



**Educational Outcome: Enrollment**

**Question #1:** Are students more likely to enroll in synchronous or asynchronous sections?

**Answer:**

- As shown in table 1 and evidenced by fill rate medians and means, students are just as likely to be enrolled in synchronous or asynchronous sections.
- Table 2 shows grades on records (GOR) earned by electronic-learning method for the Fall 2020 term after unduplicating students. It was found that 54% of students earned a GOR in only synchronous sections during the FA20 term. This may be explained by the fact that 76% of the sections offered during the FA20 term were synchronous (see table 1). Furthermore, something to be mindful of when interpreting this finding is that earning a grade on record refers to earning one of the following grades: A, B, C, D, F, CR/P, NC/NP, I, or W. Therefore, this means that although a student may have been enrolled in a section at some point in the term that does not mean they completed the course.

*File used:* Executive Information System (EIS) for FA20

**Table 1. Fall 2020 Number of Sections and Fill Rates for Asynchronous and Synchronous Sections**

Electronic-Learning Method	# of sections	% of sections	Fill rate - median	Fill rate - mean
Synchronous	548	75.8	81.1	73.9
Asynchronous	175	24.2	80.0	71.7
<b>Total</b>	<b>723</b>	<b>100.0</b>	-	-

*File used:* Informer Grades on Record for FA20

**Table 2. Fall 2020 Unduplicated Student Grades on Record by Electronic-Learning Method**

Electronic-Learning Method	#	%
Asynchronous only	853	14.3
Synchronous only	3,226	54.0
Both (asynchronous and synchronous)	1,897	31.7
<b>Total</b>	<b>5,976</b>	<b>100.0</b>

*Note: Both (asynchronous and synchronous) refers to students who earned a GOR in at least one asynchronous and synchronous section.*

**Educational Outcome: Course Completion**

**Question #2:** Are students more likely to complete courses in synchronous or asynchronous sections?

**Answer:**

- Table 3 includes overall course completion rates, results indicated there was no significant or meaningful difference found in course completion for students earning a GOR in synchronous sections (90.8%) and students earning a GOR in asynchronous sections (90.1%) during the Fall 2020 term.
- However, as illustrated in table 4, when disaggregating the data by age there was a statistically significant ( $p = .02$ ) and substantial difference ( $ES = .11$ ) between students who were 25 to 29 years old; they were more likely to complete a synchronous course (90.4%) than complete an asynchronous course (86.9%).
- Additionally, as illustrated in table 6, when disaggregating the data by ethnicity there was a statistically significant ( $p = .04$ ) and substantial difference ( $ES = .21$ ) between African American/Black students; they were more likely to complete a synchronous course (85.9%) than complete an asynchronous course (78.1%).

*File used:* Informer Grades on Record for FA20

**Table 3. Fall 2020 Course Completion Rates for Asynchronous and Synchronous Sections**

	Synchronous			Asynchronous			Statistically Significant	Substantially Different
	#	N	%	#	N	%		
Course Completion	10,568	11,638	90.8	4,261	4,728	90.1	No $p = .17$	No $ES = .02$

*Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.*

Table 4. Fall 2020 Course Completion Rates for Asynchronous and Synchronous Sections by Age

Demographic	Synchronous			Asynchronous			Statistically Significant*	Substantially Different*
	#	N	%	#	N	%		
Age Group								
19 or younger	5,056	5,498	92.0	1,559	1,688	92.4	No $p = .60$	No ES = -.01
20 to 24	3,012	3,358	89.7	1,414	1,564	90.4	No $p = .44$	No ES = -.02
25 to 29	1,275	1,410	90.4	596	686	86.9	Yes* $p = .02$	Yes* ES = .11
30 to 34	503	563	89.3	288	334	86.2	No $p = .17$	Yes* ES = .10
35 to 39	337	367	91.8	162	177	91.5	No $p = .91$	No ES = .01
40 to 49	283	319	88.7	180	202	89.1	No $p = .89$	No ES = -.01
50 or Older	102	123	82.9	62	77	80.5	No $p = .67$	No ES = .06
<b>Total</b>	<b>10,568</b>	<b>11,638</b>	<b>90.8</b>	<b>4,261</b>	<b>4,728</b>	<b>90.1</b>	<b>No <math>p = .17</math></b>	<b>No ES = .02</b>

Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.

Table 5. Fall 2020 Course Completion Rates for Asynchronous and Synchronous Sections by Gender

Demographic	Synchronous			Asynchronous			Statistically Significant*	Substantially Different*
	#	N	%	#	N	%		
Gender								
Female	5,884	6,516	90.3	2,311	2,608	88.6	Yes* $p = .02$	No ES = .06
Male	4,659	5,097	91.4	1,947	2,115	92.1	No $p = .37$	No ES = -.02
Unknown	25	25	100.0	3	5	60.0	No $p = .18$	Yes* ES = 1.93
<b>Total</b>	<b>10,568</b>	<b>11,638</b>	<b>90.8</b>	<b>4,261</b>	<b>4,728</b>	<b>90.1</b>	<b>No <math>p = .17</math></b>	<b>No ES = .02</b>

Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.

Table 6. Fall 2020 Course Completion Rates for Asynchronous and Synchronous Sections by Ethnicity

Demographic	Synchronous			Asynchronous			Statistically Significant*	Substantially Different*
	#	N	%	#	N	%		
Ethnicity								
African American	329	383	85.9	121	155	78.1	Yes* $p = .04$	Yes* ES = .21
Asian	647	697	92.8	189	201	94.0	No $p = .55$	No ES = -.05
Caucasian	3,385	3,677	92.1	1,410	1,531	92.1	No $p = .96$	No ES = -.001
Hispanic	5,218	5,787	90.2	2,121	2,380	89.1	No $p = .16$	No ES = .04
Multiple Races	791	875	90.4	334	368	90.8	No $p = .84$	No ES = -.01
Native American	17	18	94.4	11	13	84.6	No $p = .38$	Yes* ES = .33
Unknown	181	201	90.0	75	80	93.8	No $p = .28$	Yes* ES = -.13
<b>Total</b>	<b>10,568</b>	<b>11,638</b>	<b>90.8</b>	<b>4,261</b>	<b>4,728</b>	<b>90.1</b>	<b>No <math>p = .17</math></b>	<b>No ES = .02</b>

Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.

**Educational Outcome: Course Success****Question #3:** Are students more likely to achieve course success in synchronous or asynchronous sections?**Answer:**

- Table 7 includes overall course success rates, results indicated there was no significant or meaningful difference found in course success for students earning a GOR in synchronous sections (72.3%) and students earning a GOR in asynchronous sections (73.1%) during the Fall 2020 term.
- Nevertheless, as illustrated in table 8, when disaggregating the data by age there was a statistically significant ( $p = .02$ ) and substantial difference ( $ES = .11$ ) between students who were 25 to 29 years old; they were more likely to successfully complete a synchronous course (77.2%) than complete an asynchronous course (72.4%).

*File used:* Informer Grades on Record for FA20**Table 7. Fall 2020 Course Success Rates for Asynchronous and Synchronous Sections**

	Synchronous			Asynchronous			Statistically Significant	Substantially Different
	#	N	%	#	N	%		
Course Success	8,416	11,638	72.3	3,457	4,728	73.1	No $p = .30$	No $ES = -.02$

*Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, learning type is not mutually exclusive.***Table 8. Fall 2020 Course Success Rates for Asynchronous and Synchronous Sections by Age**

Demographic	Synchronous			Asynchronous			Statistically Significant*	Substantially Different*
Age Group	#	N	%	#	N	%		
19 or younger	3,843	5,498	69.9	1,238	1,688	73.3	Yes* $p = .01$	No $ES = -.08$
20 to 24	2,408	3,358	71.7	1,118	1,564	71.5	No $p = .87$	No $ES = .01$
25 to 29	1,088	1,410	77.2	497	686	72.4	Yes* $p = .02$	Yes* $ES = .11$
30 to 34	436	563	77.4	244	334	73.1	No $p = .14$	Yes* $ES = .10$
35 to 39	301	367	82.0	143	177	80.8	No $p = .73$	No $ES = .03$
40 to 49	250	319	78.4	162	202	80.2	No $p = .62$	No $ES = -.04$
50 or Older	90	123	73.2	55	77	71.4	No $p = .79$	No $ES = .04$
<b>Total</b>	<b>8,416</b>	<b>11,638</b>	<b>72.3</b>	<b>3,457</b>	<b>4,728</b>	<b>73.1</b>	<b>No</b> <b><math>p = .30</math></b>	<b>No</b> <b><math>ES = -.02</math></b>

*Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.***Table 9. Fall 2020 Course Success Rates for Asynchronous and Synchronous Sections by Gender**

Demographic	Synchronous			Asynchronous			Statistically Significant*	Substantially Different*
Gender	#	N	%	#	N	%		
Female	4,728	6,516	72.6	1,886	2,608	72.3	No $p = .81$	No $ES = .01$
Male	3,664	5,097	71.9	1,569	2,115	74.2	Yes* $p = .04$	No $ES = -.05$
Unknown	24	25	96.0	2	5	40.0	No $p = .08$	Yes* $ES = 2.02$
<b>Total</b>	<b>8,416</b>	<b>11,638</b>	<b>72.3</b>	<b>3,457</b>	<b>4,728</b>	<b>73.1</b>	<b>No</b> <b><math>p = .30</math></b>	<b>No</b> <b><math>ES = -.02</math></b>

*Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.*

Table 10. Fall 2020 Course Success Rates for Asynchronous and Synchronous Sections by Ethnicity

Demographic	Synchronous			Asynchronous			Statistically Significant*	Substantially Different*
	#	N	%	#	N	%		
African American	231	383	60.3	91	155	58.7	No $p = .73$	No ES = .03
Asian	554	697	79.5	167	201	83.1	No $p = .24$	No ES = -.09
Caucasian	2,874	3,677	78.2	1,187	1,531	77.5	No $p = .62$	No ES = .02
Hispanic	3,994	5,787	69.0	1,676	2,380	70.4	No $p = .21$	No ES = -.03
Multiple Races	617	875	70.5	268	368	72.8	No $p = .41$	No ES = -.05
Native American	12	18	66.7	6	13	46.2	No $p = .27$	Yes* ES = .41
Unknown	134	201	66.7	62	80	77.5	No $p = .06$	Yes* ES = -.24
<b>Total</b>	<b>8,416</b>	<b>11,638</b>	<b>72.3</b>	<b>3,457</b>	<b>4,728</b>	<b>73.1</b>	<b>No</b> <b><math>p = .30</math></b>	<b>No</b> <b>ES = -.02</b>

Note: Students may have earned a GOR in either or both synchronous and asynchronous sections, e-learning method is not mutually exclusive.