Soft Skills Instructional Practices: An Investigation from the Perspective of the Immediate Stakeholders

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Abstract

This paper focuses on the training of selected soft skills among higher education students. The call for such focus was guided by the growing Graduate Employability (GE) demands from the 21st century industries and the trending competencies as documented in 'The Future of Jobs Report 2018' by World Economic Forum. In the investigation, the students' perspective became central in interpreting the current instructional practices in the higher education institutes. The training of a selected set of soft skills based on the Critical Thinking Theory namely; analyzing, information seeking, logical reasoning and transforming knowledge, was the scope of the investigation. Central to the scope of the investigation is the respondents' perceptions of their instructors' instructional practices. Hence, a quantitative research design was chosen resulting in the administration of a set of questionnaire to 110 students in a selected faculty in one of the public universities in Malaysia. A descriptive statistical analysis was done in analyzing the data. The salient findings include a medium range of mean scores across the instructional practices of the instructors across the training of most of the soft skills as perceived by the respondents. Specifically, the instructors were seen to be average at training logical reasoning (M= 3.48) and transforming knowledge (M= 3.49). The instructors were perceived to be slightly better at training the respondents analyzing (M= 3.66) and information seeking (M= 3.74). Several recommendations were highlighted including the need for the instructors to be more comfortable with scientific data and language in promoting the training of transforming knowledge skill and to encourage research-based activities in promoting the training of logical reasoning. Based on the recommendations, it is expected that the instructors themselves could consider relevant innovations in their instructional practices as an effort to produce graduates with the identified soft skills. Additionally, policy makers and curriculum developers could also benefit from the findings of the present study.

Keywords: Critical Thinking, Higher Education, Instructional Practices, Soft Skills.

Introduction
Much has been said about the importance of soft skills. Equal emphasis has been given to curriculum development that could produce graduates with relevant soft skills. The World Economic Forum (WEF) in 2016 provided a report that highlights the importance of Industry Revolution 4.0 (IR4.0) and the relevance of the soft skills as important competencies deemed vital by many industries. The recent report entitled 'The Future of Jobs' by WEF (2018) showed a slight change in the soft skills and their order of importance. Needless to say, WEF (2018) emphasized on the trending soft skills expected by industries by 2022. As a result, the last few years have seen a growing literature on the importance of soft skills, the training of skills and how they are related to Graduate Employability (GE) aside the emerging automation, robotics, cloud computing and artificial intelligence in IR4.0.

This paper saw a potential focus in addressing the development of soft skills among students in the higher education institutes. How soft skills are effectively trained across the subjects and disciplines in the universities remain an issue to many policy makers and curriculum developers. Most importantly, the academics themselves may have uncertainties in their instructional practices. Questions such as whether their practices are effective in training their students the desired soft skills or whether they are training the soft skills as they might have thought they had remain common concerns among the academics.

Hence, with those potential questions in mind, the present study was conducted. In particular, it sought to find answers to the following research questions;
   a) What are the respondents' perceptions of their instructors' instructional practices in training the relevant soft skills?
   b) What are the recommendations to be considered by the instructors in improvising their instructional practices?

Literature Review
Soft Skills
Parson (2008) describes soft skills as character traits that enable a person to interact with others, enhance work performance and potential career achievement. Amiruddin, Ngadiman, Abdul Kadir and Saidy (2016) have stated that "soft skills, generic skills, social skills, and people skills are some of the term used to denote the group of skills that include communication skills, problem-solving skills, leadership skills, etc.."(p. 15). Climatti (2017) on the other hand, claims that, "…soft skills are not only necessary in professional activity, they play a fundamental role in life. Good soft skills help people to be happy" (p. 126).

Much literature has concurred that soft skills are important components of human competencies to function effectively at work and in everyday life (Ibrahim et, 2017; Seetha, 2014; Robles, 2012). Partnership for 21st century learning (P21) indicates that the super skills include creativity and innovation, critical thinking, problem solving, communication and collaboration (2016). WEF (2016) enlisted the top ten skills needed in 2020 which are complex problem-solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgement and decision making, service orientation, negotiation and cognitive flexibility.

The impact of IR4.0 is causing routine jobs to decrease but it also creates the need for quality manpower (Bowles, 2014). Bowles (2014) and Bonekamp and Sue (2015) claim that despite the growth of robotics and the Internet of Things (IoT), soft skills are still very much in great demand. DeKay (2012) postulates that in order to be successful be it to the individual employee or the organization, soft skills are crucial. The WEF report (2018) has confirmed the trending competencies by 2022. The trending competencies are a clear indication that human capital and soft skills are the heart of any successful organization. The following are the top ten skills today and trending by 2022 as reported in 'The Future of Jobs Report' by WEF (2018).

Table 1
Skills demand comparison, 2018 vs. 2022

Today, 2018	Trending, 2022
1. Analytical thinking and innovation 2. Complex problem solving 3. Critical thinking and analysis 4. Active learning and learning strategies 5. Creativity, originality and initiative 6. Attention to detail, trustworthiness 7. Emotional intelligence 8. Reasoning, problem solving and ideation 9. Leadership and social influence 10. Coordination and time management	1. Analytical thinking and innovation 2. Active learning and learning strategies 3. Creativity, originality and initiative 4. Technology design and programming 5. Critical thinking and analysis 6. Complex problem solving 7. Leadership and social influence 8. Emotional intelligence 9. Reasoning, problem solving and ideation 10. Systems analysis and evaluation

Source: WEF (2018)

Critical Thinking
Critical thinking is a set of soft skills, which will never be outdated. Hove (2011) claims that critical thinking could enhance the employability of graduates and most importantly, critical thinking could enable any individual to survive in an unfamiliar surrounding.

Ennis (2002) states that critical thinking is equivalent to reflective thinking since it focuses on making decisions on what to believe or do. Moore and Parker (2007) further commented that critical thinking could be defined as the process to determine whether to accept or reject a statement through careful evaluation and assessment. Chance as cited in McGuire (2010) also concurs as claiming critical thinking is the ability to analyze facts, produce and establish creative ideas, defend opinions, make vital judgments, draw implications, assess opinions and solve problems.

Critical Thinking Theory by Scheffer and Rubenfeld (2000) describes critical thinking as comprising several related soft skills. However, for the purpose of the present study, only selected soft skills were investigated namely; analyzing, information seeking, logical reasoning and transforming knowledge. The following is a brief description of each of the selected soft skills.

a) Analyzing is separating or breaking a whole into parts to discover their nature, function and relationships.
b) Information seeking is searching for evidences, facts or knowledge by identifying relevant sources and gathering objectives.
c) Logical reasoning is drawing inferences or conclusions that are supported in or justified by evidence.
d) Transforming knowledge is changing or concerting the condition, nature or form or function of concepts among contexts.

The four soft skills were selected as they are thought to be closest to reflect the trending top ten skills by 2022 as reported by WEF (2018) as a whole.

Instructional Practices

In general term, instructional practices are the teaching strategies employed by the instructors in addressing behavioural, cognitive and situative aspects of learning (Darling-Hammond, 2010). Literature has documented various descriptions of instructional practices (Schachter, 2012; Scot, Callahan, & Urquhart, 2009; Stronge et al., 2011). Each of them would differ in their emphasis of effective teaching. However, there is a common understanding that instructional practices have high correlation with students' learning outcomes.

Instructional theories describe how instructors could approach their lessons in catering to the learning needs and achieving the learning outcomes. Various researches have confirmed that instructional practices have high correlation with students' outcomes (Wang, Haertel & Walberg, 1993). However, it is equally interesting to note that there is no best way to define effective teaching as claimed by Bota and Tulbure (2015). According to Bota and Tulbure (ibid.), instructional practices include the manner, methods or means in which instructors convey their information and influence their students' behaviour towards understanding and learning.

Malaysian Past Research on the Training of soft Skills

The focus on soft skills training in Malaysia has received due attention from various researchers. Most of the research has concluded that there are still rooms for further improvement in the training of these skills. Ilhaamie, Rosmawani, and Yusmini (2018) who conducted a research on Malaysian graduates discovered that most graduates lack employability skills, which were strongly associated with the soft skills much demanded by the industries.

In addressing school students training on soft skills, Tee, Samuel, Norjoharuddeen, Renuka, and Hutkemri (2018) concluded that classroom practice by teachers lack activities that build the 21st century skills, which among others emphasized on the soft skills. Tee et al. (2018) further discovered that the scenario was made worst each time there were changes in the Ministry of Education's policies. On top of that, Nair (2014) mentioned in her study that some teachers and school heads agreed that their training had a lack of focus on the 21st century skills, and some of them even claimed that those skills were not mentioned specifically.

Malaysian education has long referred to the 'Technological Pedagogical Content Knowledge (TPACK)' framework in addressing teachers' competencies. Several research

conducted have indicated similar issue concerning the need for continuous training for teachers in developing their competencies in using technology to train soft skills to their students (Hasniza and Faekah, 2016; Junnaina and Hazri, 2012; Nor'ain and Zarinawaty, 2014; Filzah, 2016).

In short, it could be concluded that though the Malaysian education system is aware of the importance of soft skills training, a lot have yet to be done in providing teachers with the exposure and professional development on the skills and the competencies in training soft skills to the students.

Methodology

The present study adopted a quantitative research design. A set of questionnaire was administered to a group of higher education students studying in a faculty in one of the Malaysian public universities. A total of 110 students (32 male; 78 female) participated as respondents in the present study. All of them were enrolled in the same program which is a degree program in English Language for Professional Communication. Hence, this demographic profile confirms the homogeneity of the respondents. Based on the research questions, the respondents provided their feedback on what they thought of their lecturers' instructional practices. Specifically, their perceptions of their lecturers' instructional practices while training them the selected soft skills were investigated.

The questionnaire was adapted from Sulaiman (2012). There are two sections in the questionnaire. The first section elicits information about the respondents' demographic profile. Section B on the other hand focuses on eliciting the respondents' perceptions of their instructors' instructional practices in training the following skills; analyzing, information seeking, logical reasoning and transforming knowledge. The respondents' responses for each item were measured on a 5-point Likert scale that ranges from 1 (never) to 5 (always). From the pilot study conducted, the Cronbach's Alpha values were .77 (analyzing), .72 (information seeking), .80 (logical reasoning) and .79 (transforming knowledge). All of the values exceeded .70, which as claimed by Fraenkel, et al (2012), indicate high reliability and good internal consistency.

A descriptive statistic analysis was employed in analyzing and interpreting the data. The data was analyzed in terms of the mean scores. The values provided further interpretations of the findings in answering the research questions. In interpreting the mean score values, Best (1989) and Degang (2010) were referred. The mean score level interpretations is signified in Table 2 below.

Table 2
Mean score level interpretation

Mean scores	Interpretation
1.00 - 1.49	Never
1.50 - 2.49	Seldom
2.50 - 3.49	Moderate
3.50 - 4.49	Almost Always
4.50 - 5.00	Always

Discussions on Findings

The following discussions provide the data analysis in answering the two research questions set at the onset of the study. As a simple descriptive statistic was employed, the mean scores for each type of soft skill were derived and interpreted. As mentioned, there are four selected soft skills investigated namely; analyzing, information seeking, logical reasoning and transforming knowledge.

Table 3 below depicts the mean scores for each attributes of the respondents' instructors' instructional practices in training them 'analyzing'. For 'analyzing', it was discovered that the overall mean score is 3.66 (almost always). Based on a 5-point Likert scale, the overall mean score of 3.66 easily reflects a high range of frequency.

Table 3

Analyzing

My lecturer…	Mean	Std. Dev.
uses in-class, creative projects involving a variety of materials	3.25	.80
uses writing assignment prompts for students to engage in textual analysis of literature	3.50	.81
uses questions for students to analyze ethical choices in small group discussions and in written summaries	3.70	.88
uses questions that ask students to describe data shown to them orally and in written form	3.92	.68
asks students to analyze primary source of texts	3.65	.86
asks students to review and analyze an area of logic	3.85	.79
Analyzing	3.66	.50

The highest mean score (3.92; almost always) was discovered for the item that denotes their instructors asking the respondents to describe the data shown to them orally or in written form. The lowest mean score (3.25; moderate) was found in the item that denotes the instructors to use in class creative projects involving a variety of materials. In interpreting the mean scores of the two items, it is obvious that the respondents have perceived their instructors to be quite dependent on existing materials in training 'analyzing'. Since the instructors did not accustom to sourcing a variety of materials or allow the students to solicit further information or materials except for using or referring to what was already available (shown to the students), it is safe to deduce that they may lack resources.

Table 4 below signifies the respondents' perceptions of their instructors' instructional practices in training them 'information seeking'. The overall mean score is 3.74 (almost always). On a 5-point Likert scale, the overall mean score for 'information seeking' is considered medium high in its frequency.

Table 4
Information seeking

My lecturer…	Mean	Std. Dev.
asks open-ended questions	3.81	.83
uses small group discussions with specific tasks assigned	4.01	.75
creates an environment in which students may ask questions that exceed my immediate familiarity	3.60	.86
demonstrates how approaches can vary and the value of searching multiple media and multiple examples	3.40	.91
encourages group work to solve problems that have multiple solutions	3.86	.84
Information seeking	3.74	.59

The instructors' instructional practice of conducting small group discussions with specific tasks received the highest mean score (4.01; almost always). This could be interpreted as an emphasis on student-centredness in class activities. This fact is further confirmed when the instructors were found to encourage group work in solving problems that have multiple solutions (mean score 3.86; almost always). The lowest mean score was discovered for the item that denotes the instructors' instructional practice in demonstrating how approaches could vary and the value of searching multiple media and examples (mean score 3.40; moderate). This finding could be related to the earlier finding in which the instructors were found to be lack of resources in training 'analyzing'.

Table 5 below depicts the mean scores for the items that measured the instructors' instructional practices in training the students 'logical reasoning'. It was discovered that the overall mean score is 3.48 reflecting a moderate range of frequency.

Table 5
Logical Reasoning

My lecturer…	Mean	Std. Dev.
uses questions that ask students to reflect on their processes of decision-making during a project's development	3.61	.75
engages students with controversial topics	3.58	.90
asks students to show evidence of critical thought by posting thoughts that arise as they are reading assigned materials	3.51	.91
asks students to observe phenomenon then form and test hypotheses about them	3.25	.92
Encourages students to convince others of the truth of a claim based on supporting facts and evidence using persuasive techniques	3.42	.92
Logical reasoning	3.48	.70

From the table, it could be seen that the highest mean score is 3.61 (almost always) while the lowest is 3.25 (moderate). The highest mean score was for the item that measured the respondents' perceptions of their instructors' instructional practice in asking them to reflect on their decision making process during project developments. The respondents also perceived their instructors to engage them with controversial topics (M= 3.58, almost always).

However, the instructors were perceived to be quite poor in training observations that lead to forming and testing hypotheses (M= 3.25; moderate). These findings could be interpreted as while the instructors seem to encourage a lot of thinking that lead to logical reasoning, there seems to be a gap in their practice to train methods in observing, forming and testing hypotheses.

The final table below, Table 6 signifies the respondents' perceptions of their instructors' instructional practice in training the 'transforming knowledge'. The overall mean score is 3.48 (moderate). As discovered for 'logical reasoning', the instructors' instructional practices in training 'transforming knowledge' is also considered as medium low in its range of frequency.

Table 6
Transforming Knowledge

My lecturer…	Mean	Std. Dev.
uses the process writing approach for major assignments where students receive feedback on drafts and parts of their projects	3.57	.89
uses research-based readings that are not "dumbed down" but rather present complex ideas in a coherent way	3.29	.90
asks students to interpret scientific language in their own words	3.27	1.05
asks students to articulate an argument that would come from a point of view other than students' own	3.66	.82
asks students to take evidence and apply it to a problem in order to produce a theory or use it to evaluate an existing theory or solution to the problem	3.62	.855
Transforming knowledge	3.48	.66

The highest mean score (3.66; almost always) was discovered for the item depicting the instructors' instructional practice in making the students articulate arguments coming from others' point of view. This followed by the instructors' practice of asking students to provide evidence-based feedback (M= 3.62; almost always). However, two items with among the lowest mean score (3.27 and 3.29; both moderate) respectively indicate that the instructors were still quite poor in bringing in 'scientific language' and complex ideas in their lessons. These findings could be deduced as the instructors' lack of confidence or interests in integrating scientific and complex materials in their lessons.

Recommendations
Several recommendations could be derived from the findings. As the overall mean scores for each soft skill training range from moderate to almost always, it is safe to conclude that the instructors were lacking some effective instructional practices in training the relevant soft skills as perceived by their students. The findings have also indicated the rooms for improvements.

First, it is recommended that the instructors to encourage a variety of materials in their lessons. Best is when the materials are provided by the students as this could denote a student-centredness. The variety of materials brought into a lesson could facilitate the training of the soft skills. Snyder and Snyder (2008) state that in order to improve students'

critical thinking skills, multiple texts could be used so that students can see different views and perspectives on certain issues or problems.

Second, it is recommended that instructors to have more trust on their students in making judgments and providing evaluations. Instructors need to realize the importance of promoting independence in thinking as well as forming and testing hypotheses of what was observed. Mahyuddin, Pihie, Elias, and Konting (2004) claim that assignments that demand students to use more analysis and less descriptions are important to promote critical thinking.

Finally, it is recommended that instructors to encourage the use of scientific language and data as well as complex materials in the learning activities. In order to encourage such an activity, the instructors themselves need to be comfortable with scientific language or terms and complex materials other than their common and familiar materials. While the students could be encouraged to provide such materials for the learning activities, it is prime importance that the instructors could provide feedback based on the related learning activities. Tsui as cited in Shim and Walczak (2012) claim that feedback can improve the critical thinking skills of the students.

Conclusion

At the onset of the present study, the concern on the training of relevant soft skills was identified. This had then led to the need to confirm how the soft skills could be trained. In turn, the present study was conducted with the two research questions in mind. The perceptions of the respondents became central in understanding how best the relevant soft skills could be trained. Several salient findings have been discussed followed by the recommendations. It is believed that the recommendations could be further explored by the instructors in innovating their own instructional practices. Policy makers and curriculum developers may also be able to benefit from the findings especially in getting a close-up to what the immediate stakeholders, i.e. the students, perceive the training they receive.

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