Result

Playing Matches ************************************	
Match # Opponent AB_Improved AB_Custom A	AB_Custom_2 AB_Custom_3
	Won Lost Won Lost 10 0 8 2 6 4 6 4
3 MM_Center 9 1 9 1 4 MM Improved 4 6 5 5	7 3 7 3 6 4 8 2
5 AB_Open 6 4 7 3 6 AB_Center 5 5 6 4	5 5 6 4 4 6 6 4
7 AB_Improved 5 5 7 3 	5 5 6 4

Analysis

When comparing with AB_Improved, AB_Custom raise the overall Win Rate for about 4.3% However, AB_Custom performed slightly worse when battle with MM_Open.

Reasoning of custom_score

By evaluating the number of legal move to the power of two minus the number of legal move of opponent, we increase my chance to pick the path with higher number of legal move comparing with opponent

Reasoning of custom_score_2

By evaluating the available spaces minus the number of the legal move of the opponent, we limit the number of the legal move of the opponent. Hence, increase my number of the legal move of the opponent.

Reasoning of custom_score_3

By evaluating the number of common moves between mine and opponent, increase my chance to invade opponent's territory and limit opponent's move