Anova: Single Factor

Learning with students from other disciplines will make me a more effective sustainability professional

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	26	105	4.03846154	2.51846154
STEMM	28	113	4.03571429	1.88756614

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.16785264	2	2.08392632	1.053011	0.36	3.15593197
Within Groups	114.782967	58	1.97901667			
Total	118.95082	60				

Anova: Single Factor

Interdisciplinary education increases my ability to understand sustainability issues

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	35	5	0
Non-STEMM	26	104	4	2.4
STEMM	28	113	4.03571429	1.96164021

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	5.98653396	2	2.99326698	1.53685285	0.22	3.15593197
Within Groups	112.964286	58	1.9476601			
Total	118.95082	60				

Anova: Single Factor

Interdisciplinary education helps me understand my own discipline's limitations

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	33	4.71428571	0.23809524
Non-STEMM	26	96	3.69230769	2.62153846
STEMM	28	108	3.85714286	1.83068783

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	5.80111692	2	2.90055846	1.44535003	0.24	3.15593197
Within Groups	116.395604	58	2.00682077			
Total	122.196721	60				

Anova: Single Factor

Sustainability issues ultimately benefit when people from different disciplines work together

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	26	106	4.07692308	2.55384615
STEMM	28	116	4.14285714	1.97883598

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.50747613	2	1.75373807	0.86104461	0.43	3.15593197
Within Groups	118.131868	58	2.03675635			
Total	121.639344	60				

Anova: Single Factor

Learning with students from other disciplines will improve my professional relationships after qualification

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	26	103	3.96153846	2.43846154
STEMM	28	109	3.89285714	1.80291005

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	5.43717348	2	2.71858674	1.42698598	0.25	3.15593197
Within Groups	110.497253	58	1.90512505			
Total	115.934426	60				

Anova: Single Factor

Interdisciplinary education helps me think positively about other disciplines

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	26	103	3.96153846	2.03846154
STEMM	28	112	4	2.07407407

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.77148262	2	2.38574131	1.28338609	0.28	3.15593197
Within Groups	107.818681	58	1.85894278			
Total	112.590164	60				

Anova: Single Factor

Interdisciplinary education will help me communicate better with other professions after qualification

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	26	103	3.96153846	2.11846154
STEMM	28	116	4.14285714	1.9047619

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.4248784	2	2.2124392	1.21923822	0.30	3.15593197
Within Groups	105.247253	58	1.81460781			
Total	109.672131	60				

Anova: Single Factor

Interdisciplinary education helps broaden my perspective of sustainability issues

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	26	104	4	2.24
STEMM	28	116	4.14285714	1.97883598

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.07494145	2	2.03747073	1.07151958	0.35	3.15593197
Within Groups	110.285714	58	1.90147783			
Total	114.360656	60				

Anova: Single Factor

Interdisciplinary education helps me become a better team worker

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	31	4.42857143	0.61904762
Non-STEMM	26	100	3.84615385	2.21538462
STEMM	28	111	3.96428571	1.96164021

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.87123942	2	0.93561971	0.48424415	0.62	3.15593197
Within Groups	112.063187	58	1.93212391			
Total	113.934426	60				

Anova: Single Factor

Interdisciplinary education helps me develop my critical thinking skills

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	31	4.42857143	0.61904762
Non-STEMM	26	100	3.84615385	2.45538462
STEMM	28	115	4.10714286	1.87698413

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2.1569537	2	1.07847685	0.54027486	0.59	3.15593197
Within Groups	115.777473	58	1.99616332			
Total	117.934426	60				

Anova: Single Factor

Interdisciplinary education has challenged my own worldview

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	32	4.57142857	0.28571429
Non-STEMM	26	96	3.69230769	2.78153846
STEMM	28	109	3.89285714	1.87698413

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.26540263	2	2.13270132	1.01447829	0.37	3.15593197
Within Groups	121.931319	58	2.10226412			
Total	126.196721	60				

Anova: Single Factor

Interdisciplinary education has helped me identify other people's worldview

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	33	4.71428571	0.23809524
Non-STEMM	26	103	3.96153846	2.19846154
STEMM	28	112	4	1.92592593

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.34759503	2	1.67379751	0.89565603	0.41	3.15593197
Within Groups	108.39011	58	1.868795			
Total	111.737705	60				

Anova: Single Factor

I don't want to waste my time learning interdisciplinary coursework

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	10	1.42857143	1.28571429
Non-STEMM	22	31	1.40909091	0.34848485
STEMM	26	42	1.61538462	0.64615385

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.55914086	2	0.27957043	0.4661552	0.63	3.17514097
Within Groups	31.1863137	52	0.5997368			
Total	31.7454545	54				

Anova: Single Factor

I find interdisciplinary coursework confusing

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	14	2.8	0.7
Non-STEMM	17	46	2.70588235	1.22058824
STEMM	16	37	2.3125	1.02916667

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.62782508	2	0.81391254	0.75428298	0.48	3.26742352
Within Groups	37.7669118	35	1.07905462			
Total	39.3947368	37				

Anova: Single Factor

Interdisciplinary education assumes too much prior knowledge

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	13	2.6	0.3
Non-STEMM	17	40	2.35294118	1.74264706
STEMM	16	44	2.75	1

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.3123839	2	0.65619195	0.52099574	0.60	3.26742352
Within Groups	44.0823529	35	1.2594958			
Total	45.3947368	37				

Anova: Single Factor

It is not necessary for sustainability students to engage in interdisciplinary education

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	8	1.14285714	0.14285714
Non-STEMM	22	33	1.5	0.64285714
STEMM	26	40	1.53846154	0.81846154

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.89040959	2	0.4452048	0.66489162	0.52	3.17514097
Within Groups	34.8186813	52	0.66959003			
Total	35.7090909	54				

Anova: Single Factor

I find interdisciplinary coursework uninteresting

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	6	1.2	0.2
Non-STEMM	17	29	1.70588235	1.47058824
STEMM	16	25	1.5625	0.6625

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.99624613	2	0.49812307	0.50877965	0.61	3.26742352
Within Groups	34.2669118	35	0.97905462			
Total	35.2631579	37				

Anova: Single Factor

Sustainability problem solving skills are best learned within my own discipline

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	10	1.42857143	0.28571429
Non-STEMM	22	39	1.77272727	0.94588745
STEMM	26	45	1.73076923	0.92461538

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.65214785	2	0.32607393	0.37938218	0.69	3.17514097
Within Groups	44.6933067	52	0.85948667			
Total	45.3454545	54				

Anova: Single Factor

I find interdisciplinary coursework irrelevant

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	6	1.2	0.2
Non-STEMM	17	22	1.29411765	0.22058824
STEMM	16	22	1.375	0.38333333

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.13111455	2	0.06555728	0.22764271	0.80	3.26742352
Within Groups	10.0794118	35	0.28798319			
Total	10.2105263	37				

Anova: Single Factor

Interdisciplinary educators don't make clear connections between different disciplinary knowledge

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	9	1.8	1.2
Non-STEMM	17	31	1.82352941	1.77941176
STEMM	16	34	2.125	1.05

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.87414861	2	0.4370743	0.31206481	0.73	3.26742352
Within Groups	49.0205882	35	1.40058824			
Total	49.8947368	37				

Anova: Single Factor

Communication skills are best learned with students from other disciplines

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	24	3.42857143	0.61904762
Non-STEMM	19	70	3.68421053	1.67251462
STEMM	25	88	3.52	1.42666667

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.45025505	2	0.22512752	0.15877451	0.85	3.19072734
Within Groups	68.0595489	48	1.41790727			
Total	68.5098039	50				

Anova: Single Factor

Interdisciplinary team-working skills are important for all sustainability students to learn

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	35	5	0
Non-STEMM	19	86	4.53	0.48538012
STEMM	25	95	3.8	2.08333333

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	10.44	2.00	5.22	4.27	0.02	3.19
Within Groups	58.74	48.00	1.22			
Total	69.18	50.00				

Anova: Single Factor

For interdisciplinary group learning to work, students need to respect and trust each other

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	32	4.57142857	0.28571429
Non-STEMM	19	85	4.47368421	0.37426901
STEMM	25	102	4.08	2.16

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2.29710747	2	1.14855374	0.91440617	0.41	3.19072734
Within Groups	60.2911278	48	1.25606516			
Total	62.5882353	50				

Anova: Single Factor

Working in groups with students from other disciplines is valuable

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	35	5	0
Non-STEMM	19	85	4.47	0.37426901
STEMM	25	97	3.88	2.11

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	8.31	2.00	4.15	3.48	0.04	3.19
Within Groups	57.38	48.00	1.20			
Total	65.69	50.00				

Anova: Single Factor

Working on 'real world' sustainability issues helps me draw connections between disciplines

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	7	34	4.85714286	0.14285714
Non-STEMM	19	83	4.36842105	0.57894737
STEMM	25	101	4.04	2.12333333

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.91866726	2	1.95933363	1.51109802	0.23	3.19072734
Within Groups	62.2381955	48	1.29662907			
Total	66.1568627	50				

Anova: Single Factor

Reflection tasks help me deepen my interdisciplinary learning

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	20	4	2
Non-STEMM	16	65	4.0625	1.2625
STEMM	16	57	3.5625	1.59583333

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2.15202703	2	1.07601351	0.71910485	0.49	3.27589799
Within Groups	50.875	34	1.49632353			
Total	53.027027	36				

Anova: Single Factor

I learn about other disciplines better from other students than from interdisciplinary educators

SUMMARY

Groups	Count	Sum	Average	Variance
Mixed	5	15	3	2
Non-STEMM	16	57	3.5625	1.8625
STEMM	16	44	2.75	1

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	5.38682432	2	2.69341216	1.79781131	0.18	3.27589799
Within Groups	50.9375	34	1.49816176			
Total	56.3243243	36				