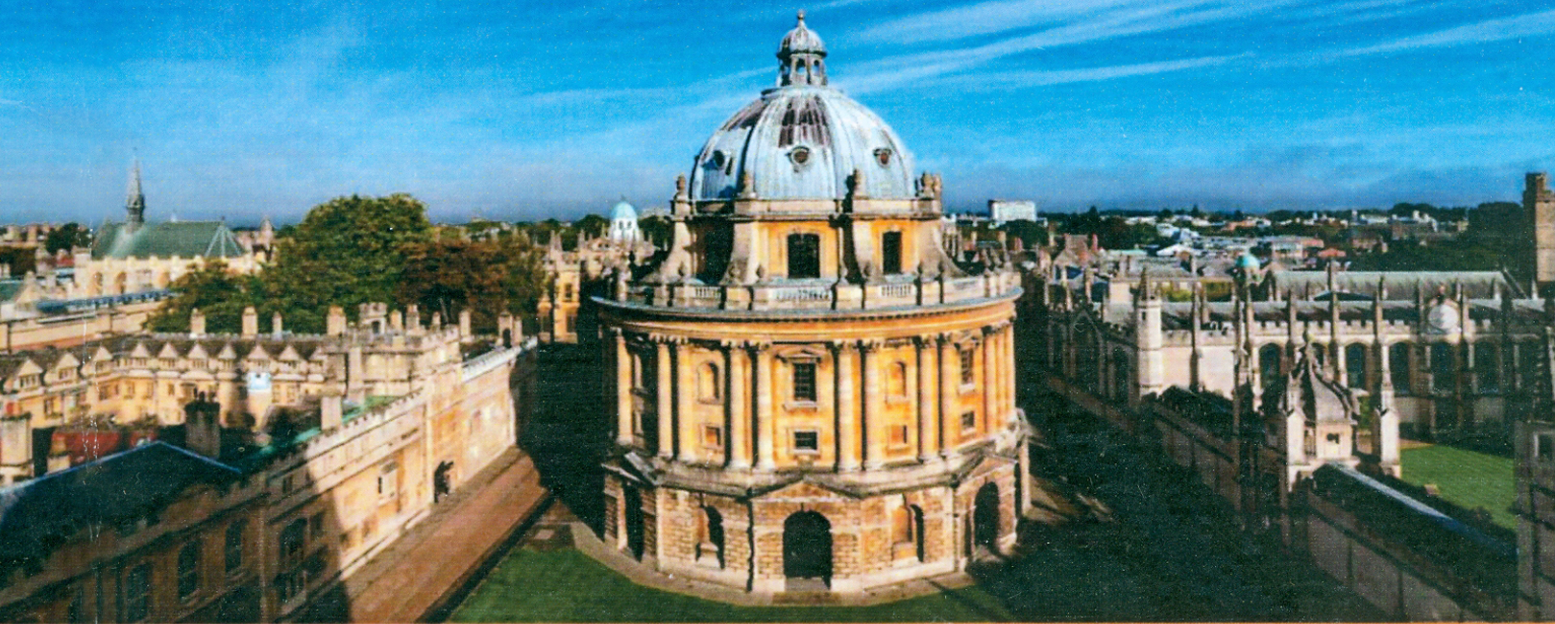


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EDITORIAL

It is my proud privilege to welcome you all to the TheIRES International Conference at Oxford, United Kingdom. I am happy to see the papers from all part of the world and some of the best paper published in this proceedings. This proceeding brings out the various Research papers from diverse areas of Science, Engineering, Technology and Management. This platform is intended to provide a platform for researchers, educators and professionals to present their discoveries and innovative practice and to explore future trends and applications in the field Science and Engineering. However, this conference will also provide a forum for dissemination of knowledge on both theoretical and applied research on the above said area with an ultimate aim to bridge the gap between these coherent disciplines of knowledge. Thus the forum accelerates the trend of development of technology for next generation. Our goal is to make the Conference proceedings useful and interesting to audiences involved in research in these areas, as well as to those involved in design, implementation and operation, to achieve the goal.

I once again give thanks to the Institute of Research and Journals, TheIIR, TheIRES & University of Management and Technology (Sialkot) for organizing this event in Oxford, United Kingdom. I am sure the contributions by the authors shall add value to the research community. I also thank all the International Advisory members and Reviewers for making this event a Successful one.

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DEVELOPMENT COMPETENCY-BASED TRAINING COURSE IN PAPER PACKAGING DESIGN FOR DESIGNER IN BANGKOK, THAILAND

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Abstract: This research was aimed for 1) to find out the qualityCompetency-based Training Course in Paper Packaging Design for Designer. (2 to establish the efficiency of the training curriculum for Paper Packaging Design for Designer. (3 to evaluate the trainees' satisfaction on the training received.The sampling group for this research were included 20 designer in Bangkok, Thailand who worked for printing industry organizations, it was found that 1) The results indicate that the quality of professional courses (the objective of the course, the teaching and learning, and assessment) the average was 4.56 in all 3 shows that the development of competency-based training course for designer is very good. 2) The efficiency of training curriculum is 89.9/87.3% which met the standard level that was 80/80%. 3) The obtained satisfaction from the sampling group to the training was on average of 4.20 which indicated the highest satisfaction level

Keywords: Competency, Paper Packaging, Designer

I. INTRODUCTION

According to survey's information in 2002, there were 2,463 registered printing house which can be calculated as 90% of all printing house in Thailand. 74% of them were in Bangkok and sub-urban. Other printing houses were spread in other regions of the country. Workers in printing and packaging industry were around 120,000 people. Researcher found that only 10% of them specifically possessed the degree in printing. Therefore, problems regarding lack of knowledge and skill development were existed in the industry. These facts pointed out that printing industry confronted difficulty in area of specialist [1] which also affected other industries, respectively. In aspect of printing industry, lacking of specialist in the area led to employment of unrelated skilled workers which increased the risk of damage in production line. In fact, students whose major was printing possessed ability to work though they were still in a college. After graduating, additionally, they had a possibility to generate higher income than others. Moreover, some printing houses also grant a scholarship to prospect students who were interested in studying printing major. Not surprisingly, printing industry was rated as 1 of 15 creative industries for free-trade in AEC 2015 which the flow of merchandise, investment, and labor were agreed upon.

Therefore, human resourced development was the urgent issue [2]it was important to develop workforce to directly serve the requirement of business area. As a result, efficiency and high competency workers would play the crucial role in development of the country, as well as,tremendously decreased production damages [3]

The printing system in the past, designers need knowledge for the job. The task needed someone with state of graphic designer to complete a quality

printing; however, such people rarely existed in the industry. These factors led to inefficiency in practice. In addition, at present, newly graduated workers were lack of skills and knowledge which greatly affected the industry. Therefore, improving the quality of printing workers in order to meet the requirement of industry was key issue to be acknowledged by other countries and can be competed to other workers at domestic and international level.[4]

Basing on relation in curriculum theory and educational theory, the educational one related to policies regarding experiences in schools, while curriculum theory was only the branch that support educational theory which was important as to other theory relating to education management [5]

II. RESEARCH OBJECTIVES

1. To find out the qualitycompetency-based training course in paper packaging design for designer.
2. To establish the efficiency of the training curriculum for paper packaging design for designer.
- 3.To evaluate the trainees' satisfaction on the training received.

III. SCOPE OF RESEARCH

The scopes of this research were detailed as follows;

1. Population was defined as graphic designer in an organization who worked for printing industry organizations in Bangkok metropolitan area. They had experience for less than 1 year and had never studied or learnt about the paper packaging design for printing.

2. Sample was defined as asgraphic designer in an organization who worked for printing industry organizations in Bangkok. They had experience for less than 1 yearand had never studied or learnt about

the paper packaging design for printing. They also had intent to cooperate with researchers to carry out this research through the method of Simple Random Sampling. The selected sample quantity was 20 people.

3. Variables

3.1 Independent variable was defined as training curriculum.

3.2 Dependent variables included;

1) Quality competency-based training course in paper packaging design for designer in bankok, Thailand

2) Efficiency of the trainees who participated in the curriculum training.

3) Trainees' satisfaction after the curriculum training.

4. Training period

The period took 5 days, 40 hours in total.

IV. RESEARCH METHODOLOGY AND DATA COLLECTION

The details of the procedures were as follows;

1. To analyze the data, study and collect knowledges regarding to a training curriculum in order to get as much detail as possible.

2. Design and development of training courses (Wichai Wongyai, 1990: 65), create outline the training curriculum by specifying the following configurations including main goals, objectives, contents, training methods, training materials, period, and evaluation and measurement. Develop research tools to be used in training curriculum with consult from the experts together with evaluation on the training quality training curriculum, and learning plan for each training unit, the curriculum to meet the set standards at 80/80 with 4 multiple choices, and questionnaires divided into 5 satisfaction levels (Likert Rating Scale, 1932: 1-55).

3. Bring the curriculum into try out on 10 people (Wat Ploysri, 2015: 36-37). Then obtain any error and mistake incurred to improve the curriculum again before it was sent out for the complete final printing. This was to achieve in revamping the curriculum to meet the set standards at 80/80. The scores from the test result both before and after the training were used for such consideration (Chaiyong Brahmawong, 2013: 6)

4. Operation training curriculum the period took 5 days, 40 hours in total. The selected sample quantity was 20 people.

5. Assessment training.

6. Locate the training participants' satisfaction level on the training received.

V. RESEARCH RESULTS

1. The improved training curriculum showed contents about manufacturing of curriculum and activity works. These works were evaluated and

approved by the experts, and they contained 9 units as follows;

Unit 1 Introduction to paper packaging design

Unit 2 Production of Printing Media

Unit 3 Paper

Unit 4 Design

Unit 5 Prepress

Unit 6 Printing Presses and Printing Systems

Unit 7 Drying Methods

Unit 8 Post Press

Unit 9 Products of Print Finishing

Unit 10 Print Quality

Table1: Summary of quality evaluation in aspect of training course by curriculum specialist.

Items	Mean	Quality Level
Course Objectives	4.52	Very Good
Instruction	4.52	Very Good
Assessment	4.64	Very Good
Mean(of all aspects)	4.56	Very Good

2. Efficiency result of the curriculum

Efficiency results of training course during learning period of each module by sample was defined as graphic designer in an Organization who worked for printing industry organizations in Bangkok metropolitan area. They had experience for less than 1 year and had never studied or learnt about the design for printing. They also had intent to cooperate with researchers to carry out this research through the method of Simple Random Sampling. The selected sample quantity was 20 people. Then identify the values of E1/E2 from the test units, each unit had 20 sections, in total 200 sections. Additionally there was a post-test divided in 100 sections. The results from all of the tests were shown below.

Table2: Efficiency results of training course during learning period of each module

Items	Attendants	Full Score	Total Score($\sum X_i$)	Efficiency
Test score during learning period of each unit (E_1)	20	100	1,798	89.9

Table3: Efficiency of curriculum in post-training

Items	Attendants	Full Score	Total Score($\sum X_i$)	Efficiency
Final post-test score (E_2)	20	100	1,746	87.3

From the table 2 and the table 3, the efficiency values of E_1/E_2 were 89.9/87.3 they were higher than expected (80/80 was the expected value from the researcher). This indicated that the efficiency values

were the success indicator for the curriculum and could be used for the sampling group.

3.Satisfaction level of the sampling group to the training curriculum

Table 4:Summarize satisfaction level on the curriculum training rated by the trainees

Evaluation subject	Mean	Level of Satisfaction
Content presentation	4.19	Hight
Resource Person	4.66	Highest
Location / Time / Food	4.21	Hight
Knowledge and understanding	3.88	Hight
Knowledge application	4.05	Hight
Mean(of all aspects)	4.20	Hight

From all aspects, the average value equaled to 4.20 this indicated that the sampling group was at the highest level of satisfaction for the curriculum training.

CONCLUSIONS AND DISCUSSIONS

The construction of training curriculum was evaluated by the experts in terms of contents and curriculum development. There was a test at the last session of each unit that the sampling group was required to do. This was to find the efficiency result of the training curriculum. There was also pre-test and post-test in order to obtain the learning results from the trainees. Such examination used on the tests came from the test warehouse picked based on behavioral objectives of the lesson. It also was well used to evaluate in accordance with the section objectives.

The results from the efficiency of the curriculum showed the value as 89.9/83.7% which was higher than initially expected. This meant that the built curriculum was with high efficiency, and could be brought into use with the sampling group.

Satisfaction of attendants onto training was scored 4.20 which mean that they are every satisfied with the course.



Fig.1



Fig.2

SUGGESTIONS

1. Results of research and development competency-based training course in paper packaging design for designer can also be applied to different courses.

2. Further research and development in training course should be done in order to improve an attitude with regards to organization including attitude evaluation.

3. In curriculum designing process, customers' requirement should be taken into account so in order to increase competency of worker and catch up with technology.

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