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A NEED ANALYSIS FOR THE TRAINING CURRICULUM MODEL

Nor Hasnida Md Ghazali^{1*}, Norazilawati Abdullah², Mohd Nazir Md Zabit³, Tajul Rosli Shuib⁴, Mahizer Hamzah⁵

- Department of Educational Studies, Universiti Pendidikan Sultan Idris, Malaysia Email: hasnida@fpm.upsi.edu.my
- Department of Educational Studies, Universiti Pendidikan Sultan Idris, Malaysia Email: nora@fpm.upsi.edu.my
- Department of Educational Studies, Universiti Pendidikan Sultan Idris, Malaysia Email: mohd.nazir@fpm.upsi.edu.my
- Department of Educational Studies, Universiti Pendidikan Sultan Idris, Malaysia Email: tajulrosli@fpm.upsi.edu.my
- Department of Educational Studies, Universiti Pendidikan Sultan Idris, Malaysia Email: mahizer@fpm.upsi.edu.my
- * Corresponding Author

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Abstract:

Work-based learning is a learning process carried out in most of a real work environment. It requires students to have the ability to apply those skills in their work environment. Developing a training curriculum model for a course is normally preceded by a need analysis. So, there is a need to do needs analysis. The aim of this study is to determine the generic skills and values required to fulfil the need of the community and the needs for the development of a training curriculum model which is trained based on the work-based learning approach. The study is using a quantitative approach which uses survey method. The samples involved are 43 trainers which are chosen through purposive sampling. Questionnaires are distributed to all the samples. Questionnaires are developed by the researcher. Data is analysed using the Statistical Package for Social Science (SPSS) version 25.0 for frequency, percentage, mean and standard deviation. The overall findings of the study show that there is no educational training either scheduled or application in the course, and there are no direct resources which focuses on generic skills and values elements. They also agree to be trained with all the seven generic skills and five values skills before they join the industry. The implication of the study is that all the elements such as the generic skills and values should be included in the training curriculum module. In conclusion, they need few generic skills and values which contributes to a training curriculum model that can facilitate a better teaching

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and learning process. Further researchers proposed are to gain data from various educational sector like community colleges and to go for in-depth research such as qualitative approach.

Keywords:

Generic Skills, Values Elements, Needs Analysis, Quantitative Approach

Introduction

Academic practitioners, professionals or the public often debate the issue of quality involving higher education students. They assume that most graduates from higher education in Malaysia are having difficulties in getting jobs as they are not good in their generic skills and values. What happen to our education system? The education system should be focused on improving these generic skills and values in our students. As we all know that education is very important in ensuring the success of a country's development. A country is a developed country not only advanced in material but also developed in their spiritual development (Anderson, 2002).

While the National Education Philosophy was formulated in 1988 and stated in the Education Act which states; "Education in Malaysia is a continuous effort towards further developing individual potential in a comprehensive and integrated way to create a balanced and harmonious person intellectually, spiritually, emotionally and physically based on faith and obedience to God. This effort is to produce Malaysians who have knowledge, skills, noble character, responsibility, and the ability to achieve personal well-being and contribute to the harmony and prosperity of the family, society, and country' (Malaysian Education Development Plan 2013-2025, 2013). Most education institutions in Malaysia have the same desire to produce a workforce that is knowledgeable in various fields and disciplines, and able to form individuals who are balanced in terms of intellectual, spiritual, emotional and physical elements based on faith and obedience to God (Nor Hasnida et al, 2021).

There are not much data concerning the needs of the trainers regarding generic skills and values. So, the researcher conducted this study based on the following objectives:

- i) Identify educational training related to generic skills and values on a scheduled basis throughout work-based-learning studies at their previous learning center.
- ii) Identify educational training related to generic skills and applied values through courses related to the field of study while following work-based-learning studies at their previous learning center.
- iii) Identify resources that are directly geared towards generic skills and values while following work-based-learning studies at their previous learning center.
- iv) Identifying the need for the application of generic skill elements based on the students' perspective.
- v) Identifying the need for the application of value elements based on the students' perspective.

Research Methodology

This study is using a design and development research as its approach for the whole research. The final objective is to produce a training curriculum model which focusing on generic elements and values for the trainers. This study is based on Richey and Klein (2007) which state that a design and development study is a study which includes a very organized and

systematic process which covers the analysis phase, design and development phase and model usability evaluation phase of a product. In this article, only the first part would be included which is the needs analysis phase. In this needs analysis phase, the need for generic skill elements and value elements will be conducted to identify the need for the development of a training curriculum model later.

This study is using quantitative approach using survey method. Surveys are one of the methods which is comprehensive and a quick way of getting information (Chua, 2013). Respondents are selected using purposive sampling. There are 43 trainers altogether for the respondents. The instrument used is the instrument is developed by the researcher from the literature reviews, past instruments and discussion among researchers and the community. The instrument consists of four sections, namely Section A: Respondents Demographics, Section B: Training background generic skills and values. Further, Section C is related to the level of agreement about the domain of generic skills and, finally Section D involves the level of agreement about the value domain. These seven generic elements consist of Training Skills, Feedback Skills, Questioning Skills, Discussion Skills, Group Skills, Presentation Skills and Writing Skills. While for the element of value, it involves five elements, namely the element of relationship with Allah SWT, the relationship with the lecturer and the relationship with friends, the element of relationship with oneself and the relationship with the environment. A 5-point Likert scale is used for sections C and D to see respondents' consent feedback on the items presented which starts from Likert scale 1 for strongly disagree until 5 which is strongly agree. The instruments are distributed online to the respondents. A pilot study was conducted before the real study is done to check for the reliability and validity of the instrument. Pilot studies are one of the most important activities for every survey study as pilot studies are used to test the best methods in administering and interpreting instruments and identifying samples and the appropriateness of the analysis methods (Mohd Najib, 2003). First, the questionnaires were given to three experts for content validity. Then, the questionnaires were distributed to 35 respondents who were not the respondents for actual study. Then, the value for reliability of the instruments were calculated based on Cronbach Alpha value as shown in Table 1.1. The accepted value for Cronbach Alpha must be more than 0.7 (Azar & Bayat, 2013).

Table 1.1: Cronbach's Alpha Value for Each Element of The Needs Analysis
Ouestionnaire

Element	Element Cronbach Alpha Value			
Generic Skills:				
Coaching Skills	0.877	5		
Feedback Skills	0.882	6		
Questioning Skills	0.910	6		
Speaking Skills	0.872	5		
Skills In Groups	0.811	5		
Presentation Skills	0.923	5		
Writing skills	0.884	5		
Values:				
Relationship With Allah SWT	0.806	6		
Relationship With Lecturers	0.702	5		
Relationship With Friends	0.836	5		

Relationship With Self	0.932	4
Relationship With Nature	0.854	5
Overall	0.822	62

The descriptive statistical data analysis described the frequency, percentage, standard deviation, and mean used for study reporting. Statistical Package for Social Science (SPSS) version 25.0 was used to analyze the data. The interpretation for descriptive analysis is based on the interpretation of the mean score by Ghazali and Sufean (2016), which states that low level for 1.00-2.00, medium-low level for 2.01-3.00, medium-high level for 3.01 - 4.00 and high level for 4.01 - 5.00.

Findings

A total of 43 graduates of the engineering program from various higher education institutions answered the distributed questionnaire. All students give answers to closed questions only. Therefore, the discussion of the findings is as follows. Table 1.2 shows the summary for Section A in the questionnaire form which is the demographics of the respondents.

Table 1.2: Demographic Analysis of The Respondents

Tuble 1:2:	Table 1.2. Demographic Analysis of The Respondents				
	Aspect	Percent (%)			
Gender	Male	35 (81.4%)			
	Female	8 (18.6%)			
Race	Malay	20 (46.5%)			
	Chinese	13 (30.2%)			
	Indians	10 (23.3%)			
	Others	0			
Religion	Islam	20 (46.5%)			
	Buddha	13 (30.2%)			
	Hindu	10 (23.3%)			
Field of study	Medical electronics	10 (23.3%)			
	Facility management	23 (53.5%)			
	Hospitality	10 (23.2%)			

If we look at Table 1.2, the number of male students (N=35) exceeds the number of female students (N=8). So, the total respondents who involved in this analysis phase of the study are 43 respondents altogether. Malay or Muslim respondents are most of the respondents which are 46.5% of all the respondents. Their field of study are three types of certificates which are medical electronics (N=10), facility management (N=23) and hospitality (N=10).

Next is to look for findings which answers all the five research questions. The first research question is 'i): Is there educational training related to generic skills and values on a scheduled basis throughout work-based-learning studies at their previous learning center?; ii): Is there any educational training related to generic skills and applied values through courses related to the field of study while following work-based-learning studies at their previous learning center?; iii) Is there any resources that are directly geared towards generic skills and values while following work-based-learning studies at their previous learning center?

Table 1.3: Respondents' Consent for Generic Skills and Value During Training

Aspect	Consent	Percentage
		(%)
Education Training of Generic Skills and Values Through	Yes	0.0
the Application of Current Field Courses while Following	No	100.0
Teaching and Learning		
Generic Skills and Values Education Training Scheduled	Yes	0.0
While Following Teaching and Learning	No	100.0
There Are Materials & Resources Directly Engaging	Yes	0.0
Generic Skills and Values while Following Teaching and	No	100.0
Learning		

Based on the findings of the study in Table 1.3, it clearly shows that all students with a percentage of 100.0% (N=43) think that there is no generic skills and values through the application of field courses and on a schedule while following the teaching and learning process during their study time. All the students (100.0%, N=43) also stated that there are no materials and resources directly involving generic skills and values while following the teaching and learning process.

Next is to answer the fourth research question which states; 'Is there a need to apply elements of generic skills based on the students' perspective?'. There are seven generic elements whose needs are measured based on the respondents' agreement where they consist of Coaching Skills, Feedback Skills, Questioning Skills, Discussion Skills, Group Skills, Presentation Skills and Writing Skills. The use of a 5-point Likert scale is used to see their agreement on all the generic elements required by the respondents.

Table 1.4: Coaching Skills

Table 1.4: Coaching Skins				
Item	Mean	Std	Score req.	
	Score	dev		
Completing the training given in the specified time	4.328	0.455	Necessary	
Manage information from multiple sources	4.250	0.472	Necessary	
Understand every piece of information delivered	4.264	0.500	Necessary	
Able to try to generate initial ideas for the problems faced	4.312	0.522	Necessary	
Able to work hard to fix a problem as soon as possible	4.255	0.502	Necessary	
Average Agreement Score	4.287	0.480	Necessary	

Table 1.4 shows the mean agreement score for coaching skills required by the respondents of is 4.287 (S. D=0.480). in general, they strongly agree that they really need the coaching skills suggested.

Table 1.5: Questioning Skills

Item	Mean	Std	Score req.
	Score	dev	
Use positive words in questioning	4.200	0.506	Necessary
Ask questions to the instructor about things that	4.402	0.492	Necessary
are poorly understood			
Ask questions to a friend about things that are	4.334	0.472	Necessary
poorly understood			
Asking open questions	4.295	0.491	Necessary
Generate thoughtful questions	4.288	0.494	Necessary
Generate simple questions	4.354	0.513	Necessary
Average Agreement Score	4.312	0.484	Necessary

Table 1.5 shows the mean agreement mean score for the Feedback Skills required by respondents with a mean agreement score value of 4.320 (S. D=0.440).

Table 1.6: Feedback Skills

Item	Mean	Std	Score req.
	Score	dev	
Negotiate by reaching an agreement	4.228	0.455	Necessary
Give feedback on what I hear	4.270	0.462	Necessary
Give feedback well and effectively	4.244	0.500	Necessary
Convince others of the decisions made	4.320	0.536	Necessary
Give an accurate description	4.294	0.529	Necessary
Give a clear explanation			
Average Agreement Score	4.320	0.440	Necessary

Table 1.6 shows the average mean score of agreement for the Questioning Skills required by the respondents with a mean score of agreement of 4.320 (S.D=0.440).

Table 1.7: Discussion Skills

Table 1.7. Discussion Skins				
Item	Mean	Std	Score req.	
	Score	dev		
Give ideas confidently during discussion	4.215	0.413	Necessary	
Make decisions based on solid evidence	4.272	0.436	Necessary	
Make a consultation after reaching an	4.292	0.491	Necessary	
agreement				
Avoid emotional influence while delivering	4.292	0.458	Necessary	
something				
Attracts the listener's attention when	4.390	0.524	Necessary	
speaking				
Average Agreement Score	4.297	0.456	Necessary	

Table 1.7 shows the mean agreement mean score for Discussion Skills required by the respondents with a mean agreement score value of 4.297 (S. D=0.456).

Table 1.8: Group Skills

Item	Mean	Std dev	Score req.
	Score		
Give ideas confidently during discussion	4.215	0.422	Necessary
Make decisions based on solid evidence	4.282	0.434	Necessary
Make a consultation after reaching an	4.291	0.491	Necessary
agreement			
Avoid emotional influence while delivering	4.293	0.456	Necessary
something			
Attracts the listener's attention when	4.380	0.524	Necessary
speaking			
Average Agreement Score	4.283	0.453	Necessary

Table 1.8 shows the mean agreement mean score for Group Skills required by the respondents with a mean agreement score value of 4.283 (S. D=0.453).

Table 1.9: Presentation Skills

Item	Mean	Std dev	Score req.
	Score		
Accept feedback from friends	4.262	0.443	Necessary
Responsible for decisions made by group members	4.277	0.451	Necessary
Build good relationships with group members	4.323	0.471	Necessary
Interact with others in group	4.262	0.443	Necessary
Work effectively with group members	4.292	0.458	Necessary
Average Agreement Score	4.283	0.453	Necessary

Table 1.9 shows the mean agreement mean score for Presentation Skills required by the respondents with a mean agreement score value of 4.283 (S. D=0.453).

Table 2.0: Writing Skills

Tuble 200 Williams			
Item	Mean	Std	Score req.
	Score	dev	
Communicate ideas clearly in writing	4.323	0.469	Necessary
Convey ideas fully confidence in writing	4.357	0.482	Necessary
Communicate ideas effectively in writing	4.390	0.484	Necessary
Writing assignments in Malay with correct	4.412	0.497	Necessary
sentences			
Writing assignments in English with correct	4.325	0.522	Necessary
sentences			
Average Agreement Score	4.363	0.495	Necessary

Table 2.0 shows the mean agreement mean score for Writing Skills required by the respondents with a mean agreement score value of 4.363 (S. D=0.495).

Next is to answer the fifth research question which states; 'Is there a need to apply elements of values based on the students' perspective?'. There are five value elements whose needs are measured based on the respondents' agreement where they consist of relationship with Allah SWT, relationship with lecturer, relationship with friends, relationship with self and relationship with nature. The use of a 5-point Likert scale is used to see their agreement on all the values elements required by the respondents.

Table 2.1: Relationship with Allah SWT

Item	Mean	Std dev	Score req.
H 11 4 C 1	Score	0.250	NT.
Humble to God	4.845	0.359	Necessary
Fulfill religious obligations	4.754	0.434	Necessary
Satisfied with the determined destiny	4.779	0.422	Necessary
Thinking of the favors given	4.733	0.477	Necessary
Thinking of all the greatness of God	4.769	0.423	Necessary
Doing good things	4.754	0.432	Necessary
Average Agreement Score	4.772	0.423	Necessary

Table 2.1 shows the mean agreement mean score for **Relationship with Allah SWT** required by the respondents with a mean agreement score value of 4.772 (S. D=0.423).

Table 2.2: Relationship with Lecturer

Table 2.2. Relationship with Decturer				
Item	Mean Score	Std dev	Score req.	
Respect the lecturer	4.692	0.465	Necessary	
Remain silent when not questioned by	4.308	0.498	Necessary	
lecturer				
Request permission in asking the	4.477	0.503	Necessary	
lecturer				
Show consistent attitude with the	4.400	0.524	Necessary	
lecturer's opinion				
Be ethical when talking to lecturer	4.539	0.502	Necessary	
Average Agreement Score	4.692	0.465	Necessary	

Table 2.2 shows the mean agreement mean score for **Relationship with Lecturer** required by the respondents with a mean agreement score value of 4.692 (S. D=0.465).

Table 2.3: Relationship with Friends

Item	Mean	Std	Score req.
	Score	dev	
Prioritize the spirit of comradeship	4.513	0.533	Necessary
Cooperate in good things	4.513	0.529	Necessary
Take care of friends' feelings	4.538	0.523	Necessary
Keep the conversation between friends	4.564	0.503	Necessary
Calling a friend by a good name	4.564	0.512	Necessary
Average Agreement Score	4.536	0.511	Necessary

Table 2.3 shows the mean agreement mean score for **Relationship with friends** required by the respondents with a mean agreement score value of 4.536 (S. D=0.511).

Table 2.4: Relationship with Self

Item	Mean	Std	Score req.
	Score	dev	
Do good to yourself	4.600	0.492	Necessary
Be responsible for yourself	4.602	0.492	Necessary
Take care of lust	4.613	0.490	Necessary
Keep yourself clean	4.621	0.476	Necessary
Average Agreement Score	4.600	0.494	Necessary

Table 2.4 shows the mean agreement mean score for **Relationship with self** required by the respondents with a mean agreement score value of 4.600 (S. D=0.494).

Table 2.5: Relationship with Nature

Table 2.5. Relationship with Nature				
Item	Mean	Std	Score req.	
	Score	dev		
Responsible in tasks involving the	4.508	0.500	Necessary	
environment			-	
Tell the truth about things that can	4.482	0.511	Necessary	
damage the environment.				
Wise in managing any development	4.473	0.501	Necessary	
towards the environment				
Transparent in matters involving the	4.492	0.502	Necessary	
environment				
Fair in making decisions involving the	4.539	0.502	Necessary	
environment				
Average Agreement Score	4.487	0.512	Necessary	

Table 2.5 shows the mean agreement mean score for **Relationship with nature** required by the respondents with a mean agreement score value of 4.487 (S. D=0.512).

The needs analysis is presented in the findings of the study. The results could be divided into four main parts which are Section A shows the demographic of the respondents, Section B is on the background of generic skills and values, Section C is on the level of agreement about the generic skills and the last section which is Section D on the level of agreement on values of the respondents.

In conclusion, from the findings of Section B, it clearly helps the researcher to know whether there is the existence and implementation of a specific training that involves generic elements and values in their previous program. In fact, the researcher also obtained information about the lack of materials and resources used in improving generic elements and value. Section C refers to the agreement of respondents to the requirements of generic elements following work-based-learning program. The generic elements measured are as follows - Coaching Skills, Feedback Skills, Questioning Skills, Discussion Skills, Group Skills, Presentation Skills and Writing Skills. Section D, on the other hand, involves the

agreement of the respondents on the value elements required for the respondents who follow work-based-learning program. The elements of value measured are as follows - relationship with Allah SWT, relationship with lecturer, relationship with friends, relationship with self and relationship with nature. The findings of this needs analysis could give information for the researchers to support the need to develop the training curriculum model for the work-based-learning. Furthermore, this information would also be a great help for the later phase in this study which is to design and develop the curriculum model.

Discussion

There is a need to develop a training curriculum model which serve as a framework and guidelines for the lecturers in higher education level to carry out training to apply and improve generic skills and values of students. Basically, the training curriculum module consists of objective, content and priorities, resources, teaching strategies and assessment. However, to ensure that the development and construction of this model is empirical and necessary, a study on the needs analysis was carried out first. In obtaining the findings of the needs analysis study, the use of questionnaires is used where it includes 4 aspects, namely the respondent demographics, the training generic skills and values, generic skills domain agreement level and value domain agreement level.

This needs analysis uses 43 trainers as respondents. They have completed their certificate from various education institutions in Malaysia. The rationale behind the selection of the respondents is because they are the groups which will be having trainings with this company. From the findings, it clearly shows that there is a gap in efforts to improve generic elements and values for the students who have gone through the work-based-learning program as there is no specific educational training for the application of the generic skills and values that are carried out. In addition, there is no material and resources which is directly geared towards the skills and values. If we look at what has been practiced in the teaching and learning process with work-based-learning approach during their previous studies, it is very necessary to focus on the process of applying the generic elements and values. This is because these students are exposed to socializing not only with fellow students but communities of various levels of workers who are in great need students' ability to build a good relationship with their learning environment. This statement is concordance with the view of a group of scholars who state that we should emphasize on the generic skills and value development in our education system so that the teaching and learning process in the classroom not only focused on certain limited fields but also other skills that is required (McNeil et. al, 2012; Barrie, 2006). Dehing and Baartman (2013) also state that the application of generic elements and values upon students should be of utmost important as it indirectly helps students in improving their skills and developing their own identity.

This argument is in line with a group of scholars who agree that students who follow work-based studies are seen as needing effective generic application because it is a learning process that is carried out based on the real world of work (Eraut, et. al, 2005; Felstead, et. al, 2005; Eraut & Hirsh, 2007). Indirectly, the effective application of generic skills and values able to form high employability skills in students, while following their teaching and learning process in the industry. This assertion is also in line with the findings of Wilton (2012) who states that the learning process based on the work-based-learning approach able to help students develop employability skills within themselves because it is to provide space for students to experience real work conditions.

It is also clear from the findings of the study for generic skills that the respondents agree that the process of applying generic elements is very important for students who follow the work-based-learning study program. There are many arguments and affirmations from past studies which state that the generic skills are a very important skill which must be instill in every student as it involves an interpersonal skill and a skill for a student (Blades et. al, 2012; Lowden et. al, 2011; Weligamage, 2009). This is also supported by Hashim (2006) by arguing that developed countries have introduced general courses of generic skills at higher education level as one of the requirements to improve students' existing skills so that they are able to survive and adapt to the rapid development of the world in this era of globalization. The mean score value for each value element also shows that the respondents agree that they really need value elements when pursuing work-based-learning at their previous colleges. This agreement is also supported by the view of scholars in the field of values who state that the element of value is an element that should be emphasized because the application and empowerment of this value element can directly help students to become good students, sincere and able to know and live a life that complies with the rules set (Sidek, 2009; Khalim & Wan Zulkifli, 2009).

From the discussion of this needs analysis phase, it is clear there is a need to develop a training curriculum model that focuses on the process of training, application and improving the elements of generic skills and values for respondents who are studying based on the work-based-learning mode.

Conclusion and Recommendation

In conclusion, there is a need to expand and develop a training curriculum model which is focusing on the generic skills elements and values of respondents. Currently, work-based learning is a learning process carried out in most of a real work environment. It requires students to have the ability to apply those skills in their work environment. If we look at the findings of this study, it clearly shows that there is no complete guidelines and framework which could help lecturers from higher educational institutions in training and applying the elements in generic skills to the students. Furthermore, the needs analysis also shows that the respondents need all the elements to apply in the industry. Finally, it is recommended that future researchers conduct more research to design and develop modules or models to help students in their future work environment.

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Corresponding Author

Name: Dr Nor Hasnida Md Ghazali

Affiliation: Universiti Pendidikan Sultan Idris

Country: Malaysia

Email ID: hasnida11@yahoo.co.uk

Address: Faculty of Human Development, Universiti Pendidikan Sultan Idris, 35900

Tanjong Malim, Perak

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