Globalization has entered the realm of education in Indonesia and has influenced various fields, one of which is Technology. Researchers have taken the aforementioned phenomenon as a goal to harness technology for the betterment of education. By capitalizing on the advantages of gadgets and the pre-school children's interest in them, researchers have developed a simple detection application using convolutional neural network as a tool for learning. As a means to compare the classification processes, different algorithmic methods, namely SVM, were employed by the researchers. In the process of classifying data, the CNN algorithm utilizes the softmax activation function, which has the capability to normalize output values and generate probabilities for each involved class. This approach allows researchers to efficiently compare the performance of each method. This study will determine the optimal outcome based on a comparison of accuracy values, classification reports, and confusion matrix values using a dataset consisting of 1000 images of hand-drawn simple plane figures. Based on the analysis results of both the SVM and CNN models, it can be concluded that the CNN model demonstrates significantly superior performance compared to the SVM model in the analyzed classification task. The SVM model achieved an average precision, recall, and F1-score of 88%, while the CNN model achieved an average precision of 100%, recall of 100%, and F1-score of 100%.