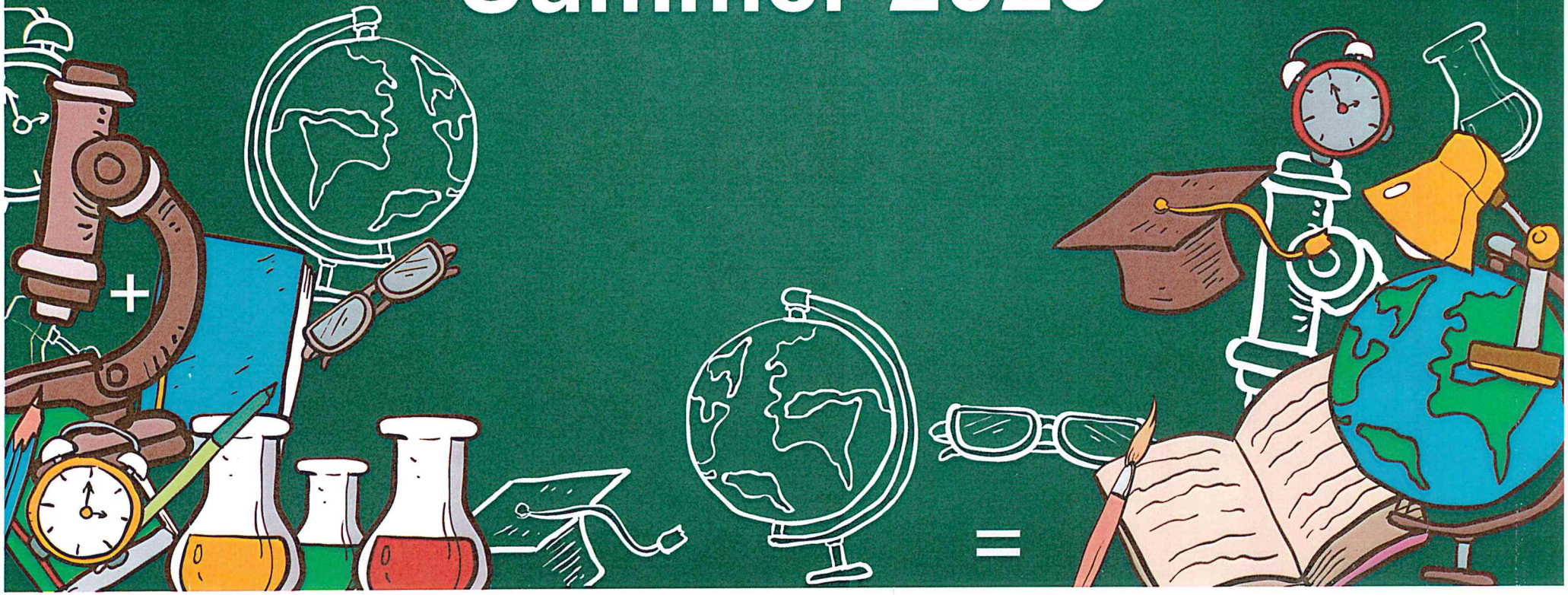
Technical Analysis

Summer 2023



Summer School 2023

SRCS Student Enrollment by Program

Gender				Ethnicity									
F	M	NB	Program	AI	A	AA	F	PI	H	W	M	NA	Total
50	59		Adelante						107	2			**109**
33	21	1	Arts Charter Boost			2			8	37	8		**55**
43	40		CCLA Boost						80	3			**83**
98	90		Elementary K-6 Academy		1				180	6	1		**188**
105	231		ESY	3	11	11	2	6	218	19	66		**336**
79	70		Excel for Youth		12	2			78	46	11		**149**
39	27		French American Boost		3	10			32	16	5		**66**
25	33		Mike Hauser Academy		7	2		1	32	12	4		**58**
459	553	6	High School Credit Recovery #1	4	18	29	7	9	757	153	40	1	**1018**
347	412	6	High School Credit Recovery #2	1	14	17	5	8	575	113	32		**765**
63	49		LandPaths Camp			1			74	26	11		**112**
96	79		Art/Mariachi Camp	5	4	4			125	32	5		**175**
25	31		MathLab		4	3			26	17	6		**56**
21	24		Migrant Education K-6						45				**45**
8	12		Newcomer Program					1	17	2			**20**
1491	**1731**	**13**		**13**	**74**	**81**	**14**	**25**	**2354**	**484**	**189**	**1**	**3235**

Legand

AI	American Indian
A	Asian
AA	African American
F	Filipino
PI	Pacific Islander
H	Hispanic
W	White
M	Multi-Ethnic
NA	No Answer

F	Female
M	Male
NB	Non-Binary

Non-SRCS	155
Day Care Programs	165
Boys & Girls Club	196
Total	**3751**

Summer School 2023 - All Programs

TRIAL #1 **Gender**

Observed

Program	Female	Male	Non-Binary	Total
Summer School	1032	1195	7	2234
Non-Summer School	6195	6435	65	12695
Totals	7227	7630	72	14929

Expected

Program	Female	Male	Non-Binary	Total
Summer School	1081.4601	1141.7657	10.7742	
Non-Summer School	6145.5399	6488.2343	61.2258	
Totals				

	2.2620	2.4820	1.3221
	0.3981	0.4368	0.2327

7.1337

Chi Table	(alpha = 0.05, df = 2)	**5.9915**
Chi Dist		0.0282
Chi-Test		0.0282

Note: **Since 7.1337 > 5.9915, we reject the null hypothesis - classifications are dependent.**
(p = 0.0282, $d.f.$ = 2, $\chi 2$ = 7.1337)

TRIAL #2 **Socio-Economically Disadvantaged (SED)**

Observed

	No	Yes	Total
Summer School	1024	1210	2234
Non-Summer School	6599	6096	12695
Totals	7623	7306	14929

Expected

	No	Yes	Total
Summer School	1140.7182	1093.2818	
Non-Summer School	6482.2818	6212.7182	
Totals			

11.9426	12.4608	
2.1016	2.1928	**28.6978**

Chi Table	(alpha = 0.05, df = 1)	**3.8415**
Chi Dist		0.0000
Chi-Test		0.0000

Note: **Since 28.6978 > 3.8415, we reject the null hypothesis - classifications are dependent.**
(p = 0.0000, $d.f.$ = 1, $\chi 2$ = 28.6978)

TRIAL #3 **Language Proficiency**

Observed

Program	English Learner	English Only	Initially Fluent Prof	Reclassified	Total
Summer School	654	831	58	623	2166
Non-Summer School	2343	6410	386	3372	12511
Totals	2997	7241	444	3995	14677

Expected

Program	English Learner	English Only	Initially Fluent Prof	Reclassified	Total
Summer School	442.2908	1068.6112	65.5246	589.5735	
Non-Summer School	2554.7092	6172.3888	378.4754	3405.4265	
Totals					

101.3378	52.8341	0.8641	1.8952
17.5444	9.1470	0.1496	0.3281

184.1002

Chi Table	(alpha = 0.05, df = 3)	**7.8147**
Chi Dist		0.0000
Chi-Test		0.0000

Note: **Since 184.1002 > 7.8147, we reject the null hypothesis - <u>classifications are dependent</u>.**
(p = 0.0000, $d.f.$ = 3, $\chi 2$ = 184.1002)

Summer School 2023 - HSCR (1&2)

TRIAL #1 **Gender**

Observed

Program	Female	Male	Non-Binary	Total
Summer School	459	553	6	1018
Non-Summer School	3234	3207	44	6485
Totals	3693	3760	50	7503

Expected

Program	Female	Male	Non-Binary	Total
Summer School	501.0628	510.1533	6.7840	
Non-Summer School	3191.9372	3249.8467	43.2160	
Totals				

	3.5310	3.5986	0.0906
	0.5543	0.5649	0.0142

8.3537

Chi Table	(alpha = 0.05, df = 2)	**5.9915**
Chi Dist		0.0153
Chi-Test		0.0153

Note: **Since 8.3537 > 5.9915, we reject the null hypothesis - <u>classifications are dependent</u>.**
(p = 0.0153, $d.f.$ = 2, $\chi 2$ = 8.3537)

TRIAL #2 **Socio-Economically Disadvantaged (SED)**

Observed

	No	Yes	Total
Summer School	435	583	1018
Non-Summer School	3575	2910	6485
Totals	4010	3493	7503

Expected

	No	Yes	Total
Summer School	544.0730	473.9270	
Non-Summer School	3465.9270	3019.0730	
Totals			

21.8664	25.1029	
3.4325	3.9406	**54.3424**

Chi Table	(alpha = 0.05, df = 1)	**3.8415**
Chi Dist		0.0000
Chi-Test		0.0000

Note: **Since 54.3424 > 3.8415, we reject the null hypothesis - <u>classifications are dependent</u>.**
(p = 0.0000, $d.f.$ = 1, $\chi 2$ = 54.3424)

TRIAL #3 **Language Proficiency**

Observed

Program	English Learner	English Only	Initially Fluent Prof	Reclassified	Total
Summer School	183	367	15	453	1018
Non-Summer School	700	3347	204	2234	6485
Totals	883	3714	219	2687	7503

Expected

Program	English Learner	English Only	Initially Fluent Prof	Reclassified	Total
Summer School	119.8046	503.9120	29.7137	364.5696	
Non-Summer School	763.1954	3210.0880	189.2863	2322.4304	
Totals					

33.3348	37.1988	7.2860	21.4498
5.2328	5.8394	1.1437	3.3671

114.8523

Chi Table	(alpha = 0.05, df = 3)	**7.8147**
Chi Dist		0.0000
Chi-Test		0.0000

Note: **Since 114.8523 > 7.8147, we reject the null hypothesis - <u>classifications are dependent</u>.**
(p = 0.0000, $d.f.$ = 3, $\chi 2$ = 114.8523)

Summer School 2023 - Elementary

TRIAL #1 **Gender**

Observed

Program	Female	Male	Non-Binary	Total
Summer School	415	428	1	844
Non-Summer School	1786	1782	5	3573
Totals	2201	2210	6	4417

Expected

Program	Female	Male	Non-Binary	Total
Summer School	420.5669	422.2866	1.1465	
Non-Summer School	1780.4331	1787.7134	4.8535	
Totals				

	0.0737	0.0773	0.0187
	0.0174	0.0183	0.0044

0.2098

Chi Table	(alpha = 0.05, df = 2)	**5.9915**
Chi Dist		0.9004
Chi-Test		0.9004

Note: **Since 0.2098 < 5.9915, we accept the null hypothesis - classifications are independent.**
(p = 0.9004, $d.f.$ = 2, $\chi 2$ = 0.2098)

TRIAL #2 **Socio-Economically Disadvantaged (SED)**

Observed

	No	Yes	Total
Summer School	410	434	844
Non-Summer School	1686	1887	3573
Totals	2096	2321	4417

Expected

	No	Yes	Total
Summer School	400.5035	443.4965	
Non-Summer School	1695.4965	1877.5035	
Totals			

0.2252	0.2033	
0.0532	0.0480	**0.5297**

Chi Table	(alpha = 0.05, df = 1)	**3.8415**
Chi Dist		0.4667
Chi-Test		0.4667

Note: **Since 0.5297 < 3.8415, we accept the null hypothesis - classifications are independent.**
(p = 0.4667, $d.f.$ = 1, $\chi 2$ = 0.5297)

TRIAL #3 **Language Proficiency**

Observed

Program	English Learner	English Only	Initially Fluent Prof	Reclassified	Total
Summer School	368	369	34	66	837
Non-Summer School	1224	1793	136	427	3580
Totals	1592	2162	170	493	4417

Expected

Program	English Learner	English Only	Initially Fluent Prof	Reclassified	Total
Summer School	301.6763	409.6885	32.2142	93.4211	
Non-Summer School	1290.3237	1752.3115	137.7858	399.5789	
Totals					

14.5813	4.0410	0.0990	8.0487	
3.4091	0.9448	0.0231	1.8818	**33.0288**

Chi Table	(alpha = 0.05, df = 3)	**7.8147**
Chi Dist		0.0000
Chi-Test		0.0000

Note: **Since 33.0288 > 7.8147, we reject the null hypothesis - <u>classifications are dependent</u>.**
(p = 0.0000, $d.f.$ = 3, $\chi 2$ = 33.0288)

Summer School 2023

Springboard Elementary Paired t-Tests

Trial 1: **t-Test: Paired Two Sample for Means - Number of Correct Letter Sounds**

	#CLS-Pre	*#CLS-Post*
Mean	66.77862595	80.17557252
Variance	9343.312155	9276.992014
Observations	131	131
Pearson Correlation	0.976993535	
Hypothesized Mean Dif	0	
df	**130**	
t Stat	**-7.407380625**	
P(T<=t) one-tail	**7.23604E-12**	
t Critical one-tail	**1.656659413**	
P(T<=t) two-tail	1.44721E-11	
t Critical two-tail	1.978380405	

(p = 0.0000, d.f. = 130, t = 7.4074, alpha = 0.05)

Since 7.407 > 1.6567, we reject the null hypothesis - the means differ at a statistically significnt level (alph = 0.05).

Trial 2: **t-Test: Paired Two Sample for Means - Words Correct Per Minute**

	WCPM-Pre	*WCPM-Post*
Mean	58.42990654	66.20560748
Variance	1785.96438	1679.919591
Observations	107	107
Pearson Correlation	0.873460971	
Hypothesized Mean Diffe	0	
df	**106**	
t Stat	**-3.834524696**	
P(T<=t) one-tail	**0.000106933**	
t Critical one-tail	**1.659356034**	
P(T<=t) two-tail	0.000213865	
t Critical two-tail	1.982597262	

(p = 0.0001, d.f. = 106, t = 3.8345, alpha = 0.05)

Since 3.8345 > 1.6594, we reject the null hypothesis - the means differ at a statistically significnt level (alph = 0.05).