

Learning about the School Budget: A Constructivist Model

Charles R. Waggoner
Eastern New Mexico University

ABSTRACT

If principal preparation programs in school finance effectively and adequately address as many aspects of the school and district culture into the study of the topic, candidates for certification will receive better preparation and understanding as they step into campus leadership positions. Designing a three-year budget using state designated “windfall dollars” to solve “real” problems of a district and school may be the most effective way for the student to develop an understanding of how budgets can impact the operation of schools. Furthermore, the principal candidates may develop effective ways to utilize the totality of school districts information, both financial and cultural, into becoming effective and ethical budget planners.

School districts and budgets are complex and are politically vulnerable. Through the budget building process students will develop a sense of what the school should be and could be. The professor of school finance has the ability to change the financial and cultural information provided to the students in this project as they see fit.

Keywords: Constructivist, School budgets, Group projects, School finance, Budget projects



INTRODUCTION

Upon his arrival to campus, the new dean of our college met individually with each professor. Prior to the meeting we were informed that he expected us to discuss with him our philosophy of learning, be it Constructivism or Instructivism. All professors in the department were to inform him where we stood on a scale of one to ten, with ten being that we followed an exclusively Constructivist Model and one being that our pedagogy was entirely Instructivist. Certainly, the individual instructor was free to roam anywhere on the imposed continuum between the two apogees. Most of the instructors in the college scurried to scrutinize their teaching methodology prior to the conversation with the new dean.

All of my classes are principal preparation for practicing teachers that have aspirations of obtaining their administrator licensure or achieving a master's degree in education administration.

A few years ago when considering how best to organize the conditions for student learning about building a school budget so as to maximize the engagement of prospective principals, one thought leaped to my mind: focus the learning on the real-life experiences of practicing school principals. The principal must be able to allocate available dollars to find the best solution possible for the education of the students in his charge.

Brooks (1993) defined Constructivism succinctly: *“meaning is not given to us in our encounters, but it is given by us, constructed by us, each in our own way, according to how our understanding is currently organized.”*

A Constructivist vision statement was developed by Stein et al., (1994): *“Constructivism leads to new beliefs about excellence in teaching and learning and about the roles of both teachers and students in the process. In constructivist classrooms, students are active rather than passive; teachers are facilitators of learning rather than transmitters of knowledge.”*

Constructivism implies that teachers embrace a holistic view of instruction, apart from the lecture methodology of direct instructivism. The school budget model that I have developed to train aspiring principals embraces the frameworks of simulation, strategy and role-playing, case studies, learning by design, and group, cooperative, and collaborative learning. Students must assimilate the new experience of building a school budget into an already existing framework of what they understand about how school buildings are organized for the education of children and how revenue and expenditure dollars are coded through the district accounting manual.

According to Waggoner (2005) when students encounter the prospect of designing a school budget they have to reconcile the assignment with their previous ideas and experiences of the budgeting process. It is my experience that students in a principal preparatory class for school finance have only a minimal understanding of how district revenue and expenditure accounts are set up and how the budgeting process is completed.

The first portion of the semester is dedicated to understanding the coding of revenue and expenditure accounts in various school districts. Fortunately, each school district within a given state uses the same state accounting manual for school districts, which is based on the generally accepted accounting principles required by the Government Accounting Standards Board. Understanding the coding system for a particular state gives the student insight into how neighboring states track revenue and expenditures.

The school budgeting model that I have constructed is flexible enough, depending on the size of the class and the needs of the students, to allow two or three students to collaborate as

principal in a particular building in the district, or allow an individual student to work on the project alone as “the principal” of a building.

My school finance class has served students in New Mexico, Texas, Missouri, and Oklahoma. While the school budget building process is fundamentally the same, the coding system and accounting manual are totally different in both states. It is very easy to group the students according to the state they reside in so that they are able to gain more experience and practice in using their state financial coding manual.

The budget building project is a rather sophisticated activity that helps the students reach the objective of internalizing financial aspects of the school, from the development of a mission statement to the allocation of dollars. The student plays an active role in assimilating knowledge onto his/her existing framework.

THE FINANCE PROJECT

All of the statistical data and school and district information is fictional and the professor may add to, delete from, or make any changes necessary to give a group a students unique challenges. School buildings and districts are similar in many aspects across the country, but circumstances and financial times can easily dictate an entirely different set of facts.

This is the setup that is presented to the students: You are a newly hired principal at one of the schools in the Cooley School District located in Cooley, Ohio.

The state legislature has just passed a bill that establishes a “School Improvement Fund” for schools in the state. The money is guaranteed for three years only and the legislature expects to see demonstrated improvement after the three years in test scores.

The legislature has made no commitment to a fourth year of funding; in fact, Governor Taft has flatly said “This is it.”

This is the attempt by the legislature of Ohio to put more dollars into the schools.

The money is formula driven and will be distributed by school building, not district, based on building demographics. The legislature of Ohio was very specific in wanting this “windfall” money to be site-based driven.

Unfortunately, for school districts throughout Ohio, the governor did not sign the legislation until June 27 and the dollars will be allocated for the first year on September 1. This does not give the principal much time to determine how to best utilize the money, which must be spent (not just allocated) in the fiscal year for which the money is provided.

All of the severe and profound special education students are transported to another school district and are not impacted by the new monies, as far as the building principal is concerned.

The past performance of students at Cooley places students as meeting standards in social studies, but falling below state and national standards in mathematics and English.

All three of the previous principals in the district were managers at best and there has not been a serious attempt to improve much of anything. The district has gone through four superintendents in the past seven years so needless to say, continuity has been lacking. The “ex-principals” have been left on their own. None of the ex-principals or superintendents had apparently ever heard the terms “site-based” or “collaborative management.”

There is a new superintendent in Cooley, currently in her fifth month on the job. She fired all of the principals and has hired four new ones to be change agents. (With the flexibility of the finance project, more or less buildings and principals can easily be added.). All of the new principals will be beginning their first year in the principalship and come from Eastern New

Mexico University, thought to be a “hotbed” of newly trained administrators. The word has spread to Ohio.

The new money was an unexpected bonus for everyone, and although it comes late, no district is going to turn it down.

JEFFERSON SCHOOL

The following data applies specifically to each of the three buildings in the district: K-5 Jefferson Elementary – 874 total students, which include: 151 students in kindergarten; 171 students in 1st grade; 122 students in 2nd grade; 177 students in 3rd grade; and 113 students in grade 4; 5th grade has 140 students.

Seventy-three percent of the students qualify for free/reduced lunch.

Fifty-four students at Jefferson are in self-contained special education classes, which include: 18 kindergarten students, 5 first graders, 5 second graders, 7 third graders, 11 fourth graders, and the rest in 5th grade. All students at Jefferson have art two days per week for 20 minutes with a special art teacher. Because there is no gym at Jefferson, physical education classes are held outside when weather permits and in the students’ classroom when the weather does not permit. In actuality, because there is no special physical education instructor, when the weather is inclement physical education typically does not occur in many classrooms.

Sixteen percent of the remaining students have Title 1 services.

Student demographics indicate 41% white; 17 % Black; and 42% Hispanic.

Jefferson was constructed in 1953 and is not air-conditioned except for the principal’s office and the counselor’s office. The counselor serves one-half time at Jefferson. (The thinking by the superintendent three-times removed was that counselors are needed in elementary schools more than junior highs or high schools. At one time the district had five guidance counselors, but budget cuts eliminated 4 ½ of them 2 years ago. The current counselor is K-12 certified, however.)

There is no early childhood program at Jefferson, although a concerned citizen’s group has lobbied for one for the past two years.

An energy audit of the entire district was conducted 3 years ago. There was no extra money in the budget so a building bond referendum was attempted. It failed 60% to 40%.

The audit indicated that Jefferson should have new energy efficient lighting (\$400,000); a new energy efficient boiler (\$185,000); a central cooling system attached to the boiler (\$232,000); and the flat roof should be replaced with a new shingled pitched roof to prevent further leaking and water damage (\$1,374,000).

Periodically, the roof will leak in various places. Custodians patch it when this happens. Many of the tiles in the classrooms (there are dropped ceilings) are stained. Last year, a group of concerned parents went to the board complaining that their children were becoming sick because of the ‘mold’ growing on the ceiling and walls as a result of the moisture created by the periodic roof problems. The board tabled the concern, pending further study.

The enrollment capacity at Jefferson is 880.

WASHINGTON SCHOOL

Washington School – grades 6, 7, & 8 – 295 total students, which include: 81 sixth graders, 115 seventh graders, and 99 students in grade 8.

Seventy-five percent of the students qualify for free/reduced lunch.

Eleven students at Washington are in self-contained special education classrooms. Four in 6th grade, four in 7th grade, and three in grade 8.

Thirty-nine percent of the remaining students have Title 1 services.

Student demographics indicate 51% white and 5% Black, 44% Hispanic.

Art is not offered; however, former principals have requested it.

Physical education is offered every day for 50 minutes. The Washington gym was constructed in 2001 and is recognized as one of the finest facilities in the state. The gym has 4 locker rooms, 2 for males and 2 for females. Regional and sectional tournaments are held there every year. The total cost of the gym was \$1,850,000 paid for by a bond referendum. The seating capacity of the gym is 2,400. Most community events are held in the Washington gym including high school prom, baccalaureate, and graduation.

Washington has a traditional 8-period day. Regular classes are tracked into A/B/high C students and into low C / D/F/ students. There is often controversy among staff and parents as to which students are high or low C. Typically, just 'C' students are tracked as high C, until they prove otherwise.

The energy audit indicated no deficiencies of a major nature and the minor ones that were identified were corrected by in-house custodial staff at minimal expense.

Washington is a three-story brick structure that served as the district high school until 1967 when the new high school was constructed. Currently, there is a four year tuck-pointing plan in place, whereby one side (of the 4-sided building) is being newly tuck-pointed each summer. Each side will cost \$40,000. The first portion of the building will be completed by September 1.

There is no elevator available in Washington for disabled students. This was the subject of a law suit filed against the district in 1995. The issue was resolved when accommodations were made on the first floor for the three years that this student was at Washington. Accommodations involved moving different grade levels to the first floor each year.

When students are temporarily disabled (broken leg, etc.) they are often home schooled for the duration or carried up the steps by staff.

Three current 5th grade students are wheelchair bound. The staff has been through this switching of floors routine before and is NOT looking forward to it happening again.

The cost of an elevator is \$450,000. It is believed that a wheelchair lift connected to the existing stairwell would cost \$285,000.

Enrollment capacity at Washington is 650.

Beginning band is offered at grade 6 and continues throughout the curriculum.

BUSH CAMPUS

Bush Campus – Grades 9 -12 – 300 total students, which includes 80 freshmen, 73 sophomores, 66 juniors and 81 seniors.

22% of the students have signed up for free/reduced lunch.

There are no self-contained special education classrooms at Bush.

Unlike Washington, all students are mainstreamed.

Seventy-five percent of the students have Title 1 services for English and/or math.

Student demographics indicate 66% white; 3% Black; and 31% Hispanic.

Freshmen and sophomore students at Bush are on a Block-4 schedule, with classes on alternating days. (For example, Algebra I occurs on Monday & Wednesday and every other

Friday. Biology occurs on Tuesday & Thursday and every other Friday – both Algebra I and Biology are first period of Block One.)

The plan is to place junior and senior students on Block 4 next year (2006-07).

This is the current Block-4 schedule for freshmen. Underlined classes are required.

(Remember: Wednesday, Thursday & alternate Fridays repeat)

Monday – 1	Tuesday -1
Algebra I	Biology
Monday – 2	Tuesday -2
U.S. History	English
Monday -3	Tuesday -3
U.S. Literature	Physical Ed
	Band – T/TH/F *

*students in band are excused from PE T/TH alternating F

Monday -4	Tuesday -4
Electives:	Electives:
Home Ec	Driver Ed / Health (age must qualify for driver ed) **
Ag	French I
Study Hall*	Study Hall*
Civics	Chorus

* Only one Study Hall is permitted per student per semester.

** One semester each.

There are two concurrent sections of PE.

There are three sections of the other required classes.

This is the current Block-4 schedule for sophomores. Underlined classes are required

Monday -1	Tuesday -1
Electives:	Electives:
Study Hall*	Study Hall*
Swine production	Driver Ed / Health (typically 100% of sophomores
French II	Chorus
Home Ec II	have taken it as freshmen – then SH)

Monday -2	Tuesday -2
Geometry	Speech / Consumer Ed / Oklahoma History / Intro to Life**
Monday -3	Tuesday -3
English	Physical Education
	Band T/TH

*Students in band are excused from PE on T/TH/ alternative F

Monday -4	Tuesday -4
Biology II	Geometry

* Only one Study Hall is permitted per student per semester.

** Each class meets for one-quarter.

There are two concurrent sections of PE.

There are three sections of the other required classes.

The Block-4 schedule for freshmen and sophomores has been in place for two years. The teachers enjoy the 100-minute planning period each day.

(On occasion there are students that work in districts that are involved in the block scheduling, or students that wish to understand the financial impact of block scheduling.)

Bush was first constructed in 1970. There is room at Bush for potentially 725 students. Two superintendents ago the thinking was to split the high schools into 2 buildings, North and South, with North housing the 9th and 10th grades and a NEW HIGH SCHOOL (South) housing grades 11 and 12. The board gave the matter serious thought and rejected the idea by a vote of 4-3.

Bush has no major construction issues. The energy audit revealed that more efficient lighting is needed at a cost of \$281,000, which includes dropping the ceilings in all classrooms. The entire campus is centrally air-conditioned.

Attendance at Bush is 94.5%.

The gym at Bush is used exclusively as a physical education and practice facility because all of fold-up bleacher seating was removed due to safety concerns five years ago. It is impossible to have "basketball games" at the facility.

Bush is the only building in the Cooley District that is fully Internet connected. There is a computer lab of 25 stations.

Parents came to the board last March asking that a work study program be implemented in the district for seniors. The board is reviewing the concern.

It has become apparent that there is a significant attrition problem of students once they enter high school.

Typically, 35% of the senior class goes on to some form of higher learning. There are no advanced placement classes, although the local junior college has proposed 'something' in the form of cooperative programming.

The Athletic Booster Club has five issues with the board of education: (1) The boosters would like an all-weather track around the football field (\$150,000) at Bush. (2) The varsity football program is 2-26 over the past three years. The Boosters want the football coach fired. Mr. Raymond is a veteran of thirty-six years in the district and could retire if he only would. He indicates that if the board will give him \$40,000 (in what he calls 'get lost' money) he will retire. Mr. Raymond also teaches English and is highly regarded as a teacher. (3) The gym facilities at the high school are inadequate. There are no shower facilities (\$40,000). (4) The booster club would like to begin a soccer program beginning with the 5th grade. The cost would include uniforms / supplies / and one coach (\$6,000). Fathers have volunteered to coach and help coach at all levels, except for the head coach. (5) There are 4 sports for boys and only 3 sports for girl's grades 6-12.

OTHER DISTRICT ISSUES

There is a disconnect between the curriculums at Jefferson and Washington. Reading books, workbooks, and additional materials for reading (including tests) were purchased last year at Jefferson (\$245,000) for K-5. The emphasis is on whole language. The reading series at Washington is 8 years old and emphasizes phonics exclusively.

Thanks to the last principal at Jefferson there are math manipulatives for each classroom and the math curriculum emphasizes 'hands-on' learning and the use of calculators. The math program at Washington places no emphasis on 'hands-on' learning and teachers there believe that the use of a calculator by students is detrimental to their true understanding of math.

The district teaching staff is advanced in terms of experience. There are 11 teachers (including Mr. Raymond) that are either eligible to retire at full-benefits or will be within two

years. All of these staff members are making in excess of \$60,000 per the contract. A beginning teacher with a BA will make \$30,600 per the current salary schedule.

The breakdown of the building location of this retirement eligible group is: 4 at Jefferson; 3 at Washington; and 4 at Bush. (These teachers are found at Years 22 – MA + 45 on the salary schedule.)

Ten of the teachers in this group are considered to be obstinate and very resistant to change. “They” have seen it all before. The feeling among many is that there have been “too many principals and too many superintendents. Just leave me alone and let me teach.”

The Third Reauthorized United Evangelical (TRUE) Church of Cooley has strongly hinted (in fact ground has been broken) for a “Christian School,” which would in its inception be only for grades PreK-4. The plan is to expand it one or two grade levels per year as enrollment increases and/or demand dictates.

Unfortunately, it is supposed that most of the students enrolling at TRUE will be the more affluent students.

It is projected that the TRUE School might take away as many as 190 students from the district in the first year. If this happens, the state of Ohio will adjust the funding for the second year of the ‘windfall’ money accordingly. The school will not open until September 2010.

(I wish to cast no dispersions on any current or future “TRUE” Church. This example and ensuing anagram is totally fictitious.)

The copy machines, one in the office and one in the teacher work room, at Bush have not operated since April. They need to be replaced if copies are to be made on site. The cost of two new machines that are rented under contract for four years is \$7,000 per machine per year. This will ensure 900,000 copies each. Copies made over 900,000 per machine will be billed at 15.5 cents for copy. Last year Bush ran 2,620,000 copies in the workroom and 890,000 copies in the office.

Drug use and gang problems are a concern at both Washington and Bush. The lunch period at Washington is not closed. The lunch period at Bush is open campus for juniors and seniors only.

Corporal punishment is allowed throughout the Cooley School District. Three students were expelled last year for gang activity at the high school.

A drug testing policy for student athletes and club participants has not been implemented because of the cost. There are 195 total students participating in interscholastic activities at Bush and 310 at Washington. The cost of one urine drop is \$25.00.

The Ministerial group of Cooley is rabid that a drug testing policy be developed. Five district students were expelled last year for drug use.

FINANCIAL INFORMATION

Student Enrollment History:

FY06 = 1469

FY05 = 1489

FY04 = 1511

FY03 = 1696

FY95 the district had a total enrollment of 1017.

Nine years ago Miller’s Cave School District consolidated with Cooley. No students are housed in Miller’s Cave. The K-12 building was destroyed by fire in 1998.

The school board at Harper Valley has indicated a willingness to consolidate with Cooley. When this occurs, Cooley would grow by 80 students, K-5; 72 students, 6-8; and 71 students in the high school. This consolidation will happen in FY 09.

District Property Value = \$195,000,000

EAV/EPV in Ohio based on 33 1/3% of property value.

Current School District tax rate is \$1.89. Projections are that because of difficulties in the manufacturing industry, the EAV will drop 10% in FY07 and another 10% in FY08.

The three year windfall dollars will be allocated to districts based on FY06 building census data, and attendance updated each June 1.

Use current data to figure FY07 windfall revenues.

PK students (if the program would exist would generate \$1000 per student: – and an extra 20% per each child on free/reduced lunch and/or participating in Title I.) Due to the fact that Cooley has no PK program these dollars can not be utilized.

Grades 1 – 4: \$500 per student - 20% extra per each child on free/reduced lunch (and/or) participating in Title I.

Grades 5 – 8: \$400 per student – 10% extra per each child on free/reduced lunch (and/or) participating in Title I.

Grades 9 – 11: \$350 per student.

Grade 12 - \$250 per student.

A portion of the new legislation contains a portion commonly known as ‘the minority allocation act.’ Each minority student in a particular building will generate an additional \$1000 in grant revenue.

Number of certified personnel:

Jefferson 42 regular teachers; 4 special education teachers; ½ time counselor.

Washington: 31 regular teachers; 2 special education teachers; ½ time counselor.

Bush: 48 regular teachers; and 1 special education teacher.

There are 121 1/2 fulltime certified teaching staff at Cooley.

This was the administrative configuration at Cooley in FY06.

Jefferson has a principal and a vice principal.

Washington has a principal and a dean of students.

Bush has a principal, a vice principal, and a dean of students / athletic director.

The Superintendent’s office consists of the superintendent, assistant superintendent for finance; and assistant superintendent for curriculum & transportation. The central office is housed downtown away from all of the schools.

I attach a salary schedule to the project. For the purpose of coding the salary schedule, Jefferson is A; Washington is B; Bush is C. Therefore the number of teachers at Years 6, BA+00 at Jefferson is A-4. On the same step at Washington is B-3, etc. All of your certified staff is listed. You add the salaries to find out what the total salary of your building is for FY06.

Health insurance costs for the district are capped at \$3,000 per year per certified staff, which covers 95% of the health premiums. The insurance benefits are not reflected in the salary schedule. The benefits are in addition to the salary.

LEGISLATIVE SPECIFICATIONS FOR WINDFALL SPENDING

The finance students are told how the state legislature (in this example, Ohio) has directed the schools in their allocations of the windfall dollars. An instructor may ‘tinker’ with the mandate of the legislature in anyway that they see fit.

1. No more than forty percent of the individual building’s windfall dollars may be utilized for new construction or renovation in any given FY.
2. At least twenty percent of the individual building’s windfall dollars in any given FY must be utilized for staff development and training.
3. Up to two percent of the windfall dollars in any given FY may be used for administration of the grant.
4. Up to twenty percent of the windfall dollars in any given FY may be used for the creation of new positions.
5. At least fifty percent of the windfall dollars in each FY must be used for classroom co-curricular materials. Ten percent of this amount may be utilized for individual equipment valued at more than \$500.

For the purpose of the activity, the students are asked to use the state revenue code to allocate the funds into various accounts. I provide the revenue codes. The students also must properly execute the expenditure coding to the proper funds, functions, or objects, whatever the state of residence of the student calls for. All revenue and expenditures coding must be explained and justified for the current FY and the following two FYs.

WHAT IS ASKED OF THE STUDENTS

In my finance class I stress that the budget decisions need to be school site-based. This project lends itself well to that philosophical perspective. Each student is asked to outline the times and date of their site-based meetings that were called to discuss the “windfall dollars.” The students are to given fictional names, yet real attributes to those selected for the meetings. For example, if a teacher is included in the meeting, the person might be given the fictional name of Mrs. Redenbacher, but her position as third grade teacher is the key component. The students are asked to given a fictional date and time of the meeting(s) and an accounting of how the committee was selected.

The finance students, through the site-based council, are to formulate a mission statement for the building, three goals for the building and two objectives for each goal, in regards to the spending of the money.

The finance students are asked to describe the current state of their particular building and address the issues that face their building (and the district) in the coming three years. Among the questions that the students must answer are:

1. How much additional revenue will your building receive in this FY, and the following two fiscal years? Show and explain all calculations.
2. How much additional revenue will the district receive in this FY, and the following two fiscal years. Show and explain all calculations.
3. How much money in local property tax can the Coley School District expect to collect this FY?
4. What is the Equalized Assessed Valuation (EAV) or the Equalized Property Value (EPV) per student in the school district?
5. What will the total payroll be for the Cooley District this FY?

6. What is the average class size in your building?
7. What personnel changes are you recommending in the following two-years (if any)?

The assignment for the aspiring principals is to take the totality of the information concerning the school district, their assigned building, and the windfall dollars and present the proposed school budget to the superintendent and board of education at a preliminary budget hearing. The report encompasses both an oral presentation and a written documentation of the presentation for “public” consumption at the board meeting.

Yager (1991) suggested that in a constructivist classroom there should be a student produced product that reviews and critiques solutions which have been elicited, discussed and accepted by others.

There are many nuisances built into the project. It is always a matter of opinion, but Cooley seems to be top-heavy with administration in the central office. The buildings in the district are at times underutilized and in need of closing or over utilized and a building program should be considered. There is always the question of should retirement eligible disgruntled staff be bought out?

SUMMARY

I believe that the school budget project can be tapered in any fashion that the professor wishes, both in addition to, and subtracted from, to make the learning experience applicable to any constructivist school finance experience. There are many benefits to including this type of project in a school finance principal-preparation program. A major benefit inherent in the process is the improvement of teaching when focusing on improving student understanding and achievement. The process of the project can be extensive, but it is a process that any good teacher follows when adjusting the instruction to meet the needs of all students. It is crucial that all of the necessary financial calculations and the state financial coding system are thoroughly understood by the finance students prior to the presentation of the project.

References:

Brooks, J.G. and M.G. Brooks (1993). *In Search of Understanding: The Case for Constructivist Classrooms*. Alexandria, VA. Association for Supervision and Curriculum Development.

Stein, M., Edwards, T., Norman, J., Roberts, S., Sales, J., Alex, R., & Chambers, J. A. (1994). *Constructivist Vision for Teaching, Learning and Staff Development*. Unpublished manuscript, Wayne State University, Detroit, MI.

Waggoner, C. (2005). *Communicating School Finance: What Every Beginning Principal Needs To Know*. New York: iUniverse, Inc.

Yager, R. (1991). *The Constructivist Learning Model*. The Science Teacher, 58 (6).