Based on the provided results, the MLPClassifier (Artificial Neural Network) is being chosen over Logistic Regression due to its superior performance across multiple metrics.

1. **Accuracy**: The MLPClassifier achieves a higher accuracy score (0.819) compared to Logistic Regression (0.751), indicating that it makes more correct predictions overall.

2. **Precision**: The precision of the MLPClassifier (0.792) is higher than that of Logistic Regression (0.709), suggesting that it is better at correctly identifying positive instances among all instances it predicts as positive.

3. **Recall**: The MLPClassifier has a higher recall (0.858) compared to Logistic Regression (0.836), indicating that it can better capture the true positive instances from the total actual positive instances in the dataset.

4. **F1 Score**: The F1 score of the MLPClassifier (0.824) is higher than that of Logistic Regression (0.768), indicating a better balance between precision and recall.

Given these results, the MLPClassifier is preferred due to its ability to capture complex relationships in the data, learn feature interactions, and provide superior predictive performance across various evaluation metrics.