

Using QuickBooks to Enhance Accounting Knowledge—Integrating Theory with Practice

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QuickBooks is not taught the traditional way but we use multiple stages that integrate accounting theory with practice. Students create their own company on QuickBooks and work through the entire accounting cycle. When they complete their work, students are required to make a final presentation. They have to use financial statement analysis tools and make recommendations for improvements.

Stage 1: Setting Up Beginning Balances: We start by teaching students how to properly set up beginning balances, paying special attention on the dual effect of each balance—captured by uncategorized income/expense and Opening Balance Equity. Students have difficulty understanding the sequence but through step by step instruction they grasp the essence of double entry system and the relationship among different accounts.

Stage 2: Journal Entries and Trial Balance: Once students can reproduce the trial balances for the DMN Corporation, we move on to creating journal entries and generate a new trial balance. This step is fairly straight forward, except the Inventory item setup to keep track of quantity and accounts that are involved in inventory transactions. Students see how Cost of Goods Sold and Merchandize Sales impact the Income Statement.

Stage 3: Practice Case 2 - GLP Co: Adjusting Journal Entries: We then have students practice a second case setting up balances for GLP Corporation. Through this example, the different types of adjusting entries were taught. Students are given 7 situations that require adjusting entries. Once they implement these into QuickBooks, an adjusted trial balance is produced.

Stage 4: Practice Case 3: Students Create Their Own Company: The Balance Sheet: At this stage, students should be comfortable setting up their own businesses in QuickBooks. This stage concentrates on the Balance Sheet, with a dual emphasis. First, they examine the relationship among accounts. Second, they start to plan ahead regarding financing and investing activities. Instead of giving a list of required account, we challenge students to come up with their own balance sheet. Each account is first properly classified, then the opening balance created. This is a substantial step in student learning and their initial balance sheet needs to be approved before moving on.

Stage 5: Entering routine transaction. Typical revenue and expenditure cycle transactions are created through forms. Some general examples are discussed then

students create their own transactions. We require students to examine how an invoice or bill affects both account balances and financial statement. We pay special attention to inventory transactions. Students need to plan ahead using purchase orders, receiving inventory with or without a bill, then paying the bills. About 40 entries are needed to cover two months for comparative analysis.

Stage 6: Entering adjusting entries. Students are not given a list of necessary entries. Since each project is different, students have to create their own adjust entries specific to the nature and scale of their own hypothetical companies. This creates substantial learning opportunity in that they are not mechanically reproducing entries, but need to analyze their own business to determine type and amount of adjusting entries.

Stage 7: Producing two period financial statements. During the adjusting entries stage, students are asked to be mindful of how profitable their businesses are by looking at their Profit and Loss statement (ie, income statement). They are also asked to examine their balance sheets to see if more accounts are needed to fairly mimic reality. They produce comparative balance sheet and income statement showing \$ and % changes.

Stage 8: Financial analysis. Once the two period financial statements are approved, students move on to conduct ratio analysis. Three types of ratios are compared between the two periods. In their presentation file, students asked to briefly describe the business, examine underlying reason behind the change in each ratio across different time periods, and make recommendation of how to improve the ratios hence their businesses. This is the final step that culminate students' understanding of the impact of accounting transaction on financial reporting. Students can also summarize their experience in the entire project in the PowerPoint file. Feedback has been very positive. See attached student projects.

Detailed instructions to students

Stage 1: Instruction on setting up trial balances for businesses that already exist, that is, transferring balances from manual system to QuickBooks:

To students: This is one of the most important skills that integrate theory and practice. And you won't find it in most of the training manuals. These are the main steps: Make sure you track Inventory during the interview process.

1. Create at least one customer (ABC) who owes you money \$2,500. Note the corresponding credit is to "Uncategorized Income".
2. Create at least one vendor (XYZ) who you owe money \$1,200. Note the corresponding debit is to "Uncategorized Expense". The above two steps can be done through the Customer/Vendor icons.
3. Create a bank account "Checking" \$6,000.
4. Set up fixed asset account and track depreciation. You will have two subaccounts under Equipment: Original Cost \$15,000 and Accumulated Depreciation (\$10,000). The chart of account will look like Equipment

Depreciation
Original Cost

5. Access the trial balance through “Reports——trial balance”. It is an iterative process that you keep adding more accounts and check the trial balance until every account and amount matches the handout GLP Corporation.
6. Go to Lists—Chart of Accounts, in the lab version, click the lower left-hand corner “accounts—new” and add all remaining balance sheet accounts except Retained Earnings. You can also edit an account. It is very important you choose the correct type of each account.
7. Access the trial balance again and note the balances in each account. Go to chart of accounts and double click “Opening Balance Equity (OBE)” to open the OBE ledger. Decrease means a debit and increase means a credit for this account that has a normal balance on the credit side. [For Sales, you need to decrease (Debit) this OBE account because the corresponding credit is to Sales. For CoGS, you need to increase (Credit) the OBE, because the corresponding debit is to CoGS. Repeat the steps for all Income Statements account. Set up Retained Earnings balances by decreasing (debit) the OBE.] Note for your own project, you don’t set up income statement accounts. You create income by buying and selling inventory.
8. Access the trial balance again and note balances in each account.
9. Open the OBE ledger again and this time close the “Uncategorized Income” by increasing (credit) the OBE, and close the “Uncategorized Expense” by decreasing (debit) the OBE.
10. Set up the “allowance for bad debts” balance by decreasing (debit) the OBE. Allowance is an Accounts Receivable type, and a subaccount of Accounts Receivable.
11. OBE should have a zero balance. Access the trial balance again and check the account balances to make sure every account and amount is correct as in the handout.
12. Three important ZEROs to check: OBE, Uncategorized Income and Uncategorized Expense should all have 0 balances.

Note: you are setting up existing balances, not creating new transactions, so it is advised that you go through the process using the OBE until the account goes to zero. At time it may be tempting to make up additional amounts to mask earlier mistakes. Please resist the urge to do so—you may be creating more trouble and later on can’t fix it. Sometimes it may be more efficient to start the process over again.

If your balances are off—it may be the best opportunity to learn the interrelationship of the accounts and train ourselves to look for errors. You will become better accountants.

Stage 2: DMN case--Journal entries and new trial balance:

Cash.....	150,000
Capital Stock	150,000

Inventory	30,000	
Account Payable.....		30,000
Account Receivable	9,000	
Sales		9,000
Cost of goods sold.....	6,000	
Inventory		6,000
Salaries expense	12,000	
Cash.....		12,000
Account payable.....	4,000	
Cash.....		4,000
Cash	6,000	
Account receivable.....		6,000

New trial balance for DMN Corporation.

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 155,800	
Accounts receivable	8,200	
Inventory	28,800	
Equipment	5,000	
Accumulated depreciation		1,400
Accounts payable		28,000
Notes payable		800
Bonds payable		6,000
Capital stock		162,000
Additional paid-in capital		7,400
Retained earnings		2,500
Sales		22,800
Cost of goods sold	12,300	
Advertising expense	5,000	
Depreciation expense	2,800	
Supplies expense	1,000	
Salaries expense	12,000	
Totals	<u>\$ 230,900</u>	<u>\$ 230,900</u>

Stage 3: GLP Case: trial balance, adjusting entries and adjusted trial balance

1. Adjusting entries

The unadjusted trial balance for GLP Corporation appears below:

GLP Corporation		
Trial balance		
September 30, 20x4		
	Debit	Credit
Cash	\$ 6,000	
Accounts receivable	2,500	
Allowance for bad debts		\$ 200
Inventory	4,500	
Supplies	800	
Equipment	15,000	
Accumulated depreciation--equipment		10,000
Accounts payable		1,200
Notes payable		6,000
Deferred fees		900
Capital stock		7,000
Additional paid-in capital		8,000
Retained earnings		11,000
Sales		16,000
Cost of goods sold	13,500	
Advertising expense	5,000	
Wages expense	12,000	
Miscellaneous expense	1,000	
Totals	<u>\$ 60,300</u>	<u>\$ 60,300</u>

End-of-period analysis revealed the following:

- a. The market value of equipment had decreased by 30% of its original cost. Depreciation for the quarter totaled \$1,000.

Depreciation expense	\$1,000
Accumulated depreciation	\$1,000

- b. The note payable was signed on August 1, 20x4. Its interest rate was 10%, and no interest had been recorded since the signing.

Interest expense	\$100
Interest payable	\$100

- c. Unpaid employee wages at September 30 totaled \$1,000.

Wages expense	\$1,000
Wages payable	\$1,000

- d. Deferred fees represented a consulting contract signed at the beginning of September. The contract's duration is 3 months, and the work is spread evenly throughout the contract period.

Deferred fees	\$300	
Fees earned		\$300

- e. Supplies on hand totaled \$150.

Supplies expense	\$650	
Supplies		\$650

- f. The market value of capital stock had increased by 15%.

No entry required

- g. Actual bad debt write-offs during September were \$300; 1% of sales will likely become uncollectible in the coming period.

Bad debt expense	\$160	
Allowance for bad debts		\$160

Prepare the required adjusting entries based on the preceding information. Then, prepare an adjusted trial balance. The adjusted trial balance appears on the next page.

GLP Corporation			
Adjusted trial balance			
September 30, 20x4			
Cash	\$	6,000	
Accounts receivable		2,500	
Allowance for bad debts			\$ 360
Inventory		4,500	
Supplies		150	
Equipment		15,000	
Accumulated depreciation			11,000
Accounts payable			1,200
Notes payable			6,000
Deferred fees			600
Interest payable			100
Wages payable			1,000
Capital stock			7,000
Additional paid-in capital			8,000
Retained earnings			11,000
Sales			16,000
Fees earned			300
Cost of goods sold		13,500	
Advertising expense		5,000	
Wages expense		13,000	
Miscellaneous expense		1,000	
Depreciation expense		1,000	
Interest expense		100	
Supplies expense		650	
Bad debt expense		160	
	\$	62,560	\$ 62,560

Stages 4 through 8:

QUICKBOOK PROJECT GENERAL DESCRIPTION

Additional instructions are discussed in class.

1. Set up your own company by using the Easy Interview procedure. You already have account balances in manual system and this is the first time you are migrating from a manual system to QuickBooks. You need to have beginning balances for your balance sheet accounts. There should be no balances in income/expense accounts because you haven't begun your entry for 2013 yet. Assume all beginning balance sheet numbers come from year end say 12/31/2013 (balance start date 01/01/2013). You can either use any balance sheet numbers you find or create your own set of numbers but make sure assets equal liability plus shareholders' equity. Income statement accounts can be 0 for the beginning period to simplify tasks.

2. [depending on versions and steps you use] After you set up the balances for Balance Sheet accounts, close Uncategorized Income and Uncategorized Expense to Opening

Balance Equity and if there is balance left in Opening Balance Equity, close it to Retained Earnings. Hopefully you have a credit balance for Retained Earnings.

2. Adapt your chart of accounts by looking at the sample chart of accounts provided by QuickBooks for a given industry that your firm is in. You can add a new account through entering transactions directly in a form or general journal entry. The following are examples of the minimum accounts you may need to use: a checking account, a savings accounting, accounts receivable (QB default account through creating customer with opening balance), accounts payable (QB default account through creating vendor with opening balance), some fixed assets to take depreciation (separate accounts for equipment, trucks, buildings, computers etc.), accumulated depreciation (as subaccount of the specific fixed asset), interest revenue and expense to accrue interest, inventory assets (QB default by setting up inventory part items), capital stock, additional paid-in capital, retained earnings (QB default account), sales and service revenue, cost of goods sold, salaries expense, insurance expense, utilities expense, utilities payable, insurance payable, notes payable, mortgage payable, etc.

3. Routine transactions involve cash sales, credit sales, collection on A/R, cash receipt, purchase order, receiving inventory, purchase on account, entering bills, A/P, cash payment, other expenses (utilities, rent, telephone bills etc.). For each month, create at least 8 purchase orders, receive some of the purchase orders, and pay some of the A/Ps; create at least 8 sales (6 invoices and 2 cash sales) and receive 4 invoices; make deposit to checking at the end of each month. Maintain POSITIVE balances in A/R and A/P. Learn to incorporate sales returns (credit memo), inventory shortage etc.

4. Financing and Investing activities--treasurer generated journal entries. Adjusting entries may include bank service charge (use the bank reconciliation help, optional), accrual interest revenue or expenses, prepaid insurance or rent and unearned revenue (deferred fees in our GLP example), depreciation expense, bad debt expense, payroll expense. Classify interest revenue and fees earned as "**other income**" to differentiate from merchandise sales. Note that there is no required list of transactions, but you are the owner of your business and have sole responsibility in choosing the activities to make your business look fuller. This way you will be more accountable to the profit/loss and cash generated in running your own business and will enjoy more of this independence.

You should check your balance sheet accounts and make sure there are no "unreasonable numbers" such as negative accounts receivable, negative accounts payable, negative equity etc. Make sure your net income for the period matches the number shown on the balance sheet. If not, check the time period you specified in the reports. QuickBooks allows you to change the time periods.

5. Once I approve the adjusted trial balance, you can generate financial statements—

(1) Two months Balance Sheet (customize the time periods as taught in class)

(2) Two months Profit and Loss

6. Using the two period data from the financial statements, perform financial statement analysis in term of ratios to explain how well your business is doing. Is it profitable? Do you have enough cash to cover your short-term expenses? Is your debt to equity ratio too high? If not, can you use some leverage to save tax expenses? Are you selling your inventory fast enough? What is the profit margin of your product? Use your Intermediate book for reference to the categories of ratios. The link below gives examples you can imitate. Submit to Blackboard your analysis (including a brief introduction to your business) in either Word or PowerPoint.

<http://www.dinkytown.net/java/Ratios.html>

7. It should be noted that this project is for you to integrate what you have learned in your other accounting courses using the tool of QuickBooks. You will be very proficient after you use any software for some time so entering transactions is not the purpose itself. Generating statements and examining the relationship among the statements are much more useful to us. In the real world you might be working in a very specific area and may not have the opportunity to see the whole picture. So use your time strategically and get the most from this project.

These pages explain some major steps you need to incorporate.

1. Easy Interview: make sure you select the following
 - Accrual basis: enter bill first and pay later
 - Inventory feature: track inventory, after the interview, click list, create new item, inventory part, and specify cost and price, and income account associated with sales of inventory.
 - Customers who owe you money: Accounts Receivable beginning balance
 - Vendors whom you owe money to: Accounts Payable beginning balance
 - Fixed assets: in the opening balances step, you need to enter some fixed assets accounts: e.g. the asset "Oven" belongs to the Fixed Asset Type. Answer "yes" when it asks you whether you take depreciation. This way each fixed asset account should have two sub-accounts called "Oven: depreciation and Oven: original cost".
 - Payroll feature: No.

Even after you finish the easy interview, you can always go back and change some of your settings or accounts.

Adopt the default chart of accounts, and edit or add accounts later. Under "List" you will open your chart of accounts and examine the major account types to see if your classification is reasonable. Fixed assets must have the account type "Fixed assets" to track depreciation. Major account types are Bank, Accounts Receivable, Other Current Assets, Fixed Asset, Accounts Payable, Other Current Liability, Income, Expense, Equity etc.

2. Routine transactions: these transactions are entered through "Forms" in QuickBooks, not through make journal entry. The regular forms you will use are enter cash sales, enter invoice, receive payment, purchase order, receive inventory and enter bill, enter bill, pay bill. These forms let you enter detailed transaction information such as quantity, price, customer/vendor names. These details should not be incorporated in general journal entries.

Inventory related transactions:

- (1) Buying inventory:
 - a. Purchase order: 8 each month
 - b. **receive inventory and enter bill:** this step will automatically debit inventory and credit accounts payable. Receive 4 of the purchase orders in one month, and the other 4 in the next month. In the second month, receive 4 purchase orders.
 - c. **pay bill:** this form will automatically debit accounts payable and credit checking.

- (2) Selling inventory:

a. **enter invoice:** this is for credit sales, and will automatically debit accounts receivable, credit sales; and debit CoGS and credit inventory.

b. **receive payment:** this step will automatically debit checking and credit A/R.

c. **enter sales receipt:** this step will automatically debit cash, credit sales, and debit CGS and credit inventory.

d. **make deposit:** at the end of each month, go to banking, make deposit, choose checking, change the date, and click the amount you want to deposit. The undeposited funds will be grouped with checking and savings to arrive at a total cash balance.

Non-inventory related transactions: enter bills: to recognize your other liabilities such as telephone bills, utility bills, service bills (provided by others). The journal entries will debit the telephone expense, utility expense and credit the payables.

3. Non-routine transactions (general journal entry): you should think about where your cash comes from and where you use your cash for the financing and investing activities.

Cash inflows: borrowings—notes payable; equity—common stock

Cash outflows: investment in fixed assets; prepaid rent, prepaid insurance etc.

4. Adjusting entries (general journal entry). Typical adjusting entries are depreciation, allowance for bad debt, adjusting prepaid/unearned balances, accrual interest and taxes etc. Depreciation should be done on individual fixed assets that have different useful life or residual value. You must show both the original cost and the accumulated depreciation on the balance sheet.

Classify Interest Revenue and Fees Earned as Other Income, to differentiate them from Merchandise Sales.

5. Bank reconciliation (optional): select checking account, create an amount for the ending balance, enter bank service charges and interest, check off deposits and checks. After the reconciliation, the bank service charge and interest income accounts will automatically be recorded. And your income statement will reflect the changes.
6. Comparative balance sheet and income statement: For balance sheet comparisons, click “modify report”, change the date to “this month” and customize the format to show previous period. The net income number on profit and loss statement must match that on the balance sheet.

Financial analysis: after you export the balance sheet and income statement to Excel, perform ratio analysis. You need to explain how these ratios show the different aspect of your business. Typical ratios are profitability ratios, liquidity ratios and turnover ratios.