

Financial Analysis

Successful&Unsuccessful Charter Schools

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Introduction

Financial management performs a crucial part of operating a Montessori Charter School. Failed management will cause catastrophic results. This analysis shows insights of the financial difference between successful Montessori Charter Schools and unsuccessful Montessori Charter Schools.

Basic Information of studied Montessori Charter Schools

In this analysis, two successful Montessori Charter Schools and one unsuccessful Montessori Charter School has been studied. The successful cases contains Willow Oak Montessori and Island Montessori Charter School, while the unsuccessful case is Montessori Academy of Cornelius. Financial projections from 2013-2014 to 2017-2018 will be studied.

Revenue

Revenue of Montessori Charter Schools mainly formed by three parts: (i) State ADM Funds; (ii) Local Per Pupil Funds; (iii) Federal Funds. State ADM Funds is the main income of Montessori Charter Schools , which usually equals to 60% of total revenue, while Local Per Pupil Funds and Federal Funds equals to 34% and 6% of total income, respectively.

Expenses

Expenses of Montessori Charter Schools usually consists of *personnel, employee benefits, staff development materials, supplies instructional equipment, office equipment, testing materials, insurance, utilities, rent, maintenance&repair, transportation, marketing, food/cafeteria supplies, professional development and contracted services*. Personnel part and employee benefits part is the major expenditure of Montessori Charter Schools, which usually equals to 85% of total expenses of successful Montessori Charter Schools.

Analysis

Revenue

According to Table 1, the total income of three under-studied charter schools (both successful and unsuccessful) increased steady each year, which is caused by the increasing number of enrolled students (see Appendix Table). The differences between these schools are also caused by different students enrolled, for the government's sponsoring policy.

Table 1 Total income of each school

| Year | Cornelius | Island | Willow Oak | |
|-----------|-----------|-----------|------------|-----------|
| 2013-2014 | | \$488451 | \$1074442 | \$716156 |
| 2014-2015 | | \$645187 | \$1252299 | \$954877 |
| 2015-2016 | | \$817571 | \$1433806 | \$1190036 |
| 2016-2017 | | \$974307 | \$1793170 | \$1428844 |
| 2017-2018 | | \$1146990 | \$1793170 | \$1671033 |

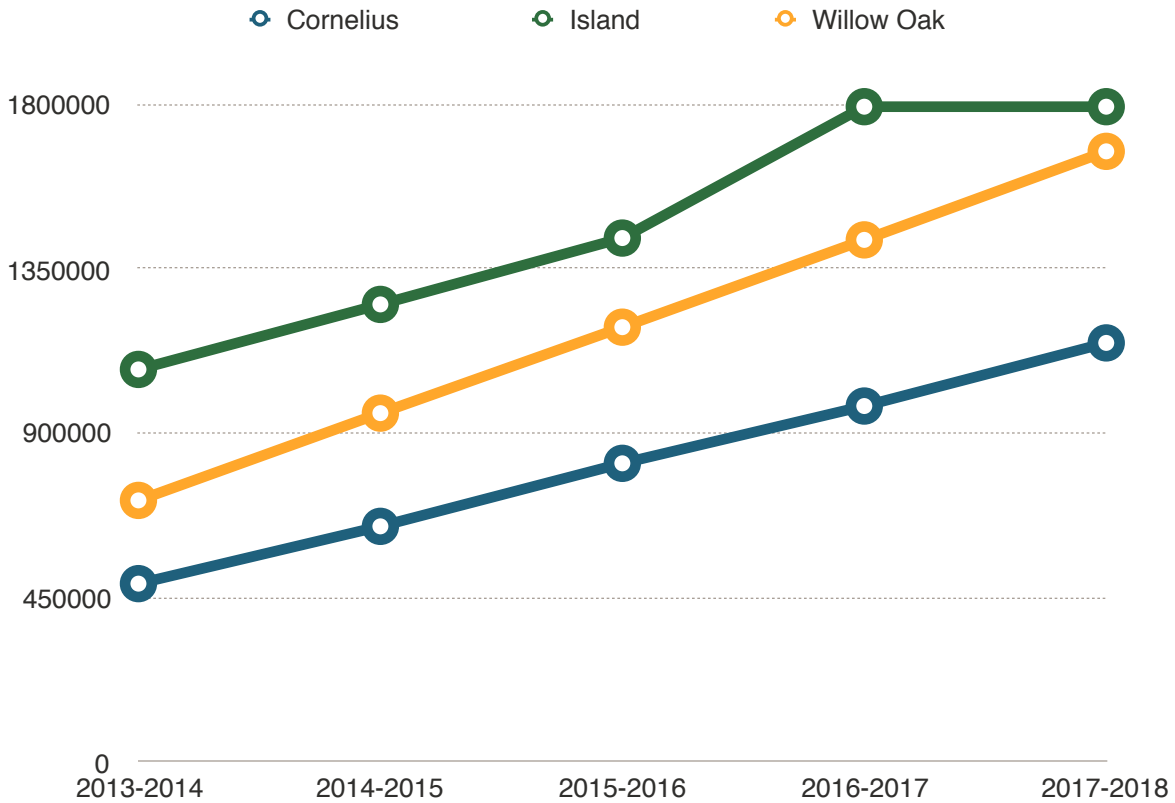


Figure 1 Total income of each school

Student-faculty ratio

A school which has low student-faculty ratio can serves students better in many ways (i.e. providing smaller classes and one-to-one attention). Conversely, a extraordinarily high student-faculty ratio will cause the poor quality of education provided. According to the Table 3, the number of students in Cornelius School (unsuccessful school) increased from 72 to 168 from 2013-2014 to 2017-2018. However, the number of faculty do not increase, which give rise to the student-faculty ratio increasing dramatically, from 8.0 to 18.7. While the successful Montessori Charter Schools, including Willow Oak Montessori and Island

Montessori Charter School, always keep the student-faculty ratio around 10 by keep recruiting teachers with respond to the increasing number of enrolled students each year (see Appendix Table).

Table 2 Student-faculty ratio of Cornelius School

| Year | # Students | # Faculties | Student-faculty ratio |
|-----------|------------|-------------|-----------------------|
| 2013-2014 | 72 | 9 | 8.0 |
| 2014-2015 | 96 | 9 | 10.7 |
| 2015-2016 | 120 | 9 | 13.3 |
| 2016-2017 | 144 | 9 | 16.0 |
| 2017-2018 | 168 | 9 | 18.7 |

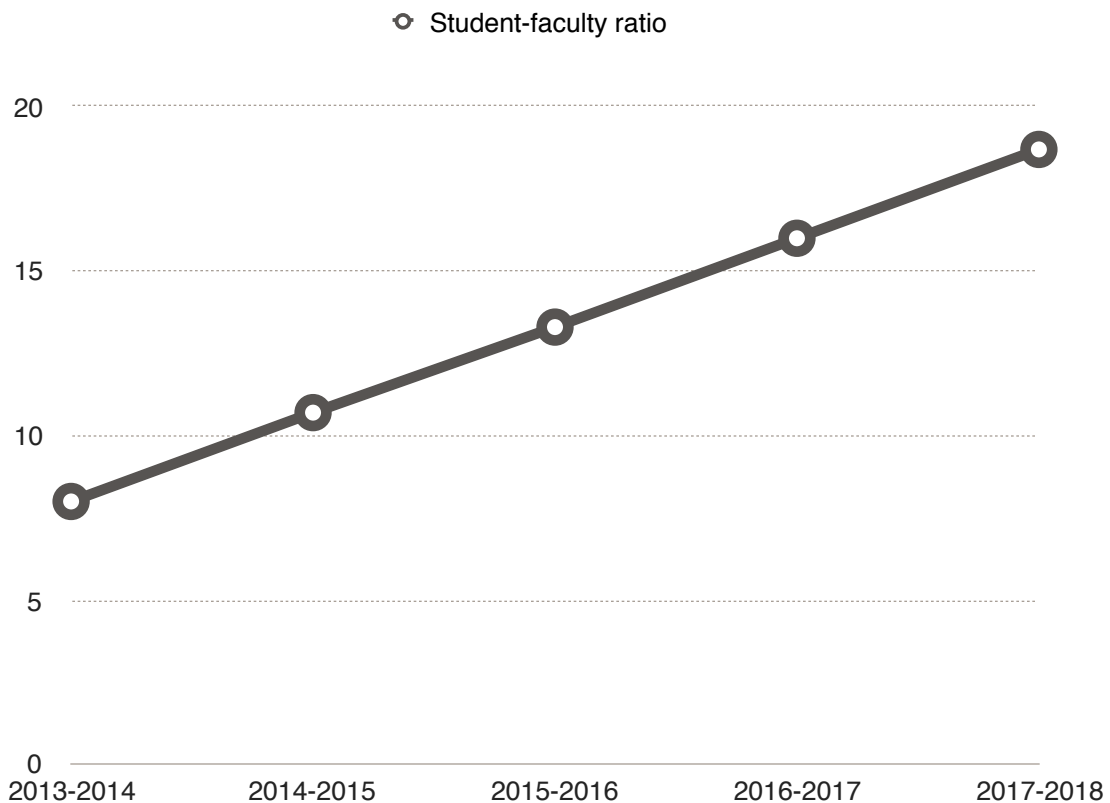


Figure 2 Decreasing faculty-student ratio in unsuccessful school

Personnel Expenses

According to Table 3, although the number of faculties do not change each year, the average expense on each faculty ascend significantly, from \$30850 per person in 2013-2014 to \$63432 in 2017-2018 period. While, for the two successful schools, expense per faculty keep

stable each year. Moreover, according to the Appendix Table, the ratio of total personnel expense to total expense, of both successful schools and unsuccessful school, do not change largely each year, which means that they all spend a nearly fixed ratio of the increasing revenue on personnel expenses each year. Although two successful schools do the same way, Willow Oak Montessori and Island Montessori Charter School use a part of increased income to hire more faculty, but not keep the number of faculties fixed and spend more money on each faculty, the way Montessori Academy of Cornelius did. Consequently, accompanied by the increasing number of students enrolled each year, hiring more faculty is more efficient. This also exerts a positive influence on increasing student-faculty ratio, which is important to provide high-quality education to students.

Table 3 Expense per faculty

| Year | Cornelius | Island | Willow Oak |
|-----------|-----------|---------|------------|
| 2013-2014 | \$30,850 | \$28500 | \$27691 |
| 2014-2015 | \$40045 | \$28893 | \$28526 |
| 2015-2016 | \$54033 | \$29645 | \$29720 |
| 2016-2017 | \$63432 | \$32056 | \$30711 |
| 2017-2018 | \$75140 | \$32056 | \$31461 |

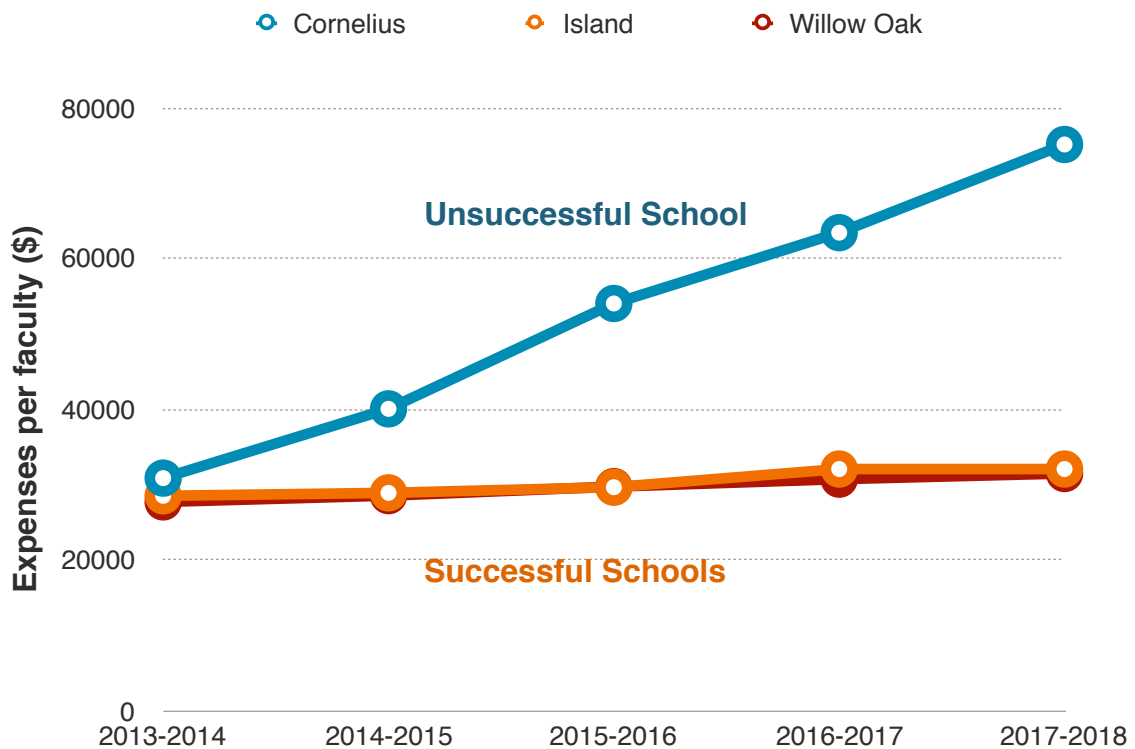


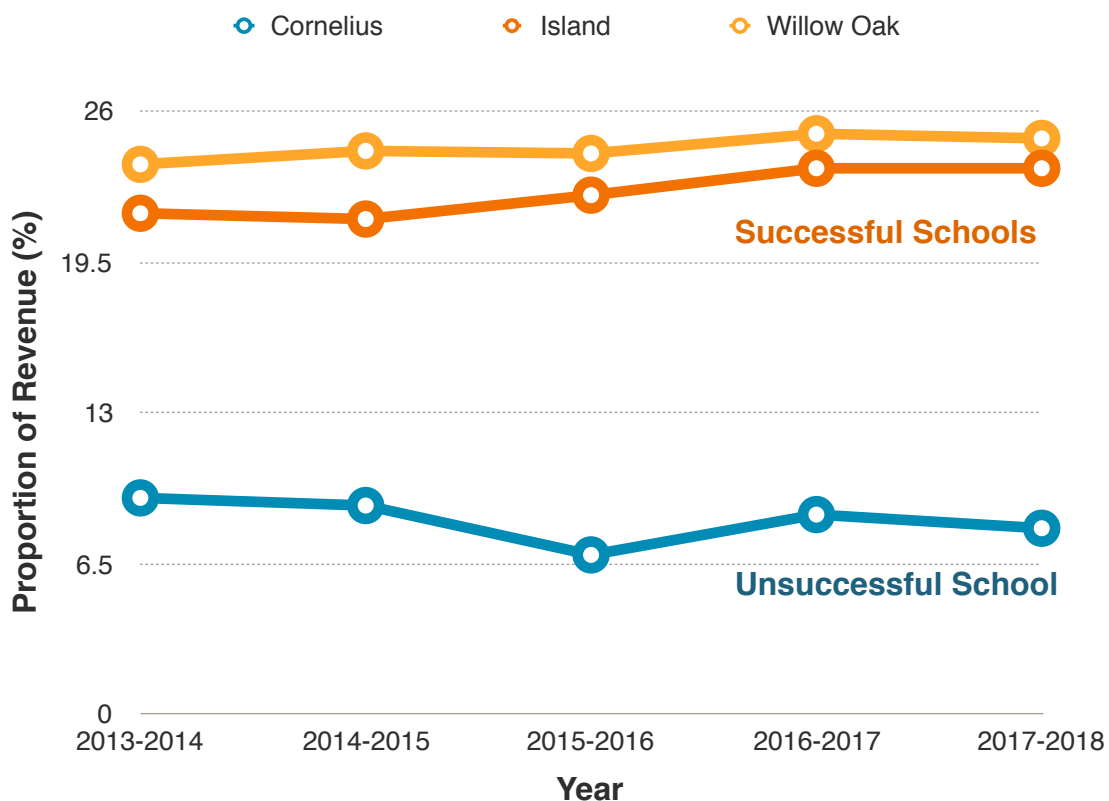
Figure 3 Comparison of expense per faculty

Expenses on Employee Benefits

According to Table 4, the unsuccessful school spent a relatively small proportion of revenue on employee benefits. Although offering a high wage in a job ad instead of benefits might attract applicants at first, employee benefits is of significance to retain employees. In other words, a high salary is helpful to attract experienced teachers, however, an appropriate employee benefit is helpful to keep experienced teachers stay in the school. Moreover, experienced teachers not only have a good way to teach students, but also can impel the school develop in the right direction. Besides, a team with less member changes could be more cohesive, which is also important to keep the school operating well.

Table 4 Proportion of Revenue spent on Employee Benefits

| Year | Cornelius | Island | Willow Oak |
|-----------|-----------|--------|------------|
| 2013-2014 | 9.32% | 21.6% | 23.71% |
| 2014-2015 | 8.99% | 21.35% | 24.29% |
| 2015-2016 | 6.86% | 22.38% | 24.18% |
| 2016-2017 | 8.6% | 23.54% | 25.03% |
| 2017-2018 | 8.01% | 23.54% | 24.83% |



Expenses on Instructional Equipment

According to Table 5, Montessori Academy of Cornelius spent excessive money on purchasing instructional equipment. Although employing instructional equipment is a good way assisting teacher to provide high-quality education, a school with extraordinarily low student-faculty ratio cannot benefit from it.

Table 5 Expenses on Instructional Equipment

| Year | Cornelius | Island | Willow Oak |
|-----------|-----------|---------|------------|
| 2013-2014 | \$34040 | \$750 | \$22000 |
| 2014-2015 | \$31400 | \$9000 | \$18000 |
| 2015-2016 | \$45580 | \$10000 | \$20183 |
| 2016-2017 | \$26040 | \$20000 | \$22278 |
| 2017-2018 | \$60360 | \$20000 | \$28500 |

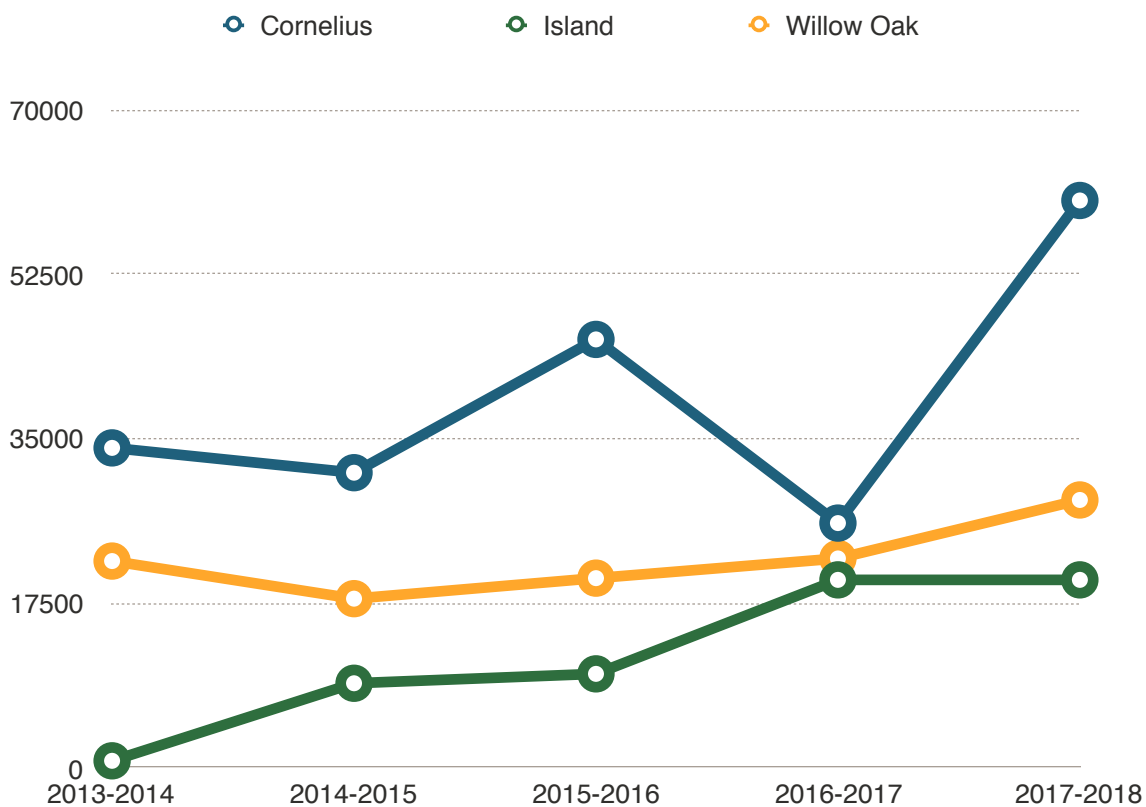


Figure 4 Expenses on Instructional Equipment