

SECTION B

Teaching Aviation Labor Relations Using Active Learning A Full Course Simulation

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ABSTRACT

Active learning approaches in college level business courses can be both challenging and productive as the course instructor engages the students in the educational process. This paper describes one professor's approach to the teaching of aviation labor relations in a specialized university setting. A full course experiential simulation is discussed in detail and the outcomes of this active learning approach are reviewed. The techniques and methods presented can readily be adapted to a variety of learning situations.

Introduction

Traditional instructional approaches to labor relations classes can present uninspiring technical and legalistic materials to contemporary college and university students. A recurring emphasis within the Academy focuses on 'active learning' methods which can capture the students' attention and stimulate more effective learning of the course information. This paper describes one professor's approach to the teaching of aviation based labor relations in a specialized university classroom. The general approach and specific set of activities used for this course are practical and useful for teaching labor relations across industries and groups of individuals. Trainers and educators can easily adapt the techniques to other labor-management relations settings.

Embry-Riddle Aeronautical University is a comprehensive, private institution that offers both undergraduate and graduate degrees across selected programs that concentrate on the aviation and aerospace industry. Within the institution's Daytona Beach Campus College of Business, undergraduates can enroll in Aviation Labor Relations, a 300 level, three-credit hour course. The Aviation Labor Relations course is structured into two complementary teaching approaches. The class is designed to foster active learning conditions for the students. A lecture/discussion technique is implemented as part of the course, while a fully developed class simulation provides a learning laboratory experience for the students. The simulation offers an excellent opportunity for the course instructor to emphasize key course concepts and have the students practice what is presented in the lecture phase.

Active Learning

Business students are exposed to passive learning modes on a continuous basis. Class lectures or 'chalk talk', while useful in the delivery of basic course content, are, for the most

part, passive forms of learning. That is, the student is expected to sit in the classroom and listen to the subject matter expert, the course instructor. Lectures do provide certain advantages as a form of class instruction, such as conveyance of large amounts of material within a limited amount of time (Hamer, 2000). Yet research covering more than twenty years suggests that alternative teaching methodologies that create active involvement from the students can contribute to their learning (Bonwell & Eison, 1991). Studies of active learning methods suggest that students who do more than listen by becoming actively involved by reading, writing, discussing and engaging in course content demonstrate more effective learning outcomes (Chickering & Gamson, 1987). Following Bloom's taxonomy, actively involved students engage in certain higher-order thought processes of analysis, synthesis, and evaluation.

Prince (2004) discusses the effectiveness of active learning and offers general definitions of active, cooperative, collaborative and problem-based learning. He notes that active learning should be viewed as an approach rather than a specific method, given the range of active learning based activities. Hamer (2000) expands on the approach to active learning by distinguishing between experiential techniques, semi-structured classroom activities and loosely-structured classroom activities. He explains that loosely-structured activities are generally broad in scope and operate over a longer time period. The Aviation Labor Relations course simulation best fits this particular technique.

Simulations can be utilized across a variety of courses and implemented through several medium (Davis, 2009). A well-designed and relevant simulation can enhance student experience and retention of course information. As a form of role playing, Davis suggests that a compelling scenario be presented to the students who must adopt their roles and confront the problems and challenges of the simulation.

The importance of bringing relevance to the classroom is discussed by Stegemann & Sutton-Brady (2010) in their showcase of a marketing education course. Their conclusions are that students become more engaged and motivated when active learning approaches are introduced in the classroom. Moreover, students appear to improve their learning outcomes through consolidation of the course information via activity-based exercises.

Watkins (2007) points out that teaching negotiations, a fundamental component of any labor relations course, is best conducted using 'manageably dynamic simulations'. Negotiations in which the participants can influence and shape the parties, issues, linkages and outcomes within a moderately structured environment may lead to the most favorable learning outcomes. This course simulation allows the students to choose their priorities for negotiation and decide upon their tactics when bargaining.

Course Simulation

This Aviation Labor Relations course is a fifteen (15) week long course that covers a full academic semester, offered either in a Monday – Wednesday – Friday or Tuesday – Thursday schedule. Approximately half of the class time is spent presenting a comprehensive overview of the field of labor relations, with particular emphasis on the airline transportation sector of the aviation industry. Students become acquainted with the history of U.S. labor relations from the colonial times to the present. Moreover, the course is structured to cover the entire spectrum of labor-management relations from inception to contract administration. Such depth and scope of information could prove to be a daunting task for most undergraduate students and a traditional classroom might fail to engage the students in their learning. Therefore, the course simulation was included in recognition of the power of active, experiential teaching methods.

The course simulation places each student into a fictitious commercial airline company. Every student is assigned a job within the airline organization and is encouraged to adopt this role behaving much like one might expect such an employee would behave under real circumstances. Every student is evaluated throughout the semester on his/her participation in the simulation.

Student Role Assignment

The simulated airline is organized into four (4) distinct job groupings. One group is identified as *management* and these students act out such roles as Chief Executive Officer (CEO), Chief Operations Officer (COO), Chief Financial Officer (CFO), Chief Human Resources Officer (CHRO), and Chief Pilot. A second group is identified as *pilots*, with selected students assigned to senior pilot status and other students assigned to junior pilot status. The third and fourth groupings respectively, are students who become either *mechanics* or *ramp workers*. As with the *pilot* group, these students are sorted into either senior or junior employment status, much like one would experience in the actual work environment. Placing these students, designated as 'labor', i.e.. pilots, mechanics and ramp workers, into junior and senior job status allows the instructor to discuss the important notion of seniority and include such issues within the simulation.

All students are provided a brief job description that familiarizes them with their respective roles in the simulation. The job description includes the student's current rate of pay, a listing of employer benefits, any opportunities for bonus pay, and the length of service the individual student holds with the airline company. The airline organization is introduced at the beginning of the course, using a set PowerPoint slides.

Table 1 illustrates the management team to which students are placed into their respective roles in the simulation. Table 2, below, illustrates the labor job groupings into which certain students are placed.

Table 1
Simulated Management Roles

CEO
VP Operations
VP Safety
VP Finance
VP Human Resources
Chief Pilot
(3) Supervisors of Ramp Operations

Table 2
Simulated Labor Roles

Pilots
Ramp Workers
Mechanics

Two key roles are developed and included within the course simulation. These two respectively are the union representatives for either the airline pilots union or the aviation workers union, which covers all mechanics and ramp worker jobs. The students who are assigned these roles are expected to perform as external union agents and support the union organizing processes that are acted upon during the simulation.

Simulated Airline Organization

Beyond the four job groupings and the two union agent positions described earlier, the students are also introduced to the airline organization's scope of services and geographic locations. This detail adds dimension and scale to the course simulation and enhances the realism of discussions that naturally occur as the labor-management issues are introduced by the course

instructor. Such organizational layout can assist the students as they begin to explore the dynamics of real world labor relations, including issues relating to defining a bargaining unit and such. Table 3 depicts this organizational layout.

Table 3
Simulated Airline Organization

Services

- Southeastern United States Flights
- Charter Operations – Tampa
- Caribbean Flights
- Air Cargo – Mexico

The airline company developed for the simulation is governed by a board of directors and the students are introduced to the chair of this board via a short video segment. Indeed, a variety of media tools are used throughout the course including PowerPoint slides, videos, clips from YouTube, internet sites, and documents posted in Blackboard, the course teaching module currently in use at Embry-Riddle Aeronautical University.

Use of Blackboard

Blackboard is used extensively in support of this labor relations course simulation. Budd (2002) discusses the incorporation of information technology into the teaching of labor relations. He also mentions that web enhanced courses, using platforms such as Blackboard, can enrich the information exchange and communication between the students. A number of tools are available to the students in Blackboard including a glossary of labor relations terms that links to the course textbook and discussion items. The discussion board feature allows the students to communicate among and between their respective simulated groupings. The course instructor can access the discussion board and measure each student's level of participation of this feature. The adaptive release function allows the instructor to post course materials and information that can only be

viewed by selected student groups, such as a sheet of Do's and Don'ts provided to the students in the management group as a union organizing campaign develops. Communication can be directed to individuals or groups of students that approximate what would occur in real world applications, i.e. a union authorization card.

Information technology can be used effectively to support good teaching practices, and the tools describe above offer students the means to learn cooperatively and collaboratively. However, regarding web-enhanced courses, instructors are reminded that "all of these are simply tools; by themselves, they cannot create learning" (Budd, 2002).

Activities within the Simulation

The course instructor is an active contributor to the student simulation throughout the semester. At the beginning of the simulation, the instructor creates a number of circumstances that might affect a student or all members of that student's group, much like could occur in an actual airline organization. For example, injuries occur among ramp workers that serve as a catalyst for those students to meet and discuss their concerns and ideas. Mechanics in the simulation are advised by members of management that outsourcing of work is under consideration. Pilots learn about the likelihood of hiring freezes and possible changes to the fleet of aircraft used by the simulated company. The students assigned to union agent roles are provided web site addresses and encouraged to take on the responsibilities of a union organizer.

A number of other situations are created by the course instructor and inserted into the simulation at selected times and synchronous with the more traditional academic discussion of the course. All situations are designed to create student reactions that mimic those as would occur in real world applications. These activities bring a sense of realism to the classroom and

provide opportunities for the students to discuss the effects and implications for their respective roles within the simulation.

A significant emphasis with this course is placed on the collective bargaining and negotiations phase of labor relations. Events occurring earlier in the course simulation lead to the election and certification of union representation so that the course instructor can then introduce discussions and demonstrations that center on the collective bargaining process. At this point, students are well versed in either their management or labor roles on how the simulation impacts each of them. The two bargaining units, comprised of pilots under one union representative and ramp workers and mechanics under a second union representative, experience the bargaining process within the classroom as they face off with those students in the management group. The course instructor structures this activity whereby at each bargaining session, three students from the management group sit across the table from three students from the pilot union for purposes of negotiation. Approximately 30 minutes is allocated to these discussions and then in similar fashion, three students from the ramp worker and mechanics union meet with either the same three management assigned students or a different set of students within the management group for purpose of negotiation.

All students in the course are expected to participate in the collective bargaining phase of the simulation and the course instructor monitors which students are seated at the table for each session. The instructor maintains documentation throughout the course on how each student is performing within the simulation, which carries its own score as part of the total course evaluation process.

The bargaining and negotiations process conducted during the simulation allows the course instructor a number of “teaching moments” that place emphasis on important items such

as negotiation style, the Walton-McKersie model of bargaining, and tactics often used at the table, i.e. packaging issues. Students gain increased appreciation and understanding of the negotiations process that typically occurs in labor relations that would otherwise be difficult to convey using traditional teaching methods.

As the course nears the end of its academic term, the course instructor asks the students, involved in the collective bargaining process, to arrive at their best and final offers. All proposals that have been finalized between the students during the negotiations activities are then consolidated into a possible contract, which the two bargaining unit groups of students then are given the opportunity to vote to accept or reject the contract, much like real world actions. The course instructor provides ballots to the students that represent similar, authentic documents found in actual labor relations applications. Students are acquainted with a number of labor relations oriented documents, e.g. authorization cards, election ballots, etc. during the simulation.

Reflective Writings

The experiential nature of the course simulation immerses the students in the labor relations cycle and its sequence of unfolding activities. As students are exposed to the variety of situations and events that impact their roles, they are asked to write a brief reflection about how they would be thinking and responding at a given point in the simulation. Each reflective writing requires the student to describe his or her perspective on matters that have occurred up to that point in the class, with a key focus on how such matters would impact on his or her job at the airline company.

There are four reflective writings submitted by each student as part of his/her participation in the course simulation. Students generally submit two paragraphs, describing their thoughts and reactions to the simulation. These writings allow students to review their responses

to the simulated conditions at the airline company and to consolidate their perspectives. The course instructor reviews all reflective writings, records their submittals, and returns these to the students. The value of reflective writings in a labor relations course is noted by Bailey, Oliver & Townsend (2007), who state that an individual reflective log assignment requires students to link theory and practice. Reflective writings are consistent with active learning principles by encouraging the student participants to think about what has happened in the simulation and how they feel about their situations.

Course Assessment and Outcomes

Perhaps the true litmus test for the efficacy of active learning approaches is a comparison of student learning outcomes using pre-post observations. This particular course has been offered for several years and, initially, the course instructor utilized the more traditional lecture style in the labor class. A retrospective analysis reflects that aggregate student scores on objective tests were measurably lower for those students who were presented the course in the traditional mode. Moreover, student satisfaction measures derived from end of course evaluations were also reduced compared to more current course measures using active learning approaches.

The aviation labor relations course syllabus states that the essential purpose of the course is to educate the student about the business field of labor relations, with particular focus on the aviation industry. The complete cycle of labor-management relations inclusive of the history of labor in the United States, the organizing process, collective bargaining and negotiations, and contract administration are covered during the academic term.

Student performance is evaluated through objective testing, attendance, and participation in the course simulation. Student engagement in the simulation portion is assessed through the discussion

board traffic, the four reflective writings, participation in the collective bargaining phase, and general involvement in the variety of situations that arise during the semester.

Exhibit 1 provides student comments received at the conclusion of the course as part of the course evaluation. Students have consistently mentioned how the course simulation maintained their interest in the class and enhanced their understanding of key labor relations issues.

Exhibit 1

- The simulation probably helped the most. It allowed us to take the material we learned and apply it in a simulated environment. It wasn't just constant lecture from class to class.
- The simulation aspect of the class was an excellent learning tool.
- The videos of Bling were a great way to draw in students.
- The simulation of collective bargaining was by far the best part of the class and was immensely helpful in giving us hands on experience with collective bargaining.
- The hands on real world simulation was the best help and by far the most involved learning experience to date.

Student ratings of the course are contained within the end of term course evaluations. It is revealing that the key questions which directly relate to learning outcomes and are contained within the evaluation instrument reflect the following ratings:

- The instructor taught the course material in a manner that made it understandable: mean student rating 3.95/4.00 all department course mean student rating 3.34/4.00
- The learning outcomes were addressed via the learning activities in the course: mean student rating 3.95/4.00 all department course mean student rating 3.37/4.00
- The instructor's materials enhanced my understanding of the course content: mean student rating 3.85/4.00 all department course mean student rating 3.30.

Challenges and Opportunities

Without doubt, the above described active learning approach requires substantial preparation and continuous effort from the course instructor. The course simulation was

developed three years earlier and modified with each subsequent class. Approximately twenty (20) hours were necessary, in addition to the time spent preparing lectures and PowerPoint presentations, to create a simulation tailored to the aviation industry. Significant assistance was provided by the institution's Center for Teaching and Learning (CTLE) in not only the development of the simulation, but also in the understanding and implementation of the various teaching tools within Blackboard.

The positive effects on student learning far outweigh the additional effort required of the course instructor. Students consistently evaluate the Aviation Labor Relations class favorably, indicating high levels of satisfaction, e.g. 3.85/4.00 on the end of course evaluation report. Student comments, as noted previously, regularly and consistently reference the course simulation as a very interesting and helpful tool that enhances their learning of the course content.

Conclusion

Evidence derived from student performance measures and direct feedback regarding the method of course instruction suggests that an active learning approach, while more time-consuming and complex, offers a superior learning opportunity compared to the more traditional lectures. Students appear to become more interested and involved in the course and promote an interactive learning environment. Importantly, the students better understand the relevance of what they are learning in the class. Connecting the course learning objectives to reality as practiced through the simulation can enhance the retention and understanding of the materials. Research supports the practice of well-chosen simulations that offer direct linkages to the course content (DeNeve & Heppner, 1997; Hertel & Millis, 2002).

The course instructor must have the confidence to accept the risks of implementing non-traditional approaches in the class. Moreover, the instructor must be willing to relinquish the responsibility for educating the students and allow for student-based responses to ambiguous situations, which can then be addressed as 'teaching moments'. Finally, the instructor must be prepared for the extra work that accompanies the above described activities. The results from these caveats can lead to increases in enthusiasm from both the students in the class and the course instructor.

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