

Universiti Teknologi MARA

**WEB-BASED ASSESSMENT
APPLICATION FOR MANAGING
AND VISUALIZING CHILDREN'S
LEARNING PROGRESS**

Nur Syahira Binti Azhar

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ABSTRACT

Assessment is important to see the performance of preschool children. Nowadays, the assessment has been done traditionally on paper and teacher need to spend lot of time to record the assessment data and visualize the record. This project focus on the children's handwriting in writing alphabet. The result of assessment includes in three levels, mastered, mastering and not mastered. Record is the most important part to easily conclude a certain things or project. The result has been recorded with visualizing in bar graph. This project help minimizes the task that teacher need to finalize in certain amount of time. The aim of this project is to display the assessment result in simple graph which is automatically visualize the result from the record. This project utilizes HTML, CSS, Javascript, PHP, SQL and Google Chart to create a bar chart of the record. Meanwhile, the handwriting part using GOCR (Optical Character Recognition) method to recognize the handwritten and to verify the children's level whether it is mastered, mastering or not mastered. The assessment part will measure the accuracy of the system in recognize the handwriting. Furthermore, the evaluation will determine the accuracy of displaying graph in visualize the children's assessment record.

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CHAPTER 1

INTRODUCTION

1.1 Project Background

Evaluation or assessment management system is important for the effective and efficiency in monitoring children's learning progress in education. According to Hamre and Pianta (2010) assessment as part of monitoring the performance of student in learning. The assessment management usually organizes features of teacher-student interactions into three major domains which are, emotional supports, classroom organization, and instructional supports. This approach have been assessing and validated for the grades of prekindergarten to five, with supported the structure of dimensions and domains across grades and across content areas (Allen J., Gregory A. et al., 2013). Assessment is important for the result of affective learning in class.

Preschool education is the early learning for children develop more knowledge. After those children gain new knowledge from the class syllabus, they had to be test of what their improvement from the learning. Therefore, assessment is the method that teachers come out for assessing the preschool children. In preschool standard, teachers does not take deeply initiative to improve the method of assessment given where is they basically deliver the assessment with using paper which is known as traditional method. These methods decrease the credibility of preschool student in facing modern. Thus, the initiative using web-based environment helps teachers doing assessment to student more effective and