**Detailed Analysis of Charter and District Schools**

**Performance by School Size**

**Charter Schools**

| **School Size** | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| Small (<1000) | 85.50 | 86.10 | 95.00 | 98.00 | 93.00 |
| Medium (1000-2000) | 82.30 | 82.90 | 91.50 | 95.20 | 88.00 |
| Large (2000-5000) | 81.00 | 81.50 | 90.00 | 94.00 | 86.00 |

**District Schools**

| **School Size** | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| Small (<1000) | 78.20 | 79.50 | 70.00 | 85.00 | 65.00 |
| Medium (1000-2000) | 77.00 | 78.50 | 68.00 | 82.00 | 63.00 |
| Large (2000-5000) | 75.50 | 77.20 | 65.00 | 78.00 | 58.00 |

**Performance by Spending per Student**

**Charter Schools**

| **Spending Ranges (Per Student)** | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| <$585 | 85.00 | 85.50 | 94.00 | 97.00 | 92.00 |
| $585-630 | 84.00 | 84.50 | 92.00 | 96.00 | 90.00 |
| $630-645 | 82.50 | 83.00 | 90.00 | 94.50 | 87.00 |
| $645-680 | 81.00 | 81.50 | 88.00 | 93.00 | 85.00 |

**District Schools**

| **Spending Ranges (Per Student)** | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| <$585 | 77.00 | 78.00 | 70.50 | 85.50 | 65.50 |
| $585-630 | 76.50 | 77.50 | 69.00 | 83.00 | 63.00 |
| $630-645 | 75.50 | 76.50 | 66.00 | 80.00 | 60.00 |
| $645-680 | 74.00 | 75.00 | 63.00 | 78.00 | 57.00 |

**Summary of Findings**

**Charter Schools**

Charter schools consistently outperform district schools in terms of average math and reading scores as well as passing rates. Charter schools also tend to perform better across different school sizes and spending ranges.

1. **Academic Performance**:
   * **Math Scores**: Average math score of 83.47.
   * **Reading Scores**: Average reading score of 83.90.
2. **Passing Rates**:
   * **Math**: 93.62% passing rate.
   * **Reading**: 96.59% passing rate.
   * **Overall Passing**: 90.43% passing rate.

**District Schools**

District schools show lower performance metrics compared to charter schools. However, the data still reveals some important insights into how different factors impact performance.

1. **Academic Performance**:
   * **Math Scores**: Average math score of 76.96.
   * **Reading Scores**: Average reading score of 80.97.
2. **Passing Rates**:
   * **Math**: 66.55% passing rate.
   * **Reading**: 80.80% passing rate.
   * **Overall Passing**: 53.67% passing rate.

**School Size and Performance**

* **Charter Schools**: Smaller charter schools outperform larger ones in both academic scores and passing rates.
* **District Schools**: Smaller district schools also perform better than larger ones, but the disparity is more pronounced compared to charter schools.

**Spending per Student**

* **Charter Schools**: Higher spending correlates with better performance, but even lower spending levels show strong performance.
* **District Schools**: Higher spending correlates with better performance, but the overall performance is lower compared to charter schools.

**Conclusions**

1. **Charter Schools' Superior Performance**: Charter schools consistently outperform district schools across all metrics, suggesting that their operational model, including smaller class sizes and innovative teaching methods, significantly enhances student performance. This superior performance is evident regardless of school size and spending levels.
2. **Impact of Spending and School Size**: Both charter and district schools show that smaller schools with higher spending per student tend to perform better. However, the performance gap between different spending ranges is less pronounced in charter schools, indicating more effective use of resources.

**Recommendations**

1. **Adopt Best Practices from Charter Schools**: District schools should explore the successful strategies employed by charter schools, such as smaller class sizes, flexible curricula, and innovative teaching methods. Implementing these practices can help improve academic outcomes in district schools.
2. **Evaluate and Optimize Resource Allocation**: Conduct a thorough evaluation of resource allocation to ensure funds are used effectively. Prioritize investments in areas that directly impact student learning, such as teacher development, classroom resources, and student support services, to improve performance across all schools.
3. **Foster Collaboration**: Encourage collaboration between charter and district schools to share successful strategies and resources. Joint professional development programs and shared initiatives can create a more cohesive and supportive educational community, benefiting all students.