

Budgets and Purchasing

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Purpose of Budgeting

Budgets are an important planning tool that allows the teacher to prioritize expenditures. Schools generally operate on a fiscal year from July 1 to June 30 so budgets are aligned with this time period. Most programs will have multiple sources of funds so each should be budgeted. Some funding sources will be quite flexible and others may be restricted in some way. When developing a budget consider your program priorities as well as the cost of the item.

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Meet with your administrator to clearly understand your sources of funding. Districts have some flexibility in allocating funds so you may be able to negotiate additional funding if you have a good justification. Changes in your program such as increased enrollment may justify additional funding.

Categorical Funding

Schools have general funds that can be spent on a wide variety of items. They also receive funds from state and federal sources that are earmarked for specific uses often called categorical funds. Meet with you administrator to determine all the sources of funds that can be used for your program. When budgeting start with the most restrictive funds.

Fiscal Responsibility

It is the teacher's responsibility to maintain spending within the allotted budget. Teachers should review their budget regularly. It is recommended that the teacher keep their own records as district reporting may often be delayed. In addition comparing your actual expenditures to district records will allow you to find discrepancies.

Teachers are reminded that they are using public funds and expenditures are open to public scrutiny. All expenditures should be clearly related to instruction.

Five Year Plan

Developing a five year plan is encouraged. A longer term plan should reflect anticipated changes in your program, cost increases, tool acquisition, and tool replacement. A current five year plan will highlight your program funding needs and may show deficits that will need to be addressed. The plan must be revised annually. Sharing your plan with your advisory committee to get feedback and buy in is recommended.

Sources of Funds

General funds are the unrestricted funds schools use to operate. They may be derived from a variety of sources. They are commonly broken down into broad categories (e.g. salaries, instructional supplies) that are approved by the school board. Site administrators generally will allocate broad categories like instructional supplies to departments, programs, or individual classes.

Special Career Technical Education (CTE) funds are restricted funds that may come from federal or state programs. They are restricted to CTE uses and should be available to the agricultural mechanics program. Commonly you would want to use these funds for bigger items.

Other restricted funds may be available to your program. It is worth the effort to determine the possible sources available to your program.

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Student Accounts such as student body accounts are a common source of funding. Student projects may be paid into and expenses paid from these accounts. If you are collecting a “shop fee” for projects then these funds are a source of supply money.

Foundations/Boosters accounts often are used like Student Accounts. In addition fundraising activities can generate revenue in these accounts. Funds may be earmarked by boosters for specific uses and may not be un-restricted.

Grants

Grants are source of one-time funding. Look for grant opportunities that have funded programs like yours. Carefully read the request for proposal (RFP) and address all the requested areas in order. This makes it easier for reviewers to evaluate. Most RFPs will require a budget and budget justification at a minimum. If funded, expenditures must be tracked and submitted to the grantor.

Grants may have their own time periods and grant budgets will be the grant period. Grants often have annual budgets or may span multiple years. Tracking expenditures is very important as it is the teacher’s responsibility not to over spend and the district will be liable for spending in excess of the grant amount.

Encumbered Funds

Districts commonly “encumber” funds when a purchase order is created. This is simply a placemark in the budget until an actual invoice is received. Encumbered funds are commonly separated on financial reporting. The encumbered amount will be replaced by the actual invoiced amount (which is often different).

Supply Expense

Generally, materials and consumables fall under the heading of instructional supplies. These can be flexibly moved between sources since they are easily divided. For example if you need to purchase 200 pounds of welding rod you might purchase 100 pounds with general funds and 100 with a boosters fund.

Capital Expense

Large tools are considered capital expenses and may need to be tracked separately from supplies. These purchases are less flexible as a single item may use most of a budget and usually cannot be split between sources. The need for capital items should be reflected in a 5 year plan. Capital items may be required to be inventoried by the district or by granting agency. Often a dollar amount is used to determine what items need to be tracked. Even if it not required it is recommended that the teacher keep an inventory with the purchase date, serial number, and vendor for use in management of the facility. This can easily be kept on a spreadsheet.

The Budgeting Process

1. Start by listing your sources of funding and their restrictions.
2. Review your spending from the past year and adjust as needed. Note: If you don't have a prior year to draw from ask the district for an expenditure report.
3. Allocate spending to appropriate sources starting with the most restrictive.
4. Review your budget. Is it realistic? Does it reflect the priorities of your program?

Budget Tools

Some districts can provide an actual/budget report. These are ideal since they commonly have detail and the teacher can review expenditures to insure that they were properly posted. However you need to clearly understand the timing of postings by the district finance personnel. District reporting may lag (sometimes significantly) actual expenditures. The teacher may find it necessary to keep track of their expenditures in real-time to avoid overspending.

Simple spreadsheets like Excel or Google Sheets can be used effectively to build the budget. An example is shown below

Sample Shop Budget

Item	Total	Source		
		General	CTE Funds	Ag Boosters
		1200	5800	900
Into to Ag Mechanics	1200	1200		
Welding Class	500		500	
Fab Class	300		300	
Small Engines	300		300	
Miller Welder	2600		2600	
Plasma Cutter	1900		1900	
Portable Power Tools	450			450
PPE Replacement	200		200	
Misc. Consumables	200			200
Contingency	250			250
TOTAL	7800	1200	5800	900

Expenses can be tracked on a spreadsheet as well. A separate spreadsheet or tabs within a single spreadsheet can be used for each budget.

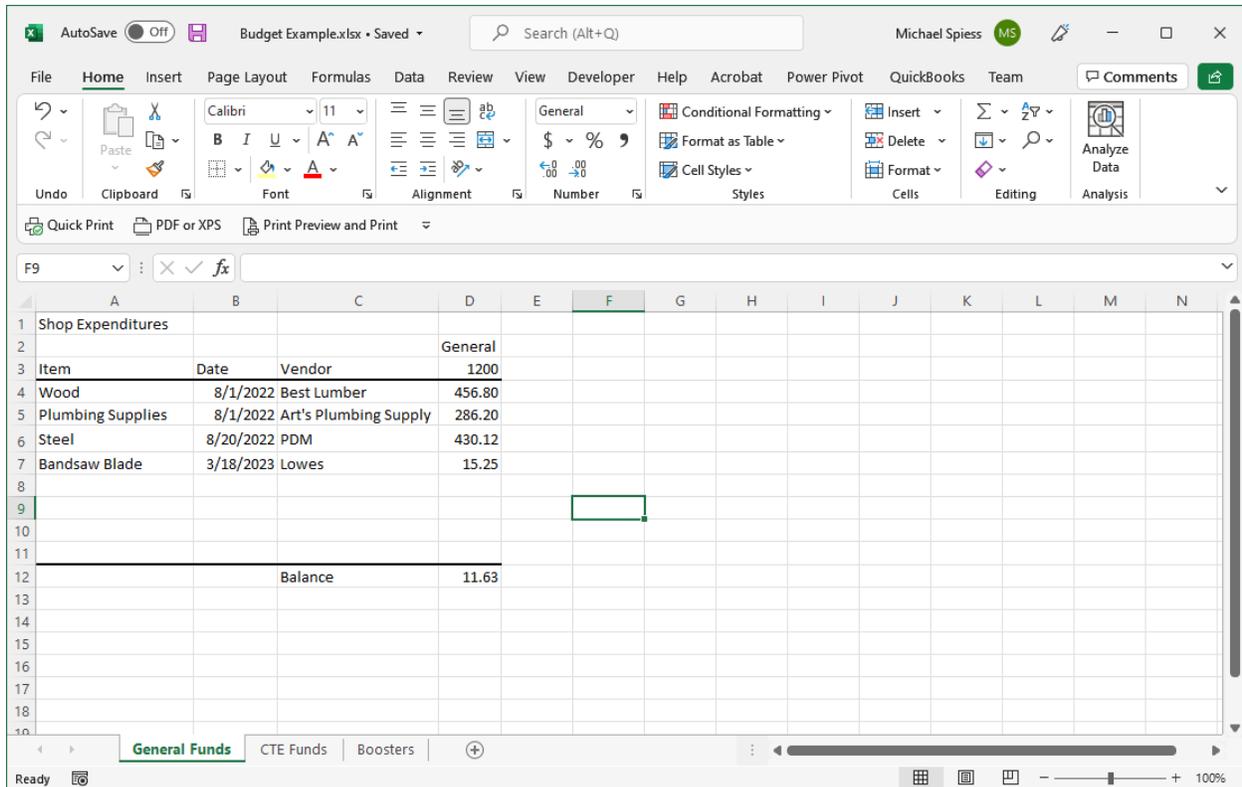
Shop Expenditures

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Item	Date	Vendor	Charged To		
			General 1200	CTE Funds 5800	Ag Boosters 800
Wood	8/1/2022	Best Lumber	456.80		
Plumbing Supplies	8/1/2022	Art's Plumbing Supply	286.20		
Steel	8/20/2022	PDM	430.12		
Gaskets	8/22/2022	Central Engine Repair		220.31	
Miller Welder	9/12/2022	Welding Supply		2546.80	
Plasma Cutter	10/2/2022	Welding Supply		2110.30	
Portable Power Tools	10/4/2022	Lowe's			389.25
Electrical Supplies	10/19/2022	Lowe's		200.49	
PPE	11/4/2022	Welding Supply			
Saw Blades	12/1/2022	Lowe's		82.46	
Parts	1/10/2023	Central Engine Repair		120.45	
Gas	2/1/2023	Airgas		400.30	
Grinder Discs	3/2/2023	Welding Supply			123.45
Bandsaw Blade	3/18/2023	Lowe's	15.25		
Balance			11.63	118.89	287.30

A budget separated by tabs.

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The screenshot shows a Microsoft Excel spreadsheet titled 'Budget Example.xlsx'. The spreadsheet is organized into columns A through N and rows 1 through 19. The data is as follows:

Item	Date	Vendor	Amount
Wood	8/1/2022	Best Lumber	456.80
Plumbing Supplies	8/1/2022	Art's Plumbing Supply	286.20
Steel	8/20/2022	PDM	430.12
Bandsaw Blade	3/18/2023	Lowes	15.25
Balance			11.63

The spreadsheet also includes a 'General' tab at the bottom, which is currently selected. The status bar at the bottom indicates 'Ready' and '100%' zoom.

A budget separated by tabs.

Purchasing

Getting the correct materials can be challenging. If you do your own ordering then you are unlikely to get the wrong materials and have the option to make substitutions. If you have a purchasing agent at your school then you need to provide complete specifications. For example if you need 2 ½" deck screws you will need to convey the drive type and finish desired. Lumber can be particularly challenging since you may want to select the best from the stack. The ability to make substitutions is something only you can do. For example if you plan on ordering 3'x8' 26 gauge sheet metal and it is not in stock. Can you use 3'x12', 2'x8', 4'x8'? Can you adjust the quantity for a different size? Will a different size affect the layout and waste?

In time you will learn what materials are commonly available from suppliers in your area. It often pays to adjust your ordering to match availability. However suppliers can order non-stock items you just need to allow more time.

Vendors

Identify vendors in your area and get to know them. Ask for educational discounts as these may be available. Supplies like steel and pipe are commonly delivered and you may avoid delivery charges if you can wait for the truck to come to your area.

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Work with your purchasing department to insure prompt payment. Many local vendors will not appreciate long delays in payment. You can usually help by promptly providing paperwork to the purchasing department.

Purchasing Procedures

A responsible teacher will follow the procedures as prescribed by the district. Some purchasing possibilities to explore are:

- Reimbursement – Teacher purchases tools with their own funds and request reimbursements. Useful for small “emergency” needs.
- Credit Cards – Some districts can issue teachers a credit card. While this is very convenient there are usually strict rules associated with these cards and they may be limited to a certain amount and perhaps types of vendors.
- Charge Accounts – Having an account at a local supplier can be very expedient. Typically the supplier will bill the district monthly. Commonly the teacher will need to provide invoices. Note: School maintenance departments may already have accounts at local vendors you can use. Do not abuse this privilege – purchasing will need to know what you have purchased to bill your department.
- Purchase Orders – Purchase orders typically are created from some form of purchase request. The district will confirm that funds are available before the purchase. The supplier will bill the district upon delivery.
- Bids – Larger purchases (usually based on a dollar value) may require the teacher to get bids from multiple suppliers. A very important note here is that you may need a specific make/model or brand. Be sure to make bid specifications detailed enough. Your district purchasing department can help you with the bidding process, but you will need to supply the technical specifications. Some purchasing departments will balk at a specific tool (ex. Miller XXXX welder) suggesting that a more generic specification is OK. Often a specific brand or model can be justified if it matches existing equipment.

Spending Strategies

Establish a timeline for your spending. Capital items and regular supplies should be purchased at the beginning of the fiscal year. Some supplies like welding gas will need to be purchased as you go through the year. When planning expenditures, you also need to consider that storage space may be limiting. Cluttering up your shop with supplies is not desirable.

Reserving some funds for contingencies is prudent as unexpected expenses often come up. For example, the chop saw fails or a grinder burns out. However the teacher needs to temper this delay of spending with the desires of the school which may want to see funds expended as soon as possible. Often meeting with the administrator can lead to an understanding that allows all parties to be comfortable.

It never hurts to think ahead. Having a few “extra” purchase orders ready may pay off if the school needs to spend some money toward the end of their fiscal year. You may wish to maintain a list of items by amount in priority (ex. Low, Medium, High). This way if funding becomes available at the

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last minute you can respond quickly. It can help to have vendors noted so you can create a purchase order quickly.

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Assessment

1. Why is important to budget?
2. What is a contingency?
3. What are “categorical” funds?
4. Why do you need to track your expenses?
5. For each purchasing method describe a pro and con.

Method	Pro	Con
Reimbursement		
Credit Cards		
Charge Accounts		
Purchase Orders		
Bids		

Activities

Budgeting for a Course

Purpose: Practice budgeting and purchasing for course.

Using the sample Course Budget spreadsheet (3 projects) for an introductory course find local vendors and complete to determine the cost of materials for 66 students. Explore the spreadsheet to determine how this model works. If the units change then you will need to alter the per student calculation. For example if the unit is a 300' roll of rope the per unit is .040 then each student will need $300' \times .04 = 12'$ If you purchase rope in 100' rolls then the per student = $12' \div 100' = 0.12$.

Intro to Ag Mechanics										
Students:		40								
Item	Units	Per/Student	Quantity Required	To Order	In stock	Net Order	Cost	Amount	Vendor	Comments
Rope										
3/8" black poly "truckers" rope	300' spool	0.040	1.60	2	0	2	\$ -			Big spools are best
Black Electrical Tape	roll	0.010	0.40	1	0	1	\$ -			
Concrete										
2 x 6 x 8' fir	each	0.250	10.00	10	0	10	\$ -			We will rip to width
6d duplex nail	pound	0.080	3.20	4	1	3	\$ -			
Concrete Mix (80 lb)	sack	0.250	10.00	10	0	10	\$ -			
15# roofing felt	roll	0.010	0.40	1	1	0	\$ -			
Electrical										
14/2 with Gnd NM Cable	250' Roll	0.020	0.80	1	0	1	\$ -			
Plumbing										
1/2" PVC Schedule 40 Pipe	20'	0.100	4.00	4	0	4	\$ -			(10' pipe OK, double per student)
1/2" SST PVC Tee	25 pak	0.040	1.60	2	0	2	\$ -			
1/2" SSS PVC Tee	25 pak	0.040	1.60	2	0	2	\$ -			
1/2" S PVC Cap	25 pak	0.080	3.20	4	0	4	\$ -			
1/2" PVC Male Adapter	10 pak	0.100	4.00	4	0	4	\$ -			
PVC Cement	1/2 Pt	0.060	2.40	3	1	2	\$ -			small brush, gray
Flowerbox (woodworking)										
1 x 12 x 12' #3 or btr Pine	each	0.200	8.00	8	0	8	\$ -			
4d Galv. EG box nails	lb	0.030	1.20	2	0	2	\$ -			
Exterior Transparent Cedar Stain waterbased	1 gal	0.020	0.80	1	0	1	\$ -			
3d Galv shingle nails	lb	0.020	0.80	1	20	0	\$ -			
Professional woodworking glue	Gal	0.010	0.40	1	1	0	\$ -			Get a gallon
Rafter										
2"x4"x12" Fir #2 btr	each	0.400	16.00	16	0	16	\$ -			
							TOTAL	\$ -		
							Per/Student	\$ -		

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Capital Budget and Planning Problem

Purpose: To learn how to develop a plan to expand or replace large shop items.

Scenario: You have been hired to teach Ag Mechanics and your shop facility is just like the university shop. Your wish to add one of the following (pick one):

Welding Course (enrollment 20 students/two periods)

Large welded SAE projects (like trailers)

ROP Diesel Engine course (12 students)

ROP Building Construction course (15 students)

Small Engines course (18 students)

Available sources of funding:

Ag CTE Grant -- \$5000

Existing District Budget -- \$1000

District CTE Funds -- \$2000

Ag Boosters Club -- \$500

Additional Funding – “You can always ask...”

Determine what tools, equipment you will need beyond what exists in the shop. Note: you may need such items as extra power outlets, tool & material storage, etc.

Complete the following and prepare as a packet. Include this sheet.

	Possible Points	Points
A professional cover letter to your principal that describes the plan and budget request	10	
Budget is realistic	10	
A budget for the improvements that includes sources of funding.	10	
Specification sheets for major tools (web page is OK)	10	
Complete P.O.'s for the tools	10	
TOTAL	50	

Be prepared to discuss in class.

