

ASSESSMENT DAY

College of Arts and Sciences

School of Mathematics

October 7, 2016

Academic Assessment

	LEVEL	FOCUS	CONDUCTED BY	FREQUENCY
Academic Success Committee	Program	<ul style="list-style-type: none"> Quality of assessment practices 	Committee of peers	Years 1 & 2
Instructional Program Review	Program / Cluster	<ul style="list-style-type: none"> Enrollment, retention, completion Industry certifications and job placement Program budget and staffing Advisory committees Curriculum changes 	Committee of peers	Year 3
Assessment Day	Course/ Program	<ul style="list-style-type: none"> Enrollment by demographics Graduation and retention Average class size Course success rate Placement rate SLOs, PLOs and ILOs 	Program Chair and Faculty	Years 1, 2, 3

Courses

[MAC1105](#) College Algebra

[MAC2233](#) Calculus for Business and Nonphysical Sciences I

[MAC2313C](#) Calculus III and Lab

[MAP3401](#) Problem Analysis

[MAS4203](#) Number Theory

[MAT0028C](#) Mathematics II (Elementary Algebra) and Lab

[MAT1033](#) Intermediate Algebra

[MGF2107](#) Mathematics for Liberal Arts

[STA2023](#) Elementary Statistics

[MAC1114](#) College Trigonometry

[MAC2311C](#) Calculus I and Lab

[MAD2104](#) Discrete Mathematics

[MAS3105](#) Linear Algebra

[MAT0018C](#) Mathematics I (Pre-Algebra) and Lab

[MAT0055L](#) Developmental Mathematics I Lab

[MAT1033A](#) Intermediate Algebra

[MHF4404](#) History of Mathematics

[STA4024](#) Statistics II

[MAC1140](#) Pre-Calculus Algebra

[MAC2312C](#) Calculus II and Lab

[MAP2302C](#) Differential Equations and Lab

[MAS3301](#) Abstract Algebra

[MAT0022](#) Integrated Arithmetic and Algebra

[MAT0056L](#) Developmental Mathematics II Lab

[MGF2106](#) Survey in Mathematics

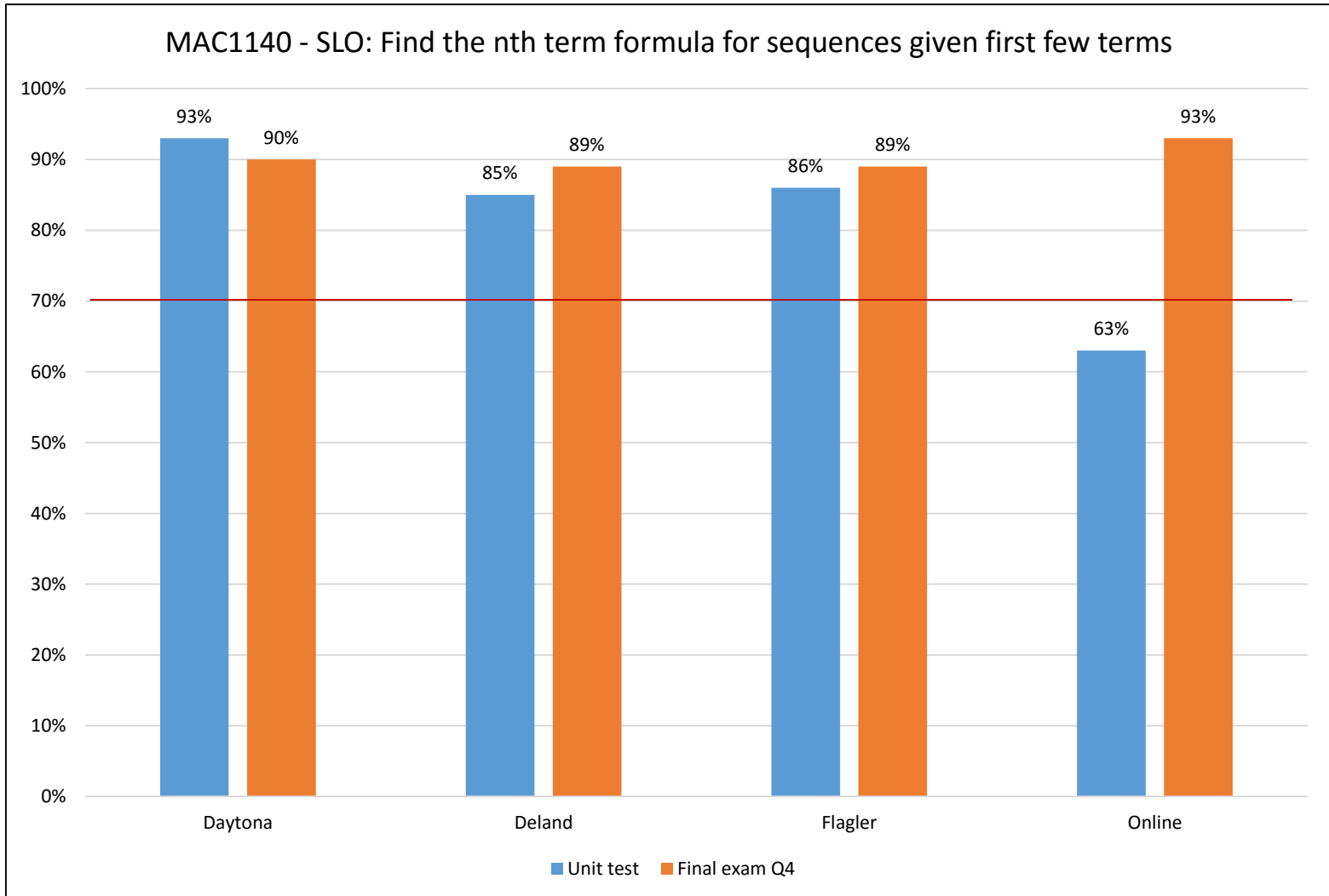
[MTG4212](#) Modern Geometry

Last Assessment Day – Action Items

School of Mathematics (10/09/2015):

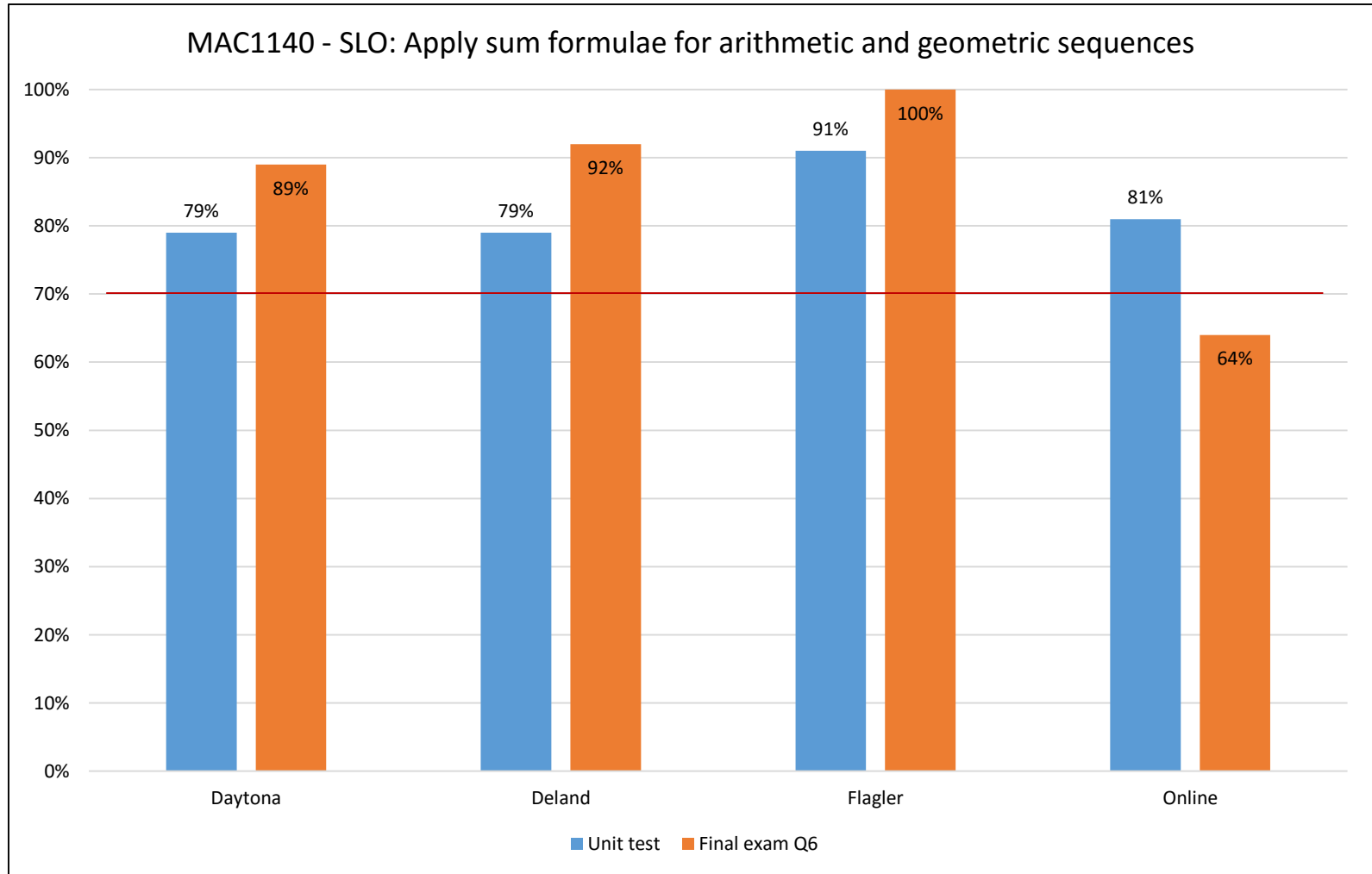
1. Add Pre-Calculus for 15-16 course learning assessment;
2. More Professional Development specifically related to the content (not just generic PD);
3. Add comments to contact faculty for online classes;
4. Attendance verification for online classes (not just log in);
5. Technology funds, Karla Moore will work with Margaret Overbey to work on a proposal for Planning Council.

Course Assessment Data



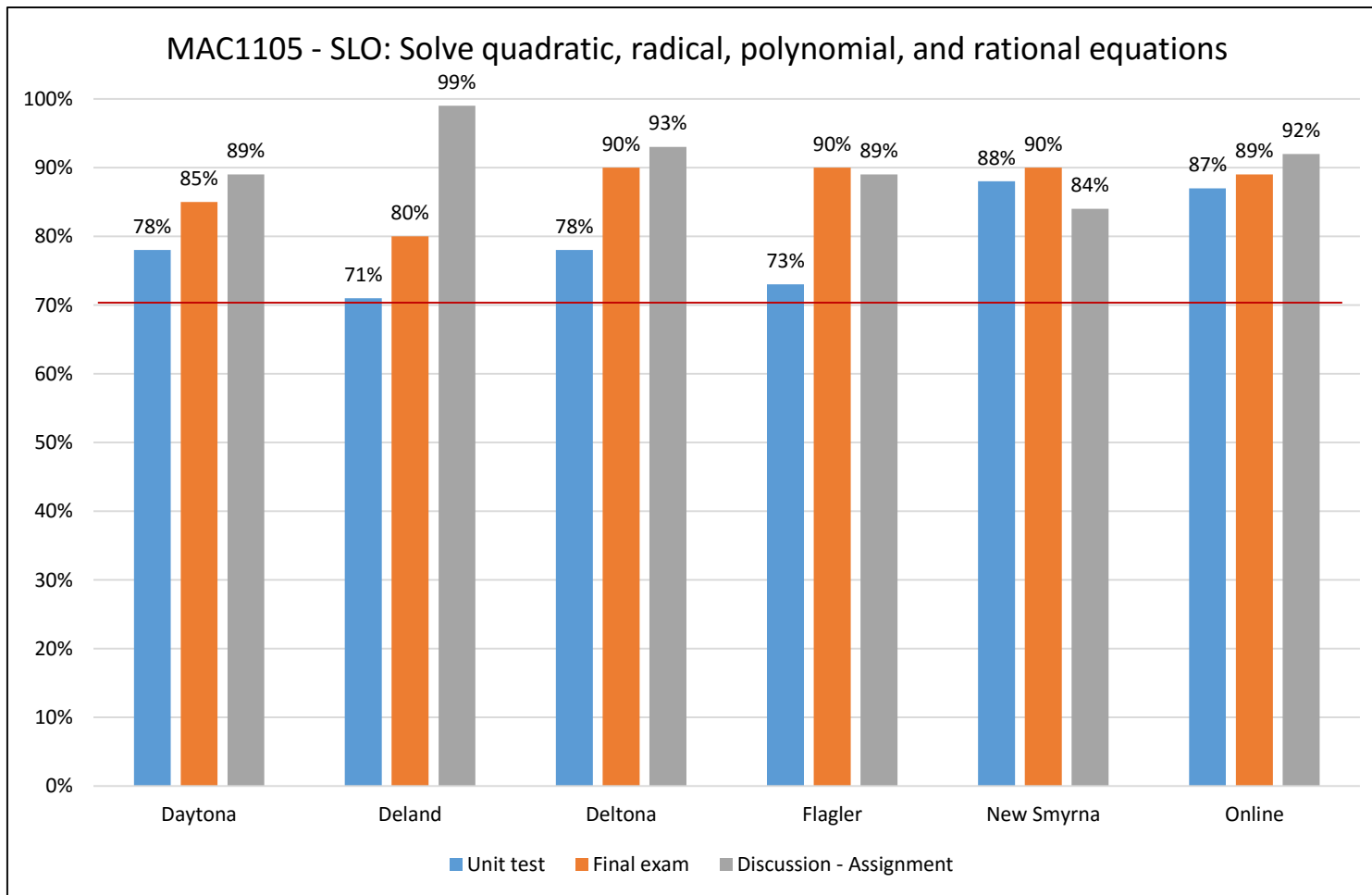
Target: 70% of the students achieve 70% competency for all assessment measure

Course Assessment Data



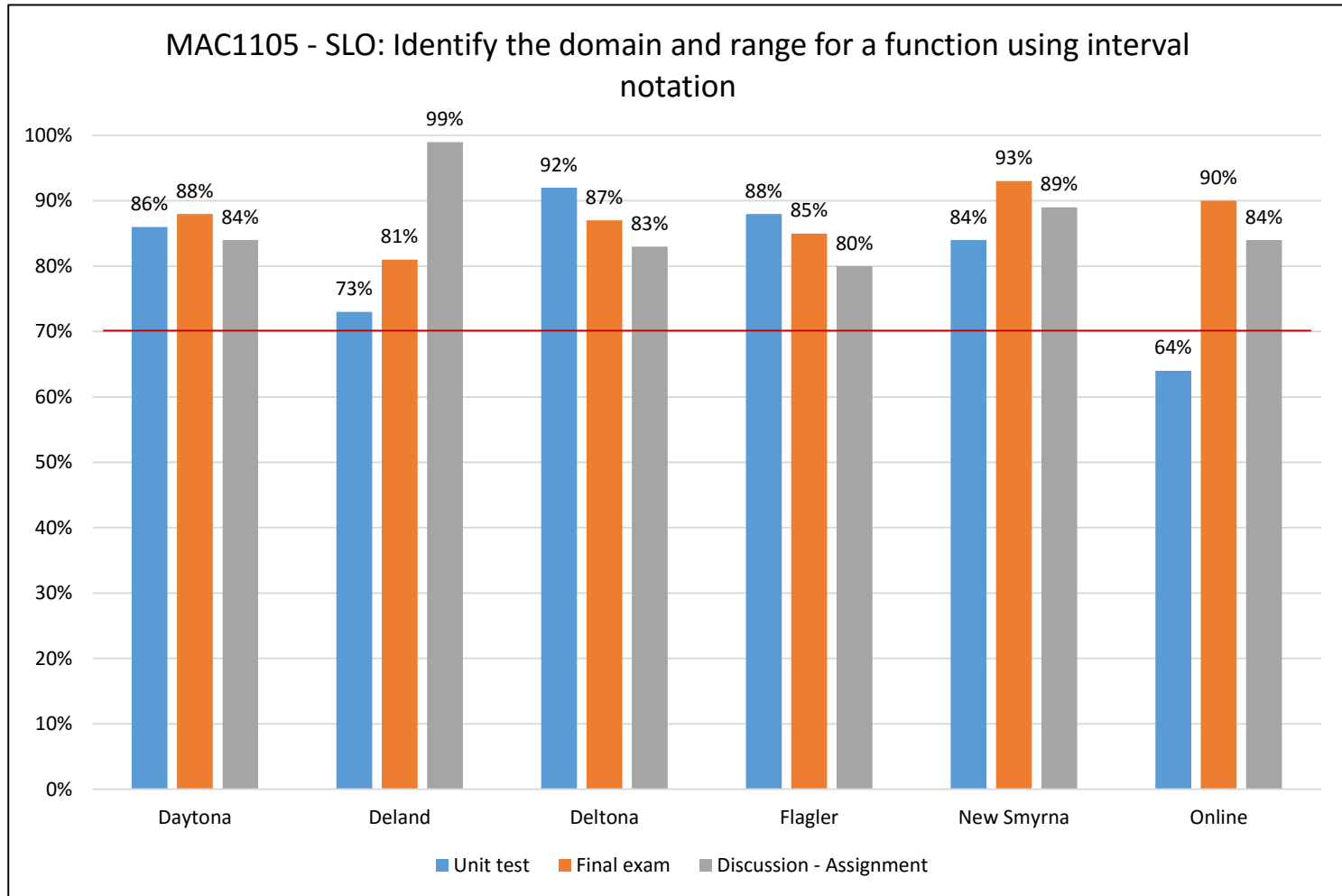
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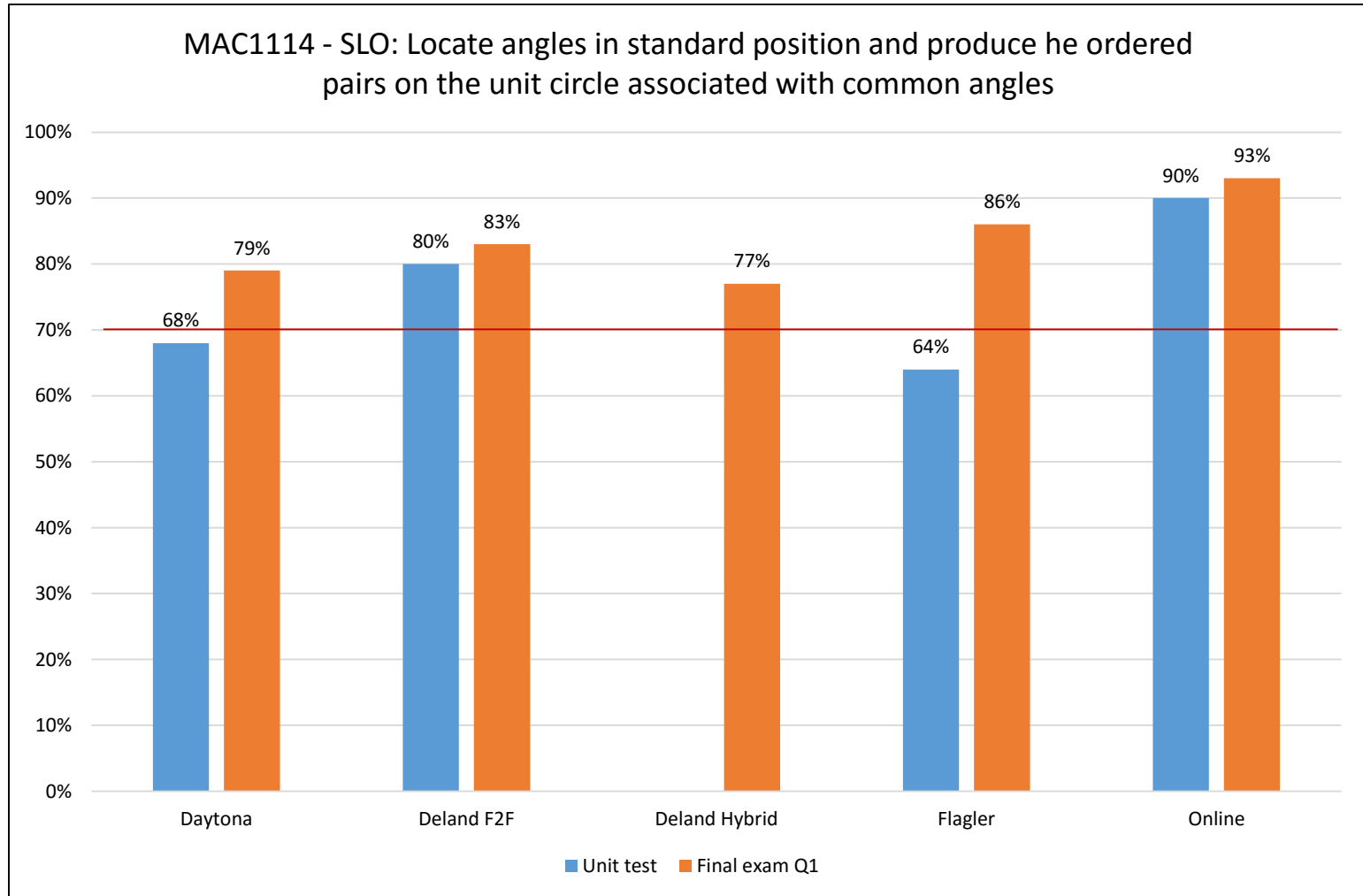
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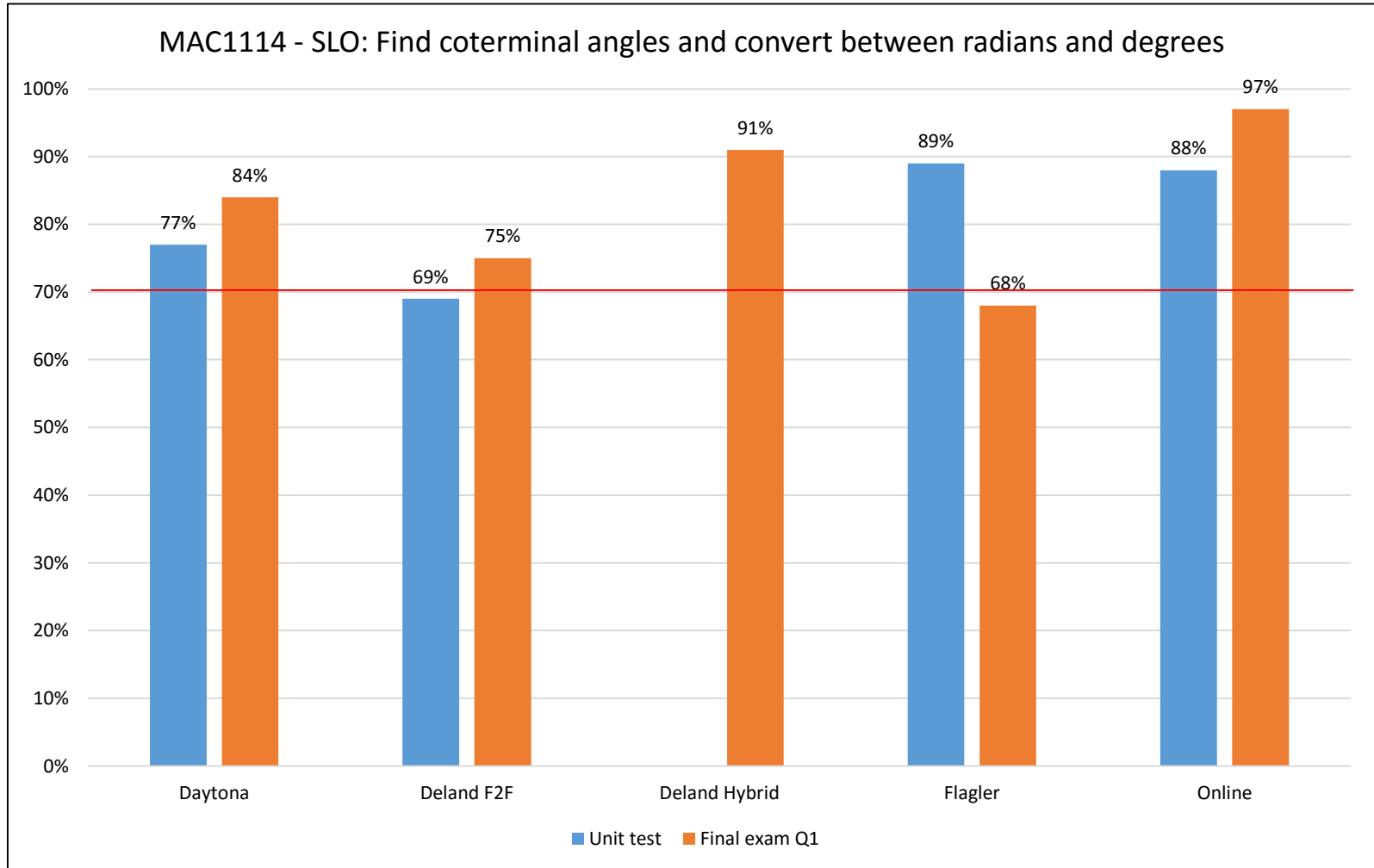
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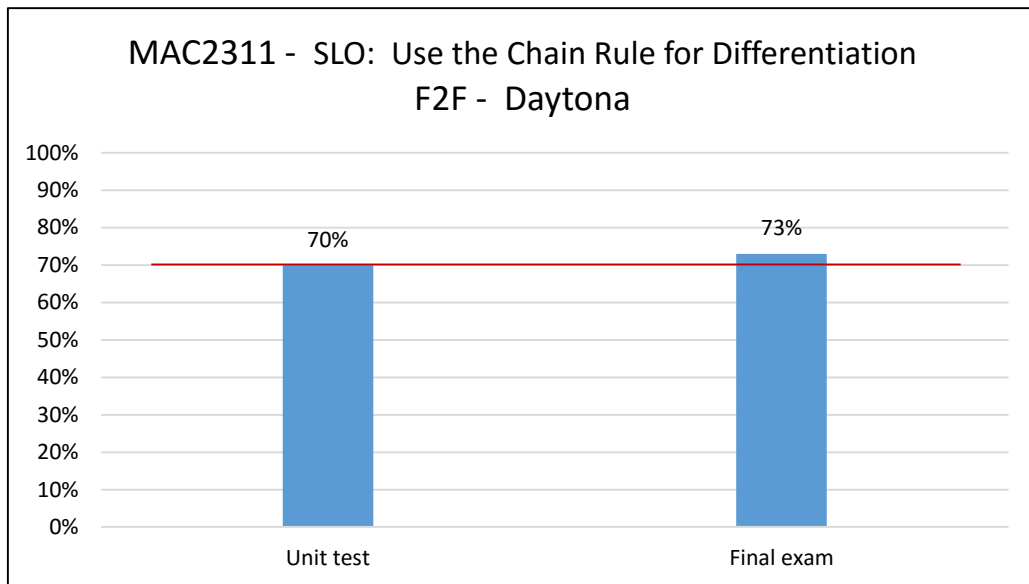
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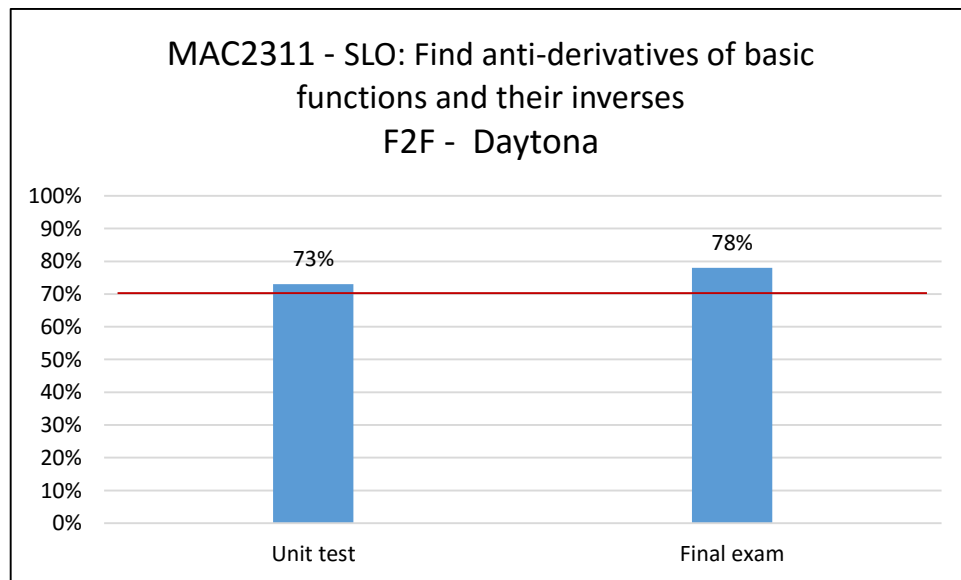


Target: 70% of the students achieve 70% competency for all assessment measure

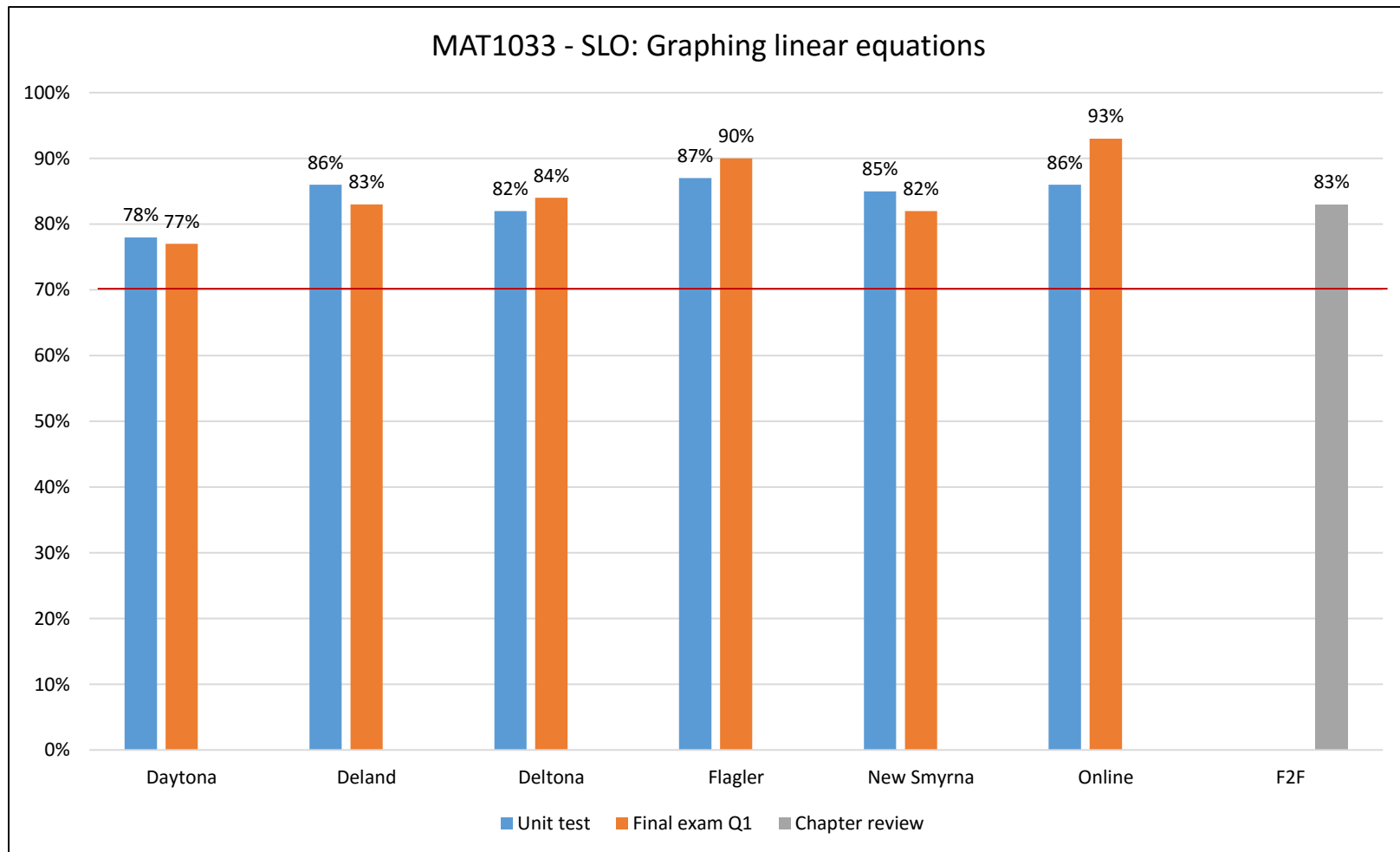
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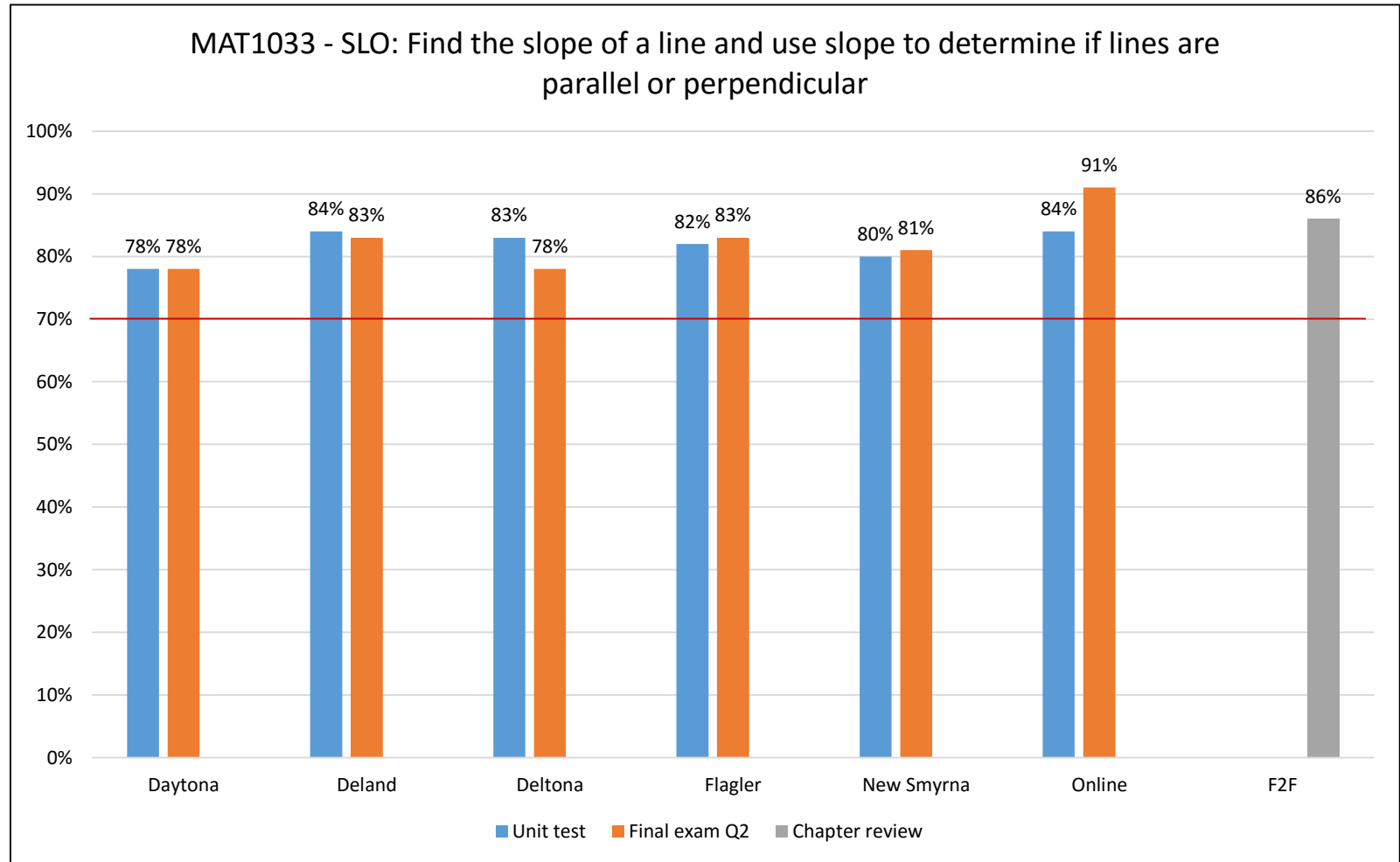


Course Assessment Data



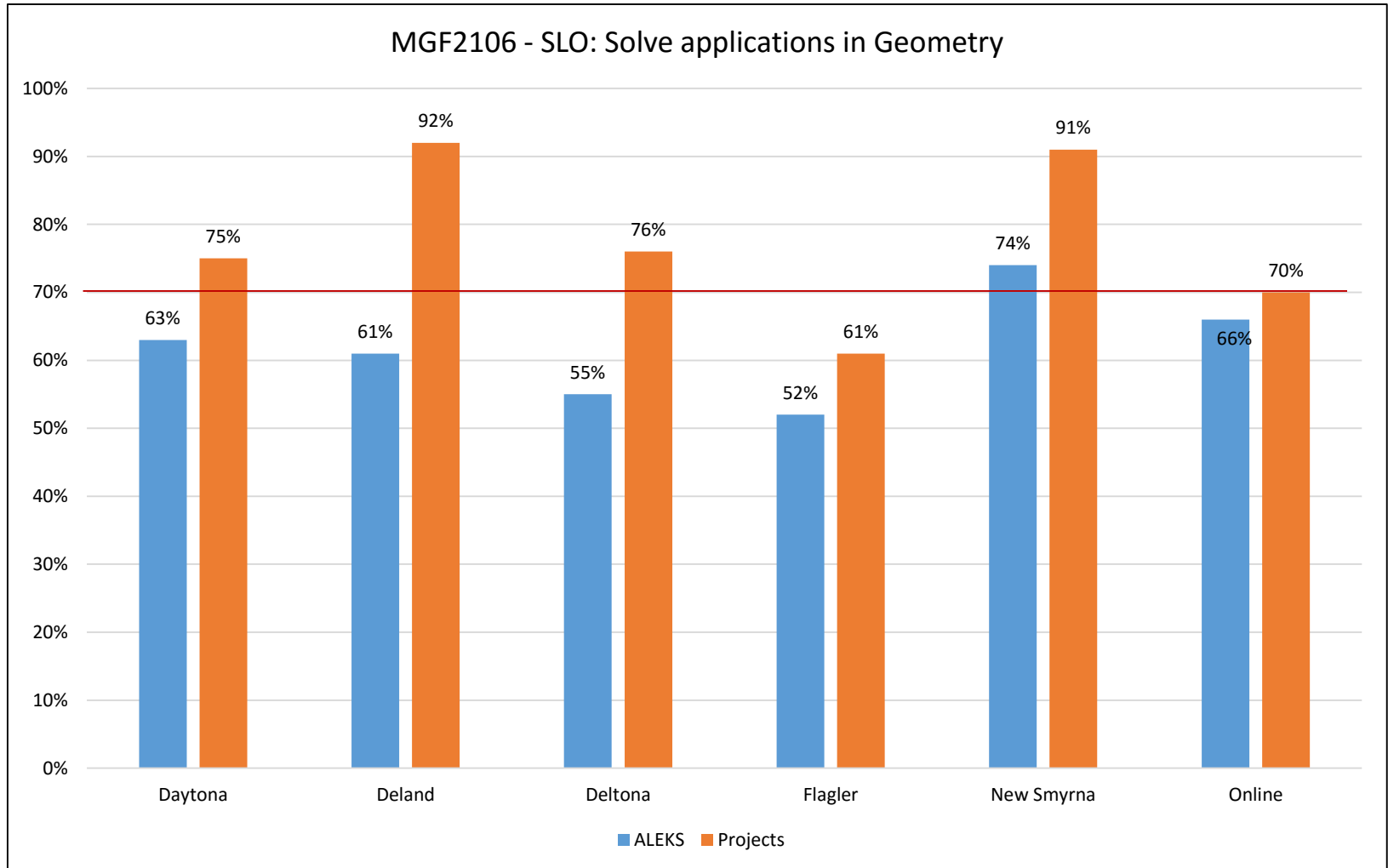
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Course Assessment Data



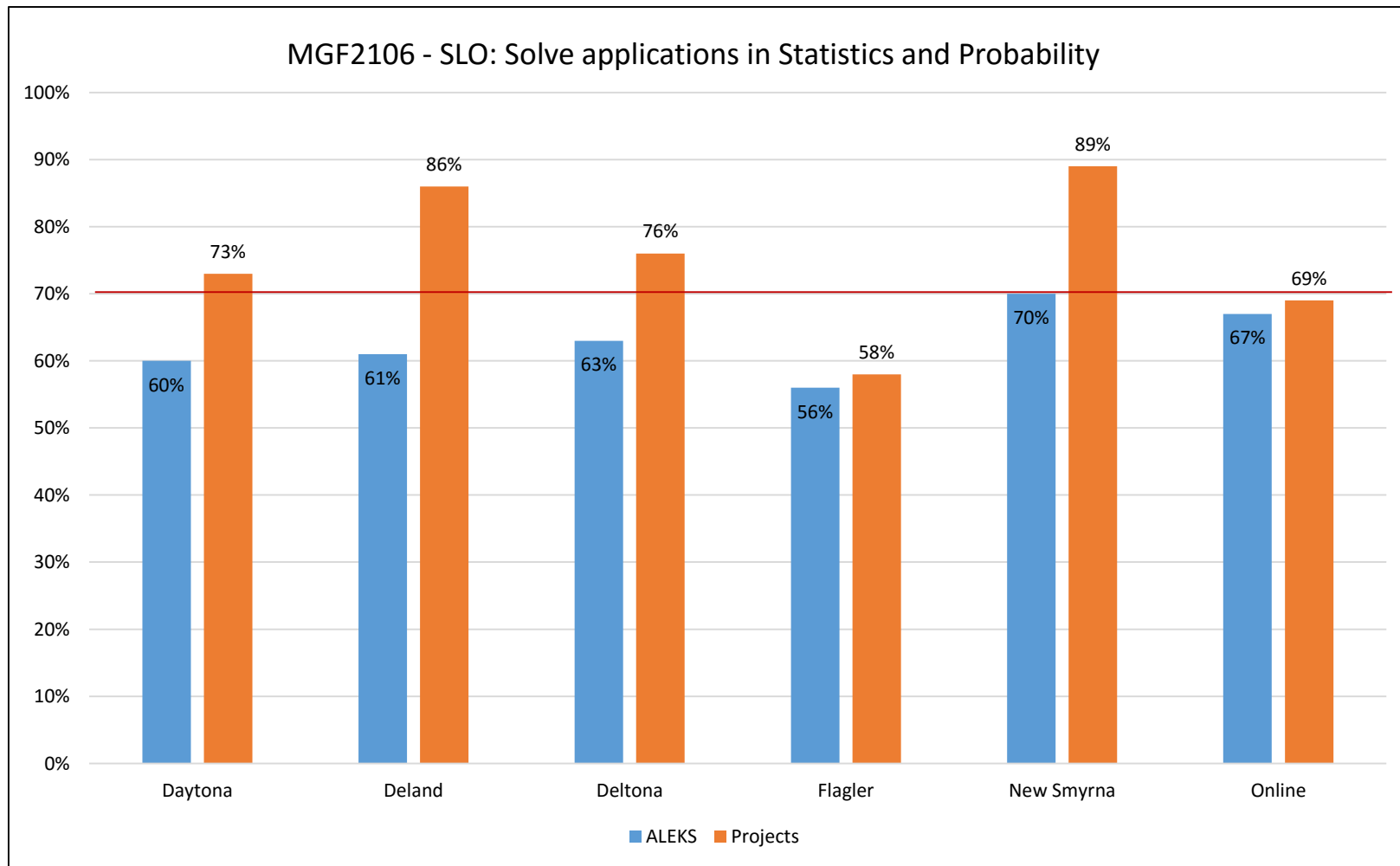
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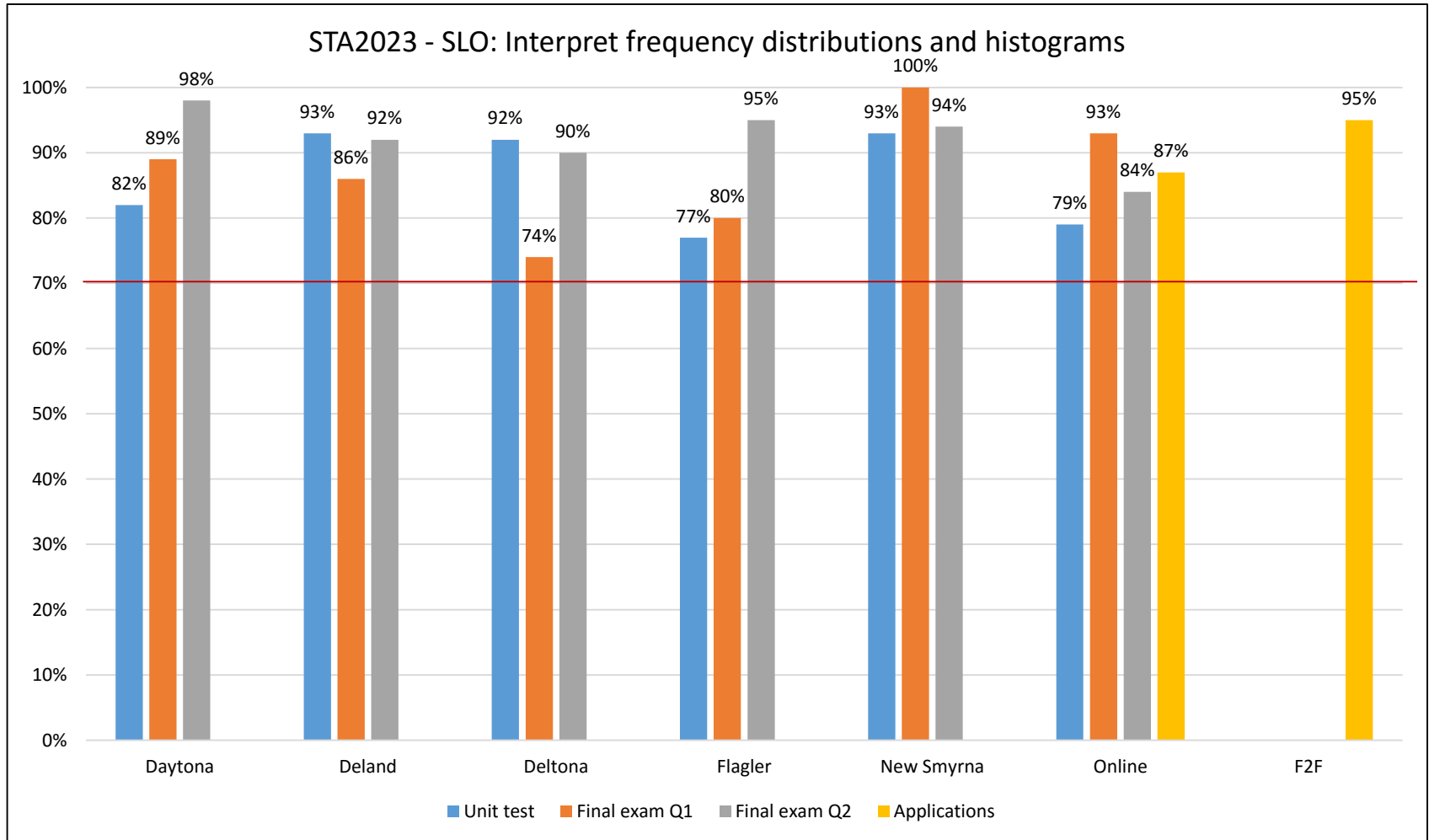
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Course Assessment Data



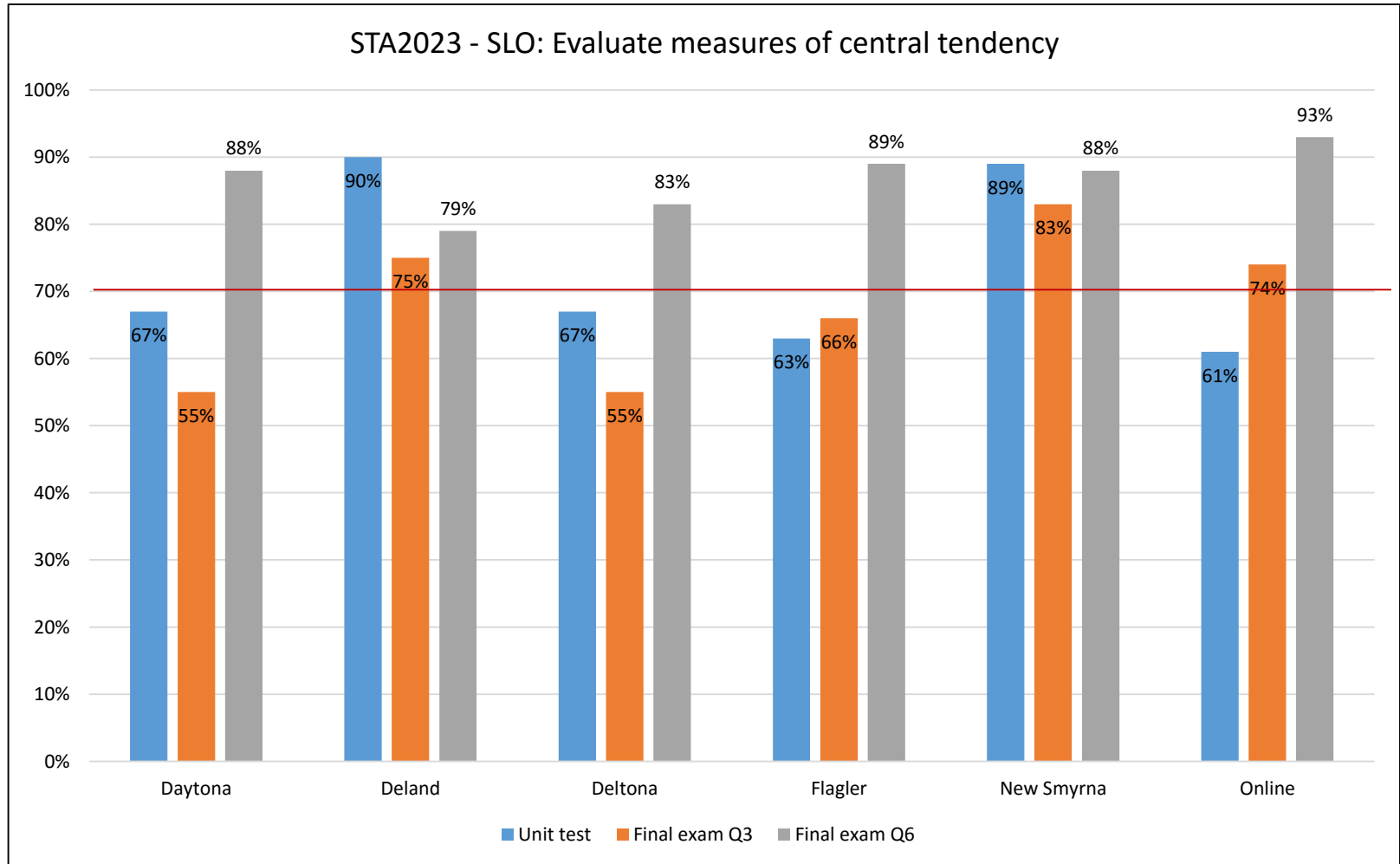
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Assessment Data

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MAC2233 Calculus for Business
and Nonphysical Sciences I

MAC2313C Calculus III and Lab

MAP3401 Problem Analysis

MAS4203 Number Theory

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MHF4404 History of
Mathematics

STA4024 Statistics II

[MAC1140](#) Pre-Calculus Algebra

MAC2312C Calculus II and Lab

MAP2302C Differential
Equations and Lab

MAS3301 Abstract Algebra

MAT0022 Integrated Arithmetic
and Algebra

MAT0056L Developmental
Mathematics II Lab

[MGF2106](#) Survey in
Mathematics

MTG4212 Modern Geometry

Course Success Rate (1 of 2)

Course	2012-2013		2013-2014		2014-2015		2015-2016	
	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAT0018	1,877	70%	1,432	62%	718	64%	493	76%
MAT0022			3	67%	6	67%	9	78%
MAT0028	3,170	55%	2,928	57%	1,590	56%	1219	68%
MAT0056L					61	95%	83	94%
Total	5,047	61%	4,363	58%	2,773	58%	2,098	70%
MAT1033	3,819	53%	3,674	52%	2,136	56%	1780	70%
MAT1033A					398	47%	294	63%
MAC1105	3,865	57%	3,566	59%	2,957	60%	2787	68%
MAC1114	659	56%	641	61%	651	61%	666	69%
MAC1140	727	65%	707	63%	676	69%	660	74%
Total	9,070	56%	8,588	57%	6,818	59%	6,187	69.1%
STA2023	1,845	73%	1,839	71%	1,786	75%	2,105	77%
MGF2106	536	64%	473	60%	2,086	65%	2,402	77%
MGF2107	398	76%	406	69%	497	72%	496	76%
MAC2233	89	71%	66	80%	84	73%	98	79%
MAC2311	242	51%	258	52%	252	63%	260	69%
MAC2312	111	64%	108	56%	110	65%	137	68%
MAC2313	49	55%	49	61%	60	58%	73	64%
MAD2104	20	75%	11	91%				
MAP2302	41	78%	24	88%	34	68%	41	85%
Total	3,331	70%	3,234	67%	4,909	69%	5,612	76.%
DSC		78%		77%		78%		80%

Indicates a success rate of 90% or higher
 Indicates a success rate between 70% and 89%
 Indicates a success rate below 70%

Course Success Rate (2 of 2)

Course	2012-2013		2013-2014		2014-2015		2015-2016	
	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAS3105	11	91%	6	83%	6	67%	10	70%
MAS3301	2	100%	4	100%	5	80%	1	100%
MAP3401							13	62%
Total	13	92%	10	90%	11	73%	24	67.7%
MAS4203	4	100%	8	63%	6	67%	5	20%
MHF4404	6	100%			10	80%	10	80%
MTG4212	3	100%	5	80%			5	100%
STA4024			10	90%	5	100%	4	75%
Total	13	100%	23	78%	21	81%	24	70.8%
Total	8,608	63%	8,181	63%	9,225	66%	13,945	72.01%
DSC		78%		77%		78%		80%



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Course Success Rate by Campus – Multiple Campuses Only (1 of 2)

Course	Campus	2012-2013		2013-2014		2014-2015		2015-2016	
		Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAC1105	Daytona	1,430	51%	1,355	57%	1,030	55%	1022	66%
	Deland	620	71%	590	68%	412	70%	358	80%
	Deltona	220	58%	205	56%	196	64%	161	73%
	Flagler/Palm Cst	380	38%	288	38%	292	42%	269	66%
	New Smyrna Beach	243	72%	236	78%	161	81%	168	89%
MAC1114	Daytona	299	52%	288	61%	288	56%	244	63%
	Deland	98	58%	111	59%	111	62%	114	66%
	Flagler/Palm Cst	54	30%	36	39%	25	36%	39	56%
MAC1140	Daytona	368	58%	342	55%	288	64%	311	69%
	Deland	115	61%	142	58%	136	71%	116	75%
	Flagler/Palm Cst	42	76%	37	68%	23	65%	23	70%
MAT0018	Daytona	994	67%	807	58%	379	61%	273	73%
	Deland	217	78%	144	68%	56	66%	42	81%
	Deltona	276	69%	228	60%	117	58%	89	76%
	Flagler/Palm Cst	252	76%	175	69%	105	74%	48	81%
	New Smyrna Beach	138	72%	78	72%	61	70%	41	85%
MAT0028	Daytona	1,642	49%	1,517	52%	843	54%	609	68%
	Deland	450	64%	382	65%	172	61%	150	65%
	Deltona	382	56%	394	56%	223	47%	185	66%
	Flagler/Palm Cst	461	60%	414	64%	235	59%	193	67%
	New Smyrna Beach	235	72%	221	65%	117	78%	82	70%

Indicates a success rate of 90% or higher
 Indicates a success rate between 70% and 89%
 Indicates a success rate below 70%

Excludes fully online courses

Source: IR Program Assessment Data

Course Success Rate by Campus – Multiple Campuses Only (2 of 2)

Course	Campus	2012-2013		2013-2014		2014-2015		2015-2016	
		Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAT0056L	Daytona					40	93%	41	95%
	Deland					7	100%	8	88%
	Deltona					11	100%	14	93%
	Flagler/Palm Cst					3	100%	11	100%
	New Smyrna Beach							9	89%
MAT1033	Daytona	1,470	47%	1,392	48%	764	55%	611	69%
	Deland	564	62%	504	65%	312	65%	237	77%
	Deltona	263	55%	250	52%	109	63%	108	74%
	Flagler/Palm Cst	358	53%	344	42%	206	34%	171	61%
	New Smyrna Beach	209	71%	197	75%	82	71%	92	82%
MAT1033A	Daytona					211	47%	168	59%
	Deland					70	36%	37	70%
	Deltona					42	57%	16	81%
	Flagler/Palm Cst					43	42%	39	56%
	New Smyrna Beach					32	59%	34	74%
MGF2106	Daytona			33	76%	583	64%	829	77%
	Deland					79	81%	149	85%
	Deltona							77	77%
	Flagler/Palm Cst					96	66%	70	73%
	New Smyrna Beach					64	73%	81	86%
MGF2107	Daytona			25	88%	133	68%	130	84%
	Flagler/Palm Cst					18	78%	27	74%
STA2023	Daytona	646	76%	675	72%	517	73%	615	77%
	Deland	282	89%	317	83%	267	85%	261	90%
	Deltona	69	75%	74	69%	71	86%	86	73%
	Flagler/Palm Cst	113	73%	87	79%	91	79%	98	78%
	New Smyrna Beach	146	82%	153	81%	148	93%	129	91%

Excludes fully online courses

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Course Success Rate By Instructional Method – Multiple Methods Only

Course	IM	2012-2013		2013-2014		2014-2015		2015-2016	
		Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAC1105	Hybrid							75	71%
	Lecture	2,893	56%	2,674	59%	2,091	59%	1903	71%
	Online	972	60%	892	57%	866	61%	809	62%
MAC1114	Hybrid							33	42%
	Lecture	451	51%	435	59%	424	56%	364	65%
	Online	208	67%	206	67%	227	70%	269	78%
MAC1140	Lecture	525	60%	521	57%	447	66%	450	70%
	Online	202	79%	186	81%	229	75%	210	80%
MAC2233	Lecture	21	67%	22	77%	32	75%	41	83%
	Online	68	72%	44	82%	52	71%	57	75%
MAT1033	Lecture	2,864	53%	2,687	53%	1,473	56%	1219	71%
	Online	955	53%	987	51%	663	57%	561	68%
MGF2106	Hybrid							325	74%
	Lecture			33	76%	822	67%	881	80%
	Online	536	64%	440	59%	1,264	64%	1196	75%
MGF2107	Lecture			25	88%	151	69%	157	82%
	Online	398	76%	381	67%	346	74%	339	73%
STA2023	Lecture	1,256	79%	1,306	76%	1,094	80%	1189	81%
	Online	589	61%	533	60%	692	68%	916	71%
DSC	Hybrid		82%		81%		83%		81%
	Lecture		77%		77%		78%		80%
	Online		76%		75%		76%		78%

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Course Success Rates- Multiple Sessions or Sub-sessions Only (1 of 3)

Course	Session	Sub-session	2012-2013		2013-2014		2014-2015		2015-2016	
			Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAC1105	FA	A term	60	67%	54	87%	50	82%	49	84%
		B term							52	44%
		Full term	1,738	55%	1,643	57%	1,318	56%	1,165	71%
	SP	A term	89	74%	83	69%	55	82%	133	77%
		B term	40	83%	17	82%	37	54%	73	56%
		Full term	1,423	54%	1,293	55%	1,106	59%	949	62%
SU	Full term	515	66%	476	69%	391	70%	366	74%	
MAC1114	FA	Full term	265	52%	242	55%	262	53%	246	70%
	SP	Full term	265	53%	289	62%	271	65%	279	68%
	SU	Full term	129	70%	110	74%	118	70%	141	71%
MAC1140	FA	Full term	293	54%	305	61%	291	62%	237	75%
	SP	Full term	303	70%	316	64%	273	72%	298	69%
	SU	Full term	131	80%	86	72%	112	83%	125	82%
MAC2233	FA	Full term	31	74%	20	80%	25	76%	36	72%
	SP	Full term	32	72%	26	92%	40	73%	39	85%
	SU	Full term	26	65%	20	65%	19	68%	23	78%
MAC2311	FA	Full term	110	45%	113	51%	119	62%	118	74%
	SP	Full term	82	61%	94	55%	91	63%	100	60%
	SU	Full term	50	48%	51	49%	42	64%	42	79%
MAC2312	FA	Full term	37	54%	40	65%	38	58%	40	70%
	SP	Full term	39	79%	40	50%	53	62%	69	62%
	SU	Full term	35	57%	28	50%	19	89%	28	79%
MAC2313	FA	Full term	21	62%	23	52%	20	50%	30	73%
	SP	Full term	15	40%	13	69%	20	70%	20	40%
	SU	Full term	13	62%	13	69%	20	55%	23	74%
MAP2302	FA	Full term	17	76%	15	80%	16	56%	20	80%
	SP	Full term	14	71%	9	100%	18	78%	21	90%
	SU	Full term	10	90%						

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Course Success Rates- Multiple Sessions or Sub-sessions Only (2 of 3)

Course	Session Subsession	2012-2013		2013-2014		2014-2015		2015-2016	
		Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAT0018	A term	499	75%	349	68%	160	72%	129	80%
	FA B term	158	59%	158	54%	61	49%	26	73%
	Full term	265	68%	220	58%	145	53%	107	73%
	SP A term	359	70%	288	61%	126	69%	58	81%
	B term	118	59%	57	51%	31	68%	30	67%
	Full term	226	64%	177	58%	96	64%	81	69%
	SU Full term	252	77%	183	67%	99	69%	62	84%
MAT0022	FA Full term					2	50%		
	SP Full term			3	67%	3	67%		
	SU Full term					1	100%	9	78%
MAT0028	A term	492	59%	508	64%	229	55%	199	73%
	FA B term	568	56%	455	54%	240	50%	226	69%
	Full term	445	58%	512	55%	334	51%	257	67%
	SP A term	414	50%	330	58%	151	58%	65	71%
	B term	402	47%	318	57%	159	67%	110	72%
	Full term	431	52%	393	45%	232	58%	210	66%
	SU Full term	418	65%	412	64%	245	60%	152	57%
MAT0056L	FA Full term					28	93%	47	96%
	SP Full term					33	97%	35	91%
	SU Full term							1	100%
MAT1033	A term	31	77%	35	71%			27	85%
	FA B term	132	54%	95	64%	50	58%	106	62%
	Full term	1,685	53%	1,570	50%	1,037	57%	853	73%
	SP A term	47	68%	32	66%	15	80%	35	69%
	B term	86	55%	105	49%	13	69%	57	67%
	Full term	1,398	50%	1,407	51%	694	53%	487	64%
	SU Full term	440	63%	430	63%	327	59%	215	73%

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Course Success Rates- Multiple Sessions or Sub-sessions Only (3 of 3)

Course	Session	Sub-session	2012-2013		2013-2014		2014-2015		2015-2016	
			Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
MAT1033A	FA	Full term					276	46%	217	65%
	SP	Full term					122	48%	77	56%
MGF2106	FA	A term							30	90%
		B term					19	74%	275	73%
		Full term	207	67%	164	57%	1,014	59%	819	79%
	SP	A term							36	89%
		B term					32	63%	146	75%
		Full term	200	60%	193	62%	914	72%	829	74%
		SU	Full term	129	67%	116	61%	107	67%	267
MGF2107	FA	Full term	146	70%	154	65%	224	67%	208	81%
	SP	Full term	154	79%	167	71%	200	75%	203	70%
	SU	Full term	98	80%	85	72%	73	82%	85	75%
STA2023	FA	B term	52	73%	47	79%	37	92%	112	82%
		Full term	642	70%	674	67%	628	76%	705	77%
	SP	A term	17	94%	13	69%	22	86%	104	87%
		B term	60	72%	73	77%	100	87%	51	57%
		Full term	715	72%	677	73%	711	73%	752	74%
		Session Total	792	73%	763	73%	833	75%	907	75%
	SU	Full term	359	81%	355	74%	288	73%	381	80%



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Years are reporting years, SU-SP.
 Blank cells or missing years indicate no enrollment.

Average Class Size by Course

Course	2012-2013		2013-2014		2014-2015		2015-2016	
	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size
MAT0018	88	21	72	20	45	16	28	18
MAT0022			1	3	3	2	1	9
MAT0028	133	24	124	24	84	19	61	20
MAT1033	158	24	144	26	88	24	74	24
MAT1033A					16	25	12	25
MAC1105	137	28	127	28	106	28	97	29
MAC1114	26	25	26	25	23	28	22	30
MAC1140	29	25	26	27	23	29	23	29
STA2023	70	26	73	25	61	29	66	32
MGF2106	21	26	18	26	70	30	85	28
MGF2107	14	28	13	31	15	33	17	29
MAC2233	5	18	5	13	5	17	5	20
MAC2311	10	24	10	26	10	25	10	26
MAC2312	6	19	5	22	5	22	4	34
MAC2313	3	16	3	16	3	20	3	24
MAP2302	3	14	2	12	3	11	2	21
MAS3105	1	11	1	6	1	6	1	10
MAS3301	1	2	1	4	1	5		
MAS3401							1	13
MAS4203	1	4	1	8	1	6	1	5
MHF4404	1	6			1	10	1	10
MTG4212	1	3	1	5			1	5
STA4024			1	10	1	5	1	4
Total	709	25	655	25	589	25	516	26

Blank cells or missing years indicate no enrollment.

To prevent data from skewing, the following instructional methods are excluded: Labs associated with lectures, Private/Performance, OJT, Clinicals, Co-op, DIS, Field trips and Internship

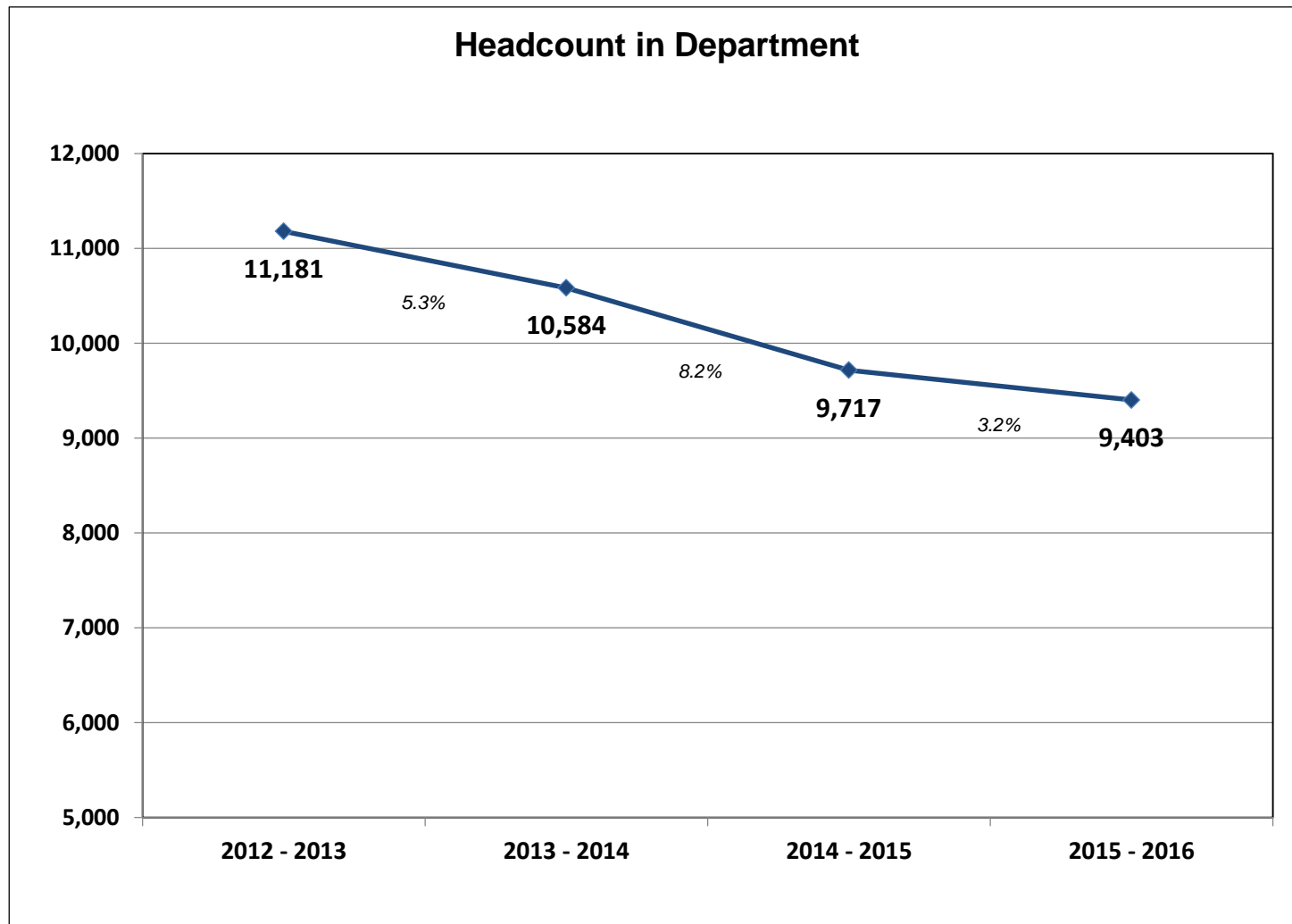
Average Class Size – Multiple Methods Only

Course	Instructional Method	2012-2013		2013-2014		2014-2015		2015-2016	
		Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size
MAC1105	Lecture	100	29	92	29	73	29	63	30
	Hybrid					3		3	25
	Online	37	26	35	25	33	26	31	26
MAC1114	Lecture	19	24	18	24	16	27	13	28
	Hybrid							1	33
	Online	7	30	8	26	7	32	8	34
MAC1140	Lecture	22	24	19	27	15	30	15	30
	Online	7	29	7	27	8	29	8	26
MAC2233	Lecture	2	11	2	11	2	16	2	21
	Online	3	23	3	15	3	17	3	19
MAT1033	Lecture	112	26	104	26	59	25	52	23
	Online	46	21	40	25	29	23	22	26
MGF2106	Lecture			1	33	27	30	28	31
	Hybrid							12	27
	Online	21	26	17	26	43	29	45	27
MGF2107	Lecture			1	25	5	30	6	26
	Online	14	28	12	32	10	35	11	31
STA2023	Lecture	50	25	51	26	38	29	39	30
	Online	20	29	22	24	23	30	27	34

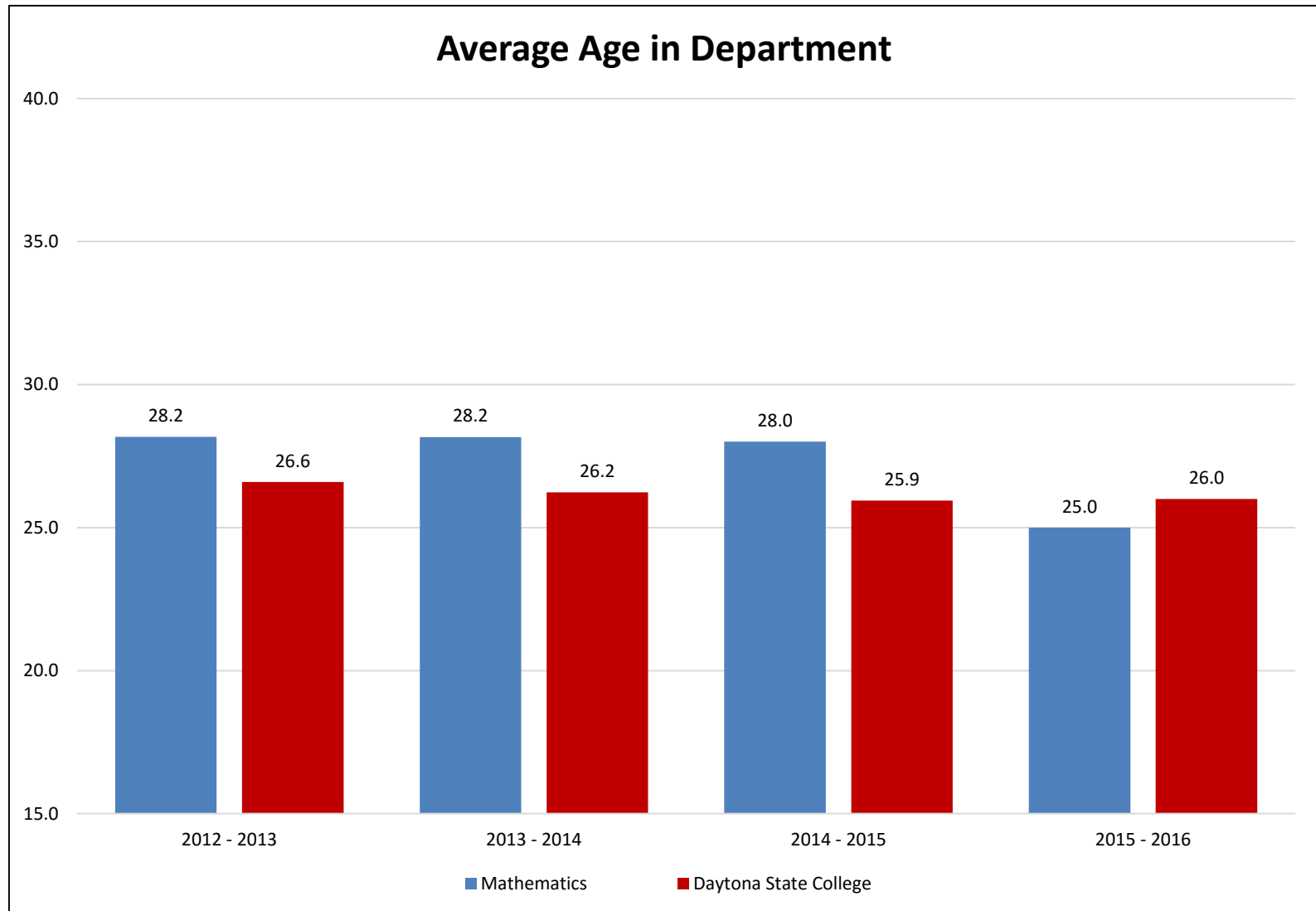
College Total

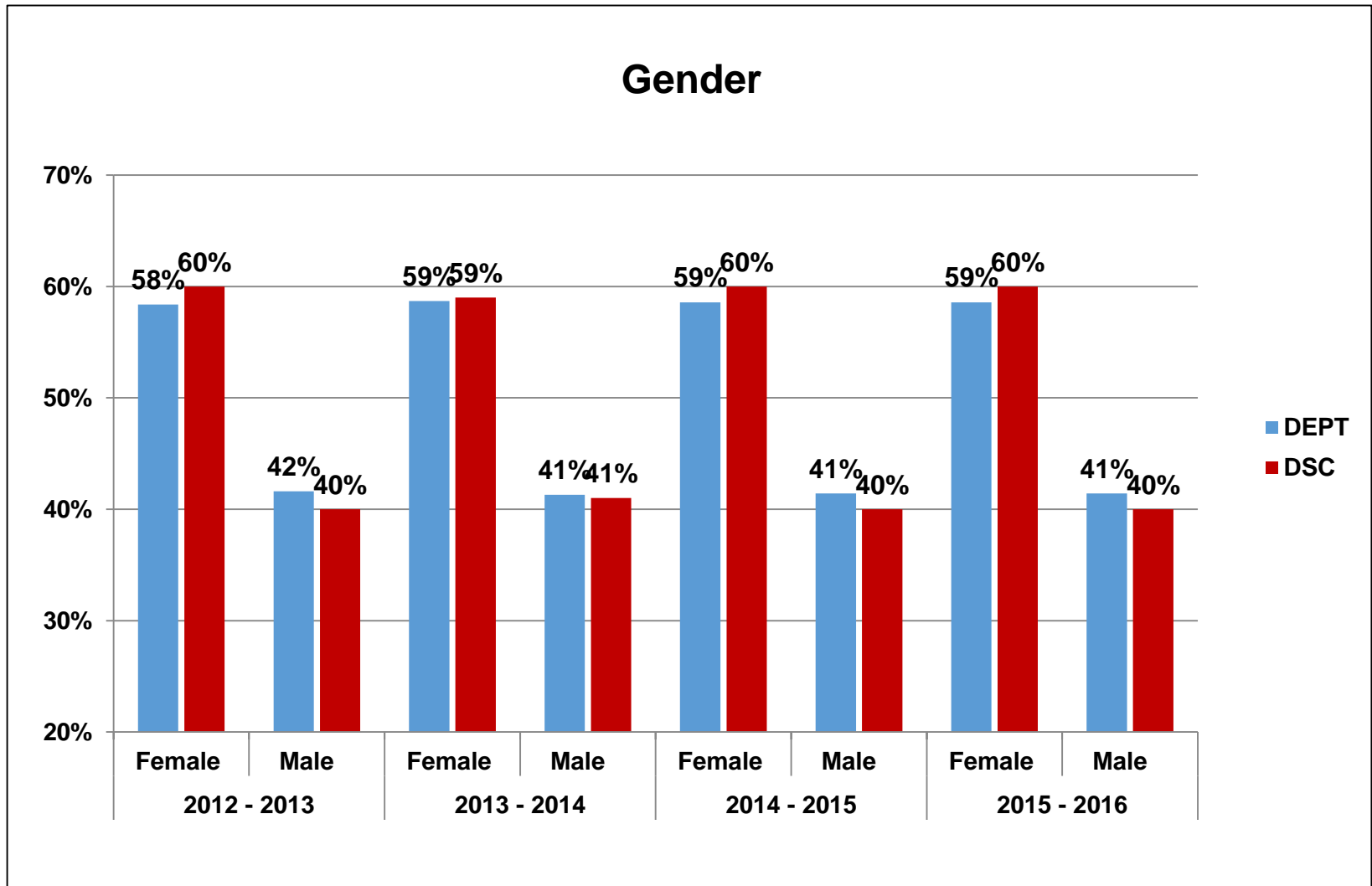
Instructional Method	2012-2013	2013-2014	2014-2015	2015-2016
	Avg. Size	Avg. Size	Avg. Size	Avg. Size
Hybrid	22	22	22	21
Lecture	23	23	22	22
Online	27	28	29	30
College Total	23.7	23.9	24.6	25

To prevent data from skewing, the following instructional methods are excluded: labs associated with lectures, Private/Performance, OJT, clinicals, co-op, DIS, field trips and internships.



College Enrollment Decreased: 7.9%(12/13); 3%(13/14); 0.73%(14/15); 1.14% (15/16)

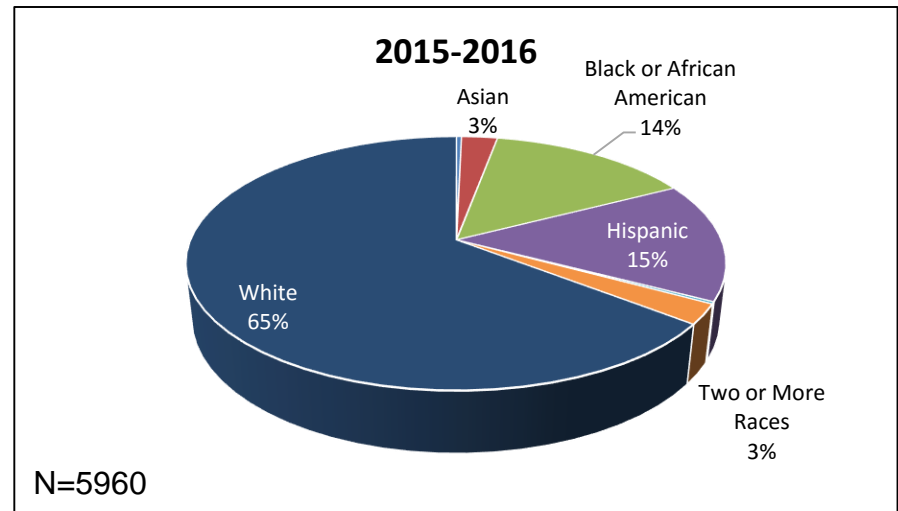
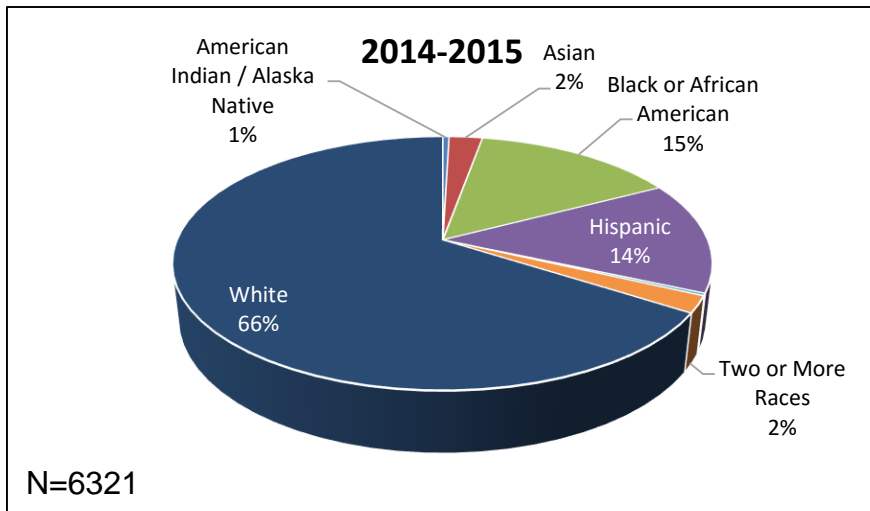
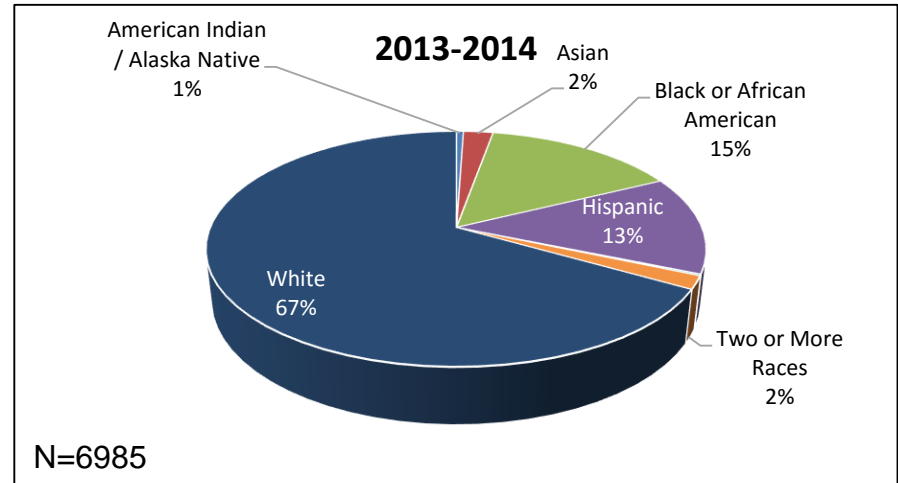
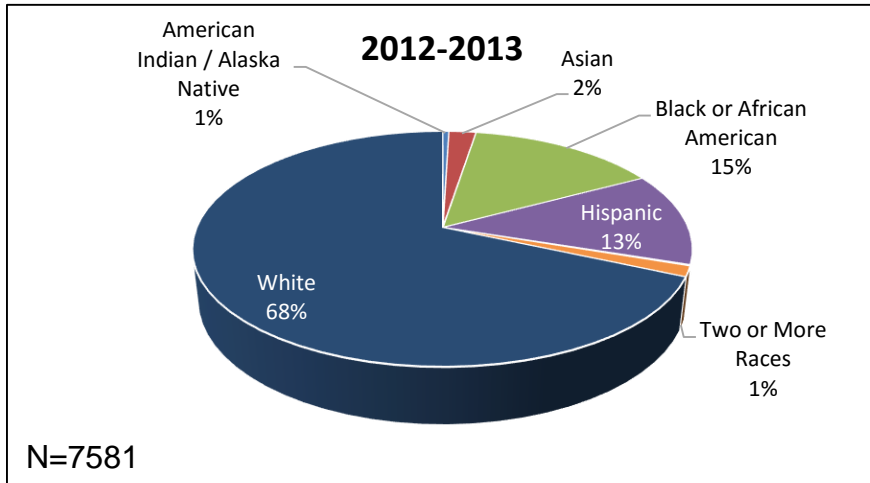




Source: IR Program Assessment Data

Excludes individuals whose gender is not reported.

Enrollment by Race/Ethnicity



DSC Averages 2015-2016

Amer Indian/ Alaska Native	Asian	Black or African Amer	Hispanic	Nat Hawaiian Pacif Islander	2 or More Races	White
0%	2%	14%	14%	0%	2%	66%

Excludes individuals whose race / ethnicity is not reported.

Source: IR Program Assessment Data