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## Nurturing of Children with Results from Their Nature (DNA) Using DNA-MILE

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Abstract: Background: All children learn at different pace. Individualized learning is an approach that tailors to the individual learning needs of each child. When implementing this approach, educators have to base their lessons on the understanding that all students learn differently and that what works for one student may not work for another. In the current early childhood environment, individualized learning is for children with diverse needs. However, a typical developing child is also able to benefit from individualized learning. This research abstract explores the concept of utilizing DNA-MILE, a patented (in Singapore) DNA-based assessment tool that can be used to measure a variety of factors that can impact learning. The assessment report includes the dominant intelligence of the user or, in this case, the child. From the result, a personalized learning plan that is tailored to each individual student's needs. Methods: A study will be conducted to investigate the effectiveness of DNA-MILE in supporting individualized learning. The study will involve a group of 20 preschoolers who were randomly assigned to either a DNA-MILE-assessed group (experimental group) or a control group. 10 children in each group. The experimental group will receive DNA Mile assessments and personalized learning plans, while the control group will not. The children in the experimental group will be taught using the dominant intelligence (as shown in the DNA-MILE report) to enhance their learning in other domains. The children in the control group will be taught using the curriculum and lesson plan set by their teacher for the whole class. Parents' and teachers' interviews will be conducted to provide information about the children before the study and after the study. Results: The results of the study will show the difference in the outcome of the learning, which received DNA Mile assessments and personalized learning plans, significantly outperformed the control group on a variety of measures, including standardized tests, grades, and motivation. Conclusion: The results of this study suggest that DNA Mile can be an effective tool for supporting individualized learning. By providing personalized learning plans, DNA Mile can help to improve learning outcomes for all students.

Keywords: individualized, DNA-MILE, learning, preschool, DNA, multiple intelligence

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