

# VERMONT PUBLIC K-12 EDUCATION

## Cost Containment

March 2009

Hugh Kemper, Londonderry, Vermont

# OUTLINE

- Introduction
  - Personal Background
- Vermont K-12: A Profile/Perspective (FY97-FY07)
  - Enrollment, Staffing, Expenditures
  - Salaries/Wages/Benefits
  - Pupil/Staffing Ratios
- Base Case: Resource Management/Cost Containment
  - Core & Supporting Initiatives
  - Resource Parameters/Reorganization
  - Results
  - Local Control
  - Brigham Decision/Does Base Case Comply
- Concluding Remarks
  - What do we Know?
  - What can we Say?

# Personal Background

– **Education:** Deerfield Academy '61; Harvard '65

– **Career:** JP Morgan (7/67-4/98; Managing Director)

- 10 Jobs in Four Countries (USA, Germany, Netherlands, Kuwait)
- Business Development/Management/Corporate Staff
- Direct (3 internal) & Indirect (clients +/- 50) Experience With Reorganizations

– **Vermont:**

- Second Home Owner (6/93-12/03); Resident (1/04)
- Flood Brook Union School Board Member (3/05-11/08)
- 4 Grandchildren: 1/BBA; 2/Flood Brook; 1/Pre-K; (Amy Kemper new Flood Brook Board Member)
- Affiliations: EAI (modest contributor); Registered Republican- (pre-08) campaign contributions to Douglas, Hube & Rainville

We'll first look at Vermont K-12's enrollment, staffing & expenditures from various perspectives; specifically....

- Enrollment, Staffing & Expenditures  
FY97-07
- Compensation and Staff Growth  
FY97-07
- Teacher and Teaching Assistants- Salary  
and Healthcare Costs FY01-FY07
- Pupil/Staffing Ratios: Teachers, Teaching  
Assistants and Other FY97-07

From FY97 to FY07 enrollment declined, staffing increased and per pupil spending increased 6.8%-7.0% p.a. (CAGR=compound annual growth rate)....

	<u>FY97</u>	<u>FY 07</u>	<u>+/-</u>	<u>+/- %</u>	<u>CAGR</u>
<b>Full Time Equivalent</b>	<b>98,369</b>	<b>90,363</b>	<b>(8,006)</b>	<b>-8.1%</b>	<b>-0.8%</b>
<b>Fall Enrollment</b>	<b><u>106,341</u></b>	<b><u>95,481</u></b>	<b><u>(10,860)</u></b>	<b><u>-10.2%</u></b>	<b><u>-1.1%</u></b>
<i>Special Education</i>	12,015	14,012	1,997	16.6%	1.5%
<i>SpEd/Fall Enrollment</i>	11.3%	14.7%			
<b>Total Staffing</b>	<b><u>15,555</u></b>	<b><u>19,221</u></b>	<b><u>3,666</u></b>	<b><u>23.6%</u></b>	<b><u>2.1%</u></b>
<b>Non-Direct Instructional</b>	<b>4,770</b>	<b>6,036</b>	<b>1,266</b>	<b>26.5%</b>	<b>2.4%</b>
<b>Direct Instructional</b>	<b>10,786</b>	<b>13,185</b>	<b>2,400</b>	<b>22.2%</b>	<b>2.0%</b>
<i>Teachers (inc. Vocational)</i>	7,712	8,856	1,144	14.8%	1.4%
<i>Teaching Assistants</i>	3,074	4,329	1,256	40.9%	3.5%
<i>(\$ thousands)</i>					
<b>Total Expenditures</b>	<b>\$831,945</b>	<b>\$1,386,116</b>	<b>\$554,171</b>	<b>66.6%</b>	<b>5.2%</b>
<b>Current Expenditures</b>	<b>\$680,020</b>	<b>\$1,200,653</b>	<b>\$520,633</b>	<b>76.6%</b>	<b>5.8%</b>
<i>FTE PPS</i>	\$6,913	\$13,287	\$6,374	92.2%	6.8%
<i>Fall Enrollment PPS</i>	\$6,395	\$12,575	\$6,180	96.6%	7.0%

Compensation grew 5.8% p.a., compensation remained +/- 80% of current expenditures; staff increase and benefits = cost drivers

	<u>FY97</u>	<u>FY 07</u>	<u>+/-</u>	<u>+/- %</u>	<u>CAGR</u>
<b>Total Salaries &amp; Employee Benefits</b>	<b><u>\$546,684</u></b>	<b><u>\$959,851</u></b>	<b><u>\$413,168</u></b>	<b><u>75.6%</u></b>	<b><u>5.8%</u></b>
<i>% of Current Expenditures</i>	<b><u>80.4%</u></b>	<b><u>79.9%</u></b>			
<i>Salaries &amp; Wages</i>	\$450,855	\$732,691	\$281,836	62.5%	5.0%
<i>% of Current Expenditures</i>	66.3%	61.0%			
<i>Employee Benefits</i>	\$95,829	\$227,160	\$131,331	137.0%	9.0%
<i>% of Current Expenditures</i>	14.1%	18.9%			
<b>Average Teacher Salary</b>	<b><u>\$36,049</u></b>	<b><u>\$46,644</u></b>	<b><u>\$10,595</u></b>	<b><u>29.4%</u></b>	<b><u>2.6%</u></b>
<b>Average Teaching Assistant Salary</b>	<b><u>\$9,783</u></b>	<b><u>\$15,070</u></b>	<b><u>\$5,287</u></b>	<b><u>54.0%</u></b>	<b><u>4.4%</u></b>
<b>Total Teachers (inc. Vocational)</b>	<b><u>7,712</u></b>	<b><u>8,856</u></b>	<b><u>1,144</u></b>	<b><u>14.8%</u></b>	<b><u>1.4%</u></b>
<i>% of Total Staff</i>	49.6%	46.1%			
<b>Total Teaching Assistants</b>	<b><u>3,074</u></b>	<b><u>4,329</u></b>	<b><u>1,256</u></b>	<b><u>40.9%</u></b>	<b><u>3.5%</u></b>
<i>% of Total Staff</i>	19.8%	22.5%			
<b>Other Staff</b>	<b><u>4770</u></b>	<b><u>6036</u></b>	<b><u>1,266</u></b>	<b><u>26.5%</u></b>	<b><u>2.4%</u></b>
<i>% of Total Staff</i>	30.7%	31.4%			
<b>Total Staff</b>	<b><u>15,555</u></b>	<b><u>19,221</u></b>	<b><u>3,666</u></b>	<b><u>23.6%</u></b>	<b><u>2.1%</u></b>

Healthcare costs increased 10.1% p.a. (FY01-07); when combined with salary increases, total compensation exceeded private sector norms...

<u>Healthcare Cost (100%)</u>	<u>FY01</u>	<u>FY 07</u>	<u>+/-</u>	<u>+/- %</u>	<u>CAGR</u>	<u>FY 10</u>	<u>CAGR</u>
Family	\$7,534	\$14,815	<b>\$7,281</b>	<b>96.6%</b>	<b>10.1%</b>	\$16,722	8.3%
Two Person	\$5,620	\$11,051	<b>\$5,431</b>	<b>96.6%</b>	<b>10.1%</b>	\$12,474	8.3%
Single	\$2,859	\$5,622	<b>\$2,763</b>	<b>96.6%</b>	<b>10.1%</b>	\$6,346	8.3%
 <u>Average Salaries</u>							
Teacher	\$38,254	\$46,644	<b>\$8,390</b>	<b>21.9%</b>	<b>2.9%</b>		
<i>Family/Avg. Salary</i>	<i>19.7%</i>	<i>31.8%</i>					
Teaching Assistant	\$11,157	\$15,070	<b>\$3,913</b>	<b>35.1%</b>	<b>4.4%</b>		
<i>Family/Avg. Salary</i>	<i>67.5%</i>	<i>98.3%</i>					
 <u>Family + Avg. Salary</u>							
Teacher	\$45,788	\$61,459	<b>\$15,671</b>	<b>34.2%</b>	<b>4.3%</b>		
Teaching Assistant	\$18,691	\$29,885	<b>\$11,194</b>	<b>59.9%</b>	<b>6.9%</b>		

The decline in key pupil/staffing ratios clearly shows the impact of increased staffing and declining enrollment; note what the ratios would have been had staffing remained at FY97 levels.

<u>Staff Ratios (Fall Enrollment)</u>	<u>FY97</u>	<u>FY 07</u>	<u>+/-</u>	<u>+/- %</u>	<u>CAGR</u>
Pupil/Teacher	13.8	11.1	(2.7)	-19.3%	-2.1%
Pupil/Teaching Assistant	34.6	22.1	(12.5)	-36.3%	-4.4%
Pupil/Non-Instructional	22.3	15.1	(7.2)	-32.1%	-3.8%
Pupil/ Total Staff (inc. Vocational FY07)	6.8	5.0	(1.9)	-27.3%	-3.1%

<u>Staff Ratios (SY97 staffing)</u>					
Pupil/Teacher	13.8	12.4	(1.4)	-10.2%	-1.1%
Pupil/Teaching Assistant	34.6	31.1	(3.5)	-10.2%	-1.1%
Pupil/Non-Instructional	22.3	20.0	(2.3)	-10.2%	-1.1%
Pupil/ Total Staff	6.8	6.1	(0.7)	-10.2%	-1.1%

While the annualized growth rates of Vermont's current expenditures and staffing between FY97 & FY05 are not wildly different from those for the US as a whole, Vermont's per pupil spending, due to the decline in enrollment, was the highest.....

<u>FY97-FY05</u>	<b>Annualized Growth Rate</b>			
	<u>Current Expenditures</u>	<u>Staffing</u>	<u>Enrollment</u>	<u>Current Exp Per Pupil</u>
USA	5.8%	2.2%	0.8%	4.9%
Vermont	6.4%	2.4%	-1.0%	7.4%
Vermont Rank	11	22	45	1

Staffing ratios (FY97-FY06) declined in the US and even more so in Vermont; Vermont's ratios continued to decline thru FY08 as staffing increased by 0.4% and enrollment declined by 2.6%.....

<u>Staffing Ratios</u>	<u>FY97</u>	<u>FY06</u>	<u>FY08</u>
<u>Pupil/Teacher</u>			
USA	17.1	15.7	
Vermont	13.8	11.3	11.1
Vermont Rank	1.0	2.0	
<u>Pupil/Staff</u>			
USA	9.0	8.0	
Vermont	6.8	5.1	4.9
Vermont Rank	1.0	1.0	
<u>Pupil/Teaching Assistant</u>			
USA	88.3	70.4	
Vermont	34.6	22.7	21.5
Vermont Rank	1.0	1.0	
<u>Teacher/Teaching Assistant</u>			
USA	5.2	4.5	
Vermont	2.5	2.0	1.9
Vermont Rank	1.0	1.0	

Where are we at this point????....

- Vermont has highest annualized growth in per pupil spending reflecting high growth in absolute spending, declining enrollment and increased staffing.
- Comparative Ratios suggestive but are not conclusive.
- Cost containment of educational spending should be tailored to Vermont based on Perceived Values, Fiscal Responsibility and Commonsense.

We're now going to look at the Base Case, Step #2 in a three step process

- Step #1: Fact Finding/Identify & Frame Principal Issue(s)
- Step #2 (Base Case): Proposed Solution
- Step #3: Choose Among Four Alternatives
  - Dismiss Issue (i.e. education spending)/Do nothing
  - Recognize Issue/reject Base Case/new Base Case
  - Accept most of Base Case/tweak to refine it
  - Accept Base Case/Move on to implementation

More specifically, the Base Case is a starting point for evaluating cost containment alternatives....

- If asked as an outsider to provide Vermont K-12 children a quality education in a fiscally responsible/cost effective manner, the Base Case would be my starting point.
- Refinements would follow based on additional information & perspective provided by insiders.
- Cost effective management of educational resources must prioritize staffing which constitutes 80% of total current expenditures.

The Base Case is predicated on two fundamental values,  
i.e. Vermonters' predisposition for.....

- **Local Control of Local Schools**

- Retain local schools (no school closings/consolidations)
- Vermonters value education and, overwhelmingly, local control of local schools; local school boards should be firmly in control and be provided cost-effectively with the resources, information and assistance they require to manage the *manageable* in an informed and timely manner.

- **Inclusive Special Education**

Furthermore, the Base Case is predicated on Four Core and Three Supporting initiatives. Today's focus is on the Core initiatives.

- **Core Initiatives**

- State assumes management responsibility for *all* special education resources
- Establish statewide resource parameters, by function and purpose that, for regular education, reflect school size and type
- Standardize teacher/support staff contracts; set annually total compensation (salaries, wages & benefits) for public school employees by function based on prevailing private sector compensation practices and competitive environment.
- Provide local school boards with on-call/experienced consultancy support for non-routine issues

- **Supporting Initiatives**

- Provide clarity on roles/responsibilities of all stakeholders
- Provide clear/specific achievement standards/curriculum options by grade
- Provide clear/comprehensive policies for school administration/environment

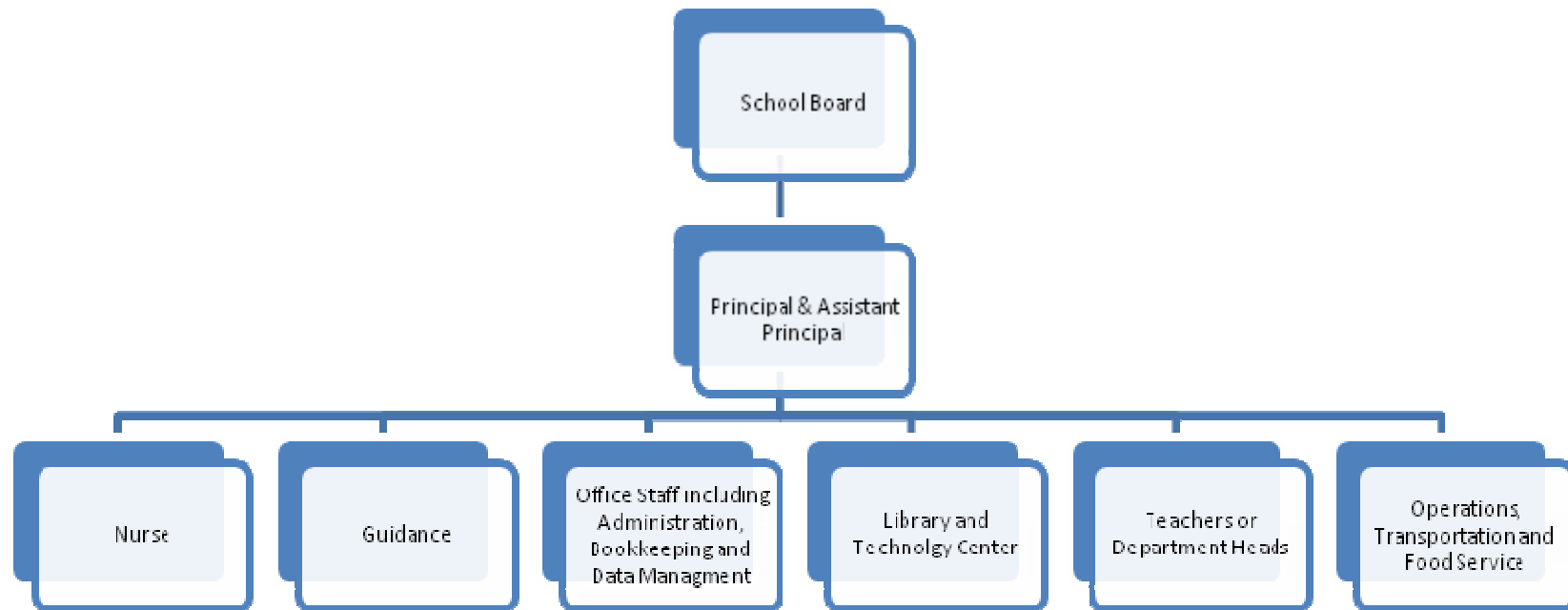
These are the key quantitative and organizational thoughts driving the implementation of the four Core Initiatives.....

- **Instructional**
  - Special Education (P/T 7:1; P/TA 7:1.....effectively 3.5:1)
  - Regular Education (P/T 15:1; P/TA 15:1 for EEE thru 1<sup>st</sup> Grade)
- **Non-Instructional (Regular Education/School Specific)**
  - Principals/Assistant Principals, Office Staff, Guidance Counselors, Nurses/Aides, Bookkeepers, Data Managers, Library/Information Technology staff allocated to each school based on size (e.g. 4 staff for <50 and 17 staff >1001)
- **Non-Instructional (General Support)**
  - Regular Education general support staff allocated to/managed by *State Office of Education Resources Management* (Resource Parameters/Optimization, Data Management, Achievement Standards/Curriculum, Human Resources, Senior Advisors, Purchasing and Technology Advisory)
  - Special Education general support staff managed by *State Office for Special Education* (Resource Parameters/Optimization, Human Resources, Data Management, Senior/other Special Education Directors)

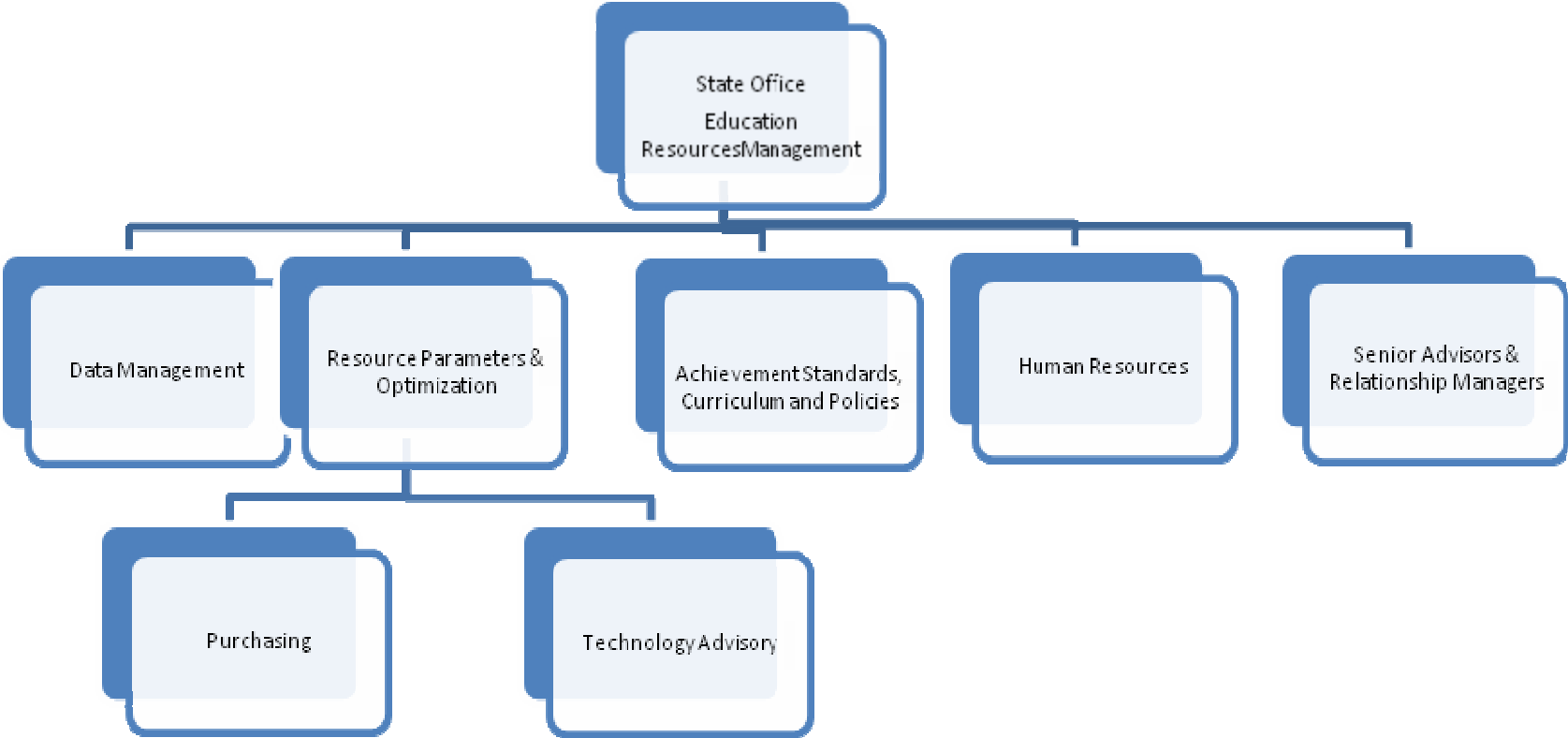
## The application of the resource parameters to the Direct Instructional staff (both Regular Education & Special Education) needs to be clear.....

- Resource parameters were applied to each of Vermont's 351 schools/facilities with a FY07 enrollment of 95,461, i.e. 276 elementary schools (55,229), 54 secondary schools (31,981) and 21 combined elementary/secondary schools (8,251).
- The direct instructional staffing at the Hannaford and Southwest Vermont Career Centers were left unchanged.
- SpEd Pupils were assumed to be spread evenly throughout the school system at their current +/- 14.5% share of fall enrollment.
- If the result generated other than a whole number for total required teachers and teaching assistants per school, the number of teachers and/or teaching assistants was rounded up to a whole number if the fraction was  $>0.25$  and rounded down if  $\leq 0.25$ . This rounding resulted in a system wide increase of 85.69 teachers and 94.36 teaching assistants.

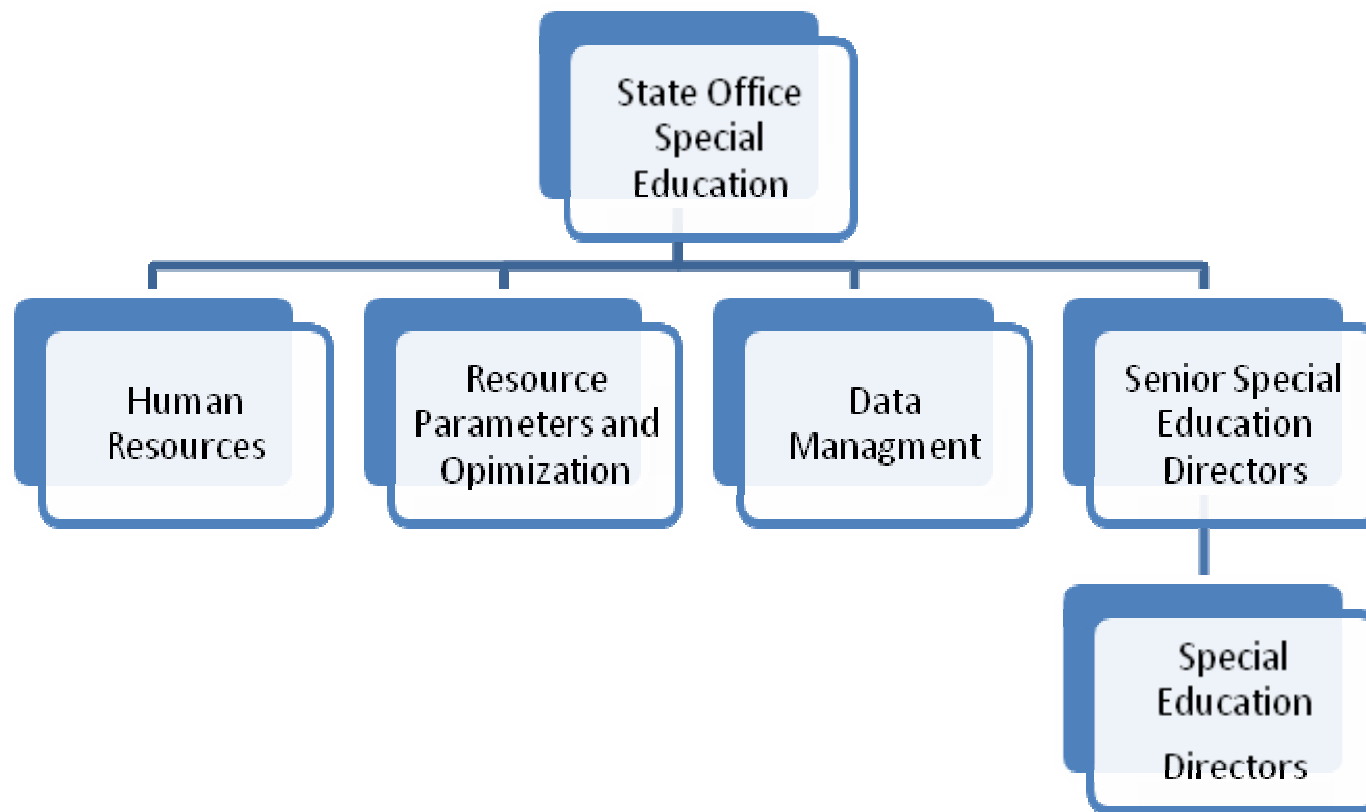
The application of non-instructional staff at the local school level is based on this general organizational structure....



The proposed State Office of Education Resources Management would look like this.....



The proposed State Office of Special Education would look like this....



The application of these resource parameters & reorganization results in a staff reduction of 17% (ex. O&M, Transportation & Food)

Function		<u>Actual</u>	Revised	Total	Located	Located
		<u>FY07</u>	<u>vs Actual</u>	<u>Revised</u>	<u>RegEd</u>	<u>SpEd</u>
	<b><u>Total</u></b>	<b><u>17,127</u></b>	<b><u>(2,906)</u></b>	<b><u>14,222</u></b>	<b><u>9,649</u></b>	<b><u>4,571</u></b>
1000	Direct Instructional Services	13,185	(2,625)	10,559	6,514	4,044
2100	Support Services Students	1,359	(328)	1,031	1,031	
2200	Support Services Instructional Staff	684	(125)	559	559	
2300	Support Services Gen. Admin./Office Resource Mgmt	191	(114)	77	77	
2400	Support Services School Administration	1,324	144	1,468	1,468	
2350	Special Education		527			527
2500	Central Support Services	383	(383)			

This staff reduction equates to a 9.3% reduction in current expenditures and very respectable staff ratios. The savings estimate is conservative.

- **Savings: 9.3% of current expenditures**
- **Ratios: FY06 ranking after applying revised staffing to FY08 enrollment**
  - Pupil/Teacher 12.5:1 (6<sup>th</sup> vs. national 15.7:1 )
  - Pupil/Teaching Assistant 31.2:1 ( 1<sup>st</sup> vs. national 70.4:1)
  - Pupil/Staff 5.8:1 (3rd vs. national 8.0:1)
- **Very Conservative Estimate: Excludes**
  - School closings/consolidations
  - Elimination of State level staff redundancies
  - Purchasing economies of scale (e.g. technology)
  - Productivity gains from standardized software (data management/bookkeeping)
  - Reduced real estate costs with less occupied space regionally
  - To be discovered opportunities as reorganization ‘peels back the onion’ (savings rule of thumb: +/- 10% tweaking existing processes; =>20% reorganizing processes). Base Case’s operating premise: avoid negative surprises
  - Special Education resource estimates very conservative (black box!)

In my view (not a lawyer!), the Base Case complies with the Brigham Decision.

- Each school has requisite *resources* to afford each student with *an equal educational opportunity*.
- Does not preclude extra local spending within *spirit* of Brigham Decision

Local control over funding was eliminated by Act 60/68. The Base Case clearly puts the State in the driver's seat regarding resource capacity; however, School Boards remain CEO's of their local schools.

- Base Case assumes no schools are closed
- School Boards remain CEOs of their schools
- Local control of funding lost via Act 60/68
- Local control of spending must comply with Vermont's capacity to pay/economic reality
  - Education Fund (w/GF transfer) = 42% of State Revenues (2008)
  - 100% of Property Taxes+45% of Personal Income Taxes+33% of Sales Taxes
  - Resident property taxes (net) pay for a relatively small % of education costs (e.g. Londonderry 34%)

# Education Spending/Cost Containment

What do we know? What can we say?

- Highest annualized growth in per pupil spending reflecting high growth in absolute spending, declining enrollment and increased staffing.
- Comparative Ratios suggest excessive staffing.
- Cost Mitigation: Resource Parameters/Reorganization based on Vermont values suggest minimum +/-10% savings but likely would yield considerably more.
- Cost Containment for the long term requires linking increases in total compensation to private sector trends.
- Base Case provides flexible framework and methodology for fine tuning cost mitigation/containment initiatives.
- Proposed Reorganization aligns State control of funding and spending while leaving School Boards in charge of local resource management and community relationships.