

## **Assessing the Achievements of UKM Undergraduate Law Students in Entrepreneurship Course**

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### Abstract

In line with the government's plans to produce more entrepreneurs in the country, entrepreneurship education programmes have been introduced not only for economic and business students but also to those in other faculties and at all education levels. The aim of this initiative is to create and nurture an innovative corps of entrepreneurs as a catalyst to achieving high-income and developed-nation status for Malaysia by 2020. This paper discusses the performance of non-business students in the Basic Entrepreneurship and Innovation course (CMIE1012) offered to first-year students in the 2012/13 law degree programme at Universiti Kebangsaan Malaysia. The overall performance in the assessment was analyzed using Rasch analysis. The results show that the majority of the students performed well in the course indicating that they were able to master basic entrepreneurship principles and concepts.

**Keywords:** entrepreneurship, teaching and learning method, law

### 1. Introduction

Many university graduates have difficulty in securing employment even six months after graduation. They often seek positions in government agencies or large private organizations. According to employment statistics, there were more than 400,000 unemployed in the country as at August 2015 (Department of Statistics Malaysia, 2015). Malaysia is focusing on promoting entrepreneurship development among students as a means to address this issue and to achieve the nation's objective of being a leader among developing countries by 2020 through the development of knowledge and economic catalysts that are innovative and competitive. In this regard, education programmes aimed at fostering entrepreneurial skills have been actively promoted to achieve this Vision 2020. This is one of the initiatives to expose students to opportunities for generating income through their own businesses. It is hoped that such skills will be developed and nurtured to enable students to secure jobs and be gainfully employed after completing their studies.

Accordingly, the Entrepreneurship Development Policy for Higher Education Institutions (IPT) requires such institutions to develop programmes that will enhance entrepreneurship skills among their students such as through relevant business courses and activities. In Universiti Kebangsaan Malaysia, the Center for Entrepreneurship and SME Development (CESMED) was established in October 2010 with the objective of creating and fostering the spirit of entrepreneurship among its students. The establishment of CESMED is the combination of education, entrepreneurship and the development of Small and Medium Enterprises (SMEs). Among the programmes offered by CESMED is Basic Entrepreneurship and Innovation (CMIE 1012) course which provides education in entrepreneurship fundamentals to its students and must be taken by all Year 1 students in the university.

The CMIE1012 course employs lectures, group presentations, simulations, and online quizzes in its teaching curricula. Such education is expected to foster student interest in entrepreneurship as a career and to create innovative startups and to be competitive. The students' performance is monitored to gauge their level of mastery of the course. However, total raw marks do not accurately reflect the true ability of the students which should also take into account the difficulty level of each

task given during the assessment (Azrilah et al., 2014). In the Rasch model, the total score for each person summarises the responses to all the items. A person with higher total score than another one is deemed to show more of the variable assessed (Rasch Model, 2015). This study was carried out to determine the performance of law students in the CMIE1012 course using the Rasch measurement model.

## **2. Entrepreneurship Education in Malaysia**

The rising level of unemployment among Malaysian graduates is worrying. Department of Statistics Malaysia (2015) reported that until August 2015, the unemployment rate in Malaysia had increased to 3.7% from 2.7% in the same month in 2014 (Department of Statistics Malaysia, 2015). Besides, based a report of the 2014 graduates tracer study, about 31% of the first degree graduates of the Higher Educational Institutions were unemployed (Graduates Tracer Study System, 2015). The main reason for the inability to gain employment especially among higher education graduates is the lack of English communication skills as assessed by employers during job interviews (Masturah Alias et al., 2013). Other contributing factors are the competency of lecturers and the relevance of the educational curricula to the needs of the employment market (Zaliza & Mohd Safarin, 2014).

Therefore, under the Critical Agenda Programme (CAP), the entrepreneurship education programme is significant to improve graduate employability skills among graduates from higher learning institutions. The entrepreneurship program, which is one of the important component desired under the Innovation Human Capital Development Plan aims to inculcate and expose students to the entrepreneurial values and skills such as leadership, creativity, competitiveness, and independence (Ministry of Education, 2015).

Law graduates have much scope in their choice of employment possibilities. They can be specialist lawyers focusing on a particular expertise, general practitioners handling a variety of law issues, or manage their own firms or companies. The possession of basic entrepreneurship skills is an asset in helping to establish and manage a viable company. According to Zuhairah et al. (2014), most law students from UIA who want to be entrepreneurs are interested in business as a means to secure better incomes and business opportunities. Most of them were involved in business activities and programmes and had a fairly strong interest in entrepreneurship and related programmes (Zuhairah et al., 2012; 2014). Such interest in entrepreneurship as a career option among the students is also related to the strength of motivation such as behavioral control, subjective norms, and attitude towards it (Ng Kim-Soon et al., 2014).

## **3. Assessment for CMIE1012**

The CMIE1012 course in UKM employs four methods in its entrepreneurship training programme, that is, lectures, group presentations, simulations, and online quizzes. During the lecture sessions, speakers from industry are invited to share their knowledge, experiences, and the challenges faced in their respective industries. This activity is aimed at cultivating and generating student interest in entrepreneurship.

The students are also assessed through online simulation games to expose them to critical thinking processes in business. The Mogul simulation game which is employed in the course requires students to use the capital provided to generate income and profit. The main objective of the game is to assess entrepreneur decision-making skills. In addition, the students will also be

assessed on their group presentation skills to expound on their ideas on product dissemination and entrepreneurship skills. During the session, the students have to compete with other groups in promoting and presenting the advantages of a chosen product.

All quizzes are done online. For this course, there is no written examination as it focuses on assignments and project presentations. The performance of the students was measured based on the course content comprising lectures (10%), quizzes (30%), presentations (35%), and business simulation (35%), which means 110% for the whole assessment. For final score, the marks for each student for each assessment will be summed and divide to become 100%.

This study applied the Rasch measurement model to identify the students' achievement for the assessments in this course. The Rasch model refers to the ideas, principles, and techniques that enable the measurement of latent traits. The theory puts individuals with high or excellent ability at the top of the positive logit scale and individuals with the lowest ability at the bottom negative logit scale. This model has been widely used in medicine and competency assessments to measure cognitive achievement and to evaluate the validity of instruments used in questionnaires and multiple choice exam questions (Ahmad Zamri & Nordin, 2015; Azrilah et al., 2013; Curcin et al., 2009; Siti Ajar & Anuar, 2014).

#### 4. Methodology

This study was conducted on 99 first-year students in the second semester of the 2013/2014 session in the Faculty of Law, Universiti Kebangsaan Malaysia (UKM). The group comprised 28.3% male and 71.7% female students (see Table 1).

Table 1. Respondents' profile

Profile	Frequency	%
Gender Male	28	28.3
Female	71	71.7

The students' performances for the course are shown in Table 2. Of the total, number of students, 72.4% received an A having obtained 80.0% and above marks for the overall score, 22.4% obtained A -, and 5.1% a B+. The maximum and minimum marks were 90.0% and 72.0% respectively.

Table 2. Summary of overall marks

Analysis	No.
Marks $\geq$ 80 (A)	71 (72.4%)
$79.9 \leq$ Marks $<$ 75 (A-)	22 (22.4%)
$74.9 \leq$ Marks $<$ 70 (B+)	5 (5.1%)
Mean	82.3
Standard Deviation	4.15
Maximum	90.00
Minimum	72.00

The overall data for this course was then recorded in Excel software. For the purpose of Rasch

analysis, students were coded as *nnnnXY* where *nnnn* refers to the students' ID, *X* to gender (M for male and F for female), and *Y* to ethnicity (M for Malay, C for Chinese, and I for Indian). The results from all four assessment were run in a Rasch analysis software, Winstep version 3.6.8, to obtain the logit values.

## 5. Results and Discussions

Winsteps software generates an output of summary statistics of persons and item measures (Table 3) with the *Person* referring to the student and the *Item* to the assessments. The summary statistics output reveal that the value of Cronbach alpha is 0.49, indicating that the raw data consistency is quite low.

Apart from that, the person reliability is 0.22, indicating that the ability spread of the sample of students involved in this study is low when tested against the items. The output also reveals that the average ability is at +1.48 logit, indicating that the ability of the students is above the mean difficulty of items, which is set at 0.00 logit. The separation of person (G) is 0.54, which approaches to 1, indicating the students can be grouped into one group of performance.

From the person summary statistics, we can see that seven (7) students obtained the maximum extreme score, indicating that they obtained the highest logit measures and also managed to complete all assessments given in the course.

Table. 3 Summary Statistics

SUMMARY OF 92 MEASURED (NON-EXTREME) Persons								
	RAW		MEASURE	MODEL ERROR	INFIT		OUTFIT	
	SCORE	COUNT			MNSQ	ZSTD	MNSQ	ZSTD
MEAN	91.7	9.0	1.48	0.38	0.86	0.0	1.09	0.2
S.D	5.5	0.0	0.51	0.20	0.58	0.9	1.00	0.8
MAX.	98.0	9.0	2.61	0.93	3.14	2.7	5.58	2.6
MIN.	76.0	9.0	0.55	0.20	0.18	-1.9	0.18	-0.9
REAL RMSE	0.45	ADJ.SD	0.24	SEPARATION	0.54	Person RELIABILITY		0.22
MODEL RMSE	0.44	ADJ.SD	0.27	SEPARATION	0.62	Person RELIABILITY		0.28
S.E. OF Person MEAN =	0.05							
MAXIMUM EXTREME SCORE: 7 Persons								
VALID RESPONSES: 99.9%								

Person RAW SCORE-TO-MEASURE CORRELATION = .81 (approximate due to missing data)

CRONBACH ALPHA (KR-20) Person RAW SCORE RELIABILITY = .49 (approximate due to missing data)

SUMMARY OF 8 MEASURED (NON-EXTREME) Items								
	RAW		MEASURE	MODEL ERROR	INFIT		OUTFIT	
	SCORE	COUNT			MNSQ	ZSTD	MNSQ	ZSTD
MEAN	1004.6	99.0	0.00	0.12	1.08	-0.4	1.09	0.0
S.D	63.6	0.0	0.51	0.06	0.62	2.2	0.44	1.6
MAX.	1071.0	99.0	0.66	0.21	2.19	3.3	1.74	2.1

MIN.	900.0	99.0	-0.76	0.06	0.42	-3.4	0.49	-2.6
REAL RMSE	0.15	ADJ.SD	0.48	SEPARATION	3.24	Item RELIABILITY		0.91
MODEL RMSE	0.13	ADJ.SD	0.49	SEPARATION	3.84	Item RELIABILITY		0.94
S.E. OF Person MEAN =	0.05							

MAXIMUM EXTREME  
SCORE: 1 Items  
UMEAN=.000 USCALE=1.000

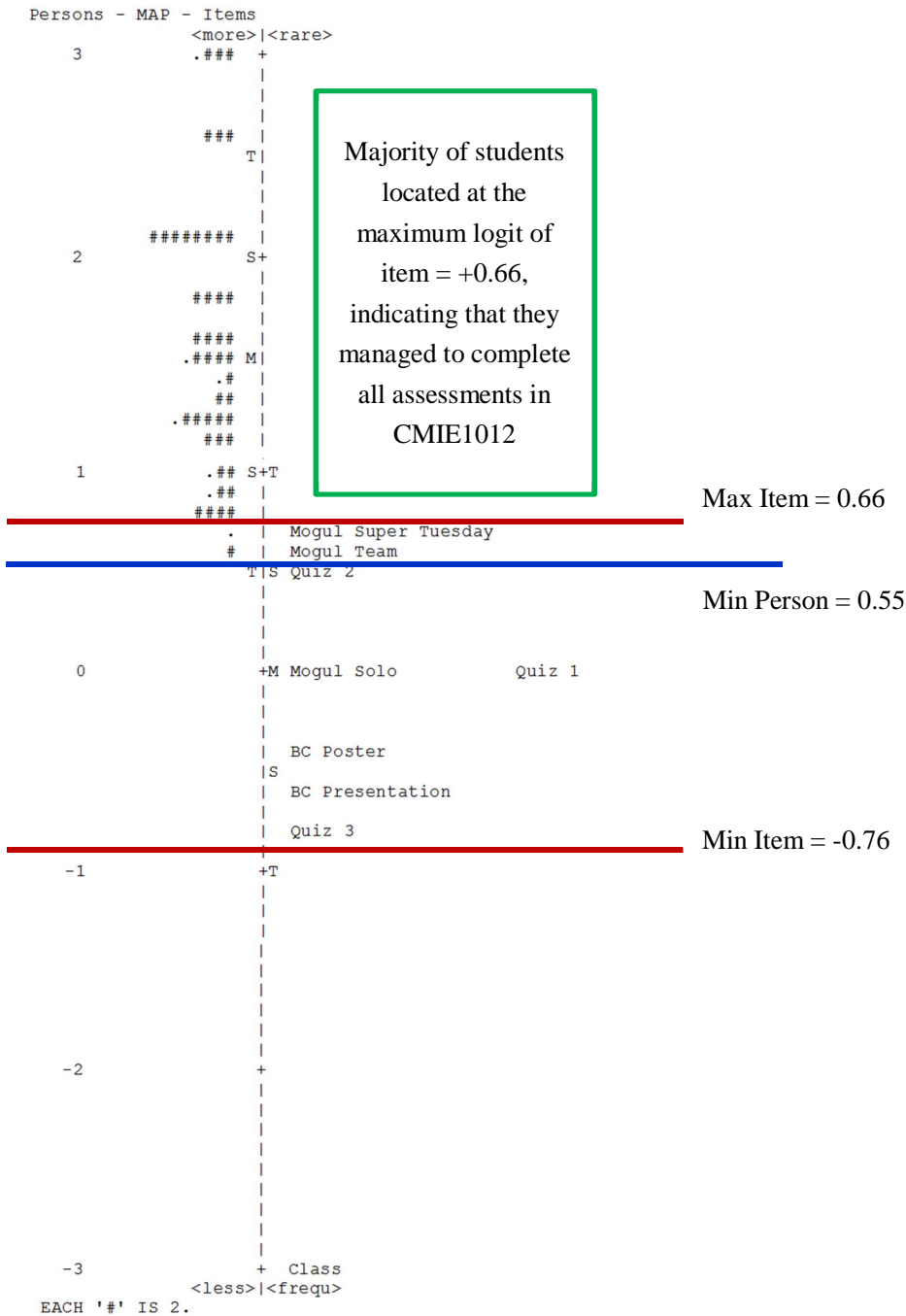


Figure 1. Person-Item Distribution Map

The summary statistics for *items* show reliability at 0.91 indicating that there is a good spread of item difficulty within the items/assessments used in this course. It also shows that the items have good difficulty measurement in measuring student ability. The separation of person (G) is 3.24, which indicates that the items can be placed into three groups of difficulty. The information from the summary statistics especially the reliability of item and person provide an indication of the difficulty and ability spread. The low reliability value shows the need for further investigation on item or construct validity (Azrilah et al., 2014).

Figure 1 shows the Wright map for the distribution of person and item for the CMIE1012 course. The Wright map shows the distribution of all persons and items on the logit measurement ruler. Most of the ten items are located below the highest persons' ability logit indicating that most of the items are considered easy for them to accomplish. The majority of students were located above the maximum logit of item = +0.66 indicating that they managed to complete all assessments in CMIE1012. From the figures, it can be seen that the easiest task was the lecture assessment while the most difficult was the Mogul Super Tuesday simulation game. The simulation game was rated fairly difficult as it challenged the business skills of the students and required them to apply the optimum decision making process in business. Overall, we also can see that the majority of the students completed all the assessments for this course.

## 6. Conclusion

The aim of this study was to identify students' performance on an entrepreneurship course. Based on the raw marks attained, most of students excelled in the course indicating that they achieved its learning outcomes. Rasch analysis also show that most of the students were able to master this entrepreneurship course extremely well and no student failed, even though there were some who had some difficulty in the Mogul simulation game. This also indicates that the students showed good performance in entrepreneurship assessments and managed to follow all the assessments and current delivery methods. Overall, based on the findings, the assessments used in this course successfully show the presence and inculcation of entrepreneurial interest and skills for UKM law students.

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