UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

BUDGET ALLOCATION FOR PRESCHOOL USING DYNAMIC PROGRAMMING METHOD

P42S19

MUHAMMAD AMIRUL AMIN BIN AZHARI (2017972925)
MUHAMMAD FAEZUDIN HAFIZ BIN MOHD NOR (2017309227)
NURSHAHADAH ALIYAH BINTI MALIKI (2017355539)

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IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

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ABSTRACT

Budget allocation for government preschool will always different every year. It will cause some difficulties to the preschool management to manage their spending well. But the main problem faced by preschool management is the challenges to minimize the balance of the budget at the end of the year. Therefore, it will affect the preschool management to operate well. This research intended to analyse the preschool budget data and optimizing the preschool budget allocation by minimizing the budget balance. Dynamic Programming method was used to solve the problem by optimizing the preschool budget allocation problem by dividing a problem into subproblem that can lead to an optimal solution. The Dynamic Programming problem is solved using lingo software. Dynamic Programming shown the optimize value for preschool to spend their preschool budget well. Furthermore, the preschool management also can know which part of budget allocation they should spend more. These findings of this study will help the preschool management in planning their budget allocation and budget spending so that they can operate the preschool well and prepare the children for the academic and social transition to primary school. Finally, this model can also be applied in other related areas.