

<b>Thesis Title</b>	<b>A Factor Analysis that Affected e- Learning of Students at Public Universities in Bangkok Metropolitan Area</b>
<b>Thesis Credits</b>	<b>6</b>
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<b>Degree of Study</b>	<b>Master of Science in Industrial Education</b>
<b>Department</b>	<b>Technology Education</b>
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#### Abstract

The purposes of this research were to analyze and to describe the major factors that affected e- Learning of students at public universities in Bangkok metropolitan area. The samples chosen for this study were 1,014 or 97.5 % out of 1,040 students at the Faculty of Education of public universities in Bangkok metropolitan area. The instrument used for data collection was 7 rating scales. The reliability of the instrument calculated by Cronbach Alpha Coefficient was 0.92. The data was analyzed by using the means ( $\bar{X}$ ), Standard Deviation (S.D.) and Analysis of Factors by Principal Component Analysis Technique: PCA, orthogonal rotation axis by Varimax Method.

The results of the study were as follows :

1. There were 12 major factors that affected e- Learning of students at public universities in Bangkok metropolitan area as follows: 1) virtual lesson, 2) promptness of network system as well as the students' readiness, 3) useful learning, 4) feeling of persons and interesting lessons, 5) supporting thought system and equity of education, 6) supporting from the institutes, 7) personal status, 8) anyplace, anytime for education, 9) social value and the acceptance of innovation, 10) experienced and facilitated by others concerned, 11) supporting self-learning and 12) finding out knowledge and enhancing English language. These factors could be explained 63.551 % of the total variance.

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2. A study of Correlation Coefficient between 14 and 52 factors was 0.390 - 0.779 and Correlation Coefficient between 12 factors with that affected e- Learning was 0.438 - 0.863 which was in high level. Correlation Coefficient within the internal factors of 12 was 0.005 - 0.070, which was in low level.

3. The regression or predicting equation that affected e- Learning of students at public universities in Bangkok metropolitan Area was :

$$\begin{aligned} Y = & Z + 0.673(\text{Virtual}) + 0.843(\text{Network}) + 0.863(\text{Useful}) + \\ & 0.657(\text{Interesting}) + 0.701(\text{Thought}) + 0.623(\text{Supporting}) + \\ & 0.598(\text{Status}) + 0.706(\text{Any place/time}) + 0.737(\text{Value}) + \\ & 0.820(\text{Experience}) + 0.650(\text{Learning}) + 0.438(\text{Knowledge}) \end{aligned}$$

The predicting equation has the power of prediction 82.857 % and the error of predicting was 7.143.