Long Island Education Review

LONG ISLAND’S
PEER-REVIEWED RESEARCH JOURNAL
FOR EDUCATIONAL PROFESSIONALS

Inside this issue:

♦ Restructuring Curriculum: The Primacy of Language

♦ Bullying In Schools

♦ School Budgets Based on the Consumer Price Index: Do They Meet the Constitutional Requirements in New York State?

♦ What Secondary School Administrators Have to Say About the Preparation of Teachers for the New Millennium

♦ Teaching the Hearing Impaired: A Guide to Understanding Hearing and Hearing Loss for Educators

♦ The New Foundations: Catalysts for Innovation

♦ Exploring the Forms and Features of an Undergraduate General Education Curriculum

Practical Research for the Educational Community

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**Contents**

- Editor’s Perspective:  
  - by Kevin N. McGuire, Ph.D.  4
- Opinion Center:  
  Restructuring Curriculum: The Primacy of Language  
  - by Thomas F. Kelly, Ph.D.  5
- Bullying In Schools  
  - by Joseph Giani  7
- School Budgets Based on the Consumer Price Index:  
  Do they Meet the Constitutional Requirements in New York State  
  - by M. Shane Higuera, Marianne F. Higuera, and Elsa-Sofia Morote, Ed.D.  10
- What Secondary School Administrators Have to Say About the Preparation of Teachers for the New Millennium  
  - by John A. Nidds, Ph.D.  14
- Teaching the Hearing Impaired: A Guide to Understanding Hearing and Hearing Loss for Educators  
  - by Eric C. Bielefeld, Ph.D.  18
- The New Foundations: Catalysts for Innovation  
  - by Kevin N. McGuire, Ph.D., and Robert J. Manley, Ph.D.  24
- Exploring the Forms and Features of an Undergraduate General Education Curriculum  
  - by Maureen L. MacKenzie, Ph.D.  31
- Subscribe to the Long Island Education Review  34

**Table of Contacts**

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SCOPE Education Services is a not-for-profit, private, voluntary organization permanently chartered by the New York State Board of Regents to provide services to school districts. Founded in 1964 by school superintendents, it is a cooperative venture for sharing resources to deal with common concerns. It is governed by a Board of Directors of school superintendents and college representatives and serves as a regional School Study Council and School Board Institute.
Future Themes for The Long Island Education Review:

Leadership – Teachers and Others
Updates to No Child Left Behind
Ethics
Contracts for Excellence
Restructuring Curriculum:  The Primacy of Language
By Thomas F. Kelly, Ph.D.

As discussion on education reform progresses, there is a growing need to focus and prioritize.

Since the mission of an effective school is excellence and equity in student achievement, the first question should be, “What do all students need to learn?” The standard curriculum includes a variety: language arts, social studies, science, mathematics, physical education, music, art, etc. The first four are usually considered the “core curriculum” and are given generally equal weight and importance. This must be reconsidered.

When we look at school curricula, they are generally viewed as ends or standards, “what” is to be learned. Language, however, is not only an end, but also a means. Language is the common denominator for all learning and thinking and communication. Therefore, language arts is the most important curriculum. My “ability” to learn in school will be no greater than my present level of language achievement. If you want to increase my “ability” to learn, teach me more language. As my language achievement rises, my “ability” to learn increases. All learning, thinking, and communication are a function of language and are facilitated and/or limited by my present level of language achievement.

The truth of the above is as self-evident as it is monumental in its implications for improving student achievement. If students have low language achievement, it makes no sense to give them one period of language arts and 6 or 7 periods of other subjects for which they do not yet have the necessary language to be able to learn. This structure has failure built in. It is also probably the single greatest cause of discipline problems, attendance problems and drop outs. Would you stay in a school when the subject you were being taught was at a language level you did not understand? While unintended, this is a genuine form of child abuse.

When I was a new junior high school teacher in the South Bronx, I remember going to the chairmen of my social studies department and telling him that four of my five eighth-grade classes didn’t understand the eighth grade textbook, curriculum materials, etc. Their reading levels tested from first to fourth-grade. His response was, “that’s the required eighth grade curriculum and that’s what you teach.” So, for a full year, I taught the required eighth grade curriculum and for a full year the students did not learn. This is a classic case of confusion of 1) ends and means, and 2) priorities.

Curriculum and instruction are means. They have too often become their own ends. Learning is the end. In and of themselves, curriculum and instruction have no value. Unless they result in learning (the end, product, standard), they are worse than useless. They become the means to failure, discouragement, poor self-image, dropping out, drug and alcohol abuse, family problems, crime, etc. From an economic point of view, failure and/or low achievement cause low productivity.

My junior high school story is also a clear case of inappropriate priorities. The needs of the curriculum, the system, the state syllabus, were placed ahead of the needs of the child. Schools exist to meet the child’s need. Children do not exist to meet the school’s need. Nor do children exist to meet the needs of business or of the state. The school and state exist to meet the needs of the child. Ironically, what is best for the children is exactly what is best for the state, business, school, etc.

Therefore, our first concern in the curriculum must be the language arts program. Language arts curriculum must be clearly defined in terms of what is to be learned. Until vital language achievement is in place, curriculum improvement should prioritize language arts. Schools must have a language arts program that can meet the needs of all students, whatever level they may be, regardless of grade.

For example:
- Language instruction should be on each child’s functional level regardless of their grade level or age. For example, a sixth grade child reading at a first grade level should be taught at a first grade level, not a sixth. Instruction in language or any other subject above the first grade level will inevitably result in frustration, failure and discipline problems.
- Provision should be made for greater time allocation to language instruction for students on an as-needed basis.
• Some students need language immersion: language arts instruction all day.
• Time allocations for language instruction must be driven only by student needs, not by Carnegie units, grade levels, state tests, or the “school curriculum.” This single reform will result in dramatically improved student achievement.

All schools should generally allocate more time to language instruction. The earlier and better students learn language, the faster and better they will learn everything else. We must stop requiring the impossible. We have no right to require all students to meet our predetermined curriculum at predetermined time intervals. We must design curriculum to be able to meet the needs of all students at any time. Time should not define the curriculum. Student needs should.

Our present system is analogous to a hospital emergency room that can’t help a patient coming in with a badly bleeding wound because this is 1:00 a.m. and at 1:00 a.m. we only treat infectious diseases. Time now drives school programs. You get one year to master sixth grade reading, whether you need it or not. When student needs drive curriculum, they will finish sixth grade reading when they demonstrate mastery. Some students may finish sixth grade reading in fourth grade. Others may finish sixth grade level reading in seventh or eighth. It should be noted that in a redesigned and more effective curriculum, virtually all students will progress much faster than they do now. We are therefore really talking about speeding up learning for all. Thus, greater achievement can be accomplished with less time, work and other resources.

We know that students learn at different rates. It makes no sense therefore to require that they all learn at the same rate. When we require the impossible, we shouldn’t be surprised by failure. In fact, some students don’t need thirteen years to master our present K-12 program. Some can cover it in less. Others need more. Needs of students should drive time allocations for learning, not arbitrary time frames set up over a hundred years ago and presently maintained out of institutional inertia.

As an extreme example, the 1990 census indicated that one million immigrants came to New York City between 1980 and 1990. Tens of thousands of non-English speaking students from all over the world entered the public schools. What typically happens to these students is driven by “the system” as it presently exists. Some get one period per day of English as a Second Language (ESL). They spend the other seven periods not learning in their other classes. They don’t need biology, Chaucer or American history that they cannot understand. They need English. We need to restructure schools to meet their needs: English immersion. They should be immersed in English until their proficiency is limited. We need to restructure schools to meet their needs. English immersion centers so students from various schools can receive this essential language instruction. Limited English Proficiency (LEP) students are functionally learning disabled as long as their English proficiency is limited. They should be immersed in English until their proficiency is not limited.

Language deficiency is by no means limited to foreign born students. Millions of native-born English speaking students have language development that is not sufficient for mastery of the rest of the curriculum. As much time as needed should be allocated to teaching these students the language they need for success in the rest of the curriculum, regardless of their grade level. True mastery of any academic subject is totally predicated and dependent on prior mastery of necessary language.

Curriculum generally needs to be restructured and prioritized to meet the needs of ALL STUDENTS. The very existence of Gifted & Talented programs is an indictment of the curriculum. When we pull out students for one period a day to meet their needs, we then return them for seven periods that don’t. If the “regular” program met their needs, we wouldn’t be pulling them out to meet their needs. The same is true for remedial reading and mathematics programs. When we pull a compensatory student out for a period to meet his needs, we then return him for seven periods that don’t. That is the simple reason 99% of them can’t master either language or the rest of the curriculum. Since language deficiency is the cause, language instruction is the only (and obvious) cure.

We know from years of experience and observation that many students who get through elementary school subsequently drop out in middle or high school. Elementary schools can help by reallocating time for language as needed. Many secondary students drop out because their language achievement is insufficient for secondary curriculum. Secondary schools would be much assisted if elementary schools focused as much time as needed on language. Nonetheless, secondary schools too must prioritize language as needed by their students for learning to occur.

Essentially, the present structure of schools requires students to adjust to the needs of the school. We set standards by grade levels. If you are in the eighth grade you get eighth grade curriculum regardless of whether it is too easy or too hard. William Glasser would call this a fine example of the “nonsense curriculum.”

Attending adequately to student language needs will result in much greater achievement in not only language, but in all areas of the curriculum as well.

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Introduction

In the wake of the school shootings at Columbine High School in Littleton, Colorado on April 20, 1999, New York Governor George Pataki appointed a Task Force on School Violence headed by Lt. Governor Mary O. Donohue. The Task Force’s charge was to determine the best methods of school safety that would ensure that students were focused on academics rather than being concerned with personal safety (http://nyscenterforschoolsafety.org/save.html). The Task Force concluded with recommendations to the governor which resulted in his signing into law a comprehensive legislative plan entitled Project SAVE (Safe Schools Against Violence in Education). Project SAVE legislation of 2000 had components that included the development of school safety plans, staff training, procedures for the removal of disruptive students and the reporting of violent incidents to the New York State Education Department. With the mandatory reporting of violent and disruptive incidents, the stakes were raised for New York State schools.

In addition, beginning January 2005, all New York State schools were to begin reporting incidents of intimidation, harassment, menacing, or bullying that have been reported to the principal or other school administrator responsible for student discipline by any source. These reports are compiled with violent and disruptive incident reporting data to determine a schools Violent and Disruptive Incident Index. The intimidation, harassment, menacing, or bullying reporting category is unique in that all incidents or complaints, of which the school principal or other school administrator responsible for school discipline is aware, must be reported. If the incident results in a disciplinary or referral action, it must be reported under another category. If the incident did not result in discipline, it must be reported under a category called “Other Information Regarding Intimidation, Harassment, Menacing, or Bullying.”

Accountability in New York State schools is currently at a high level. This accountability is not only at expanded grade levels in the academic area, but in the area of student behavior as well. For the first time, the New York State Education Department has developed an index to measure violent and disruptive incidents in New York Schools. This index is similar to the already established performance indexes that measure academics. School performance and its improvement, whether academic or behavioral, is of utmost concern. Along with new testing requirements in grades 3 to 8, this added requirement gives schools another concern and fear of appearing on yet another less-than-favorable list.

Review of Literature

School safety has always been of interest to many stakeholders, whether they be school administration, teachers, students, their parents, or the community in general. The incident at Columbine High School renewed this interest and put school violence and student conduct at the forefront of concern in education. The review of the literature suggests that to be successful in school, students must feel safe, secure and comfortable. When bullying is present, victims perceive school as a threatening place and experience adjustment difficulties and a desire to avoid school (Bullock 2002). There is little doubt among researchers that being a victim of aggression can have serious emotional consequences (Hawker and Boulton 2000). Bullying is a direct attack on a person’s self-worth, which can lead to life-altering effects if permitted to continue (Brendtro 2001), and can evoke strong negative emotions in the victim. Children who are continually aggressed against are at increased risk for depression, anxiety, social withdrawal, low self-esteem, poor academics, dislike and avoidance of school, and suicidal tendencies (Browning, Cohen, and Warman 2001). Victims generally become angry, but feel helpless, which can lead to self-destructive behavior or to strike out at others. Bullying can also lead to violence. In an interview-based investigation, the United States Secret Service found that the commonality among 71% of school shooters was that they had been targets of bullying (Espelage and Swearer 2003).

Unfortunately, bullying has been around as long as there have been schools. It continues to be a problem because it is widely tolerated (Barone 1997). Brendtro, (2001) suggests the most influential role in bullying is that played by the audience. Some people cheer and encourage, while others ignore or simply watch in silence. In a study to measure perceptions of bullying, middle school students and staff were surveyed in an upstate school district. The survey found that while 58.8% of students said they had been bullied, staff members in the same school believed only 16% of the students had been victims of bullies (Barone 1997).
Clearly, this wide range in perception suggests that staff do not even recognize bullying among students. It is this difference that has hindered effective prevention efforts.

In observing bullying behavior in the classroom, Atlas and Pepler (1998), suggest four variables that influence bullying behavior: 1) characteristics of bullies and victims, 2) relationship between bully and victim, 3) presence of peers and teachers, and 4) where bullying occurs. Two of these variables focus on the bully and the victim while the other two extend beyond (Atlas and Pepler 1998). In a study to determine the potential for violence at school, Bulach, Fulbright and Williams (2003) determined a number of indicators or signs that could be observed in the student body to identify bullying behavior. They suggest that if faculty were sensitized to these indicators, they could identify potential problems before bullying occurred (Bulach, Fulbright and Williams 2003).

Local policy makers have expressed interest and made an attempt to address the problem of bullying in schools. Currently, 15 states have enacted laws to address bullying. In a study whose primary purpose was to describe, compare and contrast current state laws about bullying, Limber and Small developed four recommendations for local policy makers: develop anti-bullying policies consistent with State Department of Education recommendations; where financially feasible, promote research-based, comprehensive bullying prevention programs, as these initiatives are likely to produce the most significant and lasting changes; initiate training for all staff and volunteers on bullying and bullying prevention; and coordinate bullying prevention activities with existing violence prevention (or other) programs within schools (Limber and Small 2003).

Strategies for preventing bullying in schools range from caregiver training and school intervention, to zero tolerance policies. Zero tolerance policies are the most widely implemented and are designed to reduce or eliminate the behavior by severely punishing certain offenses. At this point, research in the area of preventive program effectiveness is limited. Intervention programs produced a modest result in the reduction of aggression, while zero-tolerance policy has been controversial in terms of its fairness of application and effectiveness (Orpinas, Horne and Staniszewski 2003).

Critical Analysis

In this brief review of the literature, incidents of bullying clearly have a negative effect on student success in school. Recognition of the problem and developing a comprehensive plan to address it are certainly the first steps in addressing such incidents. In the framework advanced by Atlas and Pepler (1998), two of the four variables were addressed favorably by schools. These two variables are the presence of peers and teachers, and where the bullying occurs. The presence of peers and teachers extends the focus beyond the bully and the victim. Teachers and peers inadvertently reinforce bullying behavior by not reprimanding the bully, or by ending up drawn into the episode (Atlas and Pepler 1998). By training staff and teaching students how to identify bullying behaviors, preventive strategies for dealing with these incidents can be taught and advanced. Furthermore, since bullying tends to occur in unsupervised areas such as the playground, better supervision along with this training is well advised.

Districts that choose to take a no nonsense approach by implementing zero tolerance policies are cautioned. As freedoms are taken away and pranks are treated with expulsion, districts may be making difficult students more alienated and more rebellious. One researcher asserts: “There’s a knee-jerk reaction going on. Educators are punishing kids for things that they previously wouldn’t have been punished for (Easterbrook 1999).”

This review of the literature suggests that a comprehensive program approach may be best. Such a program should create a positive environment at school and include raising awareness of the issue among staff, students, and their parents. A positive school climate has been associated with fewer student behavioral and emotional problems (Kuperminc, Leadbeater, Emmons and Blatt 1997). It has also been found that a positive school climate

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can produce positive educational outcomes for students and school staff, while a negative climate can reduce student learning and influence poor teacher morale (Kuperminc, Leadbeater, Emmons and Blatt 1997). Staff and parents need to be trained to recognize bullying and learn strategies to address these behavior issues both at home and in the classroom. A comprehensive program would also teach students conflict resolution and teachers classroom management skills. In sum, the program should have a clear set of rules and consequences established and widely accepted by all. Consequences need not necessarily be punitive in nature, but should enhance a positive school climate, and reinforce positive behaviors (Orpinas, Horne and Staniszewski 2003).

Conclusions

The recognition of the presence of bullying is the first step in a prevention effort. Once school officials accept that bullying is occurring, and that there is a problem or potential for it, they can begin to develop a plan or policy. This plan must involve school personnel, teachers, children, and families (Bullock 2002). Intervention must occur on three levels: school-wide, in specific classrooms, and with individuals (Bullock 2002). A very important aspect of the process is a strong commitment on the part of the teachers, who must be active participants in the process (Orpinas, Horne and Staniszewski 2003). Teachers are on the front line, as students often report incidents to them or witness incidents throughout the school day. Therefore, teachers are in the best position to identify bullying and redirect poor student behavior.

Schools need to raise the level of awareness among students, their families, and staff. A comprehensive program should focus on creating a positive school environment, and include intervention strategies for both students and staff. A positive school climate is often overlooked but of utmost importance. School climate has been found to affect many student outcomes in schools (Cheat 1990, Lindsey 1991).

Finally, each school should establish a code of conduct that focuses on reinforcing positive behaviors and the enhancement of a positive school climate. The code should have a clear set of rules and consequences, but that are not necessarily punitive in nature.

The New York State Education Department's new requirement of reporting incidents of intimidation, harassment, menacing, or bullying (VADIR 2005), is clearly an attempt to make schools more aware of these situations, particularly since these reports are compiled with violent and disruptive incident reporting data to determine a Violent and Disruptive Incident Index for the schools. Along with the new testing requirements in grades 3 – 8, this new requirement gives schools another concern and fear of appearing on yet another less-than-favorable list. In addition to how they perform academically, schools now need to be concerned how they are performing behaviorally.

References


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Abstract

This study examined the use of the National Consumer Price Index for all urban consumers (CPI-U) as a benchmark in evaluating annual budget increases, and the use of a multiple of the CPI-U (120%) as a spending cap for contingency budgets in school districts within New York State. Using budget, enrollment, and voting data for approximately 575 school districts obtained from the New York State Education Department, one-sample t tests were conducted to determine whether the change in the annual CPI-U and 120% of the CPI-U was the same as the mean change in school district budgets. The sample mean differences were significantly higher than the test values, suggesting that the use of the CPI-U and a multiple were not appropriate.

Purpose

Even as taxpayer fatigue settles in, each year school districts in New York State are being required to do more by the federal and state governments as well as by their communities. Too often, these demands are unfunded and become an unwelcome burden to the taxpayers at budget vote time. Voters have been conditioned to compare their school district's budget increase with the CPI-U to determine if the proposed budget increase is appropriate. This was done, it seems, without determining whether the comparison is appropriate. Additionally, the State of New York limits the level of spending for those school districts on a contingency budget. The calculation of this spending limit is based on a multiple (120%) of the CPI-U. The purpose of this study was to examine the use of the consumer price index (CPI-U) as a benchmark in evaluating annual budget increases, and the use of a multiple of the CPI-U (120%) as a spending cap for contingency budgets in school districts within New York State. The research question studied was: is the change in the annual CPI-U the same as, or more than, the mean change in school district budgets required to provide a sound basic education?

Perspective

Public school finance at the State level can seem to be more a result of politics than of student need. The laws governing public school finance can seem reasonable on their surface, but they can sometimes be misaligned with the purpose of public education, which the reader will later see defined by the court. This section of the paper discusses the nature of a small but important piece of the legal puzzle that seems to be self-contradictory. We will leave the politics to the imagination of the reader.

New York State’s public school finance system is authorized by the New York State constitution, which states in full that, “The legislature shall provide for the maintenance and support of a system of free common schools, wherein all the children of this State may be educated” (N.Y. Const. art. XI, § 1.).

The Campaign for Fiscal Equity, Inc. (CFE) created a chronology of their lawsuit filed on behalf of the students of New York City against the State of New York challenging the constitutionality of New York State’s public school financing system. The relevant portion of the chronology provides the following:

January 10, 2001: The State Supreme Court rules in favor of CFE, declaring the State’s school funding system unconstitutional. In his decision, Justice Leland DeGrasse orders the State to reform the school funding system to make it predictable, transparent, and aligned to student need.

June 25, 2002: In a 4-1 vote, the Appellate Division, First Department, of the State Supreme Court rejects the trial court’s ruling that the current school funding formula is “inequitable and unconstitutional.” The intermediate appeals court holds that students in New York State are only entitled to an eighth-grade level of education and preparation for low-level jobs.

June 26, 2003: In a 4-1 vote, the Court of Appeals reverses the Appellate Division and rules in favor of CFE ordering the State to reform the funding system to ensure that schools have the resources to provide the opportunity for a “sound basic education,” which they define as a “meaningful high school education.”
education.” In their remedial order, the Court orders the State to “ascertain the actual cost of providing a sound basic education” and implement a system of accountability that will ensure the reforms actually provide the opportunity for a sound basic education. They give the State until July 30, 2004 to implement the necessary measures. (http://www.cfequity.org/CFEchronology.htm, ¶ 3-5).

The decisions described above served to expand the constitutional entitlement regarding public education, from that of a common school (eighth-grade) education to that of a meaningful high school (sound basic) education. (CFE v. State of New York, Slip Op. at 15615, 2003). The decisions also established criteria for the State’s public school finance system; the system must be predictable, transparent, and aligned to student need (CFE v. State of New York, 2001).

This paper focuses on the school district budget component of the State’s public school finance system. The laws governing school district budgets have not been adjusted as a result of the court’s order. Specifically, the laws governing the school district budget notice and those governing the calculation of the contingency budget cap may need to be revised in order to meet the court ordered standard of being aligned to student need.

School districts in New York State are required to provide written notice to their communities regarding the budget-to-budget change being proposed (N.Y.S. Education Law § 2022.2-a, 2007). In this notice, school districts are also required to report the change in the (CPI-U) for the calendar year prior to the fiscal year for which the proposed budget was developed. This requirement makes clear the State’s position that the change in the CPI-U is the appropriate benchmark against which to evaluate a school district’s proposed budget.

In New York State, if a school district’s budget is defeated by its voters, the school district may either hold another vote, or adopt a contingency budget. If the school district holds another vote, and the proposed budget is defeated by its voters, the school district must adopt a contingency budget. The contingency budget adopted by the school district is subject to a cap on total expenditures. The contingency budget cap on total expenditures is the lesser of 4%, or 120% of the change in the annual CPI-U for the prior calendar year (N.Y.S. Education Law § 2023, 2007). The use of the CPI-U, in this case 120% of the change in the CPI-U, as a cap on a school district’s budget establishes the CPI-U as a State imposed benchmark against which to evaluate school district budgets.

The CFE v. State of New York, (2001) established the new standard that the State’s school finance system must be aligned to student need. With that in mind, the question arises, is the change in the annual CPI-U the same as, or more than, the average change in school district budgets required to provide a sound basic education?

Method

We calculated the year-to-year change in the voter approved per pupil budgets for school districts in New York State for the last four years: 2004-05; 2005-06; 2006-07; and 2007-08. We used voter approved budgets because the State’s delegation of budget approval to local communities makes clear the State’s belief that local communities are best suited to determine the appropriate level of expenditures needed to provide a sound basic education. Only budgets that were voter approved on the first vote were used in the study because the second vote budget information was not available. The per pupil budget-to-budget change was used to control for the variation in needed expenditures due to student enrollment. We used a one-sample t test to compare the mean percentage change in the voter approved per pupil budgets to the percentage change in the CPI-U and 120% of the change in the CPI-U for the corresponding years.

Data Sources

The per pupil budgets were calculated using the budget and enrollment data collected by the New York State Education Department (NYSED) from the property tax report cards submitted by school districts. Big city and special act school districts are not required to submit this data as they do not vote on their budgets and, therefore, they were not included in the study. The property tax report card data is self-reported and unaudited. Though required by sections 1608(7), 1716(7), and 2601-a(3) of the New York State Education Law to do so, not every school district required to submit this data complied for the years studied. The per pupil budget data for each school district that submitted a property tax report card was checked against the first round budget vote results collected by the NYSED. These data are also self-reported and unaudited. School districts with a failed first round budget vote were excluded from the sample for the year(s) in which the failed first round vote occurred. The remaining sample of school districts for each of the years studied yielded the initial voter approved per pupil budget-to-budget percentage change data to be analyzed. The voter approved per pupil budget-to-budget percentage change data was tested for normal distribution and all outliers were excluded from the data sets. The data sets for each of the four years studied were normally distributed with low skewness and slight to moderate positive kurtosis. The remaining samples ranged from 545 to 633 school districts.

CPI data were retrieved from the United States Department of Labor, Bureau of Labor Statistics website (http://data.bls.gov/cgi-bin/surveymost?cu). We used these data to calculate the percentage change in the average annual CPI-U.

Results

One-sample t tests were conducted on the voter approved per pupil budget percentage changes for each of the budget years 2004-05, 2005-06, 2006-07, and 2007-08 to evaluate whether their means were significantly different.
from the percentage change in the CPI-U for the calendar year prior to the budget votes. For each of the years studied, the sample mean was significantly different from the percentage change in the related CPI-U and the effect size indicated a large effect (Table 1). For example, for the 2004-05 budget, the sample mean 5.86 (SD = 3.02) was significantly different from 2.28, t(534) = 27.37, p = <.01. The effect size $d = 1.18$ indicates a large effect. Table 1 shows the results of the one-sample $t$ test for each of the years studied. The results support the conclusion that the use of the CPI-U as a benchmark for the per pupil budget-to-budget percentage change required to align with student needs is not appropriate.

One-sample $t$ tests were conducted on the voter approved per pupil budget percentage changes for each of the budget years 2004-05, 2005-06, 2006-07, and 2007-08 to evaluate whether their means were significantly different from the percentage change in the CPI-U x 120% for the prior year. For each of the years studied, the sample mean was significantly different from the percentage change in the related CPI-U and the effect size indicated a large effect, except for 2006-07 when it indicated a medium effect. (Table 2) For example, for the 2004-05 budget, the sample mean 5.86 (SD = 3.02) was significantly different from 2.73, t(534) = 23.93, p = <.01. The effect size $d = 1.03$ indicates a large effect. Table 2 shows the results of the one-sample $t$ test for each of the years studied. The results support the conclusion that the use of the CPI-U as a cap for the per pupil budget-to-budget change percentage required to align with student needs is not appropriate.

### Educational Importance of the Study


<table>
<thead>
<tr>
<th>Table 1 - Test Value is CPI-U</th>
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<tr>
<th>Per Pupil Budget % Change</th>
<th>N</th>
<th>Test Value</th>
<th>M</th>
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State's public school finance system must be designed. The constitutional standard that the public school finance system must now meet has been expanded by the courts from providing all children with an opportunity for a common school (eighth grade) education to providing all children with an opportunity for a meaningful (high school) education. Additionally, the public school finance system must now be predictable, transparent, and aligned to student need. It is the system’s alignment with student need that is at issue in this paper.

The State has delegated to local school district communities the power to determine the size of the annual school district budgets necessary for meeting the constitutional standard of education. Communities exercise this power through the budget vote process established in the Education Law. This delegation is a strong indication that the local school district voters are best suited to determine the level of spending required to meet the constitutional standard. However, in what might seem like a contradictory piece of legislation, the State imposes limitations on the spending increases that may be adopted by school districts when their communities fail to approve their proposed budgets. This same piece of legislation requires school districts to include information on the change in the CPI-U in their budget notice, which is sent home to all qualified voters and is sent to the local media. This legislation is a clear indication that the State believes that budget increases should be equivalent to changes in the CPI-U, without consideration of student need.

This study found that, for the four-year period studied, the mean voter approved per pupil budget-to-budget increase was significantly higher than the change in the CPI-U. This suggests that the use of the CPI-U as a benchmark for evaluating budget increases is not appropriate when the new standard requiring the State’s public school financing system to be aligned with student need is considered. On average, the local communities determining the increases in their school district budgets needed to provide a sound basic education believed that the required funding was much higher than the percentage change in the CPI-U. As a result, the State may need to alter the benchmark it requires school districts to include in their budget notices to their communities.

The State may also need to revise the calculation of the contingency budget cap. The current calculation of the lesser of 4% or 120% of the change in the CPI-U would have been significantly lower than the mean increase in per pupil budgets approved by communities throughout the State. This suggests that a contingency budget calculated pursuant to the current law, may not be aligned with student need.

These findings also suggest the need for the development of appropriate benchmarks for evaluating the proposed budget increases and for calculating the spending cap on contingency budgets.

References


New York State Constitution, Article XI, Section 1, (2007).


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If schools are to meet the challenges of the twenty-first century, teachers must be prepared. The following questionnaire and responses, originally completed by a group of school administrators on Long Island, may help other administrators who wish to evaluate their schools and teachers and make informed changes.

Because secondary school administrators must respond to a myriad of daily, weekly, and monthly demands on their time and energy, their management style, too often, is reactive. Their agendas are dominated by fallout from a society in crisis, and the administrators feel they are applying band aids for conditions requiring massive therapy.

Principals know that fundamental innovations in organization, curriculum, and pedagogy are required if the twenty-first century is to be a time of maintaining, let alone raising, educational standards. Most practicing administrators recognize the urgency of restructuring; unfortunately, they have not been able to attack the issue in a reflective, informed, and systematic manner.

Examining the Problem

This author observed the dilemma firsthand, and described it in an NASSP Bulletin article, May, 1996, during a visit to a high school in a small city in New York State where he met with the principal, assistant principal, and dean for several hours, examining the programs and problems of the school. Though the principal had set aside this time to plan elements of restructuring, progress was hampered by constant emergencies requiring the presence of one or more of the administrators. Though committed to a "retreat" from immediate pressures, the principal finally concluded that the only possibility of working uninterruptedly was to schedule the next session during the summer months.

One comment during this oft-interrupted meeting, however, led me to mention a questionnaire I had recently completed. I asked the administrators with whom I was meeting if they would be interested in learning about the programs, needs, problems, and hopes of their counterparts on Long Island. The positive tone of the responses told me that I had overlooked the obvious value of the information I had gathered in the questionnaire.

Having received responses from almost 40 percent of the Long Island secondary school administrators whom I had queried earlier in the year, I was already aware that I had a valuable resource for the education classes taught by me and my colleagues. The responses I had received were to aid me in keeping current with the realities faced by administrators and teachers and would, of course, improve preparation of the next generation of educators.

Now I realized that an equally important use of the questionnaire and responses would be as a resource for other administrators who wished to evaluate their own situations and make informed changes. The questionnaire could function as an "idea bank" containing the perceptions of administrators regarding critical issues in their school, in schools of education, and in society as a whole.

A Tone of Frustration

That was 1996. The favorable reviews I received from that 1996 article motivated me to again (2007) ask middle and senior high school principals the same set of questions.

I had detected a tone of frustration in the responses to the questionnaire pertaining to the roles that the secondary school administrators expected to play in restructuring education.

Simply put, the administrators were almost resigned to being ignored.

The model of the modern U.S. corporation, like that of the contemporary classroom, has developed from ideas made popular by W. Edwards Deming in his efforts to reconstruct the corporate culture. Many of these same ideas have
been adapted by Thomas Friedman, Jerome Bruner, William Glasser, and others in attempts to restructure education. Yet, paradoxically, I found little evidence that these educational theorists had reached out to secondary school administrators, those who wrestle daily with pressing educational and human issues, as key resources in planning the structure of the twenty-first century educational system.

In spite of the pressing demands of their duties, these administrators had expended significant thought, time, and energy in responding to the authors’ upgraded questionnaire. This author, in turn, deemed the ideas to be logical, well-informed, often on the cutting edge of educational research, yet tempered by the daily exigencies of operating secondary schools.

Summaries of the responses of 19 high school principals and 14 middle level principals, completed in 2007, follow. Though similar, the responses differ in emphasis and, therefore, are presented separately.

**Senior High School Principal’s Questionnaire**

**1. What are the academic needs of secondary school students that should be stressed in our education courses?**

- √ Skills that relate to state standards
- √ Lessons must stress standards and assessments
- √ Fundamental skills in reading, writing and math
- √ Abstract higher level thinking skills
- √ Differentiated teaching/learning skills
- √ Technology skills-updated
- √ Problem solving
- √ Writing across the curriculum

**2. What are the non-academic needs of secondary school students that we should stress in our education courses?**

- √ Sensitivity education
- √ How to work cooperatively with peers and adults
- √ Motivation to learn
- √ Cultivate proper dress and attire
- √ Public speaking skills
- √ Develop positive relationships for openness to learning
- √ Students need role models, not “cool friends”
- √ Take pride in their work
- √ Community service
- √ Punctuality and time management
- √ Character development
- √ Stress the affective domain

**3. What educational approaches should we stress in our secondary school education courses?**

- √ Lesson plans that relate to N.Y.S. standards
- √ Relevancy in teaching/learning
- √ Stick to balance between firmness and flexibility
- √ Instructional strategies that work

- √ Increasing vigor in teaching/learning
- √ Essential questions and enduring understanding
- √ Software teacher and student presentations
- √ Teacher-hard, hard work
- √ Student-hard, hard work

**4. What classroom management and discipline skills should be stressed in our secondary education courses?**

- √ Offer anti-bullying classes
- √ Discipline with dignity
- √ Setting rules and policies
- √ Time to observe teachers with excellence
- √ Disciplinary techniques
- √ Lee Cantor workshop
- √ How to be clear, firm yet flexible
- √ How to diffuse tense situations
- √ How to promote a positive learning environment
- √ Nothing can happen without an effective discipline structure
- √ Respect, respect, respect
- √ Appropriate professional dress-do not dress as students do-they are not your friends
- √ When students are engaged, management is not a problem
- √ When organization is present, management is not a problem
- √ Use positive management techniques
- √ Dealing with the parents of difficult students

**Middle Level School Principals’ Questionnaire**

**1. What are the academic needs of secondary school students that should be stressed in our education courses?**

- √ Students who are unprepared
- √ Poor study skills
- √ Accountability, accountability, accountability
- √ Less and less is done at home
- √ More and more students do not spend sufficient time on school work at home
- √ The closer in age to the student, the necessity to have a clear delineation emphasis on literacy in the classroom
- √ Thematic planning and teaching
- √ Working effectively with parents
- √ Raising academic standards
- √ Dealing with paper work without frustration
2. **What are the non-academic needs of secondary school students?**

- Social and emotional development
- Responsibility for actions
- Sensitivity education
- Empathy for others
- Cyber safety, anti-bullying
- Stress and anger management
- More stress on the affective domain
- Community service
- Cultivate peer and adult interaction and relationship
- Punctuality and time management
- Character development
- Survival in heterogeneous and inclusion classes

3. **What educational approaches should we stress?**

- Differentiated teaching/learning
- Multi-sensory...computer and internet as tools. Integrated approaches of core and encore courses in delivery of instruction
- Assessing student learning
- Student centered strategies
- Utilization of Bloom’s taxonomy
- Technology-upgraded skills
- Use of manipulations
- Full immersion in courses-make them real, relevant and meaningful, student centered cooperative learning
- “Student as worker, teacher as coach”
- Multi-cultural issues
- Positive reinforcement
- Utilization of Bloom’s taxonomy
- Task orientation

4. **What classroom management and discipline skills should we stress?**

- Clearly defined rules and expectations for behavior and dress that are consistently role play disciplinary situations
- Parental involvement
- Consistency, fairness and modeling good behavior
- Choosing your battlegrounds
- Consistent responses to discipline
- Rules
- Emphasize the positive
- Public praise and private admonishment
- Stress organizational skills as a precursor for good classroom discipline
- Respect, respect, respect
- Teacher contact and discipline
- Responsibilities
- Crisis intervention

5. **What current educational challenges will be met on a secondary level?**

- Lack of time for effective parenting
- Too much time taken up by this assessment debacle that has evolved
- Teaching to the standards (few know them well)
- Meeting the needs of all students thru differentiated learning
- Increased accountability
- Seeing new students every 40 minutes
- State standards-tests, tests, tests
- Peer pressure
- Lack of respect
- Diversity
- Communication with parents
- Keeping track of all students
- Increased accountability
- N.C.L.B.
- Unprepared students
- Graduation requirements
- Keeping up with technology and its use in the classroom
- Growing distrust on the part of the public towards education in general

**What Principals Want**

The principals expressed concern that teacher training be improved in three areas: academic preparation, pedagogical preparation, and personal development.

Academically, the principals want aspiring teachers to be knowledgeable in the use of technology, especially regarding the Internet. They also expect them to be skilled writers, have a firm grasp of their subject area, be proficient in community relations, and have facility in public speaking.

Desired pedagogical preparation includes learning to teach computer skills (including Internet), research and study skills, and reading and writing skills particular to specific academic areas. Additionally, principals expect new teachers to be familiar with preparing units of study that incorporate authentic tasks and differentiated teaching styles, and assessments. Relating to classroom management, new teachers should be familiar with cooperative learning environments, diversity classes, and other heterogeneous arrangements.

Principals expect young teachers to:

- Possess knowledge of and sensitivity to cultural and ethnic differences
- Possess conflict resolution skills
- Be able to manage time efficiently
- Be familiar with current research in education in general as well as in specific content area
- Possess knowledge of standards and high stakes assessments
- Be able to deal with parent concerns
- Be able to communicate well
- Be reliable
Clearly, the secondary principals expect prospective teachers to be well versed in a spectrum of areas far wider than has been required heretofore. The implications for schools of education are manifest.

The breadth of interests expressed by the principals reflects the high levels at which they themselves are working. That they are able to remain so current in educational issues while operating their buildings is a tribute to their ability and dedication.

Other Crucial Elements

Both sets of responses indicate that the public school administrators who responded to my questionnaire are well informed and committed to a quality, well-rounded educational experience for each of their students.

Noticeable by their absence, however, are three areas that the author regards as crucial elements in a complete twenty-first century education.

First is the inclusion of parents and community resources in the educational process.

Second, and related, is the necessity to devise authentic tasks, activities and projects that incorporate curriculum requirements, that require application of higher level thinking or problem-solving skills, and that engage the affective lives of a diverse student body.

Third, and closely related to the first two elements of an effective educational experience is a commitment to the challenges of federal, state, and local standards and assessments. It is only through these kinds of experiences that we may realistically expect to foster academic development in our students. The difficulties of incorporating these three elements are, indeed, daunting, but must be overcome if schools are to meet the challenges of the twenty-first century.

References


Dr. John A. Nidds is a Professor in the School of Education at Dowling College, Oakdale, New York.
Hearing loss affects approximately 800,000 to 1.2 million American children of school age (Lee, Gomez-Marín, & Lee, 1996; Lee, Gomez-Marín, & Lee, 1998). Deficits in hearing, even mild temporary hearing losses, can cause significant delays in language and speech development, as well as a number of auditory-based learning disabilities (Kirkwood & Kirkwood, 1983). Because of the high amount of auditory interaction teachers have with students, teachers are in unique positions to be able to identify children with hearing deficits. Furthermore, it becomes one of the responsibilities of the teachers to help facilitate optimal communication with the hearing impaired students in their classrooms. Teachers are a key resource in combination with parents, physicians, audiologists, and speech-language pathologists in the struggle to identify and properly treat students with hearing loss. For that reason, the following is a primer on hearing, hearing testing, hearing loss, and some of the devices/treatment options for the hearing impaired.

**Hearing**

An understanding of the hearing process, the physical structure of the ear, and the kinds of impairments that occur in students and children, will assist teachers in more effectively communicating and teaching them in the classroom and school setting. The human ear consists of four general components: the external ear, the middle ear, the inner ear, and the central auditory nervous system (Figure 1). The external ear consists of the pinna (the cartilaginous structure that is attached to the skull) and the external auditory meatus (the tunnel that enters into the skull). The main role of the external ear is to collect sounds and direct them into the middle and inner ear structures (Durrant & Lorinic, 1995). Many animal species have the ability to move their pinnae in sophisticated, precise ways as a means to help localize the direction from which sounds are coming. This aids in hunting/tracking as well as escape from dangers. Humans do not have the ability to move their pinnae in sophisticated ways, but the structures are still useful for collecting and amplifying sounds. One needs only to cup his or her hands behind his or her ears to notice how much louder sounds become (de Boer, 1984). Defect or missing pinnae, as well as narrow or closed external auditory meatuses, can cause significant hearing loss.

The middle ear begins at the tympanic membrane (TM, aka: the ear drum) which is located at the end of the tunnel that is the external auditory meatus. Attached to the TM is the malleus, the first of the three middle ear bones called the ossicles. Connected to the malleus is the incus, and connected to the incus is the stapes. The three ossicles are often also referred to as the hammer, the anvil, and the stirrup. The stapes bone inserts into the cochlea, the first structure of the inner ear. When sound reaches the end of the external auditory meatus, it strikes the TM, causing it to move back and forth. Since the ossicles are attached to the TM, they also move back and forth. This action transfers the sound energy that has arrived at the TM through the ossicles and into the cochlea (Yost, 1994).

The cochlea is the key organ where the energy of sound is converted into the electro-chemical energy of the nervous system. The cochlea is a snail shell-shaped bony structure that is filled with fluid. When the stapes moves back and forth in concert with the sound energy transmitted through the TM, it sets the fluid within the cochlea into motion (Von Bekesy, 1958). Contained within the cochlea is the organ of Corti, which contains hair cells that respond to the fluid motion that results from the movement of the stapes bone. The hair cells respond to the movement of the fluid by releasing neurotransmitter (Slepecky, 1996). Underneath the hair cells are neurons of the auditory nerve (the cochlea and auditory nerve comprise the structures of the inner ear). The neurons of the auditory nerve respond to the neurotransmitter from the hair cells. The auditory nerve is comprised of a series of neurons that form a chain running from the cochlea to the brainstem (Yost, 1994). The activity of each
neuron in the chain causes a response from each neuron to which it is connected. This chain of responses from the neurons sends the auditory signal through the auditory nerve into the auditory centers of the brainstem (Sewell, 1996). Several structures within the brain work to recognize and process auditory signals. These structures comprise the central auditory nervous system and are the structures responsible for the actual sensation of hearing.

The ear is an extremely sophisticated organ and one that is very susceptible to damage. Damage at any location within the auditory pathway, from the pinna to the highest auditory centers of the brain, can lead to significant hearing deficits. Familiarity with the terminology used in the tests given by audiologists will enable the teacher to better understand the test reports and recommendations they might receive from audiologists or otolaryngologists.

Hearing Testing

The first step in any child’s hearing testing process is the recognition that a hearing evaluation is necessary. Educators are often the first to see signs of a possible hearing problem in a student, and are the ones to initially recommend evaluation for hearing loss. Warning signs include: a child who is easily distracted by background noise, one who when seated away from the teacher struggles to hear him/her, one who responds more effectively to visual questions or commands, one who appears to favor one ear over the other. Any time there is cause for concern about a child’s hearing, an evaluation by an otolaryngologist or audiologist is recommended.

Initial hearing loss diagnosis is made on the basis of the standard audiometric test battery. The normal battery consists of three principle tests: otoscopy, tympanometry, and audiometry. Otoscopy is the visual examination of the pinna, external auditory meatus, and TM. Tympanometry is a test of the pressure behind the TM, and the TM’s ability to move in response to sound. Tympanograms are labeled one of three letters to classify the type of tympanogram. A Type A tympanogram denotes normal mobility of the TM and normal pressure behind the TM. A Type B tympanogram denotes no mobility of the TM. A Type C tympanogram denotes significant negative pressure behind the TM.

Following tympanometry, an audiogram is taken. This test is the true indicator of a patient’s hearing ability. The first part consists of air conduction pure tone testing. The ear breaks complex sounds down into different frequencies, and most hearing losses vary across frequencies (Harrell, 2002). Pure tone threshold testing finds the lowest level at which a patient can hear a sound at a given frequency, ranging from low frequency (250 Hz) to high (6000-8000 Hz). Intensity of the sound is measured in decibels (dB), a logarithmic scale. Every doubling of sound pressure level leads to an increase of 3 dB. Common casual speech is in the 50-70 dB range. Sound above 85 dB can cause hearing loss, depending on the length of exposure. Pure tone thresholds are charted on an audiogram, with red circles for the right ear, and blue X’s for the left ear. The x-axis along the top shows frequency. The y-axis charts the intensity of the sound where the threshold was found (in dB). The lowest intensities are at the top of the chart, and the higher intensities occur at the lower end of the chart. The example audiogram shown in Figure 2 depicts air conduction thresholds in a patient with normal hearing sensitivity.

In addition to air conduction testing (done with headphones or earphones inserted into the external auditory meatus, an audiogram includes bone conduction. Air conduction testing delivers sound into the ear through the ear. It tests the function of the external ear, middle ear, inner ear, and central auditory nervous system. Bone conduction testing stimulates the bone of the skull to deliver the sound directly to the cochlea, bypassing the external and middle ears (Tonndorf, 1968). Only the inner ear and central system are tested with bone conduction. With both air and bone conduction testing, the audiologist is able to roughly determine where in the auditory system a problem is occurring (more on that in the Hearing Loss section).

Finally, speech testing is also performed as part of an audiogram. A speech reception threshold (SRT) is found, the minimum level at which bi-syllabic sounds can be heard and repeated by the patient (Carhart, 1951). After the SRT, word discrimination ability is tested by delivering a
series of monosyllabic words at a comfortable dB level. The percentage of correctly repeated words is calculated and reported as the word discrimination score (Carhart, 1965). This score is particularly useful for determining a patient’s potential benefit from a hearing aid. If they cannot understand words at a comfortable level, the amplification from a hearing aid is unlikely to benefit them (more on that topic in the Hearing Aids section).

**Hearing Loss**

For the teacher, an understanding of what causes hearing loss and how it affects the student’s perception of auditory information is of paramount importance for recognizing students with hearing loss and participating in the student’s auditory rehabilitation or habilitation. Hearing loss is classified into one of three forms based on the audiogram: conductive, sensorineural, or mixed (Harrell, 2002). Conductive losses result from damage to the external and/ or middle ear sections, with normal functioning inner ear and central auditory systems. On the audiogram, conductive losses manifest with elevated air conduction thresholds, but normal bone conduction. Because bone conduction bypasses the external and middle ears, it tests only the inner and central systems (Tonndorf, 1968). Those systems are normal, so bone conduction thresholds are normal. Sensorineural losses result from damage to the inner ear and/or central auditory system, with normal function of external and middle ears. In these cases, air conduction thresholds are elevated and bone conduction thresholds are elevated equally. Since both air bone conduction are testing the impaired areas, the loss shows up on both tests. Mixed losses are a combination of conductive and sensorineural losses. Air conduction and bone conduction thresholds are both elevated, but air is still considerably worse than bone.

Common causes of conductive hearing loss include: middle ear infections (with and without fluid filling the middle ear space), perforated TMs, and buildup of cerumen (ear wax) in the external auditory meatus. There are numerous other causes, but those are the most common, especially in children. In children, conductive losses are considerably more common than sensorineural or mixed. Whereas sensorineural losses are likely to be permanent, most conductive losses are temporary and medically treatable. For conditions of middle ear infection, negative pressure (resulting in a Type C tympanogram) or fluid (resulting in a Type B tympanogram) can build up behind the TM. The buildup results in decreased mobility of the TM and middle ear ossicles, resulting in less sound energy being transmitted to the cochlea (Davidson, Hyde, & Alberti, 1988). Treatment options from a primary physician or otolaryngologist (ENT doctor) include antibiotics, waiting for the infection to clear on its own, or a myringotomy. A myringotomy is a procedure in which a small incision is made through the TM, allowing fluid or excessive pressure to drain out through the external ear. Pressure equalization tubes can also be implanted at that time to keep the hole in the TM open to prevent further buildup of fluid or pressure (Mandel et al., 1989). TM perforations can also occur on their own, either through trauma to the TM or due to excessive pressure behind the TM that results in the TM bursting open to relieve the pressure. TM perforations often heal themselves, as long the damage is not too extensive. In cases of more severe damage, surgical repair is an option.

Cerumen impaction is one of the more common causes of external ear-related conductive hearing loss. While in most people, cerumen clears from the external auditory meatus naturally, some people with small ear canals or excessive production of cerumen cannot naturally clear it out. The result is that the entire external auditory meatus becomes impacted with cerumen and sound cannot reach the TM (Ney, 1993). Cerumen can be cleared by a physician using manual extraction, flushing the ears with water, or vacuuming the cerumen out with a specialized apparatus. Caregivers often make the mistake of “cleaning” a child’s ears with cotton swabs, a process that serves only to push cerumen deeper into the ear canal toward the TM, where it is more likely to become impacted and more difficult for the physician to extract. The best procedure is simply to wash the pinna and the very shallowest edge of the external auditory meatus, but without digging into the meatus in an attempt to extract cerumen. Otitis externa (aka swimmer’s ear) can also affect the external ear and cause conductive hearing loss. The infection affects the walls of the external auditory meatus, causing them to swell. The result can be an external auditory meatus with a drastically narrowed diameter (can be to the point of closing the meatus off completely) (Keim, 1977). The decrease in meatus diameter reduces the sound energy that can reach the TM. Otitis externa is usually treated with drops prescribed by a physician.

Sensorineural hearing loss affects many fewer children than does conductive hearing loss, but the severity of sensorineural hearing loss is greater, and the loss is almost always permanent. The most common cause of sensorineural hearing loss is death of the hair cells in the cochlea (Davidson, Hyde, & Alberti, 1988). In adults, the hair cells usually die from exposure to intense noise or from aging (Henderson et al., 2006). In children, this occurs due to bacterial meningitis (Fortnum & Davis, 1993), abnormalities in development of the cochlea, various severe childhood or prenatal infections or illnesses (McCullister et al., 1996; Peckham, 1989; Hall and Richards, 1987), or genetic hearing losses of unknown origin. Noise-induced hearing loss is growing as a problem for younger and younger populations, as the sound output levels of various electronic entertainment devices becomes higher and higher. Although it is rare for children under age eighteen to have significant noise-induced hearing loss, early stage hearing loss is becoming more common, and portends significant hearing losses for these children as they reach middle age and beyond. Damage/abnormalities in the central auditory nervous system that can lead to sensorineural hearing loss are often more difficult to recognize and diagnose in children. Central auditory learning difficulties are becoming more widely recognized, although exact diagnosis and treatment options are still a matter of debate.
Hearing Aids

As stated above, children with sensorineural hearing loss most likely have a permanent loss. Should the hearing deficit be severe enough, amplification is indicated. Amplification in children is most commonly accomplished with a behind-the-ear (BTE) hearing aid (Dillon, 2001). In its simplest form, a hearing aid consists of four components: a microphone to pick up sound, an amplifier to increase the dB level of the sound, a receiver to deliver the amplified sound into the patient’s ear, and a shell or mold to fit the aid into the patient’s ear (Valente et al., 2002). The BTE houses its electronic components in a shell that fits behind the patient’s ear. The shell is connected to a tube that runs to a mold that is fit into the patient’s ear. The amplified sound is delivered through the tube, through the mold, and into the patient’s ear. In adults, in-the-ear (ITE) style hearing aids are much more common. ITEs have all of the electronic components housed within a shell that is molded to fit into the patient’s ear. ITEs are often very small, and the lack of visibility is very appealing to most adult patients. The problem with ITE aids for children is that children’s ears are constantly growing, meaning that the mold that fits into a child’s ear needs to be replaced regularly because it no longer fits properly (Dillon, 2001). An ITE would need to be completely remade each time to transfer the electronic components to a new shell. With a BTE, a new mold can be made and the BTE aid can simply be connected to the new mold, while disposing of the old one. It is a much less costly procedure that also does not require the patient to go without the aid for any period of time.

Hearing aid technology is constantly changing. The classic analog hearing aid is slowly being replaced in the marketplace by digital technology, which is believed to offer better sound clarity and better performance in background noise. Indeed, clarity and background noise represent the two greatest challenges facing the hearing aid user. Sensorineural hearing loss often robs the patient of sound clarity, not necessarily at the expense of sound intensity. A sensorineural hearing loss is not the equivalent of turning down the volume on the television (although, a conductive loss comes close to this analogy). Often patients with sensorineural hearing loss can hear people speaking to them (i.e.: the volume/intensity is adequate) but they fail to understand the words being said (the clarity is not adequate). Why does this happen? Different speech sounds are dominated by different frequency sources. Vowel sounds are low frequency dominated, and those sounds contribute heavily to the intensity/volume of speech. Consonant sounds are heavily high frequency based, and those sounds contribute heavily to the clarity of sound. A person hearing only vowel sounds of speech will hear the speech but be unable to understand the words. This occurs in patients with high-frequency hearing loss (the consonant sounds are lost). High-frequency hearing loss is common in the noise- and age-related hearing loss that is so prevalent among adults.

Since sensorineural hearing loss is not the equivalent of reducing the volume on the television, the solution from a hearing standpoint is not to simply increase the volume of sound being delivered to the hearing impaired patient’s ear. Often, what is needed is selective amplification at certain frequencies, but not others. In adults, this usually means greater amplification in the more severely-affected high frequencies. In children, this pattern is much more variable, as children with sensorineural hearing loss can have losses that are predominantly low frequency, predominantly mid frequency, predominantly high frequency, or flat across all frequencies. Providing selective amplification and creating optimal speech clarity with a hearing aid is an ongoing challenge for manufacturers and dispensers (Parving, 1992). In addition to problems with clarity, patients with sensorineural hearing loss have impaired ability to filter out background noise and focus on the person to whom they are trying to listen. This is a serious issue with hearing aids, as they often cannot improve a patient’s hearing performance in background noise, and can actually make it worse. Noisy situations prove extremely challenging for hearing impaired individuals, whether they are adult or child, hearing aid user or not. Thus, one of the ongoing challenges for classrooms with hearing impaired students is to minimize the potential background noise to allow optimal speech perception. There is a growing body of evidence that minimized background noise may prove to be beneficial to all students, not just the hearing impaired.

In the classroom, one of the more effective instruments used to reduce background noise and improve the signal-to-noise ratio (the signal being the teacher’s voice, the noise being everything else) is the FM system (Nabelek, Donahue, & Letowski, 1986). An FM system uses a microphone, usually attached to the teacher’s lapel, to pick up the teacher’s speech. Since the microphone is close to the sound source, it picks up little background noise. The speech signal is then transmitted to a receiver on the student. The speech signal is then delivered to the student through a pair of headphones she/he is wearing or an uplink connected to the student’s BTE hearing aid. The receiver can also be located at a speaker that is aimed at the student. The end result is that the student is hearing the teacher’s voice with little of the background noise from other students or reverberating/echoing sounds in the classroom. This yields a higher signal-to-noise ratio that can greatly benefit the student with auditory deficits (Boothroyd & Iglehart, 1998).

Cochlear Implants

No discussion of options for children with hearing loss would be complete without a description of the cochlear implant. In fact, the cochlear implant is a topic that warrants a review paper all its own. The cochlear implant is indicated for patients with profound sensorineural hearing loss and for whom hearing aid amplification provides no benefit. In very broad terms, the cochlear implant serves to electrically stimulate the auditory nerve in place of missing or non-functional hair cells (Zwolan, 2002). As stated above, the hair cells are the key cells that respond to sound energy and convert it into the electro-chemical signaling of the nervous system. The cochlear implant is surgically implanted into
the cochlea and sits next to the auditory nerve (where the hair cells would normally be). The implant converts auditory signals into a series of electrical impulses. The electrical impulses stimulate the auditory nerve in place of the absent hair cells. The electrical stimulation begins the chain of responses from the auditory nerve that communicates the auditory signal to the central nervous system. The effect is a sensation of hearing in patients that would otherwise be profoundly hearing impaired. The auditory sensation in cochlear implant patients is quite a bit different from that of normal hearing individuals or even hearing impaired people using hearing aids. Truly, cochlear implant technology represents a new frontier in providing auditory input to the profoundly hearing impaired, a patient population that was formerly inaccessible with auditory input. That said, there is considerable controversy about the use of cochlear implants in children (Harvey, 2001). The deaf community, comprised of people with severe and profound hearing impairments is a unique population with its own unique forms of communication (including American Sign Language) and its own rich culture and heritage. The argument can be made that implanting a profoundly deaf child with a cochlear implant forces that child to be a part of the hearing community at the exclusion of the child’s possible involvement in the deaf community. At the same time, since the child is not hearing like other normal-hearing children, he or she may not be completely accepted into the hearing community. The issue becomes more complex when parents must make the decision about whether or not to implant at the child’s early age. Indications are that the earlier in the child’s auditory and language development that he/she is implanted, the better the child will do in auditory learning and language acquisition skills with the implant. Thus, the decision must be made by the parents (often normal-hearing parents) very quickly and during a potentially emotionally-trying time (they have just found out their child has a profound hearing impairment). Certainly, the decisions of whether to implant a child and how to raise and educate the hearing impaired child are complex, emotional decisions that require adequate information and sensitivity from those involved.

Conclusions

Hearing deficits come in many forms with differing underlying physical pathologies, treatment options, and impact on lifestyle. As stated at the outset, proper recognition of hearing loss in a child is a key step in tailoring the child’s education to properly overcome any hearing loss he or she may experience as a result of the hearing loss. Teachers are a key resource for recognizing hearing deficits, and they play a major role in the education of hearing impaired students. This review was intended to provide an introduction to how hearing works, how hearing losses occur, and what options are available to hearing impaired individuals. The goals are for proper treatment and education to enrich the lives of the hearing impaired and to help them maximize their learning potential (as would be the goals with normal-hearing students). It is an ongoing challenge for children, parents, teachers, and the speech and hearing service community to meet those goals.

References


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Abstract

This paper presents the evolving role of foundations in the United States and specifically examines how the Bill and Melinda Gates and Wallace Foundations in the United States have clarified their underlying principles to increase their influence on public policy for education. In many instances, the approaches to innovation that these foundations select deliberately eliminate the controls of governmental agencies such as school boards and state departments of education. Essentially, they are moving towards a decentralized, independent and entrepreneurial model that allows for flexibility, accountability and impact in the field as quickly as possible.

Introduction

When Warren Buffett, the world’s second-wealthiest man, announced his plans to devote most of his legendary fortune to the philanthropic efforts of the world’s wealthiest man, the totality of the Bill and Melinda Gates Foundation doubled, as did its anticipated annual potential grants. In light of this merger of resources, the new endowment of the Gates Foundation, which would, if fully vested today, be $60 billion, might sound like just another ordinary corporate merger, or the combined net profits of the world’s largest oil refiners in 2006.

The totality of the Gates and Buffet fortunes, and the roughly $3 billion per year that is now expected to be doled out around the world through the Gates Foundation has changed the view of Foundations. In fact, even before the Buffet announcement in June of 2006, the Bill and Melinda Gates Foundation was, by far, the largest in the world. Put another way, the discretionary dollars represented by the Gates Foundation’s annual giving to, for example, public education initiatives, will now far exceed the discretionary dollars offered by the United States government for the same purpose. This unilateral investment in knowledge acquisition is typical of Bill Gates. Microsoft has announced that in 2007 it will spend approximately $7.5 billion on research and development, or fully 17% of its 2006 revenues.

The focus of this paper is to demonstrate the shift in how foundations, large and small, have moved well beyond merely defining themselves as ‘agencies that fund proposals’ to activists that challenge would-be recipients of funding to push the boundaries of their missions, innovate, and succeed on a much broader scale. The policy activism of foundations in the United States is not surprising given the retreat of U.S. governmental entities from effective change efforts in schools and other social enterprises to policies that endorse and enforce outcome assessments as the political wedge to advance change and improvement. Even university research centers that conduct stem cell research have felt the restrictions of federal political ideology. The U.S. government formerly pushed the boundaries of science in our colleges and universities. Since 2000, it has increasingly narrowed its vision. In 2007, reductive politics take the place of public discourse in the United States. As David Brooks noted in his December 2006 New York Times article about the passing of Milton Friedman: “team loyalty has taken over the wonk’s [policy makers] world so there are invisible boundaries that mark politically useful, and therefore socially acceptable, thought” (Brooks, D., 2006). In the last two decades, the U.S. has witnessed the erosion of grants in the humanities from innovative and artistically sound productions to those adjudicated as works that are not too controversial.

Even in education within the United States, especially public education, No Child Left Behind legislation with its annual testing of students in grades three to eight has reduced innovation in the classroom to tricks about teaching to the test. Schools that benefit from foundation support find
themselves basking in the halo of the foundation and able to innovate and operate beyond the restrictions of federal legislation. From the vantage point of the professional world of public education, the ‘No Child Left Behind’ legislation has, since its passage in 2001, stirred fierce debate and, today, numerous state-sponsored lawsuits regarding the purported disregard by the Federal government for appropriate funding to meet mandated goals. These lawsuits are political responses to ideological and legislative initiatives that impact the education of children in sundry adverse ways by directing teacher attention to narrow curricula and self protective acts that prepare students for state exams (Jones & Egley, 2006; Laitsch, 2006). The sad truth is that government sponsored innovation does not reside in NCLB; it houses only ‘get tough’ goals with punitive consequences. After six years, Monty Neil (2006) in a recent issue of Re-thinking Schools, noted that we are left with a predictable pile of rubble:

" [With NCLB] the primary narrowing [of the achievement gap] has been in math. This is due to an intensified emphasis on math instruction. However, as educators are pressured to teach to state tests, NAEP gains appear to be mainly in rote learning, not conceptual understanding or problem-solving. The price of the focus on accountability testing has been narrowed instruction in the tested subjects and increased focus on rote learning" (Neill, 2006 www.rethinkingschools.org/archive/21_01/ over211.shtml, 11-12-06).

Jonathan Kozol (2005) has termed rote learning to meet testing requirements "cognitive decapitation... that led to reduced instruction in history, art, and other subjects not included on high-stakes tests" (Kozol, speech at Montgomery High School, September 17, 2005).

Stepping into this vacuum of innovation are people like Gates, who radically proposed that U.S. high schools were ‘obsolete’ (Gates, 2005). Representatives of the Federal government will not say public schools are obsolete. Only someone with the discretion to ‘think differently’ about how to achieve a goal and with no vested interest in the bureaucratic mandates will oppose a failed bureaucracy. In 1995, Gates described the next generation of classrooms and students in these words:

Classroom learning will include multimedia presentations, and homework will involve exploring electronic documents as much as textbooks, perhaps even more. Students will be encouraged to pursue areas of particular interests, and it will be easy for them to do so. Each pupil will be able to have his own question answered simultaneously with other students’ queries. A class will spend part of a day at personal computers exploring information individually or in groups. Then, the students will bring back their thoughts and questions about the information they have discovered to the teacher, who will be able to decide which questions should be brought to the attention of the full class. While students are at their computers, the teacher will be free to work with individuals or small groups and focus less on lecturing and more on problem solving (p. 187).

There are some who are troubled by this independence, who believe that a concentration of wealth and a willingness to do things differently, outside one’s core knowledge base or experience, might be... well, undemocratic. In the face of United States governmental abandonment of the liberal beliefs the founders established in their pursuit of happiness, life, liberty and justice and the broad based research and experimentation they encouraged, we have a meager substitute in the United States where our federal policy is focused on the satisfaction of special interests and specifically for education, the testing industries. With the No Child Left Behind federal requirements, they have a dream mandate of exams for all students in grades three to eight. Education in the United States for students in grades 3-12 operates as if testing were a cure for ignorance. Imagine if hospitals believed that they could cure tuberculosis by testing patients to see if they have the affliction. The United States has reduced its public educational system for the majority of its students to a narrowly focused curricula and worse, weeks and weeks of drill and practice. One third grade teacher whom we interviewed stated: “I am leaving teaching next year because all we do is drill and train the students to take practice tests. In the fall, I spend six weeks on such work and in the spring I am at it again for twelve weeks. The children are so sick of test preparation that they don’t care anymore.”

The freshness of a Gates Foundation and its willingness to ignore federal assumptions about tests invigorates the dialogue and action in the trenches. Gates (1995) writes: “Corporations wanting to help with education could provide recognition and cash awards to teachers whose materials are making a difference” (p. 189). He envisioned a time when parents and teachers would collaborate about important learning opportunities for the child. He described the process as: “once teachers have enough information on a student and are relieved of a lot of tedious paperwork, they will have more energy and time to meet the revealed individual needs of that student. This information will be used to tailor classroom materials and homework assignments. Teachers and parents will also be able to review and discuss the particulars of a child’s progress easily” (pp. 109-191). According to teachers, there is little time for innovative exchanges in the current climate of test preparation that they face in America’s schools.

Some teachers have looked beyond state and federal systems for help. Teachers who investigate the new foundations of the 21st century find they have an ear, and a place where the voice of reason and care can be heard inside the new foundations. Uniquely, the wealth of these foundations and their not-for profit status makes them independent of the government and its tax laws at least for the present decade in the 21st century. Gates has noted his interest is
schools that work. He cited the Lester B. Pearson School, a Canadian high school as an example of success and innovation when he wrote: “serving an ethnically diverse neighborhood, computers are an integral part of every course in the daily curriculum. For the 1,200 students, there are more than 300 personal computers, and more than 100 software titles are in use. The school says its dropout rate, 4 percent, when compared with a national average of 30 percent, is Canada’s lowest” (p. 195). Gates gives the example of P.S. 125 in New York City as a secondary school that used long-distance access to help students learn from other cultures and to participate in discussions all over the world. He calls these endeavors learning circles (Gates 1995).

In 2006, Sharma and Kamath assigned such actions in their schools in India that Gates and other innovative entrepreneurs would understand: “Quality Circles.” They suggested that quality circles in education should focus on the development of a holistic personality, a spirit of duty, responsibility and team work, build analytical minds, draw out possibilities and make education more relevant to the user and the customer (pp. 50-51). Meanwhile, in the United States, the teachers are engaged for a majority of the school week in test preparation. Why can’t the United States adopt the Canadian or Irish test system and simply have students take “leaving exams” at grades 3, 5, 8 and 12? There would be enormous savings with reduced costs for exams. Middle schools could hire more teachers with the savings. Their faculties could work on the strengths and weaknesses of their students as they prepare them for high school and high schools could be evaluated on the basis of how well the students gain in normalized scores for the leaving exams at grade 8 and grade 12.

Exploring the New Foundation

Cynics have dismissed foundations as sources of funding that lacked the ability to sponsor significant societal change. They would certainly be right if one thought of the impact of these private assets in comparison to the all-encompassing impact of a New Deal or a Civil Rights Voting Act. For example, governmental activism in the United States since the Great Depression was focused much more on the health and welfare of the individual. At best, many saw foundational entities as charity; at worst, they were seen as esoteric enterprises so narrowly focused as to have little relevance to the larger society (Anheier and Leat 2006). For many decades, innovation was not a word associated with foundations, except perhaps in the arts.

In 2006, foundations emerged as major catalysts for innovation that deliver tangible results to public sectors such as education. The influence and scale of the Gates commitments has inspired new approaches by foundations, beginning with a re-thinking of quantifiable impacts so that benchmarks and data collection and assessments are part of the basic fabric of the foundation grant. This structure provides the guidance, support and accountability that all enterprises need. Accountability remains a major factor in corporate and foundation grants and their renewals. Federal and state enterprises might try to learn from their accountability models. Corporate foundations, especially, have overhauled their missions. What was once perceived to be purely a modest public relations tool to burnish the image of the company has been recalibrated. The purpose of Corporate Foundations is still positive media relations for the company, but today, because they provide more than 20 billion dollars annually to educational, humanitarian and cultural organizations, they realize that they have an opportunity to inspire innovation and spur change (Porter and Kramer 1999, Okie, 2006). A desire to influence more people and to make a difference for human lives on a larger social scale has caused foundations to become broader, more aggressive and more strategic in their goal setting.

In the United States and especially in New York State, the Wallace Foundation is an illustration of the transformation that has been set into motion under the auspices of the new public agenda. As the Wallace Foundation itself states: “Most people regard foundations solely as grant makers, but after a decade of successful grant making, the Wallace Foundation concluded that funding good programs isn’t enough: national foundations need to extend their reach farther than grants...We were no longer satisfied that we were reaping sufficient social returns on the dollars we were investing...We thought we could find a way to deliver more social benefits” (Wallace website, 2006).

Recognizing that public and government agencies are often unable – financially or politically – to dedicate resources to research, experimentation and risk taking strategies that might yield significant payoffs, foundations are positioning themselves to make these influential connections (Anheier & Leat, 2006). The new model of effective philanthropy originally presented by Capek and Mead has several benchmarks for success that elevated the power of private-sector foundations on public sector issues (Capek & Mead, 2006). The several principles that they suggest should operate are:

• The New Foundation encourages “bottom-up” grant making as well as effective initiative-driven grant making (Capek and Mead, 2006, p5). This speaks directly to the desire of the new foundation to inspire the successful recipients of grant funds to define and measure their impact on society, not merely sustain themselves.

• The New Foundation develops mutually respectful relationships between funders and grantees (Capek and Mead, 2006, p5). Foundations never had to think about relationships. People and programs came to them for money, and relationships were secondary to the internal ‘math’ used to define which recipient received funding. But the new Foundation seeks to build relationships with its grantees, in part to create sustainability and help to measure grantee goals against foundation objectives.

• The New Foundation includes those working “closest to the ground,” grantees as well as foundation
staff and trustees, in decision-making and priority setting (Capek and Mead, 2006, p5). In essence, the new foundation seeks much more collaboration from the full organization than in the past, hoping to learn from the entirety of the organization, not simply the Executive Director.

- The New Foundation makes sure decision makers have firsthand experience and/or breadth of theoretical knowledge in the areas foundation’s fund (Capek and Mead, 2006, p5). Corporate and foundation directors typically insist that funds will only be provided directly to program givers, not third parties. They don’t want to see dollars or relationships diluted.

With these principles in place, foundations are acting more like societal change agents. In an era in which governmental dollars for exploration of new solutions continues to shrink, the importance of the Foundation is more profound. Although government is still expected to play a major role, the direction foundations take are more likely to be in tune with the community they hope to serve. Marie Groark, a spokesperson for the Gates foundation, says: “Bill has said himself that American education is a public sector function for a number of reasons, including the fact that our schools are located in our communities. American education in its definition is something we all have a role in, not just one foundation or even one Department of Education” (in Sturgeon, November 2006, p48).

In other words, in spite of the iconic status many people have elevated Bill and Melinda Gates to because of the positive influence their foundation has been able to have in the field of public education, they recognize that they serve the community and that trained educators in local schools are the ones best equipped to directly effect positive changes for their students. The Gates Foundation has affected change in schools because it allows educators on the local level to implement initiatives that the bureaucracy of federal and state governments won’t allow public schools to do. They offer funding to support effective learning and those efforts pay off for the communities that receive their help.

Attributes of New Foundations

The benchmarks for successful Foundations of the 21st century, what many call the success factors for the New Foundation are attributes that one notices in studying the way in which these entities are re-casting themselves, and they are decidedly more progressive than the past would indicate (Capek and Mead 2006).

- New Foundations encourage risk taking on the part of both foundations and grantees (Capek and Mead, 2006, p5). This is a major evolutionary shift. It is ‘new corporate’ in nature, a survivalist instinct borne out of the recent business experiences of leaders who have realized incredible financial windfalls accomplished with just such a mindset.

- New Foundations foster a “learning organization” culture of willingness to learn, accommodate “midcourse corrections,” and change (Capek and Mead, 2006, p5). The status quo, often identified with the culture of the old foundation, is gone. Inserted in its place is a much more vibrant organization that seeks relevancy and continuous improvements in any set of practices and metrics to assess itself.

Leon Botstein, the President of Bard College and the President of the Gates-funded Bard High School Early College, says: “We are spending a mass amount of public money poorly, and what the Gates Foundation can do is not take it over but help direct it. He’s simply adding a critical mass of fuel so that a large fuel-guzzling engine can be turned around in the right direction. He’s not replacing the engine” (in Sturgeon, November 2006, p 50).

In many places, public education has long been mired in bureaucracy that has prevented meaningful reform from taking place, especially in the nation’s low-wealth communities. Since it is not bound by the constraints of governmental bureaucracy, the Gates Foundation has been able to fund creative approaches in public education.

“We aren’t doing anything that hasn’t been talked about before by education experts,” says Chris Barbic, head of schools at the partially Gates-supported YES College Preparatory School in Houston, Texas. “The difference is that Gates was able to bring the resources to bear to actually implement it so it gets beyond the discussion stage. Ideas are great, but if you don’t have the money to do it, it’s just a report” (in Sturgeon, November 2006, p. 52).

Utilizing the funds he received from the Gates Foundation, Barbic was able to implement a smaller school model that, until the additional funding arrived, was only a great idea. This fall he opened one new school and has plans to open another in 2007. When his vision is fully realized, the YES system will include 700 students in each of five schools, all concentrating on college prep courses. Although this structure is not unique among magnet schools, it is virtually unheard of among traditional, big public high schools (Sturgeon, November 2006).

Being free of political constraints and constituencies, foundations have space to think, observe and listen. They have the potential to be creative, to take risks, to fail, to be truly innovative as they pursue new approaches to old and new problems that hinder effective social development. Foundations have the ability to take the big risks that can yield big payoffs and contend with the kind of failure that the government cannot afford. Capek & Mead (2006) suggest that the new agenda causes foundations to do multiyear, core support grants and stick with grantees over time. There’s a reason for this, and it is that the foundations recognize the perilous nature of political funding and the need for continuity to drive success. They have shifted from a scattershot annual approach to one that is marked by the
Governmental agencies have neither the dollars nor the demonstrated patience that is the hallmark of today’s new foundations. At $60 billion dollars, the Gates endowment eclipses the 20 million dollars of discretionary funding provided by the federal department of education annually (Sturgeon, November 2006). The Bill and Melinda Gates Foundation offers more than one-time grants that will apply a band-aid to complex issues within public education. Their grants are not the “pork” politicians throw at constituents. They provide a sustained source of funding to meaningful new programs in schools. The Gates Foundation has been able to make a mark on individual student achievement and, perhaps more important in the long run, it may be changing the paradigms for delivery of education and its anticipated returns.

“To date, the Gates Foundation has supported more than 2,000 new high schools across the country, including 27 in Chicago, 175 in New York, and 85 throughout Texas. The Gates’ network of early college high schools totals 170 schools, allowing students in 25 states to earn college degrees along with their undergraduate diplomas. The Gates’ Foundation reports that it has invested $1 billion to date into facilities and programs that offer what it terms the new 3Rs: rigorous instruction, a relevant curriculum; and meaningful, supportive relationships” (Sturgeon, November 2006, p.50). The United States government is reluctant to select specific public educational enterprises for experimentation.

The corporate approach of the foundations will add three additional attributes to the work that they will employ (Capek and Mead 2006):

• First, New Foundations now aim for “transparency,” with clear guidelines and accessibility (Capek and Mead, 2006, p5). In the past, murkiness about funding procedures contributed to the dim view many held of Foundations as agents of social change. No more. In fact, foundations are mindful of the need to plainly communicate what they are looking for, and many go so far as to provide assistance to potential recipients on response formation.

• Second, New Foundations establish goal setting and accountability that includes both internal and external evaluations of the effectiveness and impact of the foundations’ own grant making (Capek and Mead, 2006, p5). Like their public counterparts, grant-giving organizations relied too heavily on the status quo and only internal impact studies to gauge effectiveness. Today, care is being taken to offer fund recipients the ability to assess foundation effectiveness, a guide for the recipient to help the foundation to understand what the needs of potential fund recipients are, and how to deliver foundation resources in a manner that expedites impact (Capek and Mead 2006).

• Finally, New Foundations work with grantees (and cover their costs) to evaluate the quality and impact of grantees’ work (Capek and Mead, 2006, p5). In the past, foundations might just ‘take the word’ of the grant recipient on the effectiveness of the funded initiative. No longer will foundations accept promises without evidence of effectiveness. Because foundations are committed to ongoing, multi-year funding of core programs, they expect to do their own analysis of the impact of the dollars they are providing.

Foundations are interested in ongoing change. They hope to define themselves as nimble, that is, aptly suited to adjust to a market force or a specific unanticipated condition that a grant recipient discovers. They recognize that before they allocate large sums effectively, they must provide a clear, focused vision, strategies to achieve the vision, operative evaluative tools, ongoing high-level communications with grant recipients, and the ability to consistently re-tool operations to optimize impact. Effective foundations analyze the issues, identify their priorities, determine their intended results and select non-profit organizations most likely to advance their agenda. The managers of the foundation grants structure their grants in a fashion that holds the grantee organization accountable and provides the technical support for the grantee leaders that ensures a high level of oversight. In the 21st Century, effective American corporations operate under these principles and the former CEO’s of such businesses who direct foundations demand that recipients of their support, lead and be accountable as they were in their former enterprises.

Some might define the growing impact of the foundations, in a less charitable manner, as concentrations of wealth that have an undue influence on social policy and practice, driven as they are by the force of entrepreneurial, sometimes idiosyncratic individuals. Creativity, innovation and risk taking will undoubtedly result in some failures. Interestingly, the New Foundation seems committed to collaborative behaviors. As Oakie observed: “By serving on the
board of the Gates Foundation, (Buffet) will have some say in how the funds are spent, and he made his gift contingent on Bill or Melinda remaining at the helm” (p. 1086). His actions reflect his “business philosophy of investing in companies that have a track record” (Okie, p. 1086). Under the Gates Foundation rules, the $287 million dollars in grants for AIDS research in 2006 require scientists in 19 countries to share their data in a central repository. “Yamada predicted that such collaboration would become more common in the future, even in industry” (Okie, 1088).

The new foundations are most likely to adopt these two principles:

• Win support from other foundations and corporations for grant recipients.

• Build collaborative partnerships with other foundations that can increase and publicize for public benefit both the grantees' and foundations' own expertise (Capek & Mead).

It is hard to resist the power of the New Foundation for public good, and equally difficult to poke holes in the efforts of these entities. As Botstein states: “People are impressed with anything that has the Gates name on it, because it speaks of innovation, excellence and the contemporary. It's about brains and the economic power of knowledge” (in Sturgeon, p. 52).

In the face of a lack of trust for elected officials in the United States and many other countries today, the New Foundations have stepped in to offer reliability, innovation, and demonstrable impact in stark contrast to the plodding, costly, and largely ineffective governmental efforts at innovation.

Putting their energy, money and talent to work in collaborative efforts, such as Gates and Buffet have done, is a powerful new strategy. Just as foundations can work to empower educators, or health care professionals, or community developers in furthering their own goals without “re-inventing the wheel,” they can also work to increase the value of their own dollars by partnering with other foundations that share their values. The largest concentration of assets is likely to have the greatest immediate impact, and the leadership set by the largest Foundations could have an untold positive influence on the practices of many others. Because they are free of typical government restrictions, the New Foundations are more responsive to social problems and can intervene in a more direct manner.

New Foundations are also more nimble when it comes to partnering with peer organizations. Their partnerships allow them to avoid duplicate costs and enable them to maximize their investments in effecting social change. On a state level, the New York based Wallace Foundation has committed to innovation and the development of a new foundation of social change based upon shared knowledge.

A Wallace educational leadership initiative, SAELP – State Action for Educational Leadership Project – is aimed to strengthen the ability of principals and superintendents to improve student learning. It was advanced in New York State by identifying relevant research and supporting the recommendations of the New York State Blue Ribbon Panel on School Leadership. This grant expanded the knowledge base of research regarding the importance of school and district leadership to the achievement of students. The four year grant, originally developed within the New York State Education Department, fostered networking among cities within and outside of New York State and developed an electronic structure for communication that fostered an intensive dialogue concerning critical issues for urban schools. This level of partnership between the Wallace Foundation and the New York State Education Department demonstrates the power of the foundations to affect new thinking. New Foundations like Wallace are no longer interested in merely funding novel ideas, they are actively seeking knowledge-based and research supported programs to impact change and they will choose their partners carefully. Interestingly, it is the creative partnerships and the advanced level of collaboration that the new foundations require that may ultimately create the largest positive effect on society and, in particular, education in the United States.

Summary

This paper presented the critical elements that private philanthropic organizations such as the Gates Foundation and the Wallace Foundation employed to provide unfettered support to innovative ideas brought forth within the public sector. Foundations seek new responsibilities to lead social progress and add to the problem-solving capacity of the nation and the world. As they expand, they may even replace government’s reach. The independence of foundations is an advantage to society as a whole insofar as their funding can counterbalance the forces of short-term political markets and the financial limits on government. One wonders how to ensure the good character of the leaders of foundations. Perhaps, the transparency of the foundation’s records and the vigilance of the free press are our best guarantees of equity, fairness and benevolence.

In short, foundations no longer simply offer charitable gifts and short-term funding for social action. Because of the models established by the Gates Foundation and the Wallace Foundation, private foundations offer flexible responses to social challenges, long term commitments, and models that require accountability of all participants. In 2008, foundations intend to serve as catalysts for innovation in ways that governmental enterprises fail to do. Governmental leaders often lack vision, flexibility, and accountability. Governments desire to satisfy immediate political ends. Foundations intend to make a lasting difference. They represent new sources of hope much as the older institutions did for past generations.
To partner with a modern foundation, one must demonstrate a vision that improves the lives of those who have a specific need, clear goals and strategies to achieve the vision, criteria to measure progress and a collaborative plan that consolidates resources into an effective enterprise. If you have such a vision, it may be time to explore a partnership with a foundation.

References


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INTRODUCTION

Among the largest financial decisions that a person will make, deciding whether to go to college and where to go, are a few of the highest importance. The average yearly cost to attend a four-year private college is $21,235 and to attend a four-year public institution is $5,491 (2005-06 College Costs 2006). This significant financial investment offers an individual the opportunity to gain skills and knowledge that will last throughout life. More specifically, an undergraduate college education enables an individual to express “thoughts clearly in speech and writing, grasp abstract concepts and theories, and increase their understanding of their world and community” (Why Get a College Degree 2006). But for many, college attendance has a practical purpose, because coveted positions require successful completion of the undergraduate degree. Yet, there are varying views on how a general education curriculum should be defined.

The results of a national study undertaken by the Association of Colleges and Universities found that students today require a practical integrated liberal undergraduate education. A liberal education is “a practical education because it develops just those capacities needed by every thinking adult: analytical skills, effective communication, practical intelligence, ethical judgment, and social responsibility” (Greater Expectations 2002, 26). An engaging practical liberal education must prepare students to meet expectations both in college and after graduation, regardless of the chosen institution or course of study (Humphreys & Davenport 2005). An undergraduate education is a combination of three facets of educational focus: the major – which offers depth into a discipline, the electives and/or a minor – which offer a secondary focus or exploration into a range of topics, and the breadth of general education. General education is the “part of a liberal education curriculum shared by all students. It provides broad exposure to multiple disciplines and forms the basis for developing important intellectual and civic capacities. General education can take many different forms” (Greater Expectations 2002, 25).

The purpose of this study is to explore the different forms and features of a general education curriculum. The research questions for this study are, what is being done by the more selective top-tier institutions? And, what can Long Island regional colleges learn from the general education curriculums offered by the more selective institutions?

METHOD

Sample

The sampling frame for this study included 100% of the degree granting (Baccalaureate) colleges and universities in close proximity to the Long Island region. This sampling frame included institutions in the states of Connecticut, New Jersey, New York, Massachusetts, and Pennsylvania (eastern schools only) ranked as more or most selective (America’s Best Colleges 2005). The admissions offices of the resulting 85 schools were contacted and a printed undergraduate catalog requested. Although many had online catalogs, a printed catalog was preferred to do this research. As of the writing of this report, a total of 27 undergraduate catalogs were received. These 27 colleges and universities formed the final sample for this research study.

Data collected

For each school reviewed, the structure of its general education program was captured. Three categories sufficiently described all structures. They were:

a. Distribution system (including other requirements). The school was identified as such if the students had a choice of courses from which to select that would satisfy the specific general education requirements. The term distribution system or core may or may not have been used by the school. Various terms were used, such as, divisional requirements, discipline requirements, general institute requirements, general university requirements, distribution requirements.

b. Common core (including other requirements). The school was identified as such if the students’ choices were limited. Choice may still exist, but courses were developed specifically for the students to satisfy the specific general education requirement. It was the intent of the school that students experience a common core of knowledge.

c. Combination system (including other requirements). The school was identified as such if both systems were combined. A series of common courses may create a small foundation upon which a distribution system rests; or the school may have referred to the system as a distribution system, but may not have provided students with many courses from which to choose.
Once the broad categories were identified, then the following data was collected:

a. The categories within which the general education courses were distributed. In addition to the names of the categories, the common core courses or categories were captured.

b. Additional features of the general education program were captured, such as proficiencies required, requirements across the curriculum (e.g., intensive writing), whether students are required to take first year seminars, or other constraints or rules that may be of interest to regional colleges.

Though not as essential, the other information that was captured was: the year the institution was founded, the athletic division, the type of school as identified in the catalog language, the number of undergraduates, and tidbits pulled from the institution’s mission statement or general education statement.

A limitation was the lack of consistency across these schools as to how the undergraduate catalog was structured. Some schools provided strong details, while some schools provided minimal details. Also, language was inconsistent.

FINDINGS AND RESULTS

Findings
- 59.3% of the top-tier institutions (16) used a distribution system coupled with additional features or requirements.
- 11.1% of the institutions (3) established a common core of knowledge for their undergraduates.
- The remaining 29.6% of the institutions (8) established a combination system drawing elements from both a distribution system and a common core of knowledge.

Although there were category labels that appeared more often than others, it was clear that schools had different styles in grouping their disciplines. For example, some schools kept “arts” as a separate category, some schools combined “art & humanities”, some schools kept “humanities” as a separate category, one school combined “art and literature”, while another school labeled the category “creative expression” by combining writing, art, dance, performance, choir, and music. Similarly, natural science, physical science, math, quantitative reasoning, and technology found various ways of being combined and labeled across different schools.

The most common “categories” for the general education requirements were:
- Arts
- Humanities
- Natural/Physical Sciences
- Social Sciences
- Numeric & Symbolic Reasoning/Math
- Foreign Languages

A category to distinguish non-western cultures appeared in various forms:
- Cultures of Africa, Asia, and the Americas
- Non-Western Cultural Heritage (included courses in Anthropology, Political science, Music & Religion)
- Historical Analysis (included courses in East Asian studies, Near Eastern studies, Religions)

Another general education requirement category for a few of the schools was a course in cultural diversity, which found labels such as:
- Continuity and Change in the West
- Diversity & Multiculturalism
- Community, Culture and Society
- Cultural and Social Science
- Global Diversity
- U.S. Diversity
If an institution had a special focus, it may have appeared in its general education distribution requirements. For example, Emerson College had heavy communication and expression requirements, while MIT had a heavy and specific science core, even for non-science majors. For the few schools with a common core of knowledge, courses included some of the following:

- The Craft of Language
- The Human Person
- Fundamentals of Speech Communication
- Texts and Contexts

When considering features or requirements of the general education program, many of the schools had a writing proficiency component. Students entering could provide evidence of proficiency with a strong verbal SAT I score, an AP exam or sufficient performance on the college placement/entrance evaluation exam. Similarly, many schools had a “writing across the curriculum” component. Rather than students taking an English writing course, other courses either in the general education disciplines or in the major and minor satisfied the writing intensive component.

Many of these top-tier schools had either or both a foreign language proficiency requirement that could be satisfied with an SAT II score, an AP score, or passing a 3rd year NYS Regents exam, and/or an in-school foreign language requirement.

Similar to writing, many of the schools required a quantitative reasoning (numeric and symbolic reasoning) proficiency. For some schools, incoming students may provide evidence of proficiency with SAT I scores, ACT scores, AP scores, or college entrance exam. Some schools, though few, did not mention a quantitative requirement. This may be the result of such highly selective admission requirements, that the school does not need to test for this proficiency. Also, the math requirements may be embedded within the majors.

Noticably, the general education requirements of these top-tier schools focused on breadth rather than depth. Except for one of the schools with a common core, course sequence requirements did not exist within the general education curriculum. For example, students could take as little as 1 course in each category. If more than 1 course was required, sequencing was not a constraint.

Another trend was the existence of 1st year seminars to help students make the transition into college. Many of these 1st year seminars also satisfied the writing-intensive requirement.

The findings suggested that schools did not constrain students from transferring general education courses from other institutions. Many of the most selective schools resisted accepting AP exams as credit, but accepted coursework from other accredited institutions prior to the student matriculating. Swarthmore was an exception. It did accept general education transfer credits but required that 2 credits in each of the 3 divisions be completed at Swarthmore. Although there were residency requirements for the schools, they did not appear to be within the general education component of the curriculum.

A few interesting and noteworthy general education features/components that emerged during this research:

- MIT has a freshman-grading program – if a C or better is earned, then a “P” appears in the student’s record. If a D or an F is earned, then the course earns no credit and will never appear on any external reports/transcripts. This policy permits students to explore challenging topics without fearing non-reversible GPA damage.
- Hampshire College requires students to compile a portfolio of writing samples and course evaluations from all general education classes taken in the 1st two semesters. The advisor reviews the portfolio to determine if the student can move on to the next step in his or her program.
- Hampshire College has a community service requirement in the general education program.
- University of Connecticut and SUNY Albany each have an information literacy component, similar to the “writing across the curriculum” program. Courses within different disciplines can be tagged as appropriate to satisfy this proficiency requirement.

Summary: The results of this research may provide Long Island and regional colleges with a broader perspective of what top-tier schools are doing to ensure a strong foundation in the liberal arts and sciences for their undergraduate students. The mission statements of these schools consistently demonstrate a commitment to a practical liberal education and to promote the value of an integrated curriculum that spans the entire undergraduate curriculum. Sentiments within the mission statement or in the general education overview support the student’s personal and academic interests, and as a result offer the student a flexible, yet challenging curriculum.

WORKS REFERENCED


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