

# **EFFECTIVE STRATEGIES FOR THE COMPLIANCE WITH THE TIME-ON-TASK CONCEPT OF AACSB**

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## **ABSTRACT**

The AACSB's new "Assurance of Learning" standard has generated substantial interest in the enhancement of students learning in the courses and programs. Under its new accreditation standards for the business programs, the AACSB has introduced the concept of "Time-on-Task". The "Time-on-Task" concept is concerned with the extent of time invested by students and the faculty for learning activities in a course. The concept promotes the course requirements that result in sufficient investment of time by students in learning activities. This paper discusses several strategies for the enhancement of effective learning activities in business courses for the purpose of compliance with the "Time-on-Task" concept.

## **INTRODUCTION**

In 2003, the AACSB revised its standards for accreditation shifting the focus of higher education to *outputs*. Specifically, the new AACSB accreditation standards require business schools to produce evidence of learning in their courses and programs. Under the new AACSB accreditation standards, business schools have to determine what kinds of knowledge and skills they want their students to learn, and then demonstrate that the students meet these specified learning goals. The underlying rationale for the new standard is that when student *learning* is the focus of assessment, the institution can achieve academic excellence.

The new accreditation standards let each institution decide what those learning goals should be and how they should be measured. The new standard is called "Assurance of Learning." The AACSB has suggested two measurement categories for the assessment and monitoring of students' learning: direct methods (includes selection tests, course-embedded measurement, and stand-alone testing), and indirect methods (includes various surveys of alumni, employers, and students). The AACSB has clearly stated that the indirect methods cannot replace the direct methods for assessment of student performance. By themselves, surveys produce weak evidence of learning.

## **OBJECTIVE OF THE PAPER**

Under its new accreditation standards for the business programs, the AACSB has introduced the concept of "Time-on-Task". This concept refers to the amount of time invested by students and faculty members

for learning activities. The students and the faculty at the AACSB accredited schools are expected to invest ample time for learning activities.

For accreditation purposes, “Time-on-Task” for students is to be measured by review of course syllabus, lecture notes, learning activities, and samples of student work in order to assess the demands of course projects and learning expectations. Time-on-task for faculty members is to be measured by review of course syllabus, lecture notes, and examples of student work in order to assess participation of faculty members in direct faculty-student interaction and currency of course materials. Measurement and consideration of the “Time-on-Task” certainly will help to the enforcement of and the compliance with the assurance of learning standard.

The purpose of this paper is to describe several strategies adopted by the authors for increasing the amount of time invested by students and faculty for effective learning.

### **APPLICATION OF WEBCT BASED ASSIGNMENTS**

The introductory accounting course is an important course for business students. The course familiarizes students with the process by which accounting information is prepared and used in making business decisions. Homework is critical to the reinforcement of the accounting concepts learned in the introductory accounting class. Based on experience, students do the homework when it is graded and factored in the course grade. Thus, homework assignments are most effective as a reinforcement tool when they are graded. However, grading numerous homework assignments in an introductory accounting course with a large number of students enrolled is a substantial burden on the instructor. This obstacle is removed by requiring students to submit their answers to the homework via WebCT.

WebCT is one of the widely used web-based course management systems that help faculty make better use of the Web in their courses. Through WebCT faculty can create and manage course websites without having to know HTML. One of the important capabilities of WebCT is the automated grading. Using the automated grading feature of the WebCT, faculty can grade the answers submitted by students to a wide range of questions such as true/false, multiple choice, calculated, multiple answer, ordering, fill-in-the-blank, matching, and short answer/essay questions. Faculty can control the date and the time when students must submit their answers to a homework or test. In addition, faculty can create grading rules and weight differentially the questions in a homework or test. Furthermore, WebCT provides analysis data for homework or test item results which can be exported to excel for additional analysis.

In the introductory accounting course offered by one of the authors, WebCT grades the homework automatically, making it possible to assign and grade homework on a weekly basis. In addition, after the deadline for the submission of the homework is pasted, the detailed solution to the homework is posted on WebCT and is discussed during the class following the homework deadline.

In general, WebCT allows for the use of at least six different formats of questions for assessing the student learning in accounting courses. They are as follows:

#### **Type 1 Question – Multiple Choices**

- Q1.** A company uses the lower of cost or market to value inventories. The corresponding concept is
- Consistency
  - Materiality
  - Full disclosure
  - Conservatism

**Type 2 Question – Computing a number**

**Q2.** The Baylor Company gathered the following condensed data for the year ended December 31, 2005. Baylor is subject to 25% income tax rate.

Cost of goods sold	\$ 800,000
Sales	1,800,000
Administrative expenses	250,000
Interest expense	60,000
Interest revenue	30,000
Loss from employee strike	200,000
Selling expenses	90,000

Compute Baylor's net income/loss for 2005? In submitting your answer to the WebCT don't use dollar sign (\$), space, or comma. Example: 5000

Show net loss, if any, with negative number. Example:-5000.

**Type 3 Question - Computing several numbers**

**Q3.** The following is the account balances for Mitchell Company as of December 31<sup>st</sup> in random order:

Depreciation Expense	4,800	Salaries Payable	5,000
Interest Payable	4,000	Cash	24,000
Accounts Payable	11,000	Common Stock	27,000
Equipment	54,000	Cost of Goods Sold	12,500
Interest Expense	3,500	Dividends	4,500
Marketable Securities-short-term	11,000	Salaries Expense	15,200
Retained Earnings	23,000	Unearned Revenues	2,000
Accounts Receivable	12,000	Sales Revenue	47,000
Accumulated Depreciation	12,000	Supplies	5,000
Bonds Payable	25,000	Land-investment	9,500

Compute total current assets and current liabilities, respectively, as of December 31<sup>st</sup>. In submitting your answer to the WebCT don't use dollar sign (\$), space, or comma. Separate your answers with a comma “,”. Example: 125000,89000

**Type 4 Question – Words**

**Q4.** The \_\_\_\_\_ principle states that expenses must be recorded in the period in which they were incurred and helped to generate revenues. What is the missing word?

**Type 5 Question – Computing a number along with indicating the balance type**

**Q5.** On April 1, the cash account had a balance of \$4000. During April, company had the following transactions:

- Provided \$6000 services to customers, collected \$5000 in cash, the rest was on account
- Purchased \$8000 equipment, paid \$3000 in cash, the rest was on account
- Collected \$2000 cash from customers for services to be provided in the future

Compute the balance of *cash* account after journalizing and posting all of the above transactions. Also, indicate whether the balance is debit or credit. Use capital D for debit and capital C for credit. In

submitting your answer to the WebCT don't use dollar sign (\$), space, or comma. Example: 5000D or 2500C

**Type 6 Question – Journal entry**

**Q6.** The following is list of accounts for Brown Law firm each represented by a letter.

A. Cash	N. Retained Earnings
B. Supplies	O. Dividends
C. Accounts Receivable	P. Legal Service Revenues
D. Interest Receivable	Q. Interest Revenue
E. Prepaid Rent	R. Property Taxes Expense
F. Prepaid Insurance	S. Interest Expense
G. Equipment	T. Supplies Expense
H. Accumulated Depreciation—Equipment	U. Rent and Utilities Expense
I. Interest Payable	V. Salaries Expense
J. Salaries Payable	X. Insurance Expense
K. Accounts Payable	Y. Depreciation Expense
L. Unearned Legal Services Revenues	Z. Income Summary
M. Common Stock	N. Retained Earnings

Provide journal entries for the following transaction: Purchased \$4000 equipment, paid \$1000 in cash and the rest was on credit.

In submitting your answers to the WebCT follow instructions:

Example: \$400 of supplies on hand was used.

Supplies Expense	400
Supplies	400

The answer for the above entry for WebCT is: T400D,B400C where T denotes supplies expenses account, 400 is the amount, D stands for debit, B denotes supplies account, 400 is the amount, and C stands for credit. The letters are in capital. Comma is used to separate the debit section from credit. Don't use dollar sign, decimal point, or space in any place. If in an entry requires more than one debit or credit accounts, first enter debit accounts, then the credit accounts. The order in which debit or credit accounts are entered does not matter. Example: Provided \$5000 services to clients, collected \$3000 in cash the rest was on account. The answer for Black Board is: A3000D,C2000D,P5000C

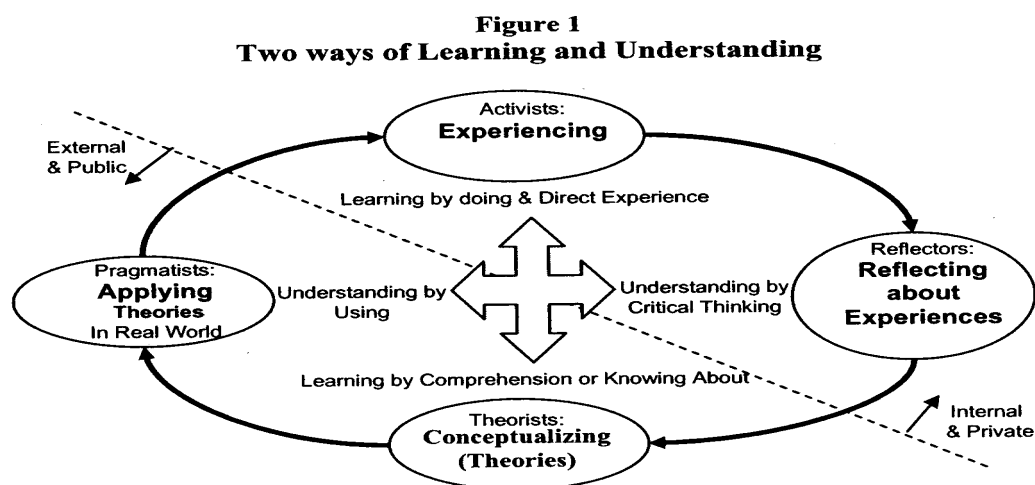
One of the critical elements of assurance of learning is to provide continuous feedback to students regarding their performance. WebCT offers students continuous feedback by allowing the students to see

their scores for each homework along with the correct answers to the questions that are missed, after the deadline. In addition, overall class performance on each homework question is tabulated and posted on the WebCT. By tabulation of the performance of students in homework, the instructor is able to monitor and assess student learning throughout the course. Questions that are missed by the majority of students are discussed in class and often placed again in subsequent homework assignments.

## APPLICATION OF EXPERIENTIAL BASED LEARNING ASSIGNMENTS

It is a well-established fact that learning is facilitated when students participate completely in the learning process, and when they are confronted with practical and real-life problems. In recent years, the discipline of business administration has received a lot of criticism. Much of the criticism has focused on dissatisfaction within the business community of business education delivered to undergraduate students. The lack of necessary skills to apply the theoretical concepts and abstract knowledge in practical situations; and too much weight placed on theory and not on practical skills are two examples of such criticisms.

Experiential learning is an approach to education that has grown in popularity over the past twenty years. This type of learning occurs when students participate in some activity, reflect upon the activity, and use their analytical skills to derive some useful insight from the experience. What experiential learning does best is to capture the interest and involvement of the students, but most importantly, it contributes significantly to the transfer of learning. David Kolb [5] has developed the most established model of experiential learning. In his model the process begins with “Experiencing”, followed by “Reflecting”, which concentrates on what the experience means to the person who is experiencing. The reflection then leads to “Conceptualizing”, which corresponds to “knowledge about” which is theoretical and is represented by abstract concepts, and finally, if applicable, “Applying the New Knowledge” in real situations. Because “Experiential Learning” engages students, its benefits include: increased learning, increased motivation, and increased connection to reality. Kolb [5] has summarized the most important characteristics of experiential learning in the following diagram:



The following describes several ways by which one of the authors of this paper has applied experiential learning in marketing course:

### **Example # 1: “Packing the Powerful P!”**

Most students in an introduction to marketing course can easily visualize the role packaging plays in protecting and facilitating the storage of products, it is not as clear to them the powerful role packing can play in determining how a consumer views and classifies a product (the promotion aspect). This taste test experiment is designed to graphically demonstrate how packaging makes us see three very similar products as completely different items. Three products are used in this taste test: KitKat candy bars, Sweet Escapes, and Keebler Fudge Sticks. The items should be cut up into bite size pieces. Each product is placed in separate bags labeled A, B, and C. Students are divided into groups of 3 to 5 depending on class size. The groups are given taste test sheets to fill out as a team. These sheets include the following items: which product did you prefer and why did you prefer it; what is the target market for the product; what the name of each product is; what price does each sell for (or list most the expensive to least). Once these are completed, they are collected and reviewed with the class and the identity of the products is revealed. Next the groups are given the ingredient lists for the three products labeled 1, 2, and 3 and are asked to match the product with its ingredients. These sheets are collected and reviewed. Finally students are given the nutritional breakdown for each product—standardized—so that each product’s nutritional breakdown is for the identical serving portion and asked to identify which product goes to which nutritional breakdown. These are collected, reviewed and how each team fared on the three tasks is reviewed. After the taste test is completed, the results are discussed as a class.

What the students discover is that the three products are all basically chocolate covered wafers are viewed very differently and sell for very different prices based on packaging. KitKat is packaged individually as a candy bar, while fudge sticks are packaged in a group as cookies, and Sweet Escape, a cross between a cookie and a candy bar, are packaged as a group but individually--. Students tend to be surprised at the fact that they cannot identify the candy bar, which they perceive as a chocolate bar, by its ingredients.

The taste test allows students to immediately begin to understand the relevance of packaging in determining how one perceives a product. It also demonstrates how packaging interacts with the price, promotion, and positioning of a product. Additionally, it allows them to apply their own experience to the material presented in class lectures. This exercise has a side benefit as it exposes students to taste tests as a form of marketing research. Most importantly it forces students from a passive state of learning to participatory learning. A good follow-up is to ask them to try and find their own examples.

### **Example #2: Pepsi/Coke Blind Taste Test**

How did the Pepsi/Coke taste test evolve? In the late 1970s, Pepsi was looking for a creative promotion for its big problem area: the southwestern United States. Pepsi's national market share was 17 percent at the time but only 8 percent in the Southwest. Pepsi decided to stage a blind taste test using a sample of loyal Coke drinkers in the southwest. Pepsi had the volunteers to taste test two colas - one labeled M (Pepsi) and one labeled Q (Coke) and state their preference. In this test, more than half the Coke drinkers chose the product labeled M, Pepsi. Pepsi advertised the results in a promotion in the Dallas-Fort Worth area, and sales of Pepsi doubled. The promotion was so successful that Pepsi introduced it into seven other market areas. At this point, Coca-Cola announced that Pepsi's taste test was biased and unfair. Coca-Cola pointed out that variables other than taste were affecting volunteers' choices. One extraneous variable is that people have a natural preference for the letter M over the letter Q. As a result, the preference for product M could be based on taste or could be a subconscious preference for the letter.

In extensive testing, when people were asked to pick either Q or M, 78 percent chose M and 22 percent preferred Q. When people were asked to chose a number from 1 to 4, 70 percent chose 2 or 3, and only 30 percent chose 1 or 4. How do your class results compare?

Before Coke introduced its reformulated "New Coke" in 1985, it conducted almost 200,000 blind taste tests with consumers. The results: New Coke (55 percent) chosen over original Coke (45 percent); New Coke (52 percent) chosen over Pepsi (48 percent). However, after New Coke was introduced, it failed miserably in the market. The original formula was reintroduced a few months later as "Coca-Cola Classic."

We can replicate the taste test comparing New Coke, Coca-Cola Classic, and Pepsi as follows:

1. First, ask each student to select either the letter M or Q. Next, ask them to select a number from 1 to 4. Tally the results.
2. Get forty small paper cups and label ten with the letter R, ten with S, ten with T, and ten with the letter W.
3. Outside the room have a student volunteer randomly assign New Coke, Coca-Cola Classic, and Pepsi to the letters R, S, and T. Write down which soft drink goes with which letter.
4. At the start of class, select ten students as taste testers. The subjects should be regular consumers of non-diet cola (at least six 12-ounce bottles in the last month). Place the students at the front of the classroom.
5. Outside the room, the student volunteer should be filling each cup with the appropriate soda. Fill the W cups with water.
6. Put an R, S, T, and W cup in front of each student, and hand each student a copy of the Cola Taste Test Form provided.
7. To eliminate order bias, have three of the students begin the taste test with cup R, three with cup S, and four with cup T. Have them take a sip of water between colas and continue to sample and test in any order they wish. They can resample as needed to fill out the questionnaire.
8. Have a student tabulate the answers during class and share the results at the end of class. The form could even lend itself to cross-tabulations (between preferences and answers to questions 5 or 6) if the sample were larger.

### **Example 3: A Peek at Packaging: Students' Observations of Their Own Use of Packaging**

The purpose of this assignment is to cultivate students' awareness of product packaging and related strategic issues. Each student records all packages handled over the course of four days, reports observations about the packaging used, and reflects on several strategic issues. An in-class activity conducted on the project's due date reinforces potential competitive advantages offered by strategic packaging and provides salient evidence of the challenges that marketers continue to face.

The project is comprised of three components:

1. **Record.** Students observe and record (i.e., list) all packaging they handle over the course of four days. For example, a peanut butter jar, jelly jar, and bread wrapper are all handled when a sandwich is made. An asterisk ( \* ) is placed on the list next to any package which is disposed of. Students are instructed to watch for miscellaneous or non-traditional types of packaging that they use, e.g., groceries are packaged in either "paper or plastic". Part of the learning experience is determining whether something should be considered "packaging", based on the definition and functions discussed in class. Students are asked to divide the days into four time periods. Students are *strongly* encouraged to record their package use throughout the day. Of the four days, two must be "weekdays" (Monday - Thursday) and two must be "weekend days" (Friday - Sunday). The days do not have to be consecutive.

2. **Report.** Students discuss their observations in a two-page paper about the packaging handled. Discussion guidelines are provided:
  - Discuss observations about the amount (sheer quantity) of packaging handled on the weekdays vs. the weekend days.
  - Discuss the *types* of packaging handled on the weekdays vs. the weekend days. Were different types of products used? Discuss any patterns observed (portion sizes, disposed of more packaging on certain days, etc.).
  - Discuss observations relating to environmental issues. Based on these observations, discuss whether or not most packaging is environmentally friendly. Identify the package that was the worst environmental offender. Identify the package that offered the most positive example of environmental responsibility.
  - Discuss one other issue/observation about the packaging used over the course of these four days. (*NOTE: Although suggestions for potential issues can be provided, requiring students to identify a salient issue based on their own observations contributes to the learning experience.*)
3. **Reflect.** Based on the packaging handled over the course of the four days, identify the very best package and the very worst package. Specify why these particular packages were selected. Bring these two packages to class on the due date.

### **In-Class Activity**

On the due date, form five-member groups. Each group member shows his/her best and worst package and explains why it was selected. Each group chooses their best and worst package. Then, each group's best package is presented to the class by the student who brought it, who again emphasizes the package's attributes. This is followed by a vote for the Grand Champion Package. This process is repeated for the worst package which culminates in the selection of the Very Worst Package. The students who brought these packages are each awarded a small prize.

The in-class activity reinforces the functions, attributes, and competitive advantages achievable via excellent strategic packaging. The poor packages provide salient examples of the criticisms and challenges facing the marketers of packaged-goods. A number of students are appalled at the quantity of packaging they personally use. Some rue obvious excess packaging while others point out that the level of product quality demanded by customers (e.g., unbroken cookies) requires product protection. A discussion of these issues can be used to [re]emphasize the challenges marketers face regarding customer expectations, social responsibility, and/or the marketing environment. When the projects have been graded and are returned to the students, a list of packages documented by especially observant students is read to the class, e.g., envelopes, banana labels, rubber bands around newspapers. This provides an opportunity to recap the qualifications, functions, and benefits of packaging.

## **APPLICATION OF APLIA BASED ASSIGNMENTS**

Aplia is an online delivery of college-level educational materials supplemented by interactive applications. It is designed to improve learning by increasing student effort and engagement, registered its 500,000th user during the spring 2007 semester. Aplia provides instructors with the ability to deliver interactive, auto-graded assignments, ensuring that students put forth quality effort on a regular basis. Aplia has four different types of content, including problem sets with detailed feedback, timely news analyses, real-time experiments, and tutorials that help students overcome deficiencies in prerequisite material. These assignments have been developed for a range of textbooks, are easily customized for

individual teaching schedules, and include several cost-effective purchasing options. Aplia first developed materials for economics courses in 2002, and has since expanded its offerings into accounting, finance and business statistics.

### **Project Description:**

*A New Vision for Learning as a Nation Goes to College* calls for a new focus on excellence to better prepare students for the twenty-first century. The report recommends the creation of a New Academy characterized by high expectations, a focus on learning, and a commitment to demonstrated achievement, intentional practices, and an engaged, practical liberal education for all students.

Aplia is an online delivery of college-level educational materials supplemented by interactive applications. It is designed to improve learning by increasing student effort and engagement. We hope that students will find participating in this interactive applications fun and increase their enthusiasm for studying economics.

### **Goals:**

Educators have emphasized the benefits of providing students with *active learning* experiences in the classroom, both to stimulate student interest and improve retention of the material taught. “Active learning may be defined as instructional activities involving students in doing things and thinking about what they are doing.” [1, P.1]. In the field of economics, classroom experiments have become a popular means of helping students understand the roles of producers, consumers, and the process by which markets achieve equilibrium.

The same instructor has had the opportunity to teach four sections of the same course of Principles of Microeconomics (ECON 2106) during fall semester 2005 through spring semester 2007. Aplia has been conducted over two semesters—fall 2006 and spring 2007-- in the course. Principles of Microeconomics is a required course for business majors at Clayton State University, and is usually taken by sophomores. The primary objective of the course is to introduce students to the economic concepts and issues involved in making business and personal decisions. During both fall 2006 and spring 2007 semesters, the instructor assigned ten (10) graded assignments on Aplia to assess the students understanding of issues ranging from the process of making choices to the opportunity costs of a teachers’ strike to the impact of trade restrictions after they have completed the readings and in-class discussions.

The above project was designed to include the following five (5) Principles of Universal Design:

**Principle 1: *Equitable use***--Students in the course will have access to the faculty web-based courseware product for assigned activities in the course.

**Principle 4: *Perceptible information***—Students will have access to all required materials in the course in both hard copy and digital (on-line) formats.

**Principle 6: *Low physical effort***—Students will use computer software to complete all activities in the project.

**Principle 8: *A community of learners***—Students will be required to use e-mail and/or class discussions in order to accomplish the goals of activities in the project.

We compared the performance and satisfaction of the students in the course during the semesters when Aplia was not used (fall 05 and spring 06) with the semesters when Aplia was required (fall 06 and spring 07). We noted the following:

1. Students drop rate from the course was more when Aplia was not used.
2. Students' performance was lower in the course when Aplia was not used.

With respect to the evaluation of instructor and content of the course, students are indifferent or better evaluate during the semesters when Aplia was used compare to the semesters when the Aplia was not required. Also, using information from on-line graded assignments in principles of microeconomics course, we find that non-procrastinators (both early-starters and front-loaders) obtain higher scores than their dillydallying counterparts. We also find that while busier students tend to start their assignments earlier, they nevertheless back-load the bulk of their effort.

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