Embracing Changes and Teaching Effectiveness

Flipping the Classroom

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Slides posted at

www.navigatingaccounting.com/presentation/presentations
Embracing Changes and Teaching Effectiveness

Flipping the Classroom

Are we ready?

“Online education is about to change the entirety of education in the elite university system,” says Roger Faxon, a board member of Johns Hopkins University, Baltimore. “The question is really: **is the faculty ready** because the students are ready?”

…..

Tests of this so-called “flipped classroom” have been encouraging.


www.ft.com/cms/s/0/8de6072c-60a0-11e2-a31a-00144feab49a.html#axzz2JBvqf6zM
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Flipping the Classroom

Ready for What?

Hurricane Sandy spaghetti chart

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Flipping the Classroom

Agenda

- Preliminaries
- Flipped classroom
- Flip challenges
- Flip example
- Closing thoughts
Pete’s notion of the intended outcome

- Teaching is effective to the extent it prepares students to have fulfilling and successful lives by helping them develop:
  - Robust conceptual frameworks that improve their decisions by accommodating facts, concepts, procedures, and principles that they will encounter throughout their lives.
  - Relationship skills and attitudes that promote effective and rewarding interactions with others.
  - A passion for life-long learning and strategies to learn on their own.
Tip 1

Aim high, but be patient.

- Your teaching effectiveness will continue to evolve as you gain experience and insights from others.
- Some insights will come from role models, but early on many will come from colleagues who share your challenges.
Tip 2

Exploit teaching and research synergies

- Scholars who excel at teaching and research are exceptionally creative and persuasive in both domains.

- To this end:
  - Whether you are teaching or researching, focus on developing the core competencies underlying both.
  - Grow three circles as big as possible.
Core Competencies of Highly Effective Scholars

- Real Phenomena
- Persuasive & Creative
- Relationship Skills
- Structuring Expertise
The first and lowest level of the hierarchy is the capacity to answer questions where experts agree on the answers.

The second level of the hierarchy is the capacity to answer questions where experts can reasonably disagree on the answers and where arguments are informed to the extent they are grounded in logic, theory, and facts.

The third and highest level of the hierarchy is the capacity to be innovative.

Teaching converges with research as you move up the hierarchy!
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Flipped Classroom – New Roles

- Students’ roles
  - Move as far as possible up the thinking hierarchy outside of class, given time constraints and available resources.
  - Move further up the hierarchy during class by participating in interactive activities that require faculty involvement.

- Faculty’s roles
  - Facilitate interactive discussions, help students locate and utilize resources, and develop class activities and assignments that move them further up the hierarchy.
  - Develop ways to assess higher-level thinking that provide appropriate feedback, motivation, and evaluations.
Keep learning new flips – the Flip Continuum

- The boundaries of what can and can’t be learned effectively through electronic media without significant faculty-student interaction will continue to evolve with new technologies and learning models.


http://gymnastics.about.com/od/famousgymnasts/ig/Shawn-Johnson-Gallery/Shawn-Johnson-Flip-.htm
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Flipped Classroom – Why Now?

Flip or be flipped

- Human capital based solely on the lowest level of the thinking hierarchy is becoming commoditized.
- Low-cost providers ultimately win in commodity markets, often by achieving economies of scale.
- Students and faculty who fail to move up the thinking hierarchy risk being flipped out of their jobs.
  - Students risk having their jobs outsourced to technology or developing countries.
  - Faculty risk having their jobs outsourced to technology.
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Why Start Moving Up the Flip Continuum Now?

Flip or be flipped

- To free up time during class to move up the thinking hierarchy and to come prepared for related discussions, students must learn the prerequisite knowledge and skills prior to class.
- Thus, for students to stay competitive by moving up the thinking hierarchy, we and our students must continue moving up the flip continuum.
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Flip Challenges – Easier Said than Done!

http://www.youtube.com/watch?v=jQT3dGTMCS4
Motivation and Resources

- Students must be motivated to assume additional responsibilities associated with flipping the classroom and have access to the resources and guidance needed to succeed.
- Faculty must be motivated to flip the classroom and have the resources to succeed.
- The education system needs to commit to moving students further up the thinking hierarchy and supporting the development of performance measures that faithfully represent progress towards this goal.
Knowledge and Skills

- Faculty must identify resources and develop guidance that help students learn foundational knowledge and skills prior to class, broadly defined to be any forum where students interact with faculty.

- Faculty must identify activities that help students move further up the thinking hierarchy during class and acquire the requisite skills to facilitate these activities.

- Students must learn how to learn foundational knowledge and skills prior to class and how to participate in higher-level thinking activities during class.
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Flip Challenges: Motivating Preparation and Participation

Tip 3

Continually motivate the course content

- Enthusiasm is contagious.
- Relevance to students is essential.

Getting Started

- Ask colleagues how they get themselves and students enthusiastic about accounting in general, specific courses, and topics therein.
- Ask colleagues to share activities students find highly relevant that help them internalize important concepts.
- Introduce robust concepts in simple contexts students have experienced and then progress to more complex settings.
Help students internalize the benefits of preparation and participation.

- Continuously seek ways to credibly communicate and reinforce the benefits of rigorous preparation and enthusiastic participation.

Getting Started

- Show students the benefits the first day.
- Ask colleagues to share first-day activities that stimulate broad insightful participation and preview course concepts relevant to students.
Tip 5

Organization is indispensable: Help students determine where they’re going and alternative ways they can get there.

- Expectations regarding course goals, session learning objectives, responsibilities, and grading should be stated clearly in the syllabus.
- Guidance regarding alternative ways to use available resources to meet these expectations should also be stated clearly in the syllabus.

Getting Started

- Don’t reinvent the wheel.
- Colleagues are almost always willing to share their syllabi and policies.
What you do in class today will affect future preparation.

- Probing deeper today motivates better preparation for the next class.
- When students don’t participate for a few days, they are less inclined to prepare in the future.

Getting Started

- Develop a series of questions prior to class that will progressively allow you to probe deeper into the topics you will be covering.
- Develop a few questions that are highly effective in most contexts and use them repeatedly so students will anticipate them when preparing for class: Why? Why not? What are alternative explanations?
Session 18: Cost of sales and supplier-related balance-sheet concepts

Watch

"What's Behind the Numbers?" video: Inventory Cost Outflows


Do

"What's Behind the Numbers?" Inventory cost outflows exercise.

- Assigned problem
  Exercise in.wbn.outs.010


  The class discussion will center on this exercise so be sure to do it before class.

Paper or Paperless

You have the option to complete the exercise on paper or in Excel. To use the paper option, you will need to print the templates in the exercise PDF. Alternatively, the Excel file templates are provided with the exercise materials on the web site.
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Flip Example – Class Preparation: LIFO-FIFO Basics

Students watch videos to learn basics prior to class and review them later.
Students tackle exercises prior to class and identify areas where they are having difficulty.
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Flip Example – Classroom Activities: LIFO-FIFO Refining Basics

Students are polled at the start of class to identify places in the assignment where they need help before moving on to more challenging applications.

- Be prepared to discuss inven.wbn.outs.010
  - Identify the parts you found most challenging. We will poll the class so we can focus on these parts.
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Flip Example – Classroom Activities: LIFO-FIFO Refining Basics

Class works on problem areas as quickly as possible. Here, LIFO-FIFO impairments.
Use “clicker questions” to assess students’ understanding of basic concepts or their capacity to apply them in other contexts.
Group assignments help students move up to level 2 of the thinking hierarchy.

Session 19: Group assignment 6

Do

- Assigned
  Industry Comparisons Exercises: Series 04

  Exercise 6: Inventories and Ratio Analyses

  This exercise will be posted to the following site within one week of the due date:
  

  This link takes you to the Industry Comparisons Exercises: Series 04 web page. Scroll down the page and click on Exercise 6: Inventories and Ratio Analyses.

  This assignment is allocated 100 of the 800 group assignment points used to determine your course score. We will notify you about the way the 100 points are allocated to the questions in the assignment within one week of the due date.

  Report Guidance and Submission Process

  Follow the directions on pages 14 - 18.
Exercise 6: LIFO/FIFO Inventories and Ratio Analyses

Topics:

- Inventories, turnover, and margin comparisons
- Consequences of converting LIFO-based ratios to FIFO-based ratios comparisons
- Effects of inventory impairments and LIFO liquidations on analyses
- Compare and contrast the effects of the financial crisis

Exercise Materials:

Exercise 6 [pdf]
Excel template 6 [xlsx] Excel template 6 [xls]
Word template 6 [docx] Word template 6 [doc]
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Flip Example – Class Preparation: LIFO-FIFO Analysis

Students must collect some of the inputs for their analyses from companies’ disclosures
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Flip Example – Class Preparation: LIFO-FIFO Analysis

Part 2 Question

• Compare and contrast what you learn from the ratios in the data template for the six companies and years therein, ignoring fiscal-year-end differences.

Part 2 Guidance

• Limit your analyses to:
  • The ratios in the data template.
  • Your understanding of the six companies’ businesses and the ways they were likely impacted by the recent financial crisis and by changes in input prices associated with producing or acquiring inventories. Your understanding of these issues will generally be enhanced by related information in the Management Discussion and Analysis (MD&A).

Additional guidance for analyzing LIFO-FIFO issues

• Your analyses of trends in reported LIFO reserves and related LIFO-FIFO comparisons will be improved to the extent you can explain changes in inventory quantities and input prices (such as the cost of raw materials).
• Generally, inventory quantities increase when companies are expanding, but they can also increase when there are unanticipated demand decreases. By contrast, inventory quantities generally decrease when companies are contracting, but they can also decrease when there are unanticipated demand increases. Companies often discuss increasing or decreasing inventory levels in the MD&A or other sections of their annual reports.
• Rapid changes in input prices are often attributable to changes in the prices of one or two commodities, or to a basket of commodities with highly correlated prices. Changes in economy-wide prices measured by broad price indices can also occur quickly during highly inflationary periods. However, they tend to
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Flip Example – Classroom Activities: LIFO-FIFO Analysis

The grocery sector experienced higher-than-normal levels of commodity inflation during fiscal 2012 and fiscal 2011, and the Company is anticipating modest inflation to continue in fiscal 2013. The Company, and the majority of its key competitors, have stated it will generally pass through vendor cost increases in the form of higher retail prices, thus mitigating the potential impact of lower gross margin rates. The Company analyzes inflation by product or product group and evaluates whether to pass on the cost inflation in conjunction with its overall price investment strategy. The Company does not expect inflation to have a material impact on its ability to execute its business strategy.

SuperValu’s 2012 10-K, page 22

**TABLE**

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<th>26-Feb-09</th>
<th>26-Feb-08</th>
<th>26-Feb-07</th>
<th>26-Feb-06</th>
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<td>LIFO reserve</td>
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<td>146</td>
<td>136</td>
<td>149</td>
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<tr>
<td>Increase in LIFO reserve</td>
<td>5</td>
<td>(10)</td>
<td>13</td>
<td>11</td>
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<td>Inventories</td>
<td>1,038</td>
<td>1,049</td>
<td>1,078</td>
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<td>Net sales</td>
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<td>20,160</td>
<td>20,210</td>
<td>19,543</td>
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<tr>
<td>Sales growth</td>
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<td>5.48%</td>
<td>-3.30%</td>
<td>1.64%</td>
</tr>
</tbody>
</table>

SuperValu acquires Albertsons and in the process revalues the acquired inventories to their fair values. This removes the related Albertson's LIFO reserve, which was close to $600 million.

Food prices increased significantly during 2008 and again from the middle of 2010 through 2011. These price increases likely contributed to the significant increases in the LIFO reserve.

Lead open ended interactive discussions during class
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Closing Thoughts

- Learn best practices from master flippers.

Marva Collins
http://www.marvacollins.com/biography.html

Eric Mazur
http://www.youtube.com/watch?v=WwslBPj8GgI

Richard Feynman
http://uweanimation.blogspot.com/2011/03/interesting-scientist-richard-feynman.html
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Closing Thoughts

Go for the Gold

- Prepare your students to compete globally by helping them learn higher-level thinking that promotes and leverages a commitment to freedom of thought, diversity, meritocracy, and risk taking.

- To the extent your students’ lives are enriched this way, yours too will be enriched.

http://gymnastics.about.com/od/famousgymnasts/ig/Shawn-Johnson-Gallery/Shawn-Johnson-Flip-.htm