TEACHING ORGANIZATIONAL LEARNING THEORIES USING TWO REASONING APPROACHES

Amber Lo, National University, 10901 Gold Center Drive, Rancho Cordova, CA 95670, alo@nu.edu, (916) 855-4140
Velma Lee, Palm Beach Atlantic University, 901 S. Flagler Drive, West Palm Beach, FL 33401, velma_lee@pba.edu, (561) 803-2461

ABSTRACT

Using film to teach organizational learning theories has great advantages. However, how the use of film affects learners’ cognitive inductive and deductive reasoning skills is yet to be explored. This paper presents teaching such theories with inductive generalization construction and deductive theory application. Examples of implementation are presented.

Keywords: management education, learning, inference skills, film

INTRODUCTION

Using film as a teaching aid provides learners with the opportunity to visualize real life scenarios in their learning process (Champoux, 2001; Comer, 2001; Gallos, 1993; Ross, 1996). While many authors have written on the use of film for teaching Organizational Behavior and Management (OBM) concepts (Champoux, 2001; Comer, 2001; Holbrooke, 2009), few explain how learning is facilitated by the use of the film extracts. This paper proposes that, students can exercise either deductive or inductive reasoning skills when they are presented with a film in a planned sequence with appropriate questions to stimulate their thinking and analysis. This paper presents two approaches to teaching an Organizational Learning theory as an illustration. Our proposal here is an extension of Whetten and Clark’s (1996) Integrated Learning model.

LITERATURE REVIEW

Whetten and Clark’s (1996) Integrated Learning model shows how thinking, doing, learning, and applying mutually enhance the learning process. Lott (1983) suggests that students learn effectively with either inductive or deductive methods. Some literature has already identified the drawbacks of teaching by lecturing alone (Gower, Walters, & Phillips, 1995; Shapiro, 1991).
One remedy is to use inductive methods such as storytelling and case studies (Eisenhardt, 1989; Whetten & Clark, 1996).

Case studies invoke either inductive or deductive reasoning, depending on how they are used in the classroom (Whetten & Clark, 1996). Scenes from a film have the same advantages and they can also offer a visual portrayal of abstract theories and concepts taught in OBM courses (Champoux, 1999). Students who learn better via visual stimuli and concrete experience find the use of film beneficial because a case scenario is visually available for comprehension (Hunt, 2001; McCambridge, 2003; Rubin & Hebert, 1998).

Many papers have discussed using film to teach OBM concepts. A unique property of film lies in its power to make one see and understand issues that only the cinema is privileged to convey (Kracauer 1973). Similarly, Smith (2009) suggests that films can provide vivid and varied contexts for students to learn the concepts in OBM. Champoux (1999) reviews the characteristics of film theory, showing the advantages of using film as a powerful teaching tool for Organizational Behavior and Management concepts. Smith (2009) features the use of films as the primary instructional medium to teach Organizational Behavior. Comer (2001) claims that The Lion King can be used to illustrate leadership and role conflict. Van Es (2003) recommends The Insider for teaching ethics. Holbrook (2009) prescribes a systematic approach for using film to teach OB classes, but the focus is more on learning assessment, concept reinforcement, and illustration of abstract concepts. All of these papers discuss using film as an illustration and application tool with no explicit discussion on how inductive and deductive reasoning skills can be incorporated in the learning process. Tyler, Anderson, and Tyler (2009) reports on the procedure and benefits of having students find media clips that illustrate Management concepts (instead of using clips chosen by the instructor). In that experiment, students were asked to select relevant films to match different Management concepts. This approach stimulates and sharpens students’ deductive reasoning skills even though this is not the main objective of Tyler et al. (2009). Huczynski and Buchanan (2004) offers ten film examples as narrative of certain theories. This approach incorporates the use of inductive reasoning for it encourages students to decode the films. Even so, the use of inductive and deductive skills is not the explicit topic.

The works cited above reinforce the value of using film for Management education. However, they do not address how a film clip enhances student learning in an integrated manner. How would the instructor use the film? What assessment exercises would follow? The objective of
this paper is to show how film can be used to teach Management theories in an integrated manner, using either the deductive or the inductive approach.

**DEDUCTIVE REASONING AND INDUCTIVE REASONING**

**Deductive Reasoning and Its Application in Learning**

Deductive reasoning is a method of deriving valid new knowledge from a set of valid premises. In this reasoning process, one starts with a set of valid premises and follows valid logic rules to derive a valid conclusion (a piece of new knowledge) in a valid deductive argument (Copi 1986, pp. 169-170). To demonstrate deduction skills, students need to construct proofs by producing a sequence of statements that logically justifies a conclusion as a consequence of givens. The deductive approach to teaching theories with film involves the application of a taught theory (first presented in lecture) to practice (applying the learned theory to the appropriate components of a film). The students are using the learned theory or concept to better understand specific situations (Whetten & Clark, 1996). According to Van Hiele (1973), students reason formally by logically interpreting definitions or statements. The mental images that remain in students’ minds after a movie serve as samples for the students to show their understanding and application of theory into practice. Before watching the chosen film, the students are to receive a handout with questions to be answered after watching the movie. This handout serves as a movie guide to help a student know what to look for and analyze. The advantage of such an arrangement lies in cognitive preparation. Roth (2001) calls it “pre-class preparation.” After the students have watched the film and answered the questions, one way to evaluate students’ learning effectiveness is by checking the accuracy of their analysis and application.

**Inductive Reasoning and Its Application in Learning**

The inductive approach involves the construction of theories from observed facts. Students need to generate relevant principles by finding the common thread and relationships behind a set of variables that work in the specified circumstances. Training in inductive reasoning (Holland, Holyoak, Nisbett, & Thagard, 1989) requires forming theories and conclusions based on the relevant features of a small sample or a case study. As applied to teaching an OB theory or concept with film using the inductive approach, no prior theory is presented. Students can be alerted to what they could look for before they view the film. Pre-film preparation introduces the general theory-building procedure with examples. After viewing the movie, students can answer
questions on a handout through which they learn to categorize patterns and generalize theories in the story to form larger principles. Finally, the instructor can summarize those points and show how they come together and to illustrate an established theory. At this point, the instructor can formally present the theory.

TEACHING OBM THEORIES WITH FILM IN BOTH REASONING APPROACHES

The Deep Smarts Theory: Learning as a Form of Change

This section reviews the Deep Smarts Theory (Leonard and Swap 2005) as a theory to be taught to illustrate our proposed teaching approach. This theory proposes that, “deep smarts” are a form of expertise that exists in an organization. Such expertise involves a large amount of first-hand experiences and insights from tacit knowledge. Expertise is acquired by an individual through active knowledge building. This includes first-hand experience and the transfer of knowledge from coaches or through other means. In such a process, the amount of knowledge that is actually internalized is also influenced by one's own beliefs and the social influence of other people. In short, we can say that “acquiring deep smarts” is equivalent to learning and learning is a form of change in oneself: changing from not having deep smarts to having them.

The four factors that can influence one’s acquisition of deep smarts are (1) one’s pre-existing beliefs and assumptions that frame any new knowledge to be acquired, (2) social influences that act as a filter of any new knowledge to be acquired, (3) the availability of coaching and guided experience from a knowledgeable coach for transferring deep smarts, and 4) the availability of relevant new experience and expertise for building deep smarts (Leonard and Swap 2005, Chapter 5). As for the first factor, if a piece of new knowledge to be learned is in conflict with one’s own beliefs and assumptions, the learner will find it difficult to receive this new knowledge. The most powerful method of changing the learner’s own belief to align with the knowledge to be learned is through direct experiences that contradict this person’s pre-existing belief system. As for the second factor, social influences, such as friends, organizations, and other experts play the role of justifying one’s beliefs and knowledge when one is building deep smarts. As coaches, we can transfer deep smarts to others by exerting social influence over them. When a learner is more aware of how knowledge is screened and shaped by social influences, he/she can exercise more power over how his/her own learning is to be influenced by these forces. As for the third factor, the transfer of deep smarts takes place with a willing and skillful knowledge coach and a receptive and able learner. This relationship works best when these two
people have aligned goals and objectives. As for the fourth factor, a learner engages in “learning by doing” to cultivate deep smarts when he/she goes through the guided experience (with feedback) designed by the coach. The coach designs a learning path and then gets the learner to learn every possible lesson along the way, so that the learner can create his/her own deep smarts.

**Using the Film *Elizabeth* to Teach the Deep Smarts Theory in a Deductive Manner**

In the film, *Elizabeth*, the young Elizabeth starts out as an innocent young lady who is not determined to rule England by herself, but she relies on a group of counselors. When she becomes queen, England is a weak and poor country. After many events, she becomes a powerful queen is determined to rule England on her own with one advisor, Walsingham.

In the deductive approach, an instructor first explains the Deep Smarts Theory in lecture. Then the students are asked to watch the movie *Elizabeth* and to go through an exercise (on the handout) to apply this theory to the film story. This exercise is shown in Appendix 1. Many of the questions ask the students to justify their answers which aides them in evaluating the accuracy of their own deductive conclusions. In developing an appropriate justification, students need to know the relevant points of the theory presented and explain the corresponding characteristics that illustrate their rightful application. In a way, students must exercise their deductive reasoning muscles to produce a sequence of sound evidence to justify their conclusions. Lastly, during the discussion after the film exercise, the instructor goes over the answers from the students and discusses any differing answers, so as to further guide their deductive reasoning.

**Using the Film *Elizabeth* to Teach the Deep Smarts Theory in an Inductive Manner**

When the film, *Elizabeth*, is used to teach the Deep Smarts Theory in an inductive manner, the instructor presents the general procedure of inductive theory building and distributes a list of questions for the students to answer after watching the film. These questions do not directly mention the concepts related to the Deep Smarts Theory. This handout (with answers) is included in Appendix 2. When students tackles this exercise and answers the questions on the handout, they are required to use their abstract conceptualization skills, reflective thinking, and application of specific points to a more general situation. Lastly, the instructor can collect and review all the answers, analyze the correctness of them, and present the Deep Smarts Theory in a formal manner.
FUTURE RESEARCH DIRECTIONS

First, identifying other reasoning skills that can be exercised when film is used to teach theories for helping students broaden their inference capabilities, for example, opportunistic reasoning is another approach in which both deductive and inductive ways of thinking are used appropriately in the same problem solving session (Erman et al. 1980). Second, there needs to be an empirical evaluation of using film in teaching. Empirical studies can be done to compare using film versus other illustrative means of teaching OBM theories (such as paper-based written cases and even YouTube video clips, etc.) with respect to learning outcomes and learning satisfaction. Further, empirical research can also be done on demonstrating the improvement of inference skills with teaching theories with film. Third, investigating the technical aspects of using film for teaching OBM theories in different formats can help us understand the effectiveness of this illustrative medium in various delivery modes, such as it being a mandatory or optional component of a course, it being an individual or group assignment, and it being incorporated into an on-site or online class, etc. Furthermore, the technical aspect of formally developing and validating guidelines for choosing suitable film needs to be addressed. A sample issue is the level of violence in a film. Fourth, investigating the use of film to teaching other theories in other business courses, such as Strategic Management, Marketing, and issues related to Business Ethics, can broaden the usefulness of film a tool that makes theories more concrete and vivid.

CONCLUSION

This paper has proposed two step-by-step approaches of using film to teach OBM theories in Management classes in an integrated manner, either with the deductive or the inductive approach. It uses the film, Elizabeth, to illustrate how the Deep Smarts Theory can be taught using these two approaches. Future research directions have also been discussed. The use of film in teaching OBM concepts while exercising students’ inductive and deductive skills can facilitate concept clarification, appropriate application of theory to practice, and theory construction.

APPENDIX 1 HANDOUT FOR EXERCISE IN THE DEDUCTIVE APPROACH

In the film, Elizabeth, the young Elizabeth starts out as an innocent young lady who is not determined to rule England by herself, but she relies on a group of counselors. When she becomes queen, England is a weak and poor country. She faces the conflict of being with the one she loves and marrying someone for political reasons. After many events, she becomes a
powerful queen is determined to rule England on her own with one advisor, Walsingham. She is also determined not to get married for life. Eventually, she rules for forty years in “The Golden Age” and England becomes a wealthy country. We are going to investigate how various points of the Deep Smarts Theory can be found in the film, *Elizabeth*. Please review the following questions, watch the film, and answer the questions before our in-class discussion.

I. **One’s Own Belief or Assumption Framing the New Knowledge to be Acquired**

1. With respect to becoming the Queen of England, was Elizabeth eagerly anticipating her future at the beginning of the story? Why did she feel this way? Did this hinder her from becoming a strong ruler in the beginning?

   Elizabeth was not eagerly anticipating her future of becoming the Queen of England at the beginning of the story. She felt this way because she knew Queen Mary, her half-sister, did not like her. She was just living her own life away from the court. This hindered her from becoming a strong ruler at first because she did not know how to rule the country and she did not understand the international situation of England well to rule it in the right way. She had to rely on a group of counselors who had their own agendas.

2. Elizabeth’s counselors advised her to marry a dignity from Spain or from France to secure England. She was in love with another man. The advice of having a political marriage clearly conflicted with her own desires. What was Elizabeth’s initial response: acceptance, resistance, or compromise? Please justify your answer.

   Her initial response was resistance. This was because she was in love with another man and she did not know the seriousness of the situation until England lost the battle against the Queen of Guise.

3. Elizabeth first accepted her counselors’ advice to fight the Queen of Guise. What was the direct experience (or what she saw) that changed her belief about accepting the advice of those counselors from that time onwards? Was this a powerful experience that contradicted an old belief?

   The direct experience that changed her belief about accepting the advice of those counselors was seeing an English child wounded in the battle against the Queen of Guise.
when she listened to those counselors who advised her to fight the battle. It was only after seeing the wounded English child that, these counselors reviewed that, the Catholic bishops would not release English men to fight. This was a powerful experience that contradicted her initial belief in those counselors’ advice.

II. Social Influences That Frame the New Knowledge to be Acquired

1. Who were the members of influence that Elizabeth trusted at the beginning of her reign? How did these people filter the new knowledge (deep smarts) that she needed to become a strong ruler? Did they help her become a strong ruler or did they have their own agenda?

The majority of the group of counselors to the Queen were her immediate social influence at the beginning of her reign. They did not encourage her to rule with strength because most of them secretly wanted her off the throne or thought she was too weak. The only long-term solution they offered her was marriage and an heir. Many of them had their own agenda. In one incident, they urged her to fight the Queen of Guise, probably knowing that England would lose. This would weaken England further and that was what they wanted, since they were the puppets of Catholic bishops.

2. On the positive side, Elizabeth became more courageous in acting as the ruler of England. Besides Walsingham, who did she have as another positive influence (this person was not living at that time)? This positive influence served as her role model or source of courage, providing benchmarks for her beliefs and behavior and played a role in shaping how she developed deep smarts.

Elizabeth’s other role model was her own father, the deceased King of England. She encouraged herself by telling herself, “For I am my father’s daughter.”

III. The Availability of a New Coach to Provide Guided Experience to Acquire Deep Smarts

1. Was Walsingham the new coach who helped Elizabeth become a strong ruler? Please justify your answer.
Walsingham was the new coach who helped Elizabeth become a stronger ruler. This is because he constantly gave her sound advice, helped her get the united Church of England approved, and removed her real enemies for her.

2. Walsingham and Elizabeth were a good coach-protégé pair. What aligned goals, objectives, or religious belief did they share?

Both Walsingham and Elizabeth had the aligned goal of doing something good for England and making Elizabeth a stronger queen. They shared a common religious belief because they were both Protestant Christians.

IV. The Availability of New Experience and Expertise to Build Deep Smarts

1. Does the movie show any new experiences that Elizabeth had while she was building her own strength to become a strong ruler? If yes, what were these positive experiences that helped her build deep smarts and courage? Please justify your answer.

Yes, she managed to get the House to pass the unified Church of England with Walsingham’s help (he locked up those who would not vote for this) and ended the internal struggle between Catholics and Protestants in England.

She listened to Walsingham about the Pope’s plot to kill her (with proof) and got rid of those who committed treason (with Walsingham’s help) to start ruling with strength.

V. Overall

Does the story in the film, Elizabeth, illustrate the Deep Smarts Theory that we learned in class? How well does it do the job? Please justify your answer.

Yes, the story in the film, Elizabeth, illustrates all the elements of the Deep Smarts Theory. It does the illustration very well because there are many points in the story that align with the points in the theory, as described in the answers to the questions above.
APPENDIX 2 HANDOUT WITH EXERCISE IN THE INDUCTIVE APPROACH

In the film, *Elizabeth*, the young Elizabeth starts out as an innocent young lady who is not determined to rule England by herself, relying instead, on a group of counselors. When she becomes queen, England is a weak and poor country. She faces the conflict of being with the one she loves and marrying someone else for political reasons. After many events, she becomes a powerful queen determined to rule England on her own with one advisor, Walsingham. She is also determined not to marry. Eventually, she rules for forty years in “The Golden Age” and England becomes a wealthy country. We are to discuss what we can learn from the over story and various parts of the film, *Elizabeth*. Please review the following questions, watch the film, and answer the questions before our in-class discussion.

1. With respect to becoming the Queen of England, was Elizabeth very eager to rule England at the beginning of the story? Why did she think this way? How did this hinder her from becoming a strong ruler in the beginning?

   She was not vying for the throne in the beginning, partly because she was innocent and young and partly because she was not a favorite sister of Queen Mary. She lived her own life, apart from the court. This did not prepare her to become Queen of England. She did not know how to do the job. There was also no indication that she thought of herself differently inside. She did not believe or assume that she could be a strong ruler.

2. Many of Elizabeth’s counselors advised her to marry the King of Spain or a duke from France to secure England. She was in love with another man. The advice to enter a political marriage clearly conflicted with her own desires. Did she agree to investigate these possibilities? Why? In a similar situation of receiving a piece of information or suggestion that is directly in conflict with one’s own thinking, what are other possible responses that can come out of a human being?

   Elizabeth agreed to investigate these marriage possibilities because her counselors convinced her that, the only solution to England was marrying and having an heir. She, alone, was not strong enough to survive for long. She has also experienced some setbacks (or helplessness) at that time. The example was English children getting killed fighting the Queen of Guise, just because the Catholic bishops refused to send men to fight.
In a similar situation of receiving a piece of information or suggestion that is directly in conflict with one’s own thinking, besides reluctantly compromising, other possible responses can be acceptance, an outright rejection or passive avoidance via ignoring the issue.

3. Did Elizabeth assume that she was in danger immediately after she became Queen of England? What experiences turned her assumption of being safe around?

Elizabeth did not assume that she was in danger immediately after she became Queen of England. She experienced assassination attempts several times and these negative experiences changed her basic assumption of her safety.

4. Elizabeth first accepted her counselors’ advice to fight the Queen of Guise. What effect did seeing the wounded English child have on Elizabeth’s feelings towards her war against that queen?

Personally seeing the wounded English child changed Elizabeth’s feelings towards her war against the Queen of Guise immediately. She regretted fighting that Queen.

5. Who were the members of influence that Elizabeth trusted at the beginning of her reign? Did they help her become a strong ruler or did they have their own agenda? Did they hide any information from her? What was it? Why did they do that?

They were a group of counselors who actually did not want her to survive for very long as Queen of England. They did not help her become a strong ruler. We can say they were hiding the information of “how-to” from her. Many of them wanted her to get married and even with this, different people had different personal agenda, to gain power or to revive Catholicism in England. When they advised Elizabeth to fight the Queen of Guise, they did not reveal to her that, the bishops would not send men to fight on England’s behalf. Therefore, children were sent and many were killed.

6. On the positive side, Elizabeth became more courageous in acting as the ruler of England. Besides Walsingham, from whom did she draw her courage (this person was not living at that time)? What role did this figure play in helping Elizabeth become a strong ruler?
Besides Walsingham, Elizabeth also drew courage from her own father, the deceased King of England. His role was the positive role of another coach or encourager.

7. What role(s) did Walsingham play in the story? Did he play a positive or negative role in regards to her path to becoming a strong ruler? Please justify your answer.

Walsingham played the role of the good counselor and coach in a very positive manner in helping her become a strong ruler. He gave her good advice and even killed her enemies for her.

8. What aligned goals, objectives, or religious belief did Walsingham and Elizabeth share? Did they have a good functional (professional) relationship in the story? Please justify your answer.

Both Walsingham and Elizabeth wanted England to be strong, without succumbing to Catholicism. Their aligned religious belief was Protestant Christianity. They did have a good professional relationship in the story. They worked together and did not fight with each other.

9. Does the movie show any new experiences that Elizabeth had while she was building her own strength to become a strong ruler? What role did these new experiences play in helping her become a strong ruler? Please justify your answer.

Yes, she managed to get the House to pass the unified Church of England with Walsingham’s help (he locked up those who would not vote for this) and ended the internal struggle between Catholics and Protestants in England.

She listened to Walsingham about the Pope’s plot to kill her (with proof) and got rid of those who committed treason (with Walsingham’s help) to start ruling with strength.

These experiences let her increase her public speech and debate capabilities. They also gave her the courage to rule on her own. Overall, they made her grow.

10. Overall, after watching Elizabeth, can you identify some elements that can help or hinder a person from learning new knowledge or developing oneself in fulfilling the
responsibilities of a new role? For each element, please indicate whether it hinders or helps and how the story in Elizabeth demonstrates that element.

Hindering elements can include:
(1) One’s own incorrect assumptions about the real situation can hinder one’s own learning because this can lead the person to reject the necessity of such learning. This is illustrated by Elizabeth not realizing that she was in danger. It was after experiencing several assassination attempts that she realized how dangerous her situation was.

(2) Having bad counselors who prevent oneself from learning the necessary new knowledge is a hinder because the learner is barred from the new knowledge. This is illustrated by those initial counselors in the story of Elizabeth. They did not want her to survive as the Queen of England. Therefore, they did not give her good advice on how to become strong. They did not instill her to learn at all. They just suggested marriage and having an heir.

Helping elements can include:
(1) The correct discernment of the real situation can lead to the motivation to learn the necessary knowledge. This is illustrated in the story of Elizabeth changing from believing those counselors wrongly to realizing that their solutions were not sufficient and she herself was in danger. With these new beliefs, she was ready to search for the real solution.

(2) Having a good coach with aligned goals can help one learn, as illustrated in the story of Elizabeth, Walsingham was that good coach.

(3) Having the chance to practice what one is trying to learn can help one learn, as illustrated by Elizabeth succeeding in having the House pass the unified Church of England. Gaining this experience reinforced her confidence and techniques.

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