ACTIVE LEARNING IN BUSINESS EDUCATION

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*Although, we cannot compare active learning as one of the 7 **Wonders** of the world, however, it surely does **Wonder** to your classroom. If you do it right, you can see the motivation, the enthusiasm, the sparks and the eagerness to learn and teach in your classroom!!!*

*Active learning can **Transform** your students and you!*

- Chan, C.K.Y.

Delivery of lectures is often inevitable due to large course enrollment, time and resources constraints. But lecturing can be difficult to engage students as it often poses a passive learning environment and experience to students (Ekeler, 1994; Mulryan-Kyne, 2010). Existing literatures also reported other pedagogical challenges of lecture teaching, including teachers' inability to attend to students' need, and difficulties in assessing student's ability and providing prompt feedback. Students with different backgrounds, experiences, and abilities in particular, may find lectures difficult to follow. The root of these difficulties often lies in a lack of teacher-student interaction in lectures.

Lecturing is often characterized by one-way communication which promotes teacher-centered learning, offering students minimum opportunities to express or discuss their opinions in class. VanDeGrift et al. (2002) suggested several factors that inhibits student-initiated interaction in lectures, including student apprehension, comment verbalization, feedback lag and single-speaker paradigm. Student apprehension refers to students' feeling of uneasiness when asked to speak up in a large class; this is particularly true when they are unfamiliar with the class material or find it struggling to express their difficulties in class. Students may also have a misconception that the opportunity to ask questions has passed once the lecturer move on to a new topic, resulting in feedback lag. Even if students do take the initiative to ask questions or make comments, there is limited time for them to do so one by one (i.e. single-speaker paradigm). With limited lecture time, teachers usually do not arrange any in-class activity to further students' learning, resulting in the difficulty for students to evaluate newly acquired knowledge and concepts and apply them to their existing knowledge. Furthermore, many large enrolment courses often takes place in large lecture theatres with significant physical distance between teacher and students, creating an imaginary barrier and an impersonal atmosphere hampering student involvement and interaction (Geske, 1992).

A common method for teachers to try to solve this problem is to pose questions in class to encourage interactions and discussion, however, students are usually not responsive to these approaches and rarely do they initiate questions. All in all, the learning environment of lecturing makes it difficult for students to maintain their concentration in a long period of time; the lack of interaction may also result in a negative student learning experience and atmosphere. An effective way to deal with these issues of large class lecture and encourage student engagement is through the implementation of active learning (Biggs, 1989). The active elements of the activities could bring excitement and stimulation to increase student participation, while the increased interaction between the student and teaching contexts will also encourage a deeper approach to learning and in turn, produce quality learning outcomes.

Active learning can enhance student participation and learning by transforming students from being passive receptors of information within a lecture teaching format into active processor of knowledge. It is commonly understood as meaningful learning activities that involves student in doing things and taking the lead to think about what they are doing (Prince, 2004). With student's becoming more active in processing information and more frequent in reflecting on their learning, active learning can lead to greater learning comprehension, better knowledge retention, superior problem-solving skills, more positive attitudes, and higher motivation for future learning (Synder, 2003). Active learning can be implemented and incorporated into lectures and classrooms through various forms of activities, such as cooperative learning, role-playing, drama, debate, simulations, in-class writing, etc. As shown by the following cases, active learning could not only help to tackle the problem of passive and non-responsive students, it can also foster additional skillsets – i.e. problem solving, communication skills, creativity, etc. – that many would considered important for the general development of a business school graduate.

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GOOD CASES ON ACTIVE LEARNING IN BUSINESS EDUCATION

CASE STUDY 1
USING INSTANT FEEDBACK CARDS TO ENCOURAGE STUDENT'S PARTICIPATION IN AN INTRODUCTORY ACCOUNTING COURSE

Pedagogy	Multiple Choice Group Exercise
Course Year	Undergraduate
Discipline	Business - Accounting

Rationale
Adding active learning and gaming elements to enhance students' learning and participation in lectures.

How it was done
- Students in an accounting introductory course were given scratch-off cards with objective questions for study as review material for midterm exams.
- The scratch-off cards, called IF-AT cards which stand for "Immediate Feedback Assessment Technique", can be purchased from the Epstein Educational Company (http://www.epsteineducation.com/home/Default.aspx).
- The IF-AT cards allow students to select a multiple-choice answer that is covered by a waxy opaque coating (exhibited below). Working in groups of 4 or 5, students selected the answer they believed is correct and scratch-off the coating. If the selection is correct, a star appears in the box and students go on to the next question. If the choice is incorrect, a blank space appears. Should they get a blank space, students can then reconsider the options that remain and continue to scratch-off the boxes until the star is found.
- There was no grade associated with this exercise; to make the exercise interesting, the scores of the teams were posted on the white board as competition.

Benefits
- Facilitates an active learning environment.
- Encourages peer learning.
- Allow students to learn from their mistakes by immediately displaying the correct answers, providing instant feedback.

Challenges
- Students cannot second guess their answers or change their answers once the waxy opaque coating has been scratched-off.
- The scratch-off cards cannot be computer graded; students' scores have to be computed manually.
- Funding is needed for purchasing the IF-AT cards (e.g. US$90 for 500 cards for 10 questions with 4 answer choices).

Student response
- Students think that the choice card was fun and very helpful in preparing for the exam that came a week after.
- Students enjoy reviewing with the groups and thought it was helpful to work in groups to figure out the right answers.

How to further enhance the case?
Teachers who are low on budget can consider the use of free, online classroom response systems such as "Polleverywhere" (https://www.polleverywhere.com/classroom-response-system), which can also engage students in a similar manner.

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Reference
Mohrweis, L., & Shinham, K. (2015). Enhancing students' learning: Instant feedback cards. American Journal of Business Education, 8(1), 63-70.

CASE STUDY 2
TEACHING NEGOTIATION USING INTERACTIVE DRAMA: "THESPIAN EXERCISE"

Pedagogy	Drama
Course Year	Postgraduate
Discipline	Business - General

Rationale
To provide an opportunity for Masters of Business Administration (MBA) students to apply theories of negotiation to a real-world case study.

How it was done
- Students were asked to develop a script for a negotiation role-play in groups of 4 to 5 students, to demonstrate a particular aspect of negotiation theory and practice.
- Each group was given 30 minutes for their presentation, including the role play and a class discussion. After performing the role play, the group

led a class discussion to further explore the selected aspect of negotiation.

- After the presentation and discussion, students were required to hand in a written report, including the script and their analysis of the negotiation process.
- Marking scheme for the "Thespian Exercise" is presented in the table below:

Assessment Criteria	Percentage of Grade
1. Negotiation Scenario and Role-Play • Knowledge and understanding of negotiation models and frameworks • Practical application(s) identified • Original ideas beyond class discussions • Key learning points clearly articulated • Consideration given to how learning applies to other negotiation contexts • Effective use of visual aids • Relevant readings to support analysis • Evidence of wide reading beyond course material	70%
2. Class Discussion • Effective use of learning aids • Audience involvement • Answers to questions	20%
3. Presentation of the Report • Logical structure and presentation • Grammar and punctuation • Correct in-text Harvard referencing • Harvard formatted reference list	10%

Benefits

The role play is intellectually stimulating and practically relevant to real-life work environment.

Challenges

- Students may take an easy way out by selecting a simple scenario, so it is important for the teacher to ask students to discuss their idea with them before moving on to develop the script.
- To encourage deep learning, it is also important to ask students to supplement their analysis of the case study with relevant readings.
- Some students may not be comfortable acting in front of their peers.

Student response

Feedback from students indicated that they perceive the whole exercise as an enjoyable and valuable learning experience.

How to further enhance the case?

- Selection of cases should be provided.
- Assessment criteria should also be provided to students as this type of activity is new to students.

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Reference

Kiffin-Petersen, S., & Fells, R. (2011). Thespian exercise: An innovative approach to teaching negotiation using interactive drama. *Business Education Innovation Journal, 3*(1), 50-56.

CASE STUDY 3
THE PUZZLE EXERCISE: INTERACTIVE TEACHING STRATEGY FOR A SUPPLY CHAIN MANAGEMENT COURSE

Pedagogy	Group Simulation Exercise
Course Year	Undergraduate
Discipline	Business - Logistic Management

Rationale

- Introducing basic supply chain management concepts (e.g. price, labour cost, production efficiency) with the help of a hands-on exercise.
- Promoting interaction among students in class at the beginning of the semester.

How it was done

- In a Supply Chain Management course of 45 students, students have to work in groups on a simulation exercise that mimics a real supply chain, and used jigsaw puzzle exercises to represent the process of product assembling in a supplier factory.
- Nine students were selected as team leaders, each selected a set of jigsaw puzzle before recruiting their fellow students as team members (two to six students per team).
- In their teams, students put together the puzzle as quickly as possible.
- As students were completing the puzzle, each team leader randomly picked a number card from a table, which indicated the number of days their team was given to ship the completed puzzle to the buyer (*Lead Time*).
- Students were asked to record the following information:
  i. *Cycle Time*: Time taken (in minutes) to complete the puzzle
  ii. *Cost*: $1.00 x *Cycle Time* x Number of students (i.e. workers) in the team
  iii. *Price*: Students have to decide on the price to sell the completed puzzle at in order to make a profit.
- Towards the end of the exercise, information were collected from the students and presented on a board:

Group Team Leader	Finish Time	Lead Time	Cycle Time	Team Size	Cost/ unit	Profit/ unit	Price/ unit
Tony	1:17pm	9 days	27min	2 people	$54	$16.00	$70.00
Mary	1:16pm	3 days	26min	4 people	$104	$46.80	$150.80
Charles	12:59pm	1 day	9min	5 people	$45	$21.67	$66.67

- At the beginning of the next class, students were required to hand in a piece of reflective writing which include:
  i. *General comments on the puzzle exercise.*
  ii. *What would you do differently if you could re-do the puzzle exercise?*
  iii. *What did you learn from your team members during the exercise?*
  iv. *What did you learn from yourself during the exercise?*
- To reinforce the relevance of the puzzle exercise

to the course, the teacher spent a few minutes sharing some meaningful comments from students' reflective writing in class.

Benefits

- Enhance student's understanding and engagement as students are involved in creating their own data (i.e. time taken to complete a puzzle).
- Facilitate students' understanding of abstract business concepts, such as the relationship between the number of workers and cost.
- Help students to develop generic skills (e.g. communication skills, team work skills, leadership skills, decision making) as they work together as a team.

Challenges

The exercise does not include all the factors that a company must considered when making supply-related decisions.

Student response

- Students became aware of the different factors that can affect the supplier's cost of production and profit.
- Students realized the importance of communication in team work, one student indicated that the ability to communicate clearly in a team can affect work efficiency.
- Students gained confidence in applying the knowledge gained from the exercise to both academic and real-life work environment.

How to further enhance the case?

To extend the exercise, additional problems arise from the supply chain management concepts, such as calculating the number of days it will take to make 1000 puzzles, can be added.

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Reference

Carr, A. (2015). The Puzzle Exercise: Interactive teaching strategy for a SCM course. *Business Education Innovation Journal, 7*(1), 15-21.

CASE STUDY 4
"WHO WANTS TO BE A MILLIONAIRE?" – AN ACTIVE LEARNING STRATEGY FOR AN ACCOUNTING CLASSROOM

Pedagogy	Multiple Choice Questions Game
Course Year	Undergraduate
Discipline	Business - Accounting

Rationale

To present accounting topics and engage students participation in a fun and enjoyable way through the "Who Wants To Be A Millionaire" game.

How it was done

- In a Principles of Accounting class, the game was introduced towards the end of the semester to review materials covered in the lecture.
- PowerPoint slides for the game included:
  i. Accounting related Multiple Choice Questions (MCQs) that imitates the real "Who Wants To Be A Millionaire" game
  ii. Three Lifelines (Methods in which the participating student can seek help)
  - Ask the audience in class
  - "Phone" a friend or classmate
  - 50/50 (eliminate 2 choices from the question)

- After introducing the rules of the game, students were asked to volunteer.
- Questions and possible answers were read aloud by the lecturer, and the participating student either responded or used a Lifeline.
- The student continued to answer the questions until he/she missed a question.
- If the student missed a question, another student would be selected to continue the game with the remaining questions.
- The game went on until all questions were answered.
- A prize (e.g. candies) was given to the last player who gave the right answer.

Benefits

- The game helps to create a more relaxed classroom atmosphere.
- The "ask the audience" Lifeline is most commonly used by students, which not only encourages active participation in class, but also give the teacher lots of opportunities to elaborate on important concepts.

Challenges

- The game may result in the loss of class time if too much time is spent on the game.
- If an academically strong student volunteers to participate, weaker students may have difficulty following the pace of the game and they may not have a chance to participate.

Student response

Students commented that the game motivated them to prepare in advance before the class.

How to further enhance the case?

- A software from DecSoftware (www.decsoftware.com) can also be used to create the game. However, the software needs to be purchased.
- For higher-level accounting courses, the game can be used to review more complicated concepts by using modified Certified Public Accountant (CPA) review-type MCQs.
- The game can also be used to review material from prior courses.

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Reference

Cook, E. D., & Hazelwood A. C. (2002). An active learning strategy for the classroom – "who wants to win … some mini chips ahoy?". *Journal of Accounting Education, 20*(4), 297-306.

CASE STUDY 5
USING DISNEY'S "THE LION KING" TO TEACH LEADERSHIP

Pedagogy	Film-Viewing & Discussion
Course Year	Undergraduate
Discipline	Business - Management

Rationale

Using Disney's animation 'The Lion King' to help students learn and apply leadership concepts taught in an introductory management class.

How it was done

The 'Lion King' exercise was conducted in two sessions.

First session (Movie-viewing)

- At the beginning of the class, students were introduced to different leadership theories.
- Before playing 'The Lion King' movie, students were given a list of questions (**Set A**) which would help them focus on key leadership-related issues as they watch the video. They were asked to prepare responses to be discussed in the next class.

Example question from **Set A**: *Katz (1955) discussed technical, human, and conceptual skills. Which of these three kinds of skills does an effective leader need? How do leaders acquire and develop these skills? Give examples from the movie.*

Second session (Discussion)

- Students were divided into small groups of four to six to discuss their responses to **Set A** given to them in the first session. Then, the teacher engaged the whole class in a discussion as each group shared their ideas.
- After the first round of discussion, another list of questions (**Set B**) was distributed. Compared to **Set A** which required students to apply leadership concepts to 'The Lion King' movie, **Set B** required students to generalize leadership ideas from the movie to the organizational context.

  Example question from **Set B**: *How can a leader's enemies undermine the leader's effectiveness? How should an organizational leader view or deal with his or her enemies?*

- Again, students were asked to discuss in their small groups and then share their responses with the whole class.
- Next, the third list of questions (**Set C**) was handed out for students to respond in the format of a reflective essay.

  Example question from **Set C**: *Riddled with guilt, shame, and self-doubt, Simba initially abdicated his leadership responsibilities. He decided to fight for his kingdom only after his encounter with Rafiki. Recall a situation in which you initially feared living up to your potential. What eventually persuaded you to face the challenge? How?*

- Towards the end of the second session, the teacher reviewed the leadership concepts portrayed in the movie and asked students to think more about how the characters, storyline and themes may apply to organizations in real life.

Benefits

- '*The Lion King*' movie helps to convey leadership concepts in a simple and entertaining way.
- The well-known animation helps to arouse students' interest on the topic taught in class.

Student response

Student feedback indicated that '*The Lion King*' movie was useful in facilitating their understanding and application of leadership concepts.

How to further enhance the case?

To save class time, the teacher can assign the viewing of the movie as homework.

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Reference

Comer, Debra R. (2001). Not just a Mickey Mouse

exercise: Using Disney's The Lion King to teach leadership. *Journal of Management Education, 25*(4), 430-436.

📝 CASE STUDY 6
LIGHTS, CAMERA, ACTION!
LEARNING ABOUT MANAGEMENT WITH
STUDENT-PRODUCED VIDEO ASSIGNMENTS

Pedagogy	Video Production & Presentation
Course Year	Undergraduate
Discipline	Business - Management

Rationale

Incorporating video into business courses help to supplement the lack of real-life business experience of undergraduate students, however, readily available video materials are often difficult to find or does not contain suitable relevant content. Thus, the teacher decides to introduce student-produced video assignment, known as '*The Newsroom Assignment*', in which students are involved in the creation of authentic videos which requires the application of management concepts.

How it was done

- In a management course, students had to produce a short video documentary on a real, local organization selected by the teacher.
- Students were expected to use the management theories learned in class to examine the problems and issues faced by the organization. Students were required to come up with ways to solve the problems as a team, and produce a video of their work in the form of a news report.
- In order to produce the video, students had to (1) conduct research on the organization. (2) prepare questions to conduct an interview with a manager in the organization, (3) prepare a script for narration and discussion sections in the video.
- Students started filming once the interview materials and script were approved by the teacher.
- Two workshops were held by the department's multimedia technical support office to provide training on how to use digital camcorders and editing software.
- Towards the end of the course, the videos were presented to the whole class for sharing and discussion.

Benefits

- Students are actively engaged in the learning process as they have to do a lot of hands-on work (i.e. out-of-class interviewing and filming, video editing) in order to create the video.
- Students can develop generic skills, such as communication and teamwork skills, as they have to interact with the interviewees and collaborate with team members.

- Strengthen students' understanding of key management theories and problem solving skills as they are expected to apply those theories to real-life problems.

Challenges

The teacher needs to have a good network and relationship with different organizations in order to obtain their support for the video assignment.

Student response

- Students were anxious at the beginning as the video assignment is quite different from their other course work, such as an essay.
- Students reported that they appreciate the real-life nature of the assignment, with an opportunity to interview managers.
- Although some students enjoyed learning new technologies in the process of making the video, some students mentioned that they faced difficulties when working with team members who are less comfortable with technology.

How to further enhance the case?

- To help reduce anxiety, show examples of videos produced by previous cohort of students when introducing the video assignment.
- May consider having students to write individual reflection papers about their whole video production process after completion.
- To avoid free riders in group work, a small percentage can be allocated for peer assessment of each other or for the individual reflection work.
- Students may also be asked to write a team journal on the team's progress, shared through blogs or wikis, so that both the teacher and peers can provide feedback or comments.
- To overcome difficulties in looking for organizations to support the video assignment, the same organization can be selected for the whole class, with each team analysing the same organization from a different perspective (e.g. structural, cultural).
- Invite the managers who were interviewed to the video presentation to provide feedback and answer questions from students.
- As the ethical approval guidelines in each university differ, it is advisable for teachers to consult the Human Research Ethics Committee in their institution on whether ethical approval is required for the collection of interview data.

Contact details

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Reference

Schultz L., & Quinn S. (2014). Lights, camera, action! Learning about management with student-produced video assignments. *Journal of Management Education, 38*(2), 234-258.