

## **Abstract**

E-learning is a learning technology was developed in several institutions . One of the educational institutions which using e-learning is Telkom University, namely i-Caring. To know effectivity of the i-Caring, it will be evaluated regular based on the frequency of using i-Caring compared with student's academic performance . Method is used to evaluate the i-Caring is kernelized fuzzy c-means ( KFCM ) and linear regression . KFCM method is used for grouping categories of students ( high level diligence, medium level diligence, and low level diligence ). Calculation accuracy of KFCM method is comparing the cluster results from final value of students. The results are also influenced by the accuracy of the minimum error value and the rank fuzzy. Accuracy was gained from KFCM method for determining the category of students is 71.79 % . Academic performance can be determined by a linear regression calculation, it use the cluster results of KFCM method, there are value of UTS and UAS. Academic performance three cluster are high craft level is 84.58%; medium level craft is 80.14%; and low level craft is 9.46%. To sum up, frequency of accessing i-Caring had impact on student's academic performance.

Keywords : i-Caring , kernelized fuzzy c-means ( KFCM ) , linear regression , academic performance