



Student Survey.ie

Appendix 4 Figures to accompany Chapter 3

Cohort

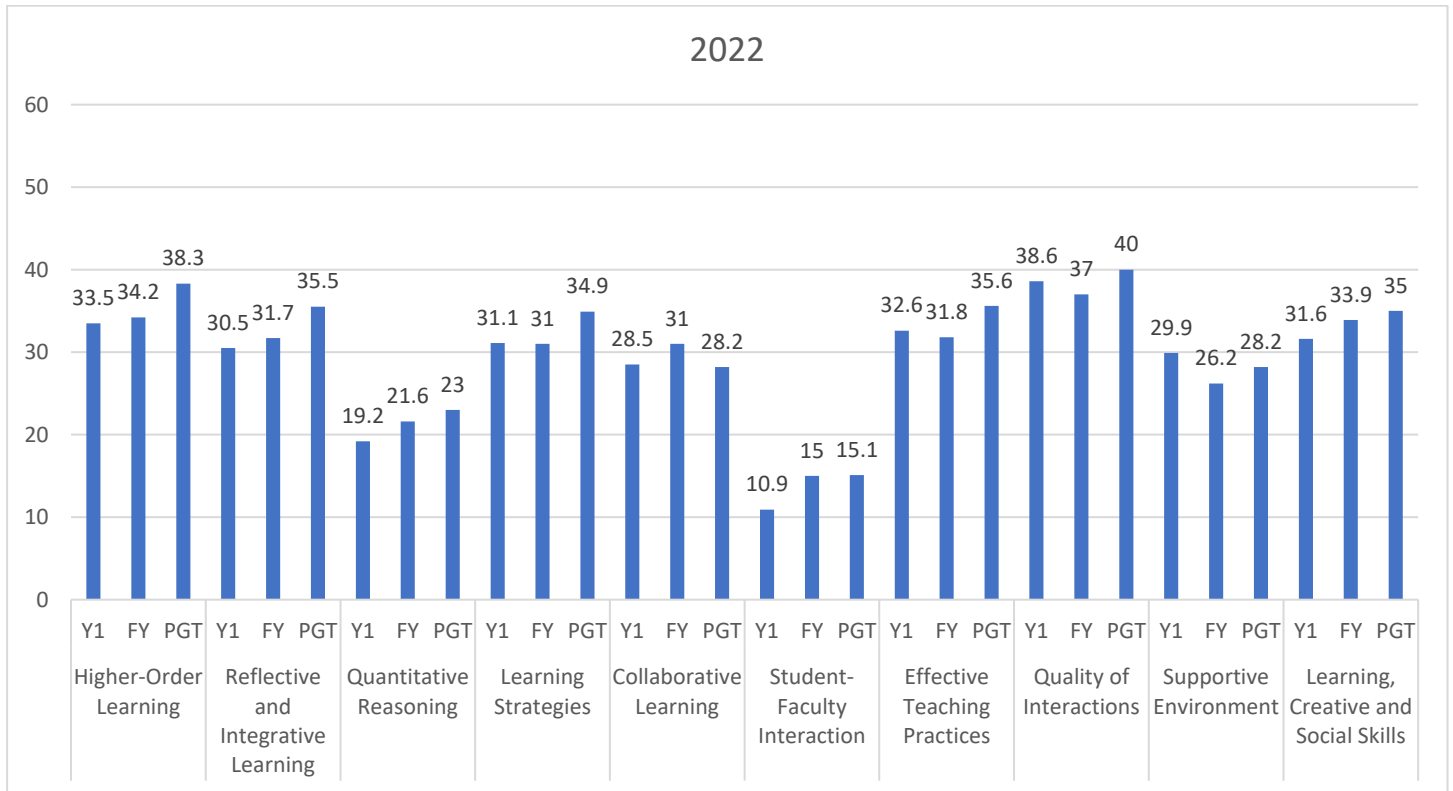


Fig. 6.1 Indicator scores by cohort

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $F(2,33293) = 331.93$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 < FY; FY < PGT; Y1 < PGT

Reflective and Integrative Learning, $F(2,41205) = 668.05$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 < FY; FY < PGT; Y1 < PGT

Quantitative Reasoning, $F(2,35992) = 219.70$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 < FY; FY < PGT; Y1 < PGT

Learning Strategies, $F(2,36026) = 289.04$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 = FY; FY < PGT; Y1 < PGT

Collaborative Learning, $F(2,40968) = 158.53$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 < FY; FY > PGT; Y1 = PGT

Student-Faculty Interaction, $F(2,35934) = 491.37$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 < FY; FY = PGT; Y1 < PGT

Effective Teaching Practices, $F(2,32840) = 192.93$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 > FY; FY < PGT; Y1 < PGT

Quality of Interactions, $F(2,24037) = 103.09$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 > FY; FY < PGT; Y1 < PGT

Supportive Environment, $F(2,31967) = 203.77$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 > FY; FY < PGT; Y1 > PGT

Learning, Creative and Social Skills, $F(2,31588) = 187.57$, $p < .001$; Scheffe Post-hoc, where $p < .001$: Y1 < FY; FY < PGT; Y1 < PGT

Mode of study

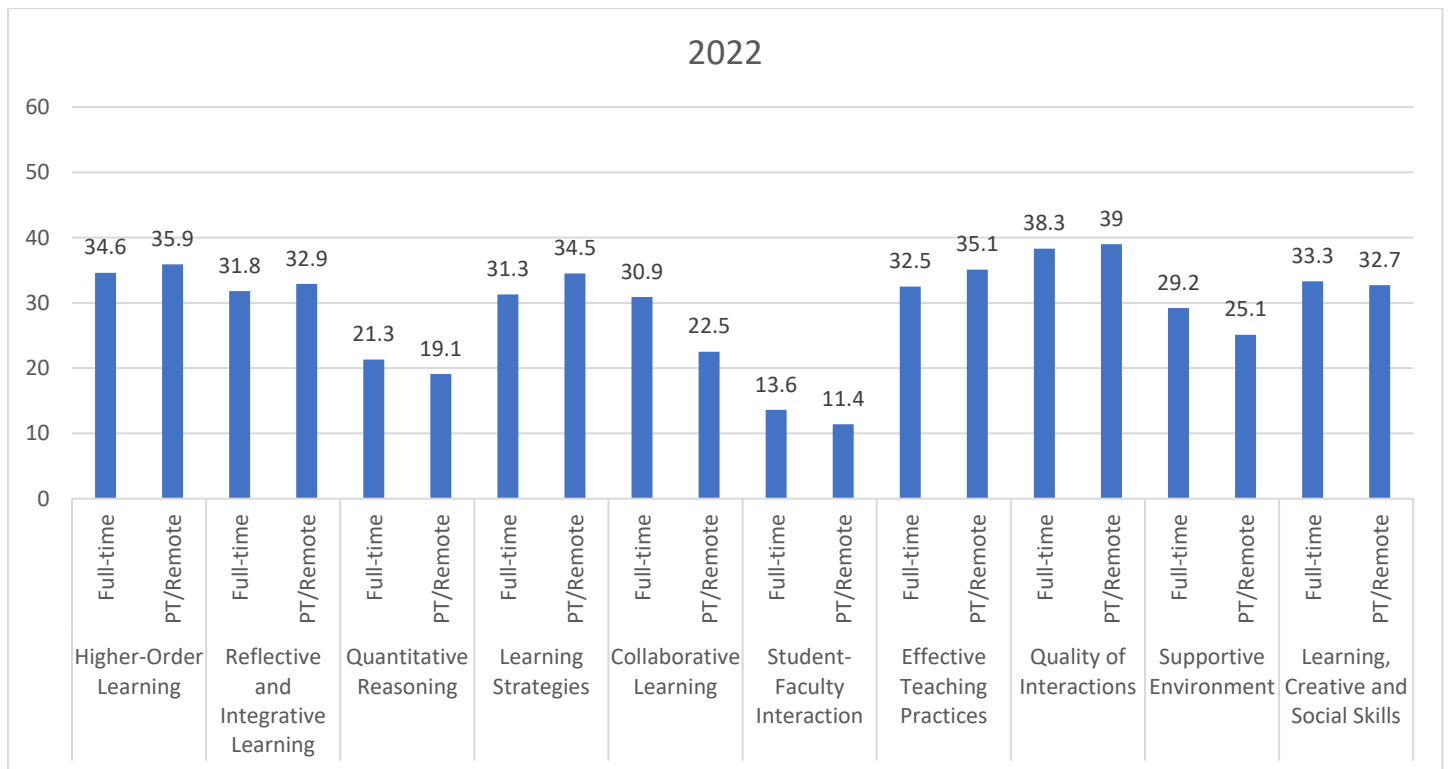


Fig. 6.2 Indicator scores by mode of study

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $t(10554) = 6.84$, $p < .001$; Effect size = 0.095 (negligible)

Reflective and Integrative Learning, $t(12744) = 7.58$, $p < .001$; Effect size = 0.095 (negligible)

Quantitative Reasoning, $t(35993) = 11.89$, $p < .001$; Effect size = 0.154 (small)

Learning Strategies, $t(36027) = 18.93$, $p < .001$; Effect size = 0.245 (small)

Collaborative Learning, $t(12226) = 49.47$, $p < .001$; Effect size = 0.638 (medium)

Student-Faculty Interaction, $t(12609) = 14.81$, $p < 0.001$; Effect size = 0.183 (small)

Effective Teaching Practices, $t(10006) = 13.32$, $p < .001$; Effect size = 0.193 (small)

Quality of Interactions, $t(5184) = 3.11$, $p < .01$; Effect size = 0.061 (negligible)

Supportive Environment, $t(9728) = 19.73$, $p < .001$; Effect size = 0.29 (small)

Learning, Creative and Social Skills, $t(9715) = 3.23$, $p < 0.01$; Effect size = 0.05 (negligible)

Programme type

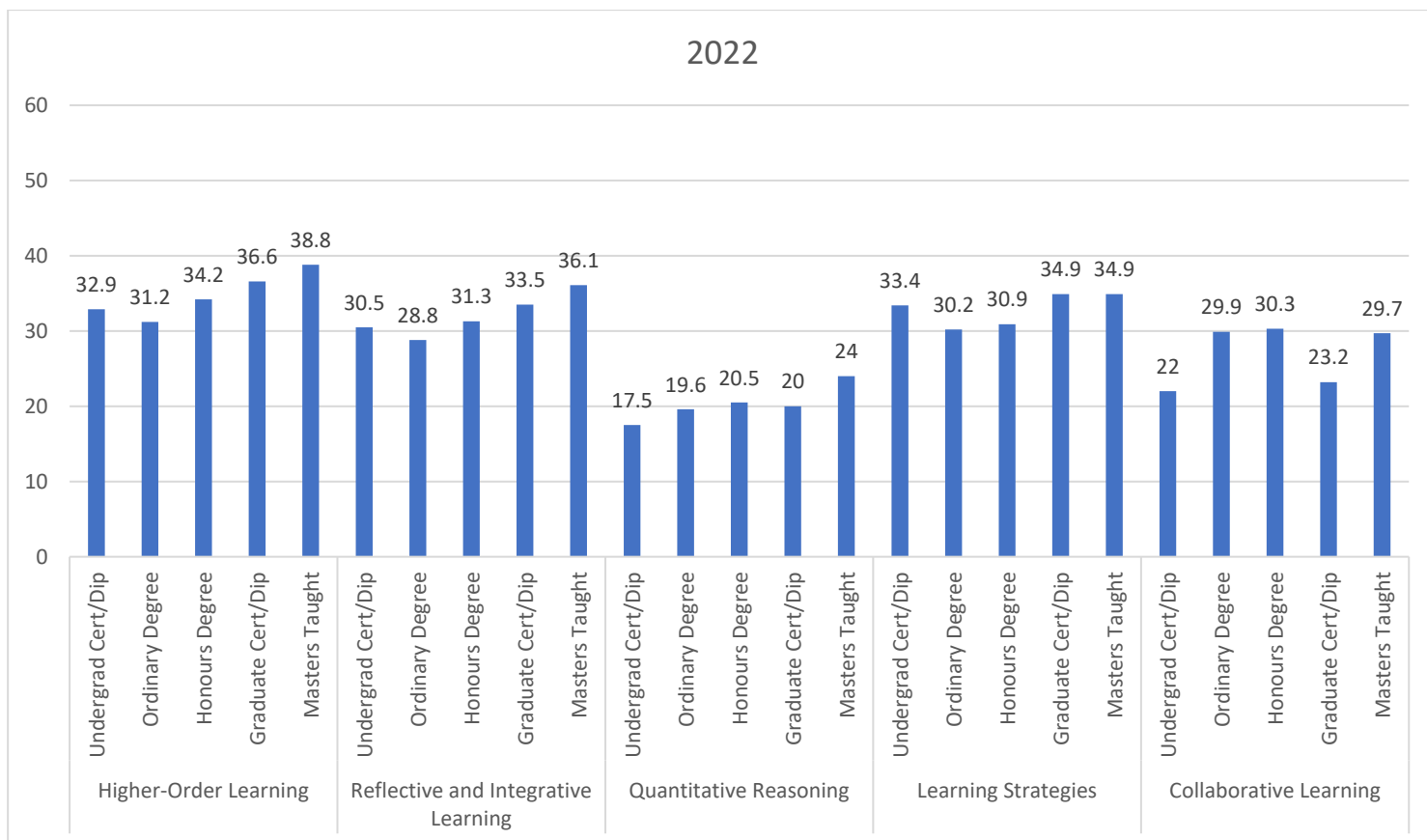


Fig. 6.3a Indicator scores by programme type

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $F(4,33291) = 203.81, p < .001$

Reflective and Integrative Learning, $F(4,41203) = 373.79, p < .001$

Quantitative Reasoning, $F(4,35990) = 121.21, p < .001$

Learning Strategies, $F(4,36024) = 170.77, p < .001$

Collaborative Learning, $F(4,40966) = 371.68, p < .001$

The combinations of significant paired differences in the Scheffe post-hoc analyses are presented in the table on the following page.

Table 6.12a Post-hoc analyses for programme type

		Undergrad Cert/ Dip	Ordinary Degree	Honours Degree	Grad/ PG/ Higher Dip	Taught Masters
<i>Higher-Order Learning</i>	Undergrad Cert/ Dip			*	*	*
	Ordinary Degree			*	*	*
	Honours Degree	*	*		*	*
	Grad/ PG/ Higher Dip	*	*	*		
	Taught Masters	*	*	*		
<i>Reflective and Integrative Learning</i>	Undergrad Cert/ Dip		*		*	*
	Ordinary Degree	*		*	*	*
	Honours Degree		*		*	*
	Grad/ PG/ Higher Dip	*	*	*		*
	Taught Masters	*	*	*	*	
<i>Quantitative Reasoning</i>	Undergrad Cert/ Dip		*	*	*	*
	Ordinary Degree	*				*
	Honours Degree	*				*
	Grad/ PG/ Higher Dip	*				
	Taught Masters	*	*	*	*	
<i>Learning Strategies</i>	Undergrad Cert/ Dip		*	*		*
	Ordinary Degree	*			*	*
	Honours Degree	*			*	*
	Grad/ PG/ Higher Dip		*	*		
	Taught Masters	*	*	*		
<i>Collaborative Learning</i>	Undergrad Cert/ Dip		*	*		*
	Ordinary Degree	*			*	
	Honours Degree	*			*	
	Grad/ PG/ Higher Dip		*	*		*
	Taught Masters	*			*	

* Denotes a statistically significant difference, where $p < 0.001$.

Programme type

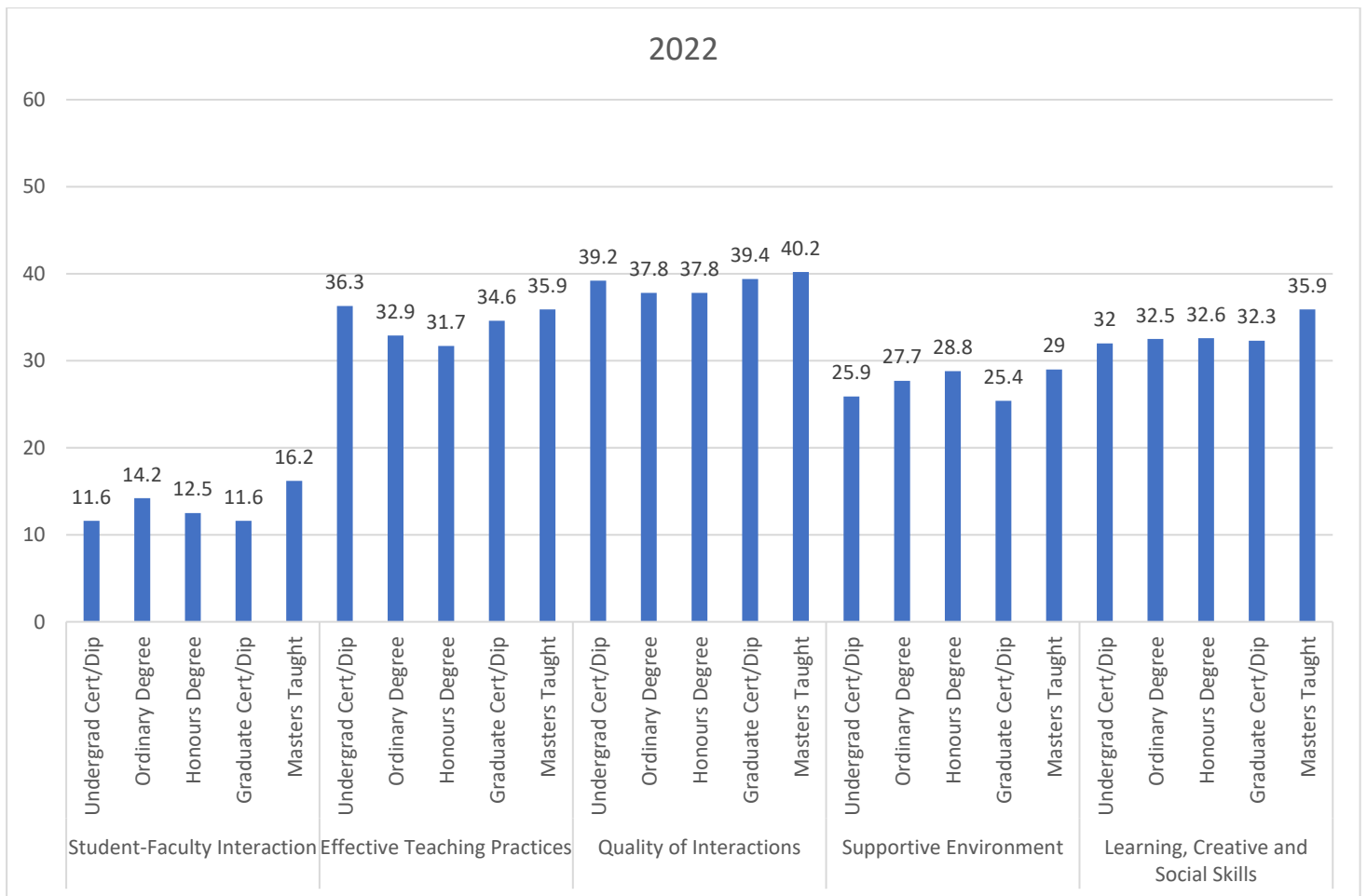


Fig. 6.3b Indicator scores by programme type

Student-Faculty Interaction, $F(4,35932) = 138.45$, $p < .001$

Effective Teaching Practices, $F(4,32838) = 155.99$, $p < .001$

Quality of Interactions, $F(4,24035) = 37.12$, $p < .001$

Supportive Environment, $F(4,31965) = 44.56$, $p < .001$

Learning, Creative and Social Skills, $F(4,31586) = 76.42$, $p < .001$

The combinations of significant paired differences in the Scheffe post-hoc analyses are presented in the table on the following page.

Table 6.12b Post-hoc analyses for programme type

		Undergrad Cert/ Dip	Ordinary Degree	Honours Degree	Grad/ PG/ Higher Dip	Taught Masters
<i>Student-Faculty Interaction</i>	Undergrad Cert/ Dip		*			*
	Ordinary Degree	*		*	*	*
	Honours Degree		*			*
	Grad/ PG/ Higher Dip		*			*
	Taught Masters	*	*	*	*	
<i>Effective Teaching Practices</i>	Undergrad Cert/ Dip		*	*		
	Ordinary Degree	*				*
	Honours Degree	*			*	*
	Grad/ PG/ Higher Dip			*		
	Taught Masters		*	*		
<i>Quality of Interactions</i>	Undergrad Cert/ Dip					
	Ordinary Degree					*
	Honours Degree					*
	Grad/ PG/ Higher Dip					
	Taught Masters		*	*		
<i>Supportive Environment</i>	Undergrad Cert/ Dip		*	*		*
	Ordinary Degree	*			*	
	Honours Degree				*	
	Grad/ PG/ Higher Dip		*	*		*
	Taught Masters	*			*	
<i>Learning, Creative and Social Skills</i>	Undergrad Cert/ Dip					*
	Ordinary Degree					*
	Honours Degree					*
	Grad/ PG/ Higher Dip					*
	Taught Masters	*	*	*	*	

* Denotes a statistically significant difference, where $p < 0.001$.

Field of study

Edu	Education
A & H	Arts and humanities
SS, J & I	Social sciences, journalism, and information
B, A & L	Business, administration, and law
NS, M & S	Natural sciences, mathematics, and statistics

ICT	Information and Communication Technologies
E, M & C	Engineering, manufacturing, and construction
A,F,F & V	Agriculture, forestry, fisheries, and veterinary
H & W	Health and welfare
Services	Services

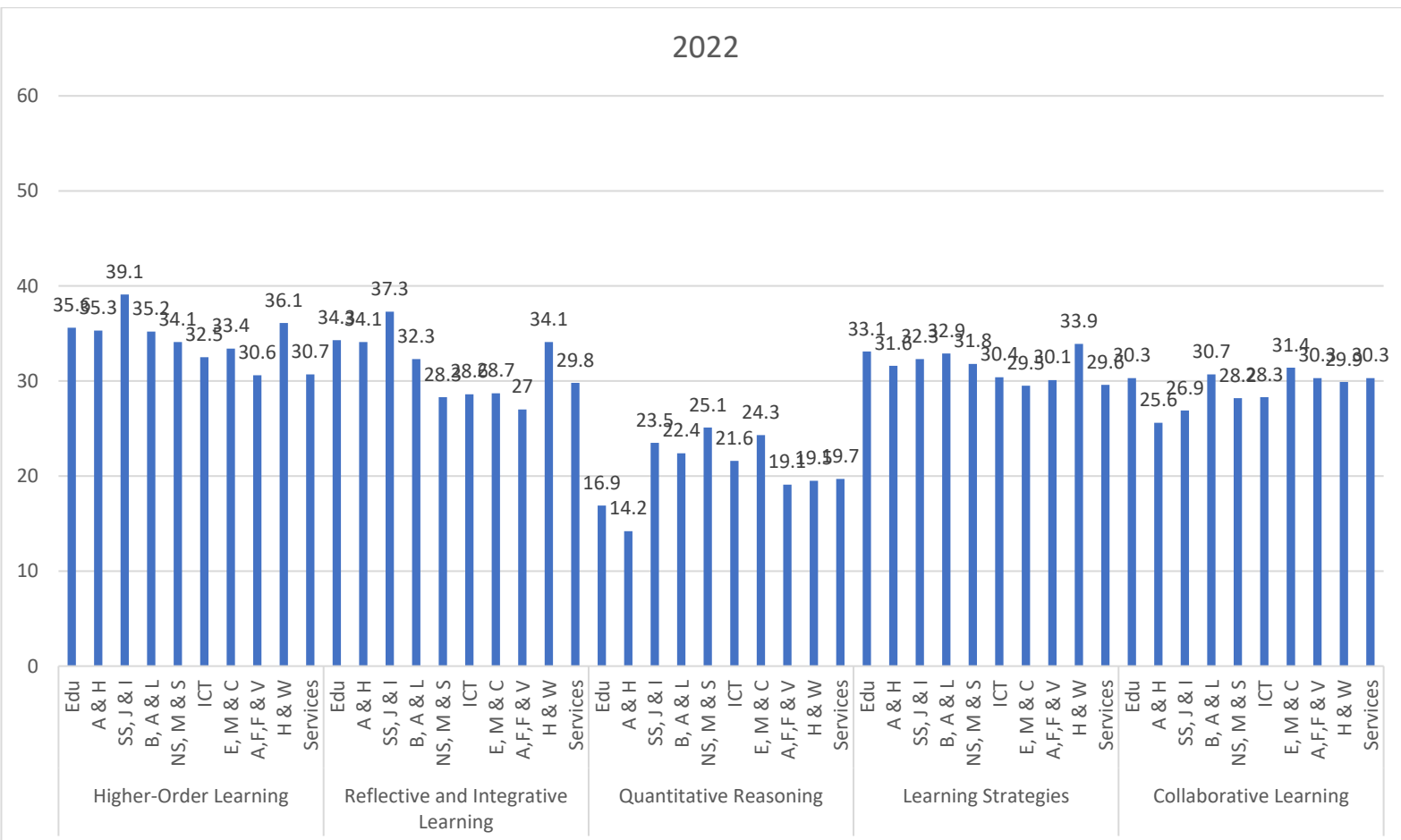


Fig. 6.4a Indicator scores by field of study

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $F(10, 33285) = 60.705, p < .001$

Reflective and Integrative Learning, $F(10, 41197) = 278.708, p < .001$

Quantitative Reasoning, $F(10, 35984) = 209.489, p < .001$

Learning Strategies, $F(10, 36018) = 43.433, p < .001$

Collaborative Learning, $F(10, 40960) = 80.167, p < .001$

The combinations of significant paired differences in the Scheffe post-hoc analyses are presented in the table on the following page. * Denotes a statistically significant difference, where $p < 0.001$.

Table 6.13a Post-hoc analyses for Field of study

		Edu	A&H	SS,J&I	B,A&L	NS,M&S	ICT	E,M&C	A,F,F&V	H&W	Services
<i>Higher-Order Learning</i>	Edu			*			*	*	*		*
	A & H			*			*	*	*		*
	SS, J & I	*	*		*	*	*	*	*	*	*
	B, A & L			*			*	*	*		*
	NS, M & S			*					*	*	*
	ICT	*	*	*	*					*	
	E, M & C	*	*	*	*				*	*	*
	A,F,F & V	*	*	*	*	*		*		*	
	H & W			*		*	*	*	*		*
	Services	*	*	*	*	*		*		*	
<i>Reflective and Integrative Learning</i>	Edu			*	*	*	*	*	*		*
	A & H			*	*	*	*	*	*		*
	SS, J & I	*	*		*	*	*	*	*	*	*
	B, A & L	*	*	*		*	*	*	*	*	*
	NS, M & S	*	*	*	*					*	*
	ICT	*	*	*	*					*	
	E, M & C	*	*	*	*					*	
	A,F,F & V	*	*	*	*					*	*
	H & W			*	*	*	*	*	*		*
	Services	*	*	*	*	*			*	*	
<i>Quantitative Reasoning</i>	Edu		*	*	*	*	*	*		*	*
	A & H	*		*	*	*	*	*	*	*	*
	SS, J & I	*	*			*			*	*	*
	B, A & L	*	*			*		*	*	*	*
	NS, M & S	*	*	*	*		*		*	*	*
	ICT	*	*			*		*		*	
	E, M & C	*	*		*		*		*	*	*
	A,F,F & V		*	*	*	*		*			
	H & W	*	*	*	*	*	*	*			
	Services	*	*	*	*	*		*			

Table 6.13a Post-hoc analyses for Field of study (continued)

		Edu	A&H	SS,J&I	B,A&L	NS,M&S	ICT	E,M&C	A,F,F&V	H&W	Services
<i>Learning Strategies</i>	Edu		*				*	*	*		*
	A & H							*		*	*
	SS, J & I						*	*			*
	B, A & L						*	*			*
	NS, M & S							*		*	
	ICT	*		*	*					*	
	E, M & C	*	*	*	*	*				*	
	A,F,F & V	*								*	
	H & W		*			*	*	*	*		*
	Services	*		*	*					*	
<i>Collaborative Learning</i>	Edu		*	*		*	*				
	A & H	*			*	*	*	*	*	*	*
	SS, J & I	*			*			*	*	*	*
	B, A & L		*	*		*	*				
	NS, M & S	*	*		*			*		*	
	ICT	*	*		*			*			
	E, M & C		*	*		*	*				
	A,F,F & V		*	*							
	H & W		*	*		*					
	Services		*	*							

Edu	Education
A & H	Arts and humanities
SS, J & I	Social sciences, journalism, and information
B, A & L	Business, administration, and law
NS, M & S	Natural sciences, mathematics, and statistics

ICT	Information and Communication Technologies
E, M & C	Engineering, manufacturing, and construction
A,F,F & V	Agriculture, forestry, fisheries, and veterinary
H & W	Health and welfare
Services	Services

2022

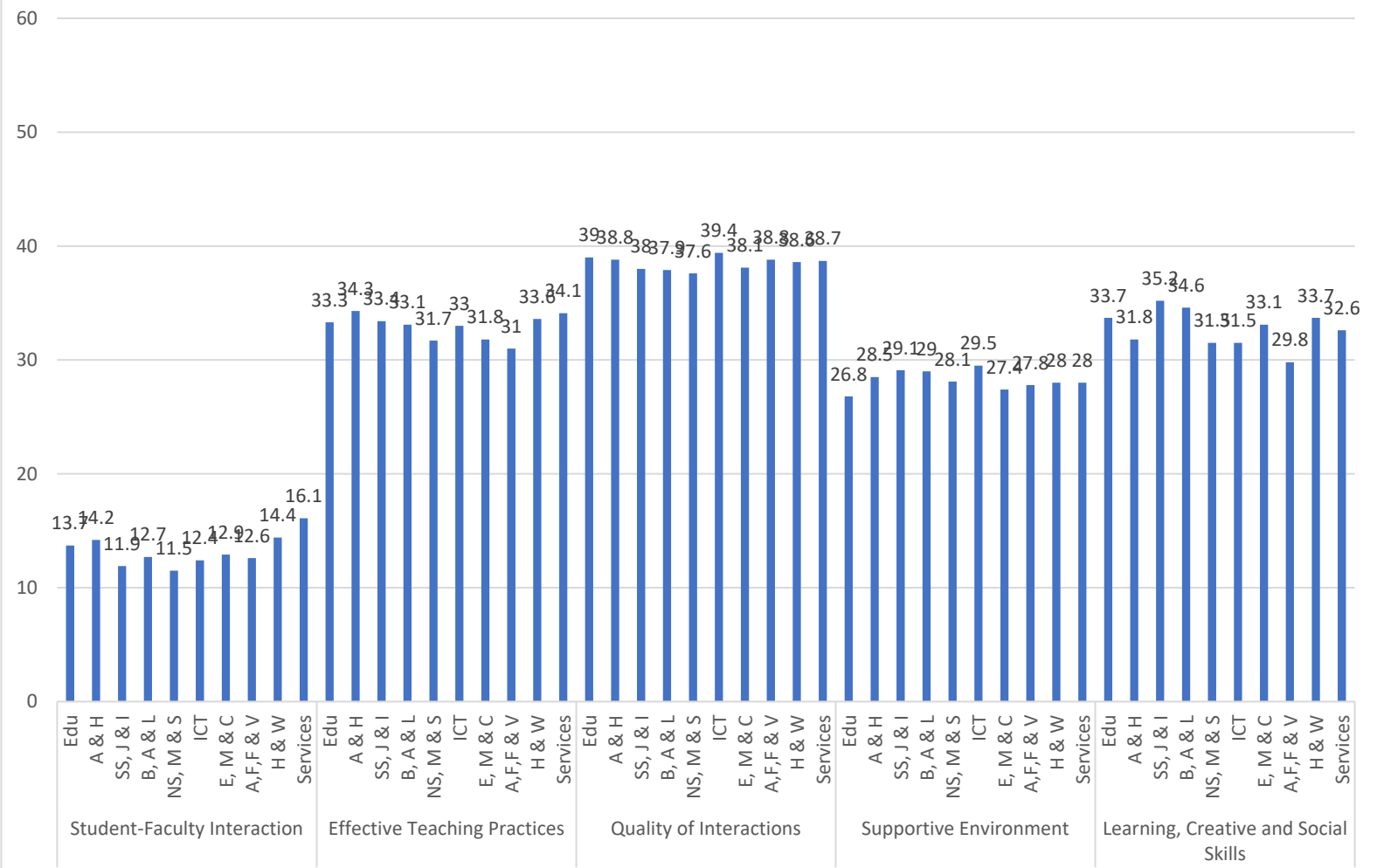


Fig. 6.4b Indicator scores by field of study

Results of tests of statistical significance of differences between groups

Student-Faculty Interaction, $F(10, 35926) = 27.646, p < .001$

Effective Teaching Practices, $F(10, 32832) = 13.178, p < .001$

Quality of Interactions, $F(10, 24029) = 4.757, p < .001$

Supportive Environment, $F(10, 31959) = 9.384, p < .001$

Learning, Creative and Social Skills, $F(10, 31580) = 32.714, p < .001$

The combinations of significant paired differences in the Scheffe post-hoc analyses are presented in the table on the following page.

Table 6.13b Post-hoc analyses for Field of study

		Edu	A&H	SS,J&I	B,A&L	NS,M&S	ICT	E,M&C	A,F,F&V	H&W	Services
<i>Student-Faculty Interaction</i>	Edu					*					*
	A & H			*	*	*	*				
	SS, J & I		*							*	*
	B, A & L		*							*	*
	NS, M & S	*	*							*	*
	ICT		*							*	*
	E, M & C									*	*
	A,F,F & V										*
	H & W			*	*	*	*	*			
	Services	*		*	*	*	*	*	*		
<i>Effective Teaching Practices</i>	Edu										
	A & H					*		*			
	SS, J & I										
	B, A & L										
	NS, M & S		*							*	
	ICT										
	E, M & C		*							*	
	A,F,F & V										
	H & W					*		*			
	Services										
<i>Quality of Interactions</i>	Edu										
	A & H										
	SS, J & I										
	B, A & L										
	NS, M & S										
	ICT										
	E, M & C										
	A,F,F & V										
	H & W										
	Services										

Table 6.13b Post-hoc analyses for Field of study (continued)

		Edu	A&H	SS,J&I	B,A&L	NS,M&S	ICT	E,M&C	A,F,F&V	H&W	Services
<i>Supportive Environment</i>	Edu			*	*		*				
	A & H										
	SS, J & I	*									
	B, A & L	*									
	NS, M & S										
	ICT	*						*			
	E, M & C						*				
	A,F,F & V										
	H & W										
	Services										
<i>Learning, Creative and Social Skills</i>	Edu					*	*		*		
	A & H			*	*					*	
	SS, J & I		*			*	*	*	*		
	B, A & L		*			*	*		*		
	NS, M & S	*		*	*					*	
	ICT	*		*	*					*	
	E, M & C			*							
	A,F,F & V	*		*	*					*	
	H & W		*			*	*		*		
	Services										

* Denotes a statistically significant difference, where $p < 0.001$.

Gender

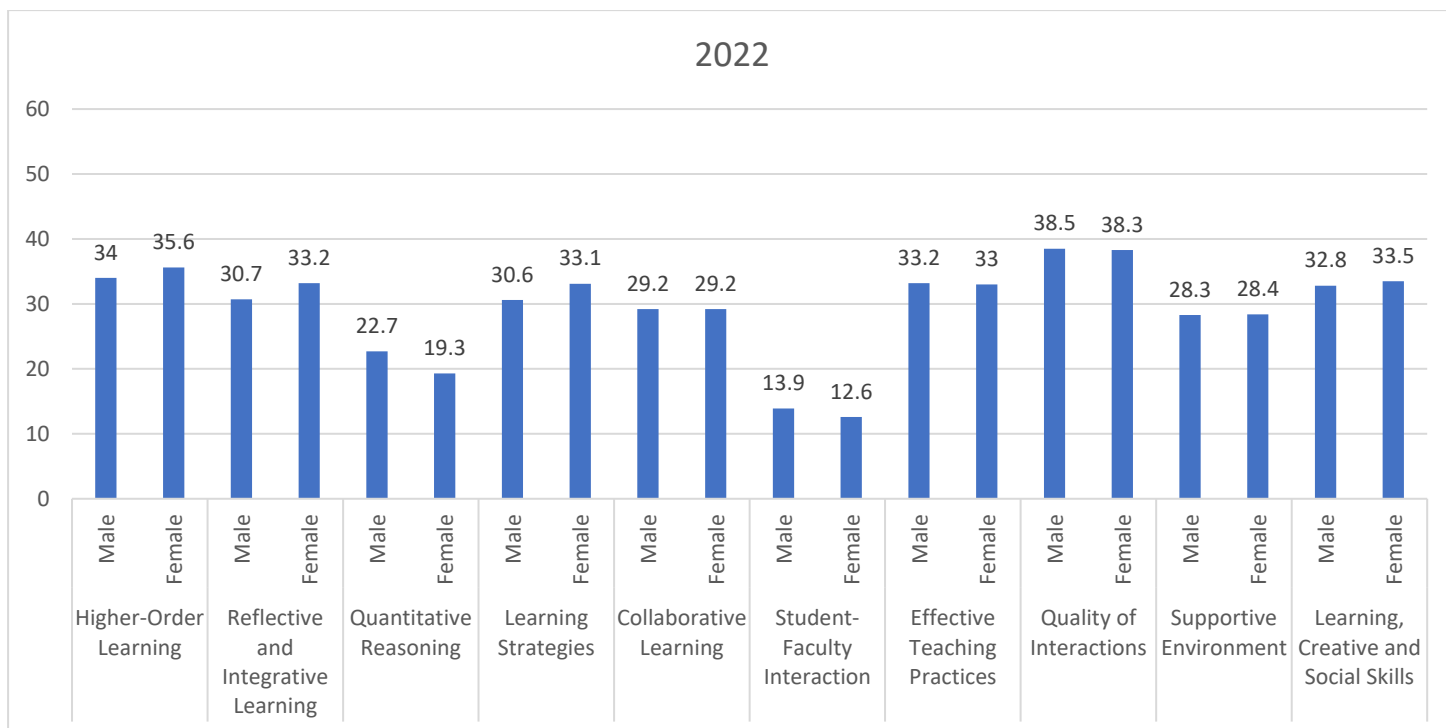


Fig. 6.5 Indicator scores by gender

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $t(32,457) = 10.59$, $p < .001$; Effect size = 0.116 (small)

Reflective and Integrative Learning, $t(40,404) = 22.53$, $p < .001$; Effect size = 0.222 (small)

Quantitative Reasoning, $t(35,837) = 21.80$, $p < .001$; Effect size = 0.231 (small)

Learning Strategies, $t(34,723) = 17.88$, $p < .001$; Effect size = 0.189 (small)

Collaborative Learning, $t(40,788) = 0.507$, $p = .612$; difference not significant

Student-Faculty Interaction, $t(34,019) = 9.33$, $p < .001$; Effect size = 0.099 (negligible)

Effective Teaching Practices, $t(31,966) = 1.11$, $p = .268$; difference not significant

Quality of Interactions, $t(23,214) = 1.55$, $p = .12$; difference not significant

Supportive Environment, $t(31,284) = .35$, $p = .724$; difference not significant

Learning, Creative and Social Skills, $t(31,447) = .414$, $p < .001$; Effect size = 0.05 (negligible)

Age group

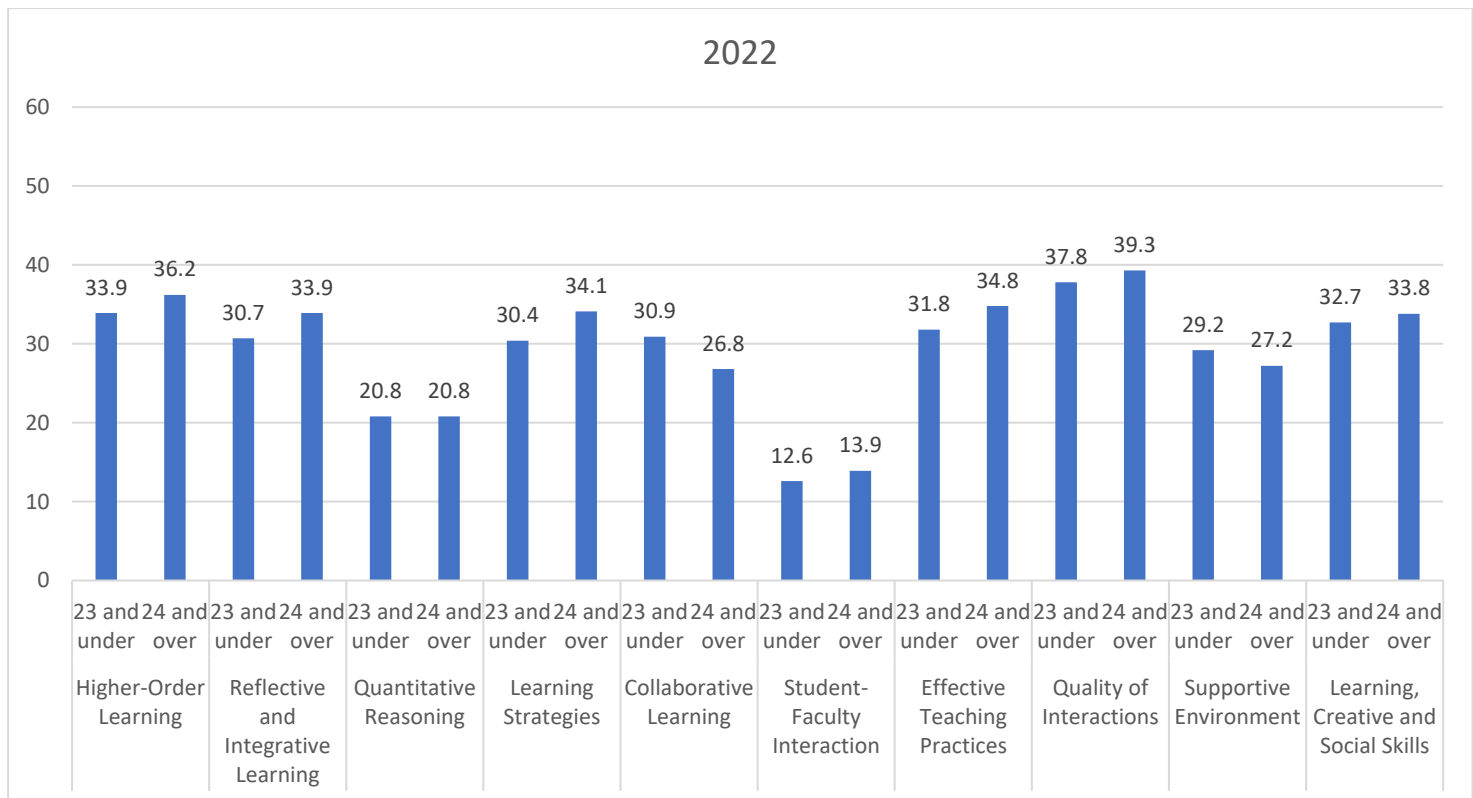


Fig. 6.6 Indicator scores by age group

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $t(29,760) = 14.99$, $p < .001$; Effect size = 0.167 (small)

Reflective and Integrative Learning, $t(35,098) = 27.87$, $p < .001$; Effect size = 0.282 (small)

Quantitative Reasoning, $t(32,216) = .394$, $p = .694$; difference not significant

Learning Strategies, $t(36,026) = 26.77$, $p < .001$; Effect size = 0.286 (small)

Collaborative Learning, $t(33,551) = 29.45$, $p < .001$; Effect size = 0.302 (medium)

Student-Faculty Interaction, $t(35,935) = 10.06$, $p < .001$; Effect size = 0.107 (small)

Effective Teaching Practices, $t(27,983) = 19.21$, $p < .001$; Effect size = 0.218 (small)

Quality of Interactions, $t(18,913) = 9.43$, $p < .001$; Effect size = 0.127 (small)

Supportive Environment, $t(27,583) = 11.78$, $p < .001$; Effect size = 0.14 (small)

Learning, Creative and Social Skills, $t(27,470) = 7.44$, $p < 0.001$; Effect size = 0.09 (negligible)

Country of domicile

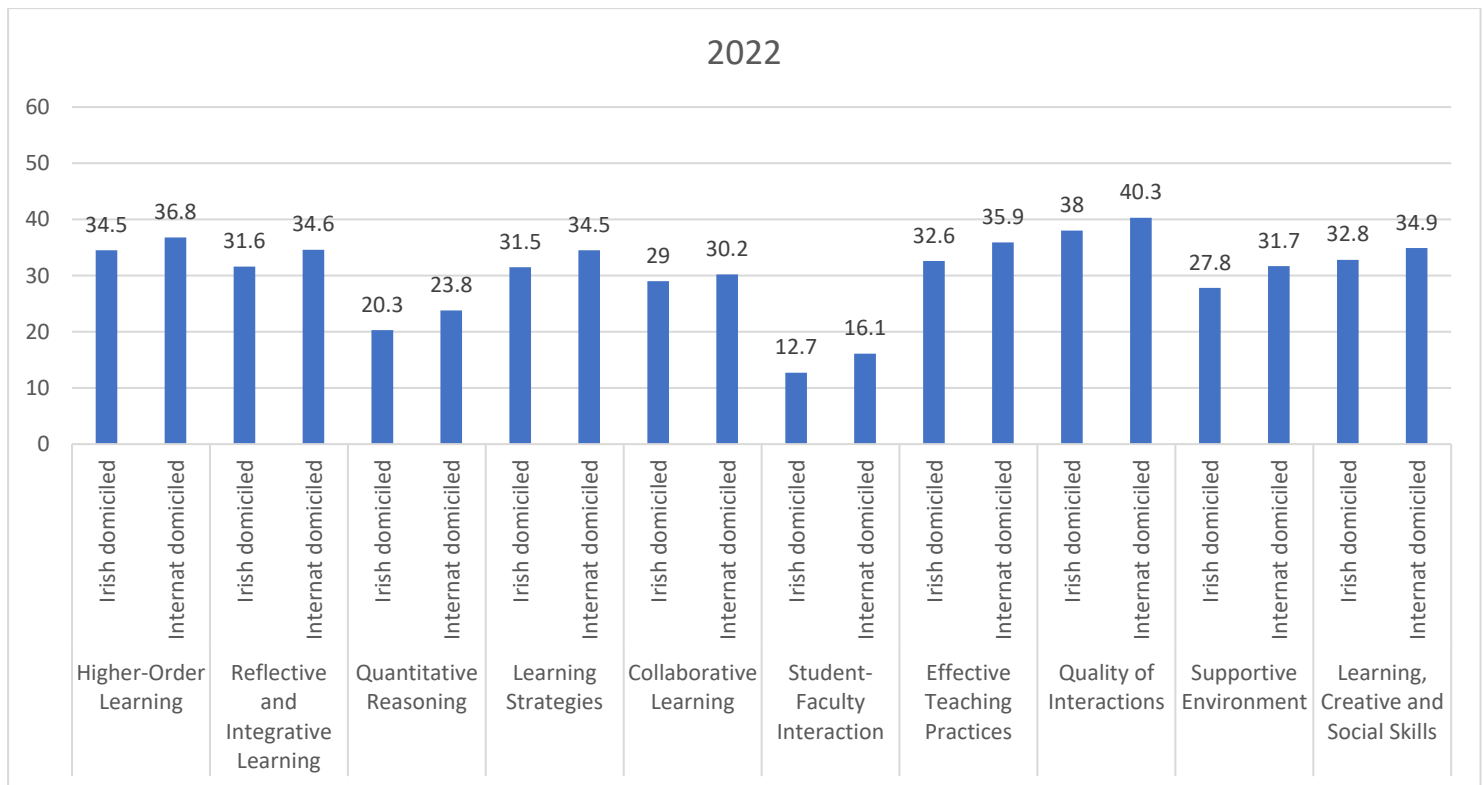


Fig. 6.7 Indicator scores by country of domicile

Results of tests of statistical significance of differences between groups

Higher-Order Learning, $t(6,744) = 10.39$, $p < .001$; Effect size = 0.161 (small)

Reflective and Integrative Learning, $t(8,106) = 18.95$, $p < .001$; Effect size = 0.268 (small)

Quantitative Reasoning, $t(7,072) = 15.83$, $p < .001$; Effect size = 0.242 (small)

Learning Strategies, $t(36,027) = 15.16$, $p < .001$; Effect size = 0.226 (small)

Collaborative Learning, $t(8,007) = 5.93$, $p < .05$; Effect size = 0.084 (negligible)

Student-Faculty Interaction, $t(6,813) = 17.20$, $p < .001$; Effect size = 0.277 (small)

Effective Teaching Practices, $t(6,526) = 15.24$, $p < .001$; Effect size = 0.245 (small)

Quality of Interactions, $t(24,038) = 10.43$, $p < .001$; Effect size = 0.184 (small)

Supportive Environment, $t(6,330) = 16.89$, $p < .001$; Effect size = 0.28 (small)

Learning, Creative and Social Skills, $t(6,265) = 9.68$, $p < 0.001$; Effect size = 0.16 (small)