

EDU 5650: School Based Data Analysis St. John's University – Oakdale Campus Fall 2010 – Dr. Jonathan Hughes

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### Chapter I: Purpose of Study

- Introduction
  - Tuition/Enrollment Based Finances
  - Demographics
  - Student Services
- Research Questions:
  - To analyze data that is useful in the determination of effective feeder schools to Catholic high schools

### Chapter I: Purpose of Study

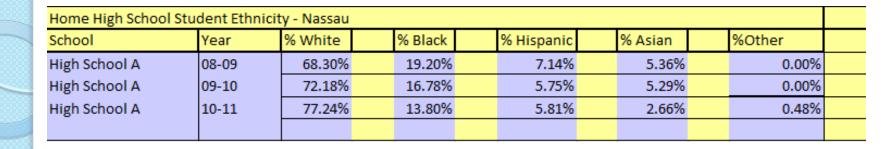
- Background Information
  - A Nassau and a Suffolk Catholic High School
  - Current Financial Environment of Catholic Schools

#### Financial Information Budgeted -Home High School Nassau

	2007-08	2008-09	2009-10	2010-11
				2010 11
Enrollment	413	448	435	
Tuition	\$7,100	\$7,300	\$7,400	
Cost PP	\$11,592	\$10,709	\$10,953	
Expenses	\$4,787,592	\$4,797,592	\$4,764,592	
Subsidy	\$521,042	\$541,042	\$360,792	

#### Financial Information Budgeted -Home High School Suffolk

	2007-08	2008-09	2009-10		2010-11
Enrollment		307	392		400
Tuition		\$7,375	\$7,700	M	\$7,995
Cost PP		\$12,681	\$12,745		\$11,821
Expenses		\$5,669,650	\$5,546,945		\$5,924,331
Subsidy		\$750,000	\$550,000		\$500,000



Home High School	Student Ethn	icity - Suffolk					
School	Year	% White	% Black	% Hispanic	% Asian	%Other	
High School B	08-09	83.19%	1.62%	5.69%	2.43%	6.23%	
High School B	09-10	87.50%	2.80%	5.10%	0.26%	4.33%	
High School B	10-11	83.25%	1.75%	7.50%	3.00%	4.50%	

Mean PSAT Scor	es (scale of	f 800) -High	School N	assau						
		Math								
	2006-07	2007-08	2008-09	2009-10		2006-07	2007-08	2008-09	2009-10	
Sophomores	n/a	402	416	419		n/a	412	440		425
Juniors	n/a	441	467	459		n/a	451	488		453

Mean PSAT Score	es (scale of	800) -High	School St	uffolk						
		Math								
	2006-07	2007-08	2008-09	2009-10		2006-07	2007-08	2008-09	2009-10	
Sophomores	442	n/a	424	459		435	n/a	432		424
Juniors	505	n/a	485	458		492	n/a	489		457

### Chapter I: Purpose of Study

- Definition of Terms
  - Per Pupil Cost the cost of educating a student which is derived by dividing the total expenditures by the number of students enrolled.
  - Expended Per Pupil Cost is a synonym for Per Pupil Cost, which is used in elementary school budgets.
  - Tuition the expensed charged to the family of a student to attend the school for one academic year, sans registration fees.

#### Chapter I: Purpose of Study

- Definition of Terms
  - Subsidy the total funds given to a school by the governing body, which represents the shortfall between total revenue (including development funds and rental income) and total expenditures.
  - Subsidy Per Pupil the amount derived by dividing the total subsidy by the enrollment.

### Chapter 1: Purpose of Study

- Definition of Terms
  - Elementary School Grades Pre K to 8
  - Feeder School an elementary school whose students choose to attend one of the two home high schools in our study.

## Chapter 1: Purpose of Study

 Significance – By analyzing specific data points of both one's home school and feeder schools, the home schools are able to better understand their own strengths and needs of their feeder schools.

#### Chapter 2: Literature Review

- Conceptual Framework
  - Dr. Jonathan Hughes Data Matters (2008)
    - Content What do we have?
    - Compare Where do we stand?
    - Contrast Why are we here?
    - Context Why are we here?
    - Construct How do we move forward?

#### Chapter 2: Literature Review

- Data Warehousing: Beyond Disaggregation Lawrence M. Rudner and Carol Boston (2003)
  - Data are not an island
  - Comparing two data points is much more useful
  - Longitudinal data provides us with the big picture

#### Chapter 2: Literature Review

- Sustainable Leadership Hargreaves and Fink (2005)
  - Breadth where do we stand and why are we here?
  - Depth what do we have and what do they need?

## Chapter 3: Methodology

- Feeder Schools
  - Examined the Diocesan data available
  - Narrowed focused to four areas of data
    - Finance
    - Ethnicity
    - Student Performance
    - Instruction
  - Selected four data points for each area
  - Ranked schools in each area of data
  - Performed overall ranking

## Chapter 3: Methodology

- Home High Schools
  - Examined our local data warehouse available
  - Narrowed focused to areas related to the feeder schools
    - Finance
    - Ethnicity
    - Student Performance
- Examined descriptive and comparative data in order to formulate summative constructs
- Offered first step recommendation

		2008		Tuition		Subsidy		Op/Maint		Expended			Rank of
School	Village	Enroll	Rank	PP	Rank	PP	Rank	PP	Rank	PP	Rank	Sum	Sums
4	1	369	5	\$4,183	1	\$1,007	3	\$664	5	\$5,837	3	14	
3	2	222	1	\$3,978	2	\$1,836	1	\$1,154	1	\$7,646	6	10	
	3	262	3	\$3,441	4	\$1,062	2	\$754	3	\$5,435	5	15	
)	4	302	4	\$3,337	5	\$666	6	\$876	2	\$5,898	2	13	
	5	261	2	\$3,508	3	\$680	4	\$713	4	\$5,674	4	13	
:	6	450	6	\$3,058	6	\$683	5	\$421	6	\$4,424	6	24	
School Per Pup	il Summary Measur	res - Suff	olk 🖟										
School Per Pup	il Summary Measur	es - Suff 2008		Tuition		Subsidy		Op/Maint		Expended			Rank oF
School Per Pup School	il Summary Measur Village	2008			Rank		Rank		Rank		Rank	Sum	Rank oF Sums
·		2008	Rank	PP	Rank 4	PP		PP		PP			
School		2008 Enroll	Rank	PP \$2,996		PP \$1,051	Rank	PP \$548	Rank	PP \$5,737	Rank	14	
School		2008 Enroll 140	Rank 1 4	\$2,996 \$2,012	4	\$1,051 \$1,174	Rank 3	PP \$548 \$464	Rank 3	\$5,737 \$4,714	Rank 3	14 20	
School	Village 7 8	2008 Enroll 140 262	Rank 1 4	\$2,996 \$2,012 \$3,639	4 5	\$1,051 \$1,174 \$974	Rank 3 2	\$548 \$464 \$910	Rank 3	\$5,737 \$4,714 \$7,946	Rank 3 5	14 20 10	

				_					1	_		
												Rank o
School Village	% White	Rank	% Black	Rank	% Hispanic	Rank	% Asian	Rank	%Other	Rank	Sum	Sums
Α 1	49.2%	3	4.0%	6	38.9%	3	3.30%	5	4.6%	5	22	
В 2	65.0%	5	2.0%	5	29.0%	4	1.90%	6	2.1%	3	23	:
с 3	75.0%	6	0.5%	3	7.5%	6	16.30%	3	0.7%	6	24	
D 4	62.3%	4	1.4%	4	22.6%	5	10.40%	4	3.3%	4	21	
E 5	62.3%	4	1.4%	4	22.6%	5	10.40%	4	3.3%	4	21	4
F 6	62.3%	4	1.4%	4	22.6%	5	10.40%	4	3.3%	4	21	4
Ethnicity Report 2008 Feeder So	hools Suffolk											
												Rank of
School Village	% White	Rank	% Black	Rank	% Hispanic	Rank	% Asian	Rank	%Other	Rank	Sum	Sums
G 7	78.0%	5	2.0%	1	17.2%	1	0.50%	5	2.3%	5	17	
	53.9%	1	17.4%	5	24.7%	4	1.20%	3	2.8%	4	17	:
н 8	33.5%					_	4.400/		0.40/	_	4.5	
н 8 1 9	66.8%	3	5.5%	3	23.5%	3	1.10%	4	3.1%	3	16	
н 8 I 9 J 10												
	66.8%	2	9.0%	4	25.3%	5	1.50%	2	3.1%	3	16	

											D
											Rank
		Grade 4		Grade4		Grade 8		Grade 8			of
School	Village	ELA	Rank	Math	Rank	ELA	Rank	Math	Rank	Sum	Sums
A	1	95.4%	5	100.0%	5	72.5%	1	70.0%	1	12	2
В	2	88.0%	1	96.0%	4	93.1%	3	96.5%	5	13	3
С	3	92.8%	2	100.0%	5	96.6%	6	100.0%	6	19	6
D	4	95.0%	4	95.3%	3	93.3%	4	95.5%	4	15	5
E	5	96.0%	6	0.0%	1	93.5%	5	70.9%	2	14	4
F	6	93.4%	3	91.3%	2	89.6%	2	77.9%	3	10	1
NYS Math and ELA	Testing Scores 2	.008 - Feeder	r Schoo	ls Suffoll							
											Rank
		Grade 4		Grade4		Grade 8		Grade 8			of
School	Village	ELA	Rank	Math	Rank	ELA	Rank	Math	Rank	Sum	Sums
G	7	93.1%	4	n/a	1	100.0%	5	n/a	1	11	2
н	8	74.9%	1	71.0%	3	76.0%	2	91.7%	5	11	2
ı	9	78.6%	2	100.0%	5	85.7%	4	85.7%	4	15	1
J	10	89.8%	3	82.8%	4	100.0%	5	78.2%	3	15	1
к	11	100.0%	5	100.0%	5	80.0%	3	65.0%	2	15	-

															Ran
						under		over							of
School	Village	Certified	Rank	Master's	Rank	6 yrs	Rank	25 yrs	Rank	Admin Exp	Inst Exp	% Inst.	Rank	Sum	Sur
4	1	87.5%	5	79.0%	4	16.7%	6	33.3%	1	\$286,661	\$1,253,321	81.39%	3	19	
3	2	90.5%	6	76.0%	3	21.1%	5	15.8%	4	\$143,212	\$997,200	87.44%	5	23	
	3	84.0%	4	74.0%	2	26.3%	3	26.3%	2	\$189,134	\$749,670	79.85%	2	13	
0	4	75.0%	3	80.0%	5	30.0%	2	25.0%	3	\$256,330	\$940,607	78.58%	1	14	
E	5	73.7%	2	89.5%	6	40.0%	1	12.0%	5	\$141,608	\$808,711	85.10%	4	18	
F	6	60.0%	1	60.0%	1	25.0%	4	10.7%	6	\$111,129	\$1,238,948	91.77%	6	18	
Instructional Sta	tistics 2008 - Feeder S	chools Suff	olk												
Instructional Sta	tistics 2008 - Feeder S	chools Suff	olk												Rar
Instructional Sta	tistics 2008 - Feeder S	chools Suff	olk			under		over							Ran
Instructional Sta	tistics 2008 - Feeder S Village			Master's	Rank				Rank	Admin Exp	Inst Exp	% Inst.	Rank		ı
			Rank		Rank 4	6 yrs		25 yrs	Rank 1	Admin Exp \$124,696	Inst Exp \$438,834	% Inst.	Rank 3		oF Sur
		Certified	Rank 4	75.0%		6 yrs 25.0%	Rank 5	25 yrs 33.3%			-			Sum	oF Sui
		Certified 83.3%	Rank 4 2	75.0% 57.1%	4	6 yrs 25.0%	Rank 5	25 yrs 33.3% 0.1%	1	\$124,696	\$438,834	77.87%	3	Sum 17	oF Sui
		Certified 83.3% 57.1%	Rank 4 2	75.0% 57.1% 44.4%	4	6 yrs 25.0% 50.0% 38.8%	Rank 5 2	25 yrs 33.3% 0.1%	1 2	\$124,696 \$99,473	\$438,834 \$598,288	77.87% 85.74%	3	Sum 17 14	oF Sui

Overall Ranking 2008 - Fe	eder Schools I	Maccau		1			
School	Village	Finance Rank	Demographic Rank	Instructional Rank	Assessment Rank	Sum	Rank of Sums
F	6	INDIIK 1	4			9	
A	1	3				10	
	5	5			3		3
В	2					11	
C -	3	2		5		14	4
E	5	4				15	5
D	4	4	4	4	5	17	6
Overall Ranking 2008 - Fe	eder Schools S	Suffolk					
overall hanking 2000 TV		I					Rank
		Finance	Demographic	Instructional	Assessment		oF
School	Village	Rank	Rank	Rank	Rank	Sum	Sums
G	7	3	1	1	2	7	1
н	8	2	1	2	2	7	1
J	10	1	2	4	1	8	2
I.	9	4	2	3	1	10	3
K	11	5			1	10	3

Enrollment from Feeds to Home High School - Nassau									
School	Village	2008 Enroll		2010 9th Grade Enroll Home School	Rank	2010 9th - 12th Grade Enroll Home School	Rank	Sum	Rank of Sums
В	2	222		14			6	12	1
Α	1	369		7	5	37	5	10	
E	5	261		6	4	18	4	8	3
С	3	262		3	3	10	3	6	4
D	4	302		1	1	10	3	4	5
F	6	450		2	2	8	2	4	5
Enrollment from Fee	ds to Home High	School -	Suffo	k					
		2008		2010 9th Grade Enroll Home		2010 9th - 12th Grade Enroll Home			Rank of
School	Village	Enroll		School	Rank	School	Rank	Sum	Sums
G	7	140		15	4	77	5	9	1
J	10	358		16	5	51	4	9	1
Н	8	262		11	3	46	3	€ 6	2
К	11	196		6	2	16	2	4	3
L	9	208		4	1	9	1	2	4

Rankingof Feeder Schools by Actual Enrollment		Nassau	Ranking of Feeder Schools Based on Analysis	
School	Rank of Sums		School	Rank of Sums
Α	2		Α	2
В	1		В	3
С	4		С	4
D	5		D	6
E	3		E	5
F	5		F	1
Rankingof Feeder			Ranking of Feeder	
Schools by Actual	N3		Schools Based on	
Enrollment		Suffolk	Analysis	
School	Rank of Sums		School	Rank oF Sums
G	1		G	1
Н	2		н	1
L	4		L	3
J	1		J	2
K	3		К	3

- Nassau there exists an almost inverse correlation between the current enrollment from Feeder Schools and the Feeder Schools that have the characteristics that the High School is seeking to attract.
- Suffolk there exists an almost direct correlation between the current enrollment from Feeder Schools and the Feeder Schools that have the characteristics that the High School is seeking to attract.

#### Chapter 5: Recommendations

- First Step Nassau High School: Redirect the current marketing plan towards the Feeder Schools that have the characteristics that the High School wishes to attract.
- First Step Suffolk High School: Continue to market to attract students from the current Feeder Schools, which have the characteristics which the High School is seeking to attract.