# Hong Kong Shue Yan University Industrial Attachment Office BEPP Youth Competitiveness Indicators Model 1st Biannual Assessment Report

#### Introduction

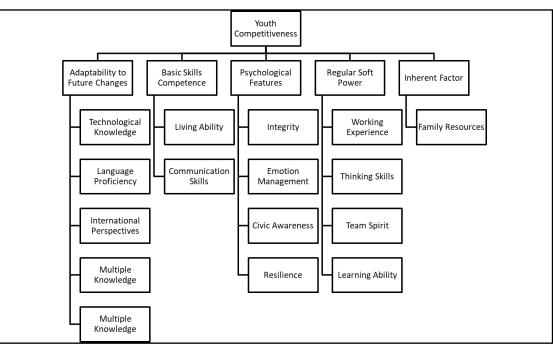
The BEPP Youth Competitiveness Indicators Model (Model) is a comprehensive assessment tool developed by the Business, Economics and Public Policy Centre in conjuncture with Commission on Youth (2014) based on the "Youth Competitiveness Indicator System in Hong Kong" (Indicator system)<sup>1</sup>.

In the indicator system, there are 21 elements formed under 7 indicators, namely "adaptability to future changes", "basic skills competence", "psychological features", "regular soft power", "inherent factor", "human resources" and "supporting environment". The 7 indicators can be divided into 2 main parts. The first part comprises 5 indicators, namely "adaptability to future changes", "basic skills competence", "psychological features", "basic skills competence", "psychological features", "regular soft power" and "inherent factor", represented by the statistics of young people collected from a micro perspective and gathered from first-hand data (micro-data) obtained through questionnaires. The second part comprises 2 indicators, namely "human resources" and "supporting environment", represented by territory-wide statistics collected from a macro perspective and retrieved from existing openly available data (macro-data). The micro-data reflect the competitiveness of young people in Hong Kong while those macro-data indicate the global competitiveness of our young people as a whole.

The micro-data model of 5 indicators with 16 elements was adopted for assessing the sustainable capacity of Shue Yan students in light of the future development trend (See Figure 1).

<sup>&</sup>lt;sup>1</sup> Commission on Youth. (2015). 香港青年競爭力指標體系研究 [A Study on the Youth Competitiveness Indicator System in Hong Kong]. HKSAR: Business, Economic and Public Policy Research Centre, Hong Kong Shue Yan University. A total of 4,253 young people aged between 15 and 24 were covered in the study. Confirmatory factor analysis (CFA) and structural equation modelling (SEM) were employed to validate the questionnaire and the Indicator System.

Figure 1: BEPP Youth Competitiveness Indicators Model



The first indicator is the Adaptability to future changes (配合未來變化能力), comprising the elements of the Professional competence (專業能力), Technological knowledge (科技知識), Language proficiency (語言能力), International perspectives (國際視野) and Multiple knowledge (多元知識). Below are the definition of each element:

- Professional competence: relating to individual profession or technical expertise, the professional knowledge acquired and the skills required in a particular field, or the competence of an individual in a certain area.
- Technological knowledge: the technique in processing information technology efficiently and the proficiency with computer programmers.
- Language proficiency: the knowledge of and proficiency in foreign languages.
- International perspectives: the ability to handle cross-cultural exchanges and cope with or adapt to the development trend of globalization.
- Multiple knowledge: a conglomeration of abilities in adapting to future changes, reflecting the future competitiveness of the youth.

The second indicator is the Basic skills competence (基礎技術能力) which consists of two elements, i.e. Living ability (生活能力) and Communication skills (溝通能力). The definition of each element is set out below:

- Living ability: abilities in self-caring, financial management and planning for the future.
- Communication skills: the ability to show and express one's opinions and feelings.

The third indicator is the Psychological features (心理特徵) which comprise the elements of Integrity (品德),

Resilience (抗逆能力), Emotion management (情緒控制) and Civic awareness (公民意識). The definition of each elements is listed below:

- Integrity: personal conduct and characters, a reflection of an individual's behavior and conduct.
- Resilience: the ability to overcome difficulties and recover from adversity after a major crisis.
- Emotion management: the ability to show and immediately change the emotions experienced in different situations.
- Civic awareness: the understanding of and concern about civil obligations and the civic values held.

The fourth indicator is the Regular soft power (恆常軟實力) which comprises such elements as Working experience (工作經歷), Thinking skills (思考能力), Team spirit (團隊合作) and Learning ability (學習能力). Below are the definitions of the elements:

- Working experience: personal experience and exposure, understanding and appreciation of interpersonal relationship as well as the values towards a job.
- Thinking skills: ability in decision-making and problem-solving, cognitive competence, goal setting capacity, creativity and a sense of moral judgment.
- Team spirit: interpersonal communication skills, comradeship, managerial and organizing capacity.
- Learning ability: motivation for and performance of learning, including both psychological and environmental factors.

The fifth indicator refers to the Inherent factor (天賦因素) of which Family resources (家庭資源) is the element. Family resources refers to the relationship between the youth and their parents.

# Operation

Participants complete the pair of pre- and post-industrial attachment questionnaires online on a voluntary basis. It shall be noted that, firstly, this is a year-round survey, so it is possible for students to participate in the survey across different reporting periods. Secondly, the arrangement of industrial attachment (i.e. duration, start- and end-time) are varied. Thirdly, data recorded from September 2018 to January 2019 was presented in this 1st Biannual Assessment Report. In other words, students who complete the pre-industrial attachment questionnaire shall start their industrial attachment within or after this period while students who complete the post-industrial attachment questionnaire shall finish their industrial attachment within or before this period. The changes would be shown if the same participant completed pre and post-industrial attachment questionnaire up to the current reporting period. The number of students participated in the pre- and post-industrial attachment survey are shown as below (see Table 1).

Table 1: Number of students completed the pre- and/or post-industrial attachment survey

Pre-industrial attachment	94

Post-industrial attachment	41
Both	12

## Result

## Pre-industrial attachment survey

## Full sample

There are 94 students (31 males and 63 females) from 3 programs (i.e. Business and Administration, Economics and Finance, and Sociology) participated in the pre-industrial attachment survey. The mean of youth competitiveness is 3.83 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.52, 3.97, 3.86, 3.93 and 3.84 respectively (See Figure 2 and Table 2).

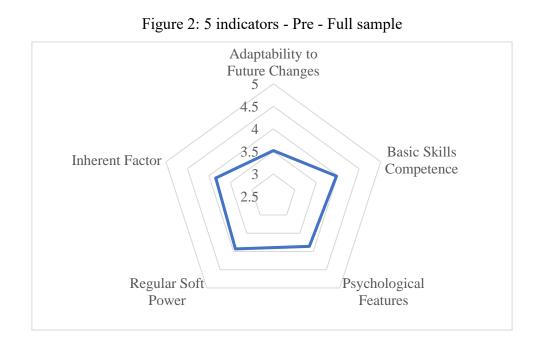


Table 2: 5 indicators and	16 elements - Pre	- Full sample
---------------------------	-------------------	---------------

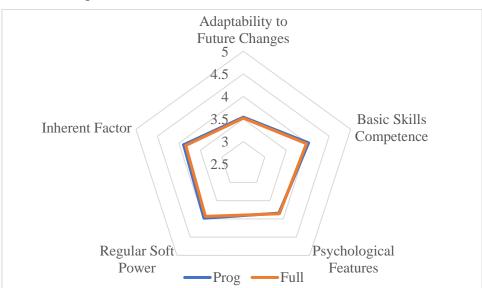
	Youth	Adaptability to	Bas	ic Skills	Psycholo	gical	Regular	Inherent
	Competitiveness	Future Changes	Con	npetence	Featur	es	Soft Power	Factor
Mean	3.83	3.52	3.97		3.86		3.93	3.84
SD	0.35	0.44		0.46	0.31		0.39	0.82
Q1	4.01	3.79		4.28	4.00		4.09	4.25
Q2	3.83	3.52		4.00	3.88		3.94	4.00
Q3	3.65	3.25		3.75	3.69		3.73	3.50
	Professional	Technological		Language		International		Multiple
	Competence	Knowledge		Profi	ciency Pe		erspectives	Knowledge
Mean	2.43	3.91	3.		74		3.99	3.55
SD	0.95	0.52	0.4		48		0.58	0.47
Q1	3.00	4.25		4.00		4.25		3.75
Q2	2.33	3.75		3.	75		4.00	3.50
Q3	2.00	3.50		3.	50		3.75	3.25
	Living	Communica	tion					Emotion
	Ability	Skills		Inte	grity	F	Resilience	Management
Mean	3.94	4.01		4.	07		3.37	3.92

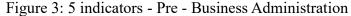
SD	0.49	0.56		0.50			0.57		0.46
Q1	4.25	4.33	4.33		4.50		3.75		4.00
Q2	4.00	4.00	4.00		.00		3.50		4.00
Q3	3.56	3.67		3.75			3.00		3.75
	Civic	Working	Thi	nking	Te	am	Learning		Family
	Awareness	Experience	S	kills	Sp	oirit	Ability	I	Resources
Mean	4.06	3.73	3	5.96	3.	99	4.03		3.84
SD	0.45	0.64	0	).44	0.	45	0.55		0.82
Q1	4.44	4.00	4.00		4.	20	4.44		4.25
Q2	4.00	3.75	3.75		4.	00	) 4.00		4.00
Q3	4.00	3.50	3	5.80	3.	60	3.50		3.50

Note: Q1, Q2, Q3 =  $1^{st}$ ,  $2^{nd}$ ,  $3^{rd}$  quarters

#### **Business** Administration

There are 46 Business Administration students (17 males and 29 females) participated in the pre-industrial attachment survey. The mean of youth competitiveness is 3.85 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.54, 4.02, 3.84, 3.98 and 3.89 respectively. To compare with the full sample, the participants from Business Administration acquire a higher value in adaptability to future changes, basic skills competence, regular soft power and inherent factors while lower in psychological features (See Figure 3 and Table 3).





Note: Prog = values for the program; Full = values for the full sample

	Yo	Youth Adaptability		bility to	Basic Skills		Psychological		Regular		Inherent	
	Competitiveness		Future Changes		Competence		Features		Soft Power		Factor	
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full
Mean	3.85	3.83	3.54	3.52	4.02	3.97	3.84	3.86	3.98	3.93	3.89	3.84
SD	0.38	0.35	0.54	0.44	0.55	0.46	0.25	0.31	0.41	0.39	0.83	0.82
Q1	4.11	4.01	4.01	3.79	4.36	4.28	3.98	4.00	4.22	4.09	4.50	4.25
Q2	3.84	3.83	3.48	3.52	4.00	4.00	3.81	3.88	3.97	3.94	4.00	4.00

Table 3: 5 indicators and 16 elements - Pre - Business Administration

Q3	3.65	3.65	3.19	3.25	3.77	3.75	3.75	3.69	3.75	3.73	3 3.50	3.50
	Prof	essional	,	Fechnolo	ogical	Lang	guage	In	ternationa	.1	Mul	tiple
	Con	npetence		Knowle	edge	Profie	ciency	Pe	erspective	s	Know	ledge
	Prog	Full	P	rog	Full	Prog	Full	Prog	g F	ull	Prog	Full
Mean	2.46	2.43	3.	.88	3.91	3.82	3.74	3.98	3 3.	.99	3.56	3.55
SD	1.10	0.95	<b>0</b>	.54	0.52	0.55	0.48	0.66	<b>5</b> 0.	.58	0.59	0.47
Q1	3.00	3.00	) 4.	19	4.25	4.25	4.00	4.19	) 4.	.25	3.75	3.75
Q2	2.50	2.33	4.	.00	3.75	3.75	3.75	4.00	) 4.	.00	3.50	3.50
Q3	1.33	2.00	) 3.	.50	3.50	3.50	3.50	3.75	5 3.	.75	3.25	3.25
	L	iving	C	ommun	ication						Emo	tion
	Ability			Skills		Inte	grity	I	Resilience		Manag	ement
	Prog	Full	P	rog	Full	Prog	Full	Prog	g F	ull	Prog	Full
Mean	4.01	3.94	4.	.02	4.01	4.05	4.07	3.35	5 3.	.37	3.97	3.92
SD	0.52	0.49	0	.69	0.56	0.46	0.50	0.52	2 0.	.57	0.34	0.46
Q1	4.25	4.25	5 4.	.58	4.33	4.44	4.50	3.75	5 3.	.75	4.00	4.00
Q2	4.00	4.00	9 4.	.00	4.00	4.00	4.00	3.38	3 3.	.50	4.00	4.00
Q3	3.75	3.56	5 3.	.67	3.67	3.81	3.75	3.00	) 3.	.00	3.75	3.75
	Civ	vic	Wo	rking	Th	inking	Te	am	Lean	rning	F	amily
	Awar	eness	Expe	rience	S	Skills	Sp	irit	Ab	ility	Res	sources
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full
Mean	3.98	4.06	3.83	3.73	3.94	3.96	4.03	3.99	4.11	4.03	3.89	3.84
SD	0.42	0.45	0.72	0.64	0.44	0.44	0.44	0.45	0.55	0.55	5 0.83	0.82
Q1	4.25	4.44	4.25	4.00	4.15	4.00	4.20	4.20	4.50	4.44	4.50	4.25
Q2	4.00	4.00	4.00	3.75	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Q3	4.00	4.00	3.50	3.50	3.80	3.80	3.80	3.60	3.81	3.50	3.50	3.50

Note: Q1, Q2, Q3 = 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> quarters; Prog = values for the program; Full = values for the full sample

#### Economics and Finance

There are 18 Economics and Finance students (9 males and 9 females) participated in the pre-industrial attachment survey. The mean of youth competitiveness is 3.80 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.52, 4.00, 3.93, 3.85 and 3.69 respectively. To compare with the full sample, the participants from Economics and Finance acquire the same value in adaptability future changes, a higher value in basic skills competence, psychological features and a lower value in regular soft power, inherent factor.

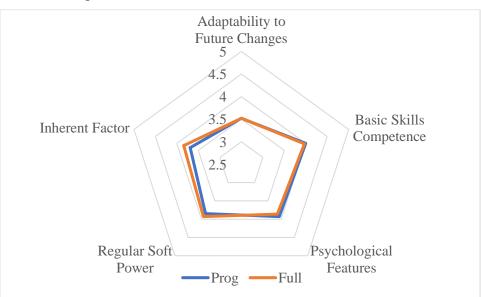


Figure 4: 5 indicators - Pre - Economics and Finance

Note: Prog = values for the program; Full = values for the full sample

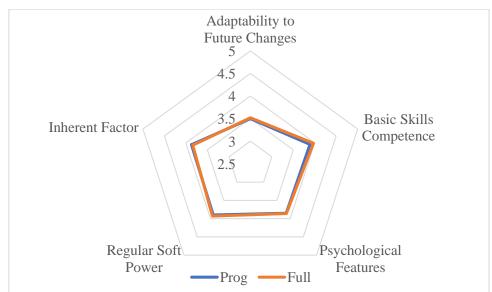
								1			<u> </u>	T 1							
	Yo Competi		-	bility to Changes		c Skills petence	Psycho Feat	e		gular Power			erent ctor						
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Ful		Prog	Full						
Mean	3.80	3.83	3.52	3.52	4.00	3.97	3.93	3.86	3.85	3.9		3.69	3.84						
SD	0.33	0.35	0.30	0.44	0.41	0.46	0.38	0.31	0.41	0.3		0.94	0.82						
Q1	3.92	4.01	3.68	3.79	4.32	4.28	4.11	4.00	3.99	4.0		4.19	4.25						
Q2	3.75	3.83	3.48	3.52	4.00	4.00	3.91	3.88	3.87	3.94		3.75	4.00						
Q3	3.53	3.65	3.34	3.25	3.75	3.75	3.58	3.69	3.56	3.7		3.25	3.50						
<b>C</b> -		essional		Fechnolog			guage		ternationa			Multi							
		petence		Knowled		-	ciency		rspectives			Knowle							
	Prog	Full	Pı	og	Full	Prog	Full	Prog	-	ull	P	rog	Full						
Mean	2.43	2.43	3.	89	3.91	3.72	3.74	4.04	3.	99	3.	.53	3.55						
SD	0.87	0.95	0.	51	0.52	0.37	0.48	0.62	0.	58	0.	.34	0.47						
Q1	2.92	3.00	9 4.	00	4.25	4.00	4.00	4.69	4.	25	3.	.75	3.75						
Q2	2.50	2.33	3.	75	3.75	3.75	3.75	4.00	4.	4.00		4.00		4.00		4.00		.50	3.50
Q3	2.00	2.00	3.	50	3.50	3.50	3.50	3.50	3.	75	3.	.27	3.25						
	L	iving	C	Communication								Emotion							
	А	bility		Skills			grity	R	lesilience			Manage							
	Prog	Full		rog	Full	Prog	Full	Prog	/			rog	Full						
Mean	3.93	3.94		07	4.01	4.07	4.07	3.67		37		.04	3.92						
SD	0.53	0.49	0.	44	0.56	0.64	0.50	0.59		57	0.	.39	0.46						
Q1	4.25	4.25		33	4.33	4.50	4.50	3.75		75		.00	4.00						
Q2	4.00	4.00			4.00	4.13	4.00	3.75		50		.00	4.00						
Q3	3.50	3.56		00	3.67	4.00	3.75	3.31		00	3.	.81	3.75						
	Ci			king		inking		am		ming			nily						
	Awar			rience		kills	-	irit		ility			urces						
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Ful		Prog	Full						
Mean	3.93	4.06	3.44	3.73	4.09	3.96	3.94	3.99	3.90	4.0		3.69	3.84						
SD	0.57	0.45	0.58	0.64	0.48	0.44	0.53	0.45	0.55	0.5		0.94	0.82						
Q1	4.44	4.44	3.94	4.00	4.40	4.00	4.15	4.20	4.00	4.4		4.19	4.25						
Q2	3.88	4.00	3.50	3.75	4.00	4.00	4.00	4.00	3.75	4.0		3.75	4.00						
Q3	3.56	4.00	3.06	3.50	3.80	3.80	3.60	3.60	3.50	3.5		3.25	3.50						

Table 4: 5 indicators and 16 elements - Pre - Economics and Finance

Note: Q1, Q2, Q3 = 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> quarters; Prog = values for the program; Full = values for the full sample

## Sociology

There are 30 Sociology students (5 males and 25 females) participated in the pre-industrial attachment survey. The mean of youth competitiveness is 3.80 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.50, 3.89, 3.85, 3.90 and 3.87 respectively. To compare with the full sample, the participants from Sociology acquire a higher value in inherent factor and a lower value in adaptability to future changes, basic skills competence, psychological features and regular soft power.





Note: Prog = values for the program; Full = values for the full sample

	You	ıth	Adapta	bility to	o Bas	ic Skills	Psycho	ological	Reg	ular	In	herent	
	Competi	tiveness	Future	Change	s Con	npetence	Feat	tures	Soft l	Power	F	actor	
	Prog	Full	Prog	Full	l Prog	Full	Prog	Full	Prog	Ful	l Prog	Full	
Mean	3.80	3.83	3.50	3.52	2 3.89	3.97	3.85	3.86	3.90	3.9	3 3.87	3.84	
SD	0.32	0.35	0.33	0.44	0.32	0.46	0.34	0.31	0.35	0.3	9 0.75	0.82	
Q1	3.98	4.01	3.68	3.79	9 4.09	4.28	4.00	4.00	4.08	4.0	9 4.19	4.25	
Q2	3.83	3.83	3.55	3.52	2 3.88	4.00	3.94	3.88	3.94	3.94	4 4.00	4.00	
Q3	3.67	3.65	3.37	3.25	5 3.61	3.75	3.69	3.69	3.77	3.7	3 3.56	3.50	
	Professional			Technological		Language		In	International		Mul	Aultiple	
	Competence			Knowledge		Profi	ciency	Pe	Perspectives		Know	ledge	
	Prog	Full	Pı	og	Full	Prog	Full	Prog	g Fi	ıll	Prog	Full	
Mean	2.37	2.43	3.	98	3.91	3.64	3.74	3.97	3.	99	3.53	3.55	
SD	0.75	0.95	0.	51	0.52	0.41	0.48	0.44	0.	58	0.34	0.47	
Q1	2.92	3.00	4.	44	4.25	4.00	4.00	4.19	9 4.	25	3.75	3.75	
Q2	2.33	2.33	3.	75	3.75	3.75	3.75	4.00	) 4.	00	3.50	3.50	
Q3	2.00	2.00	3.	75	3.50	3.31	3.50	3.75	3.	75	3.31	3.25	
	Li	iving	C	ommur	nication						Emo	otion	
	A	bility		Ski	lls	Inte	grity	F	Resilience		Manag	gement	
	Prog	Full	P1	og	Full	Prog	Full	Prog	g Fi	ıll	Prog	Full	
Mean	3.83	3.94	. 3.	96	4.01	4.12	4.07	3.23	3.	37	3.78	3.92	

Table 5: 5 indicators and 16 elements - Pre - Sociology

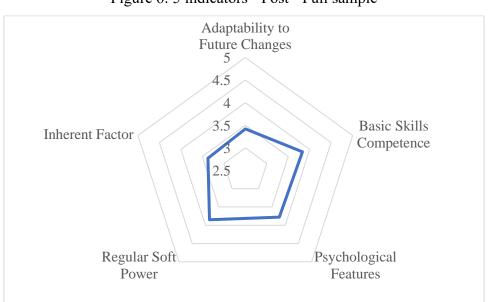
SD	0.41	0.49	0.	40	0.56	0.47	0.50	0.60	0.	57	0.61	0.46
Q1	4.00	4.25	5 4.	00	4.33	4.50	4.50	3.50	3.	75	4.00	4.00
Q2	3.75	4.00	) 4.	00	4.00	4.00	4.00	3.25	3.	50	4.00	4.00
Q3	3.50	3.56	5 3.	67	3.67	3.75	3.75	3.00	3.	00	3.50	3.75
	Civ	vic	Wor	king	Thi	nking	Te	am	Learning		Fa	umily
	Awareness		Expe	Experience		Skills		Spirit		ility	Res	ources
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full
Mean	4.26	4.06	3.77	3.73	3.90	3.96	3.95	3.99	3.98	4.03	3.87	3.84
SD	0.34	0.45	0.50	0.64	0.43	0.44	0.42	0.45	0.55	0.55	0.75	0.82
Q1	4.50	4.44	4.00	4.00	4.00	4.00	4.15	4.20	4.25	4.44	4.19	4.25
Q2	4.25	4.00	4.00	3.75	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Q3	4.00	4.00	3.50	3.50	3.80	3.80	3.60	3.60	3.50	3.50	3.56	3.50

Note: Q1, Q2, Q3 = 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> quarters; Prog = values for the program; Full = values for the full sample

### Post-industrial attachment survey

## Full sample

There are 41 students (18 males and 23 females) from 2 program (i.e. Economics and Finance, and Sociology) participated in the post-industrial attachment survey. The mean of youth competitiveness is 3.65 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.42, 3.83, 3.78, 3.85 and 3.37 respectively (See Figure 6 and Table 6).



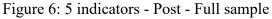


Table 6: 5 indicators and	16 el	lements -	Post -	Full sam	ple
---------------------------	-------	-----------	--------	----------	-----

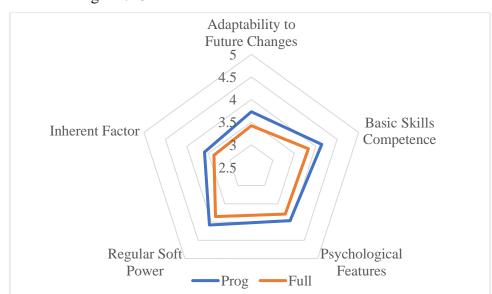
	Youth	Adaptability to	Bas	ic Skills	Psycholo	gical	Regular		Inherent
	Competitiveness	Future Changes	Competence		Featur	es	Soft Power		Factor
Mean	3.65	3.42	3.83		3.78		3.85		3.37
SD	0.42	0.47		0.47	0.36		0.47		0.86
Q1	3.97	3.65		4.00	4.00		4.09		4.00
Q2	3.61	3.40		3.79	3.81		3.83		3.25
Q3	3.34	3.12	3.54		3.63		3.60		3.00
	Professional	Technologi	cal	Lang	guage	In	ternational		Multiple

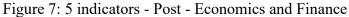
	Competence	Knowledg	ge	Profi	ciency	Pe	erspectives	Knowledge	
Mean	2.42	3.83	3.83		3.62		3.86	3.38	
SD	1.01	0.51		0.	.59		0.68	0.55	
Q1	3.00	4.25		4.	.00		4.25	3.75	
Q2	2.33	3.75		3.	.75		4.00	3.50	
Q3	1.67	3.50		3.	.25		3.50	3.00	
	Living	Communicat	tion					Emotion	
	Ability	Skills	Skills		Integrity		Resilience	Management	
Mean	3.85	3.80	3.80		4.07		3.10	3.80	
SD	0.54	0.58		0.51			0.63	0.51	
Q1	4.25	4.00		4.50			3.75	4.00	
Q2	4.00	4.00		4.00			3.25	4.00	
Q3	3.50	3.33		3.	3.75		2.75	3.75	
	Civic	Working	Tł	ninking	Tean	1	Learning	Family	
	Awareness	Experience	S	Skills	Spiri	t Ability		Resources	
Mean	4.14	3.72		3.92	3.87		3.87	3.37	
SD	0.49	0.70		0.50	0.50	)	0.74	0.86	
Q1	4.50	4.25		4.20	4.00		4.25	4.00	
Q2	4.25	3.75		4.00	4.00		4.00	3.25	
Q3	4.00	3.25		3.60	3.40	)	3.50	3.00	

Note: Q1, Q2, Q3 =  $1^{st}$ ,  $2^{nd}$ ,  $3^{rd}$  quarters

#### Economics and Finance

There are 14 Economics and Finance students (7 males and 7 females) participated in the post-industrial attachment survey. The mean of youth competitiveness is 3.90 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.73, 4.14, 3.96, 4.08 and 3.59 respectively. To compare with the full sample, the participants of Economics and Finance acquire a higher value in all the indicators (See Figure 7 and Table 7).





Note: Prog = values for the program; Full = values for the full sample

	Yo	uth	Adapta	bility to	Basi	c Skills	Psycho	ological	Reg	gular	Inh	erent
	Competi	tiveness	Future	Changes	Com	petence	Feat	tures	Soft	Power	Fa	ctor
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full
Mean	3.90	3.83	3.73	3.52	4.14	3.97	3.96	3.86	4.08	3.93	3.59	3.84
SD	0.40	0.35	0.47	0.44	0.53	0.46	0.25	0.31	0.44	0.39	0.85	0.82
Q1	4.08	4.01	3.94	3.79	4.31	4.28	4.05	4.00	4.42	4.09	4.00	4.25
Q2	3.88	3.83	3.73	3.52	4.13	4.00	3.97	3.88	4.04	3.94	3.50	4.00
Q3	3.63	3.65	3.53	3.25	4.00	3.75	3.88	3.69	3.95	3.73	3.00	3.50
	Prof	fessional		Fechnolog	gical	Lang	guage	In	ternationa	1	Multi	ple
	Con	npetence		Knowlee	lge	Profi	ciency	Pe	erspectives	5	Knowl	edge
	Prog	Full	Pı	rog	Full	Prog	Full	Prog	g F	ull	Prog	Full
Mean	2.71	2.43	3.	96	3.91	3.93	3.74	4.20	) 3.	99	3.82	3.55
SD	1.25	0.95	0.	55	0.52	0.36	0.48	0.61	0.	58	0.48	0.47
Q1	3.00	3.00	4.	44	4.25	4.00	4.00	4.69	9 4.	25	4.19	3.75
Q2	3.00	2.33	4.	00	3.75	3.75	3.75	4.00	) 4.	00	3.75	3.50
Q3	1.50	2.00	3.	75	3.50	3.75	3.50	3.81	3.	75	3.56	3.25
	L	Living		Communication							Emot	ion
	А	bility		Skills		Inte	grity	F	Resilience		Management	
	Prog	Full		rog	Full	Prog	Full	Prog	5	ull	Prog	Full
Mean	4.09	3.94		19	4.01	4.18	4.07	3.55		37	4.00	3.92
SD	0.59	0.49		55	0.56	0.42	0.50	0.39		57	0.38	0.46
Q1	4.50	4.25		50	4.33	4.50	4.50	3.75		75	4.00	4.00
Q2	4.13	4.00		00	4.00	4.13	4.00	3.50		50	4.00	4.00
Q3	4.00	3.56		00	3.67	4.00	3.75	3.31		00	3.81	3.75
	Ci	vic		king		inking		am		ming		mily
		eness	1	rience		kills	1	irit		ility		ources
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full
Mean	4.11	4.06	3.89	3.73	4.19	3.96	4.10	3.99	4.16	4.03	3.59	3.84
SD	0.39	0.45	0.59	0.64	0.46	0.44	0.55	0.45	0.55	0.55	0.85	0.82
Q1	4.25	4.44	4.19	4.00	4.55	4.00	4.45	4.20	4.50	4.44		4.25
Q2	4.13	4.00	3.88	3.75	4.10	4.00	4.00	4.00	4.13	4.00		4.00
Q3	4.00	4.00	3.50	3.50	4.00	3.80	4.00	3.60	4.00	3.50	3.00	3.50

Table 7: 5 indicators and 16 elements - Post - Economics and Finance

Note: Q1, Q2, Q3 = 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> quarters; Prog = values for the program; Full = values for the full sample

## Sociology

There are 27 Sociology students (11 males and 16 females) participated in the post-industrial attachment survey. The mean of youth competitiveness is 3.52 out of 5. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" were 3.27, 3.66, 3.68, 3.72 and 3.26 respectively. To compare with the full sample, the participants of Sociology acquire a lower value in all the indicators (See Figure 8 and Table 8). It shall be noted that those participants are who completed their industrial attachment in summer 2018 while the project has not been established. It is estimated that the participants of the coming slot with more pre-attachment support will acquire a higher value in the post-attachment survey.

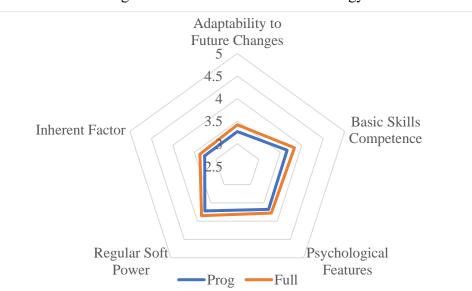


Figure 8: 5 indicators - Post - Sociology

Note: Prog = values for the program; Full = values for the full sample

	Yo	uth	Adapta	bility to	Basi	c Skills	Psycho	ological	Reg	gular	Inh	erent		
	Competi	tiveness	Future	Changes	Com	petence	Feat	tures	Soft	Power	Fa	ctor		
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full		
Mean	3.52	3.83	3.27	3.52	3.66	3.97	3.68	3.86	3.72	3.93	3.26	3.84		
SD	0.37	0.35	0.39	0.44	0.35	0.46	0.38	0.31	0.44	0.39	0.86	0.82		
Q1	3.72	4.01	3.46	3.79	3.85	4.28	3.88	4.00	3.89	4.09	4.00	4.25		
Q2	3.49	3.83	3.25	3.52	3.75	4.00	3.69	3.88	3.70	3.94	3.25	4.00		
Q3	3.32	3.65	3.09	3.25	3.46	3.75	3.59	3.69	3.51	3.73	2.88	3.50		
	Prof	essional	,	Technolog	gical	Lang	guage	In	ternationa	1	Multi	ple		
	Con	npetence		Knowled	lge	Profi	ciency	Pe	erspectives	5	Knowl	edge		
	Prog	Full	P	rog	Full	Prog	Full	Prog	g F	ull	Prog	Full		
Mean	2.27	2.43	3 3	.76	3.91	3.45	3.74	3.69	) 3.	99	3.16	3.55		
SD	0.84	0.95	5 0	.48	0.52	0.62	0.48	0.66	<b>6</b> 0.	58	0.44			
Q1	3.00	3.00	) 4	.00	4.25	3.75	4.00	4.13	3 4.	25	3.50	3.75		
Q2	2.00	2.33	3 3	.75	3.75	3.50	3.75	3.75	5 4.	00	3.25	3.50		
Q3	1.83	2.00	) 3	.50	3.50	3.00	3.50	3.25	5 3.	75	2.88	3.25		
		Living		ommunic	ation							Emotion		
	А	bility		Skills		Inte	grity	F	Resilience		Manage	ement		
	Prog	Full	P	rog	Full	Prog	Full	Prog	g F	ull	Prog	Full		
Mean	3.72	3.94	4 3	.60	4.01	4.01	4.07	2.87	3.	37	3.69	3.92		
SD	0.47	0.49	0 0	.50	0.56	0.55	0.50	0.61	0.	57	0.55	0.46		
Q1	4.00	4.25	5 4	.00	4.33	4.50	4.50	3.38	3 3.	75	4.00	4.00		
Q2	3.50	4.00	) 3	.67	4.00	4.00	4.00	2.75		50	3.75	4.00		
Q3	3.50	3.56		.33	3.67	3.75	3.75	2.50	) 3.	00	3.50	3.75		
	Ci	vic	Wo	rking	Th	inking	Te	am	Lean	rning	Fa	mily		
	Awar	eness	Expe	rience	S	kills	Sp	irit	Ab	ility	Reso	ources		
	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full	Prog	Full		
Mean	4.16	4.06	3.63	3.73	3.79	3.96	3.75	3.99	3.72	4.03	3.26	3.84		
SD	0.55	0.45	0.74	0.64	0.47	0.44	0.44	0.45	0.78	0.55	0.86	0.82		
Q1	4.63	4.44	4.25	4.00	4.00	4.00	4.00	4.20	4.00	4.44	4.00	4.25		
Q2	4.25	4.00	3.75	3.75	3.80	4.00	3.80	4.00	3.75	4.00	3.25	4.00		
Q3	3.88	4.00	3.13	3.50	3.40	3.80	3.40	3.60	3.50	3.50	2.88	3.50		

Table 8: 5 indicators and 16 elements - Post	- Sociology
--	-------------

Note: Q1, Q2, Q3 = 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> quarters; Prog = values for the program; Full = values for the full sample

### Pre- and post-industrial attachment comparison

## Economics and Finance

12 Economics and Finance participants (5 males and 7 females) completed the pair of pre- and post-industrial attachment questionnaire in this reporting period. The mean of youth competitiveness increased from 3.69 to 3.78. The indicators of "Adaptability to Future Changes", "Basic Skills Competence", "Psychological Features", "Regular Soft Power" and "Inherent Factor" increased 0.14, 0.05, 0.06, 0.17 and 0.06 respectively. The largest change was found in regular soft power. The results indicated that participation in the industrial attachment would be positively associated with the scores of the post-industrial attachment survey (See Figure 9 and Table 9).

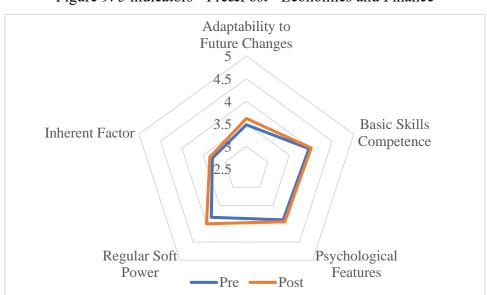


Figure 9: 5 indicators - Pre&Post - Economics and Finance

Note: Pre-mean = values for Pre-industrial attachment; Post-mean = values for Post-industrial attachment

	Youth	Adaptability to	Bas	ic Skills	Psycholo	gical	Regular		Inherent	
	Competitiveness	Future Changes	Competence		Features		Soft Power		Factor	
Pre-mean	3.69	3.48		3.96	3.89	)	3.82		3.29	
Post-mean	3.78	3.62		4.01	3.94	ł	4.00		3.35	
Change	0.10	0.14		0.05	0.06	5	0.17		0.06	
	Professional	Technologi	ical	Lang	guage	Int	ernational		Multiple	
	Competence	Knowledg	ge	Profic	eiency	Pe	rspectives		Knowledge	
Pre-mean	2.14	3.85		3.	79	4.04			3.56	
Post-mean	2.50	3.88		3.	.88		4.10		3.73	
Change	0.36	0.02		0.	08		0.06		0.17	
	Living	Communica	tion						Emotion	
	Ability	Skills		Inte	grity	R	esilience		Management	
Pre-mean	3.90	4.03		3.	98		3.73		3.98	
Post-mean	3.96	4.06		4.	17		3.54	3.98		
Change	0.06	0.03		0.	0.19		-0.19		0.00	
	Civic	Working	Tł	inking	Tear	n	Learning		Family	
	Awareness	Experience	2	Skills	Spirit		Ability		Resources	

Table 9: 5 indicators and 16 elements - Pre&Post - 1	Economics and Finance
--	-----------------------

	1 0	<b>D</b> · · · · ·	1 5	1 0	<b>D</b> • • • •	
Change	0.23	0.40	0.13	0.02	0.15	0.06
Post-mean	4.08	3.75	4.17	3.98	4.08	3.35
Pre-mean	3.85	3.35	4.03	3.97	3.94	3.29

Note: Pre-mean = values for Pre-industrial attachment; Post-mean = values for Post-industrial attachment;

Change = values for Post-industrial attachment - values for Pre-industrial attachment