

# What's Our Plan?

An Analysis of Improving Overall  
Student Achievement of Advanced  
Regents Diplomas

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EDU 5650

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# INTRODUCTION



# Purpose of Study

This study was conducted so that the researcher could analyze available data from comparable districts to evaluate how higher levels of student achievement can be fostered for secondary students. An aspiring district will be used to gauge a desirable level of achievement.

Looks great...what's the issue here?



# Problem Statement

To progress toward higher levels of student achievement, i.e. Advanced Regents Diplomas, as students transition from primary to secondary schools, the district needs to evaluate areas that can foster this type of success.

# Definitions

- Target District- the district identified for change or Farmingdale Public Schools, using related data represented throughout this presentation
- Aspiration District- the district whose achievement level represents what the target district strives to accomplish
- Cross Sectional Data- A report providing information for different groups within one time period (Rudner & Boston, 2003)

# Definitions continued...

- Higher Levels of Student Achievement-
  - a. Students who graduate with a N.Y.S. Advanced Regents diplomas;
  - b. scored levels 3/4 on the N.Y.S. Eighth Grade Math Assessment Exam;
  - c. the percentage of students who pass the N.Y.S. Math B Regents Exam;
  - d. the percentage students who pass the N.Y.S. Chemistry Regents Exam

# LITERATURE REVIEW





# LITERATURE REVIEW continued...

Five C's Model as defined by Dr. Jonathan Hughes, Ed. D., was the framework used to determine the focus of the four categories:

- Content- What do we have?
  - Compare- Who are we?
- Contrast- Where do we stand?
  - Context- Why are we here?
- Construct- How do we move?

# LITERATURE REVIEW continued...

Three data analyses are also part of the conceptual framework and focus of the study:

- Descriptive- tables and charts illustrating district characteristics
  - Comparative- data results are compared
  - Summative- data findings are reported and explained

# LITERATURE REVIEW continued...

Journal reviews found in *Educational Research, and School Administrator* express the importance of improving student achievement with data analysis.

Author Dennie Palmer Wolf explains the relationship that help support teaching and learning success over time in her article “When Raising Isn’t Rising.”

Authors Lawrence M. Rudner and Carol Boston wrote “Data Warehousing: Beyond Disaggregation,” defines cross-sectional data as- A report providing information for different groups within one time period.

# METHODOLOGY



# METHODOLOGY continued...

➤ Step 1: Ten districts including the target district and the aspiration district were selected for comparison. Each district was selected based on comparable enrollment size of 5360 students :

- Baldwin
- East Meadow
- Farmingdale
- Freeport
- Hempstead
- Oceanside
- Plainview-OB
- Sachem
- Smithtown
- Syosset

# METHODOLOGY continued...

- Step 2: Four indicators were selected that are functional variables influencing student performance outcomes. They are:
  - Census
  - Finance
  - Instruction
  - Student Performance

# METHODOLOGY continued...

- Step 3: Four descriptors were selected for each indicator category. They are:
  - Census- % White Students; % Black Students; % Hispanic Students; % Asian Students
  - Finance- Full Valuation; Total Revenue; Total District Exp; Teacher Salary Exp.; Per Pupil Exp.
  - Instruction- # of Teachers; % of Teachers w/ Masters or More Credits; # of Core Classes Taught Each Day; Average Class Size
  - Student Performance- Grads. w/Adv. Regents Dip.; % of 8<sup>th</sup> Grade Math Students Scoring 3 or 4; % Passing Math B Reg.; % Passing Chemistry Reg.; % Passing Physics Reg.

# METHODOLOGY continued...

- Step 4: Descriptive, Comparative, and Summative analyses were conducted to influence educational decisions to foster higher levels of student achievement. Each of these analyses will be presented in the findings, along with the Five C's framework.



What did we find here?



# FINDINGS

What do we have?

Who are we?

Where do we stand?

# 1. What do we have?



# Census

	% White Enrolled	% Black Enrolled	% Hispanic Enrolled	% Asian Enrolled	Rank Summary	Final Rank
Baldwin	8	2	3	4	17	<b>1</b>
East Meadow	7	5	4	2	18	<b>2</b>
Farmingdale	5	4	5	6	20	<b>3</b>
Freeport	9	3	2	9	23	<b>7</b>
Hempstead	10	1	1	10	22	<b>6</b>
Oceanside	2	7	6	7	22	<b>5</b>
Plainview-OB	4	10	9	3	26	<b>10</b>
Sachem	3	6	7	5	21	<b>4</b>
Smithtown	1	8	8	8	25	<b>8</b>
Syosset	6	9	10	1	26	<b>9</b>

# Finance

	Full Valuation	Total Revenue	Total District Exp.	Teacher Salary Exp.	Per Pupil Exp.	Rank Summary	Final Rank
Baldwin	9	10	10	10	6	45	<b>10</b>
East Meadow	4	4	5	4	8	25	<b>4</b>
Farmingdale	7	6	7	7	3	30	<b>6</b>
Freeport	8	7	6	9	4	34	<b>8</b>
Hempstead	10	5	4	5	5	29	<b>5</b>
Oceanside	5	9	9	6	7	36	<b>9</b>
Plainview-OB	6	8	8	8	2	32	<b>7</b>
Sachem	1	1	1	1	10	14	<b>2</b>
Smithtown	3	2	2	3	9	19	<b>3</b>
Syosset	2	3	3	2	1	11	<b>1</b>

# Instruction

	# of Teachers	% of Teachers w Masters +	# of Core Classes Taught Each Day	Avg. Class Size	Rank Summary	Final Rank
Baldwin	10	9	9	4	32	<b>10</b>
East Meadow	3	6	4	5	18	<b>3</b>
Farmingdale	6	2	5	9	22	<b>5</b>
Freeport	5	10	6	10	31	<b>9</b>
Hempstead	9	4	10	2	25	<b>7</b>
Oceanside	7	5	7	6	25	<b>8</b>
Plainview-OB	8	1	8	7	24	<b>6</b>
Sachem	1	7	1	1	10	<b>1</b>
Smithtown	2	8	2	3	15	<b>2</b>
Syosset	4	3	3	8	18	<b>4</b>

# Student Performance

	Grads w/Adv. Regent Dip	8th Math %w Level 3/4	Math B Regents	Chemistry Regents	Physics Regents	Rank Summary	Final Rank
Baldwin	7	8	8	6	9	38	<b>8</b>
East Meadow	5	7	3	8	5	28	<b>6</b>
Farmingdale	6	5	7	7	6	31	<b>7</b>
Freeport	9	9	9	9	8	44	<b>9</b>
Hempstead	10	10	10	10	10	50	<b>10</b>
Oceanside	3	6	5	3	4	21	<b>5</b>
Plainview-OB	8	4	2	1	1	16	<b>2</b>
Sachem	4	3	4	5	3	19	<b>4</b>
Smithtown	2	2	6	4	2	16	<b>3</b>
Syosset	1	1	1	2	7	12	<b>1</b>

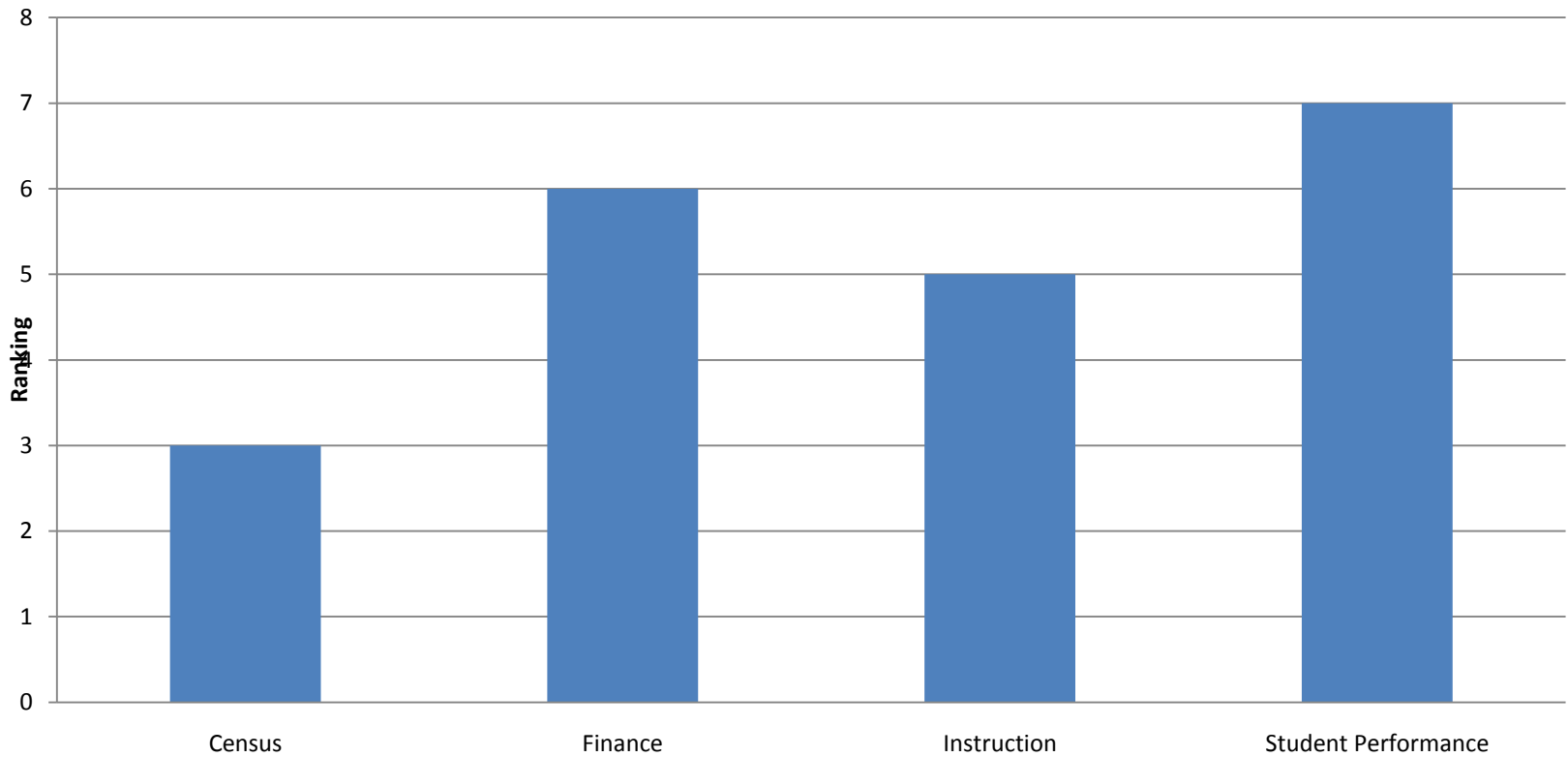
- Note in the following graphs that each range with the smaller bar graphs are the higher achieving districts...

**“LESS IS MORE”**



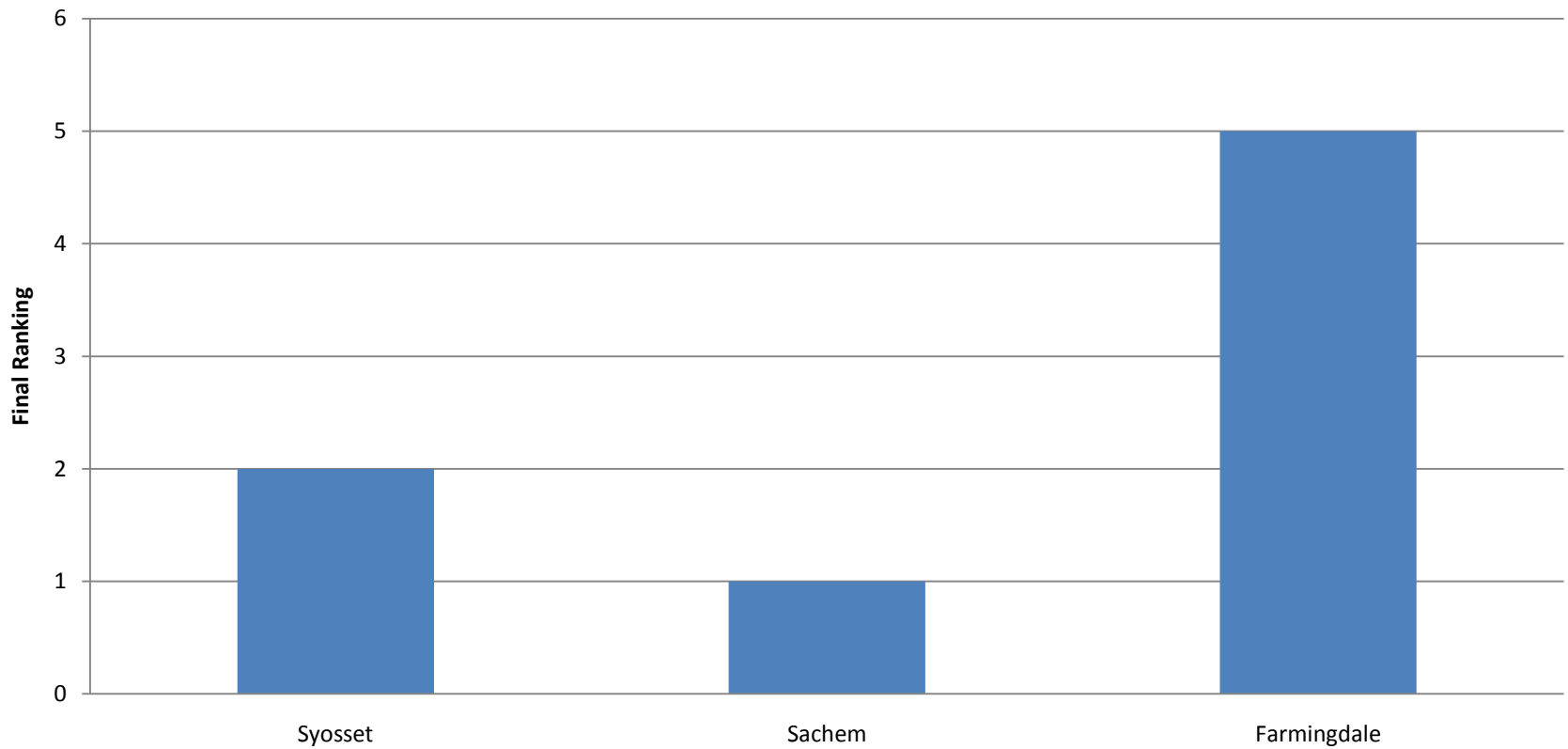
## 2. Who are we?

Farmingdale



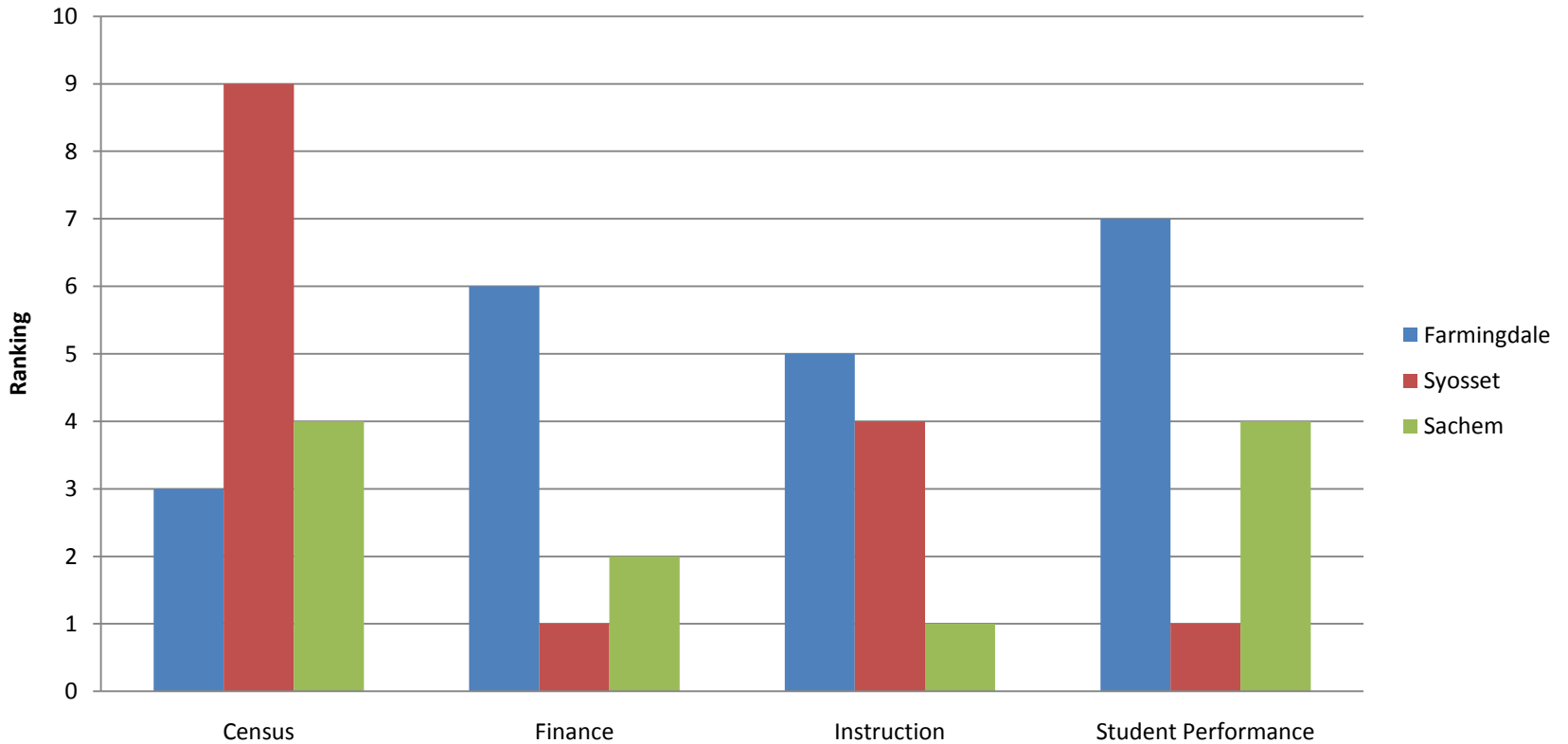
# 3. Where do we stand?

**Farmingdale vs. Aspiring School  
and Sachem**



# 4. Why are we here?

**Farmingdale, Syosset, and Sachem Compared to each other**



# CONCLUSION

Deficits in Instruction and Student Performance have led to the inability to reach high levels of student achievement.

However, district spending and student make-up/diversity are relative or better than most districts in this study.

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## 5. How do we move?

To consider our first step:

Dennie Wolf says, “...how many children are on path to meeting the standards...will depend largely on local educational leaders to articulate the need for thinking in terms of continuous growth.”

She recommends- “Working toward vertical alignment. It is time to balance time and resources between grade level and vertical teams.”

# CONCLUSION continued

## First Step:

We must consider **professional development to improve instructional strategies and best practices, vertical alignment of curriculum, especially in the areas of Math and Science**, because they are your predictors of success toward **Advanced Regents Diplomas**.

## Next:

We also need to evaluate ways to change **student expectations both in the community and in the classroom**, to encourage higher levels of student achievement.



# REFERENCES

- Hughes, J. (2005). *School District Almanac, Data Points*. SCOPE and NYSSBA, Connolly – Cormack, Publishers. ISBN 1-884280-07-2
- Rudner, L. & Boston, C. (2003) Data Warehousing: Beyond Disaggregation. *Educational Leadership*, 62-63.
- Wolf, Debbie Palmer. (2002). When Raising Isn't Rising. *The School Administrator*, 21-23.