C5)</b>	1284	1401	+9.1	1160	-17.2	1175	+1.2	-8.4
<b>DL - Online (C1)</b>	924	1187	+28.4	1478	+24.5	1245	-15.7	+34.7
<b>DL - Adult Education (AE)</b>	---	---	---	60	---	76	+26.6	---
<b>Web-Supplemented (WS)</b>	1171	1173	+0.1	1655	+41	2109	+27.4	+80.1
<b>Blended (C4, C6)</b>	---	---	---	89	---	625	+602.2	---

Source: OWC's Nexus Q-Class. Data were collected 02/2007.

Note: Special Designator for adult education (AE) was initiated 2005 Fall semester (20061).

## Distance Learning Enrollment Trends by Credit Type

4. **Subject:** OWC and Distance Learning enrollments by credit type  
**Question:** Are A&P and PSV enrollments up or down?

Since Fall 2003, both College A&P and PSV enrollments have declined; however, technology-enhanced and -delivered A&P and PSV enrollments have increased.

	DL Fall 2003 (20041) Enrollment	DL Fall 2004 (20051) Enrollment	Pct +/-	DL Fall 2005 (20061) Enrollment	Pct +/-	DL Fall 2006 (20071) Enrollment	Pct +/-	% Change in Enrollment since Fall 2003 (20041)
<b>Advanced &amp; Professional (A&amp;P)</b>								
All OWC	15287	15518	+1.5	15700	+1.1	15397	-1.9	+0.7
All DL (C1, C3, C5, AE), Web-Supplemented (WS), and Blended (C4, C6)	2386	2785	+16.7	3115	+11.8	3638	+16.7	+52.4
DL (C1, C3, C5, AE)	1501	1845	+22.9	1850	+0.2	1773	-4.1	+18.1
Technology-enhanced and -delivered (C1, C6, AE, WS)	1549	1875	+21.0	2304	+22.8	2646	+14.8	+70.8
<b>Post-Secondary Vocational (PSV)</b>								
All OWC	2899	2539	-12.4	2700	+6.3	2692	-0.3	-7.1
All DL (C1, C3, C5, AE), Web-Supplemented (WS), and Blended (C4, C6)	954	931	-2.4	1133	+21.6	1098	-3.0	+15.0
DL (C1, C3, C5, AE)	707	743	+5.0	787	+5.9	644	-18.1	+15.4
Technology-enhanced and -delivered (C1, C6, AE, WS)	507	440	-13.2	711	+61.5	672	-5.4	+32.5

Source: OWC's Nexus Q-Class. Data were collected 04/2007.

## Sections Offered in Each Delivery Method and Average Enrollment per Section

5. **Subject:** Technology-enhanced and -delivered sections offered and average enrollment per section by delivery method

**Question:** Are the number of technology-enhanced and -delivered sections offered up or down?

**Question:** Is the average enrollment per section up or down?

OWC's overall enrollment grew 2.0% between Fall 2005 and Fall 2006 (see Question 3), and the College offered more sections in various delivery methods. Available choices appear to have outstripped student demand as average enrollment per section has decreased in all but Adult Education and blended classes.

	Fall 2003 (20041) Sections Offered	Fall 2004 (20051) Sections Offered	% Change in Sections Offered	Fall 2005 (20061) Sections Offered	% Change in Sections Offered	Fall 2006 (20071) Sections Offered	% Change in Sections Offered	Average Enrollment per Section Fall 2006 (20071)	% Change in Average Enrollment per Section since Fall 2005 (20061)
All OWC	1510	1533	+1.5	1557	+1.5	1628	+4.5	16.4	+0.0
Technology-enhanced and-delivered									
All DL (C1, C3, C5, AE), Web-supplemented (WS), and Blended (C4, C6)	158	181	+14.5	250	+38.1	304	+21.6	19.3	-1.5
DL (C1, C3, C5, AE)	110	132	+20.0	159	+20.4	163	+2.5	17.3	-6.9
Technology-enhanced and-delivered (C1, C6, AE, WS)	84	97	+15.4	162	+67.0	202	+24.6	20.8	-4.5
Technology-enhanced and-delivered by specific method/special designator									
DL - Text-Based (C3, C5)	74	84	+13.5	81	-3.5	83	+2.4	15.8	-1.2
DL - Online Only (C1)	36	48	+33.3	62	+29.1	70	+12.9	20.0	-25.3
DL – Adult Education (AE)	---	---	---	16	---	10	-37.5	9.5	+156.7
Web-Supplemented Only (WS)	50	51	+2.0	84	+64.7	103	+22.6	22.1	-0.9
Blended (C4 & C6)	---	---	---	8	---	39	+387.5	20.1	+35.8

Source: OWC's Nexus Q-Class. Data were collected 03/2007.

## Special Programs

### 6. Subject: BAS Classes and Enrollments

Question: In the BAS program, which delivery method tends to produce full (over 17 students) sections?

The BAS program decreased its section offerings by one section between Fall 2005 and Fall 2006. The number of distance learning sections in the program increased by two. Distance learning classes were more likely to have full enrollments (over 17 students).

Classes Offered	Total number of sections		Sections with Over 17 students		Sections with 10-17 students		Sections with Less than 10 students	
	Fall 2005 (20061)	Fall 2006 (20071)	Fall 2005 (20061)	Fall 2006 (20071)	Fall 2005 (20061)	Fall 2006 (20071)	Fall 2005 (20061)	Fall 2006 (20071)
<b>All BAS</b>	33 (100%)	32 (100%)	10 (30%)	10 (31%)	3 (9%)	8 (25%)	20 (61%)	14 (44%)
<b>BAS - F2F (Traditional, Face-to-Face)</b>	18 (55%)	19 (50%)	4 (22%)	4 (21%)	2 (11%)	6 (32%)	12 (67%)	9 (47%)
<b>BAS - DL (C1, C3, C5)</b>	10 (30%)	12 (38%)	5 (50%)	5 (42%)	1 (10%)	2 (17%)	4 (40%)	5 (42%)
<b>BAS - Blended (C4, C6)</b>	5 (15%)	1 (12%)	1 (20%)	1 (100%)	0 (0%)	0 (0%)	4 (80%)	0 (0%)
<b>Totals</b>	33 (100%)	32 (100%)						

Source: OWC's Nexus report STC710P0. Data were collected 04/2007.

**7. Subject: Delivery Method of BAS Classes**  
**Questions: What delivery methods are used in the BAS program?**  
**What is the historical pattern of delivery formats in the BAS program?**

In Fall 2006, the BAS program relied heavily on text-based distance learning and on traditional classes for its distance offerings, and each class was offered in only a single method.

Fall 2006							
Class ID	DL - Online (C1)	DL - Text-based (C3)	DL - Text-based w/ E-mail (C5)	Blended w/Text-based (C4)	Blended w/Online (C6)	F2F – Traditional w/Web- Supp (WS)	F2F - Traditional
ACG3083						X	
ACG4901							X
BUL3320							X
BUL4333							X
BUL4931							X
FIN4402							X
GEB3031							X
GEB3213				X			
GEB3434			X				
GEB3444			X				
GEB3930		X					
GEB3933	X						
GEB4901							X
GEB4930							X
GEB4931							X
GEB4932							X
GEB4933							X
GEB4941							X
MAN3052		X					
MAN3120							X
MAN3310		X					
MAN3350		X					
MAN4401		X					
MAN4520		X					
MAN4555		X					
MAN4720		X					

Source: OWC's Nexus Q-Class + manual count. Data were collected 04/2007.

**8. Subject: EPI Program class enrollment analysis**  
**Question: Are EPI program class enrollments up or down?**

The EPI program saw an increase of 139 students, or 76.0%, compared to Summer 2006. The EPI program used the blended with online delivery method (C6).

		Spring 2006 (20062)		Summer 2006 (20063)				Fall 2006 (20071)			
Class ID	Class Title	Delivery Method	Enrlmnt	Delivery Method	Enrlmnt			Delivery Method	Enrlmnt		
		Type	#	Type	#	Raw # +/-	Percent +/-	Type	#	Raw # +/- since last offered	Percent +/- since last offered
EPI0001	Classroom Management	C6	55	C6	29	-26	-47.3%	C6	43	+14	+48%
EPI0002	Instructional Strategies	C6	54	C6	29	-25	-46.3%	Not offered	---	N/A	N/A
EPI0003	Educational Technology	Not offered	---	C6	47	N/A	N/A	C6	30	-17	-36%
EPI0004	Teaching & Learning	C6	50	Not offered	---	N/A	N/A	C6	72	+22	+44%
EPI0010	Foundations of Research – Pract Reading	Not offered	---	C6	47	N/A	N/A	Not offered	---	N/A	N/A
EPI0020	Professional Foundations	C4	51	C6	30	-20	-41.2%	C6	51	+21	+70%
EPI0030	Diversity	C6	57	Not offered	---	N/A	N/A	C6	72	+15	+26%
EPI0940	Prof Found-Field Ex	F2F	53	Not offered	---	N/A	N/A	F2F	26	-27	-51%
EPI0945	Diversity-Field Exp	F2F	52	Not offered	---	N/A	N/A	F2F	27	-26	-50%
Total		---	372	---	182	-190	-51%	---	321	+139	+76%

Source: OWC Nexus mainframe 04/2007

Note: A comparison is made to previous semesters (Spring 2006 and Summer 2006) as there were no EPI program classes offered during Fall 2005.

8 cont.

**Subject: EPI Program class enrollment analysis**  
**Question: Are EPI program class FTE enrollments up or down?**

		Spring 2006 (20062)		Summer 2006 (20063)				Fall 2006 (20071)			
Class ID	Class Title	Delivery Method	FTE	Delivery Method	FTE			Delivery Method	FTE		
		Type	#	Type	#	# +/-	% +/-	Type	#	# +/- since last offered	% +/- since last offered
EPI0001	Classroom Management	C6	5.5	C6	2.9	-2.6	-47%	C6	4.3	+1.4	+48%
EPI0002	Instructional Strategies	C6	5.4	C6	2.9	-2.5	-46%	Not offered	---	N/A	N/A
EPI0003	Educational Technology	Not offered	---	C6	4.7	N/A	N/A	C6	3.0	-1.7	-36%
EPI0004	Teaching & Learning	C6	5.0	Not offered	---	N/A	N/A	C6	7.2	+2.2	+44%
EPI0010	Foundations of Research – Pract Reading	Not offered	---	C6	4.7	N/A	N/A	C6	2.7	+2.0	+43%
EPI0020	Professional Foundations	C4	3.4	C6	2.0	-1.4	-41%	C6	3.3	+1.3	+65%
EPI0030	Diversity	C6	3.8	Not offered	---	N/A	N/A	C6	4.7	+1.1	+29%
EPI0940	Prof Found-Field Ex	F2F	1.7	Not offered	---	N/A	N/A	F2F	0.8	-0.9	-53%
EPI0945	Diversity-Field Exp	F2F	1.7	Not offered	---	N/A	N/A	F2F	0.9	+0.8	-47%
Total		---	372	---	182	-190	-51%	---	321	+139	+76%

Source: OWC Nexus mainframe 04/2007

Note: A comparison is made to previous semesters (Spring 2006 and Summer 2006) as there were no EPI program classes offered during Fall 2005.