

From Reel to Real: Practical Tips for Implementing Inductive Learning with Film

Introduction

Teaching commonly applies a deductive approach, a method in which learners are introduced to new concepts in a lecture first and then asked to use the new information in a specific application (Prince & Felder, 2006). Prince and Felder (2006) suggest that this method provides little motivation for learners since the “telling” aspect of the lecture portrays the idea that learners may use this information in the future and does not necessarily focus on allowing learners to understand the why behind the lessons. Alternatively, an inductive teaching approach is more learner-centered and emphasizes learners coming to their own conclusions about relationships between the course content and a specific context (Lee & Lo, 2014; Prince & Felder, 2006). The inductive method provides learners with a predetermined vicarious experience prior to any direct instruction. This provides learners an example, connecting course content as it is subsequently delivered. The inductive approach has been found to improve learning and academic development and be equally effective in achieving learning objectives when compared to the deductive approach (Klauer & Phye, 2008; Prince & Felder, 2006). While some research indicates that teachers prefer the inductive approach (Machila et al., 2018), Prince and Felder (2007) found that students may resist the inductive method, particularly in project or team-based courses, so instructors should use careful planning.

Process

We applied an inductive approach in a team leadership and communication course. Team development is a fundamental concept that describes how team processes and interactions evolve over the life of a team. Tuckman and Jensen (1977) provide one popular model describing stages of forming, storming, norming, performing, and adjourning. We initiated the inductive learning process by showing the film, *Ocean's 11* (2001), to provide our learners a shared vicarious experience during the first week of the semester. We provided a ‘thought guide’ to help learners take notes while they watched the film in class. The instructor facilitated a discussion about the team in the film during the following class session, encouraging learners to recall and explain the behaviors and interactions of team members throughout the film. Subsequently, the instructor taught a lesson on the stages of small group development (Tuckman & Jensen, 1977). The remainder of the course content guides learners through competencies associated with team development such as group goal setting, decision-making, conflict management, and team evaluation. Additionally, learners worked in small project teams to complete a team project. Near the conclusion of the semester, learners wrote an essay analyzing the development of the team

in film and comparing it to the development of their own team in class. As a component of their essay, learners responded to questions measuring their satisfaction with the assignment analyzing a team in film, including the inductive approach applied.

Assessment

Overall, learners performed well on the assignment (M = 89%). They indicated satisfaction with the assignment and found it to be effective and a unique way to learn the course content. Moreover, they reported that the assignment was motivating and helped them learn. Although less definitive, learners also indicated that they had modeled teamwork behaviors from the film and that their teammates had modeled behaviors from the film. Table 1 indicates frequency of responses to Likert-type questions, where 1 represented strongly disagree (SD) and 5 represented strongly agree (SA).

Table 1.
Student Satisfaction Using Inductive Learning through Film (N = 32)

Item	Frequency of Response					Mean
	SD	D	UN	A	SA	
Analyzing a team in film to learn about stages of group development was helpful and effective.		1	3	14	14	4.28
The team in film analysis provided a unique activity to promote my learning of the stages of group development.	1		2	10	19	4.44
I enjoyed learning the stages of group development through analyzing a team in film.			3	8	21	4.56
Analyzing a team in film was motivating and helped me learn.		3	3	11	15	4.19
Analyzing a team in film is suitable to the way I learn.		3	2	13	14	4.19
I would have preferred freedom to choose the film to analyze.	6	10	11	1	4	2.59
I would have preferred a different assignment to assess my understanding of the stages of group development.	5	15	10	1	1	2.31
I have modeled teamwork and/or team leadership behaviors I saw in the film in my own team this semester.	1	2	12	7	10	3.72
My teammates modeled teamwork and/or team leadership behaviors I saw in the film.	3	4	7	8	10	3.56

Note. Strongly Disagree (SD) = 1, Disagree (D) = 2, Undecided (UN) = 3, Agree (A) = 4, Strongly Agree (SA) = 5

Learner responses to open-ended questions highlighted more nuanced perceptions. Several learners indicated that they enjoyed the assignment and learning through film. Some learners appreciated watching the film before learning the concepts. One learner shared, “This made it so much easier to grasp what we were learning each unit because we already saw it displayed.”

Another learner acknowledged “I also understand why it would be beneficial to see the movie earlier in order to have the opportunity to watch a team in action.” However, others found it challenging and indicated they would have felt more comfortable learning the concepts prior to watching the film. One learner wrote, “I wish that we would have learned about the concepts before watching the film. I don’t think my notes meant much before learning about the topic.” Several learners noted that they would have preferred less time between viewing the movie and writing their analysis paper. One learner said, “We watched the film at the beginning of the semester and was asked to analyze it at the end. It made it a little more challenging to recall scenes from the film.” Ultimately, however, learners were able to identify the stages of group development in the film as well as compare the behaviors they saw in the film with their own behaviors and those of their teammates.

Recommendations

Learners in our class indicated they enjoyed learning through film, although their preferences were somewhat mixed regarding whether an inductive or deductive approach should be applied. This is not surprising, given that Prince and Felder (2006 & 2007) cautioned about student resistance to inductive learning, despite it being an effective approach. Based on our experience, we recommend that instructors consider utilizing film to provide a common vicarious learning experience for learners when appropriate. We suggest that when using an inductive approach, associated assignments occur relatively quickly following the viewing of the film so that learners can more easily recall specific scenes to relate to course content. In our case, the film could be used to demonstrate nearly all of the concepts taught across the semester. Therefore, in the future we will strategically incorporate clips from the film throughout the semester to help learners recall specific scenes and interactions as they learn the course content.

Instructors should carefully consider the film they choose, ensuring that it provides content as realistic as possible to aid in transfer of learning. Previous research suggests that animated films are viewed strictly as entertainment and represent a fantasy context that learners may not connect with in an educational environment (Champoux, 2001; Champoux 2005; Rockler, 2002). It is also recommended that the film be suitable to a wide range of audiences and avoids inappropriate language and potential triggers, if possible or requested by the learners. Moreover, full feature length-films may not be feasible or appropriate in some classes, so we encourage instructors to consider integrating short clips or episodes from tv series to initiate inductive learning.

Although learners may initially resist an inductive approach to learning, we encourage instructors to apply this approach when possible to help learners draw from a common experience to co-create learning in the classroom. Beginning with shorter clips followed by guided discussion and direct instruction may help learners build comfort and confidence in their ability to derive relevant and important learning from experience whether real or vicarious. Fostering learners’ ability to extract learning from their experiences, we believe, can contribute to helping them become life-long learners.

References

- Champoux, J. E. (2001). Animated film as a teaching resource. *Journal of Management Education*, 25(1), 78–99. <https://doi.org/10.1177/105256290102500108>
- Champoux, J. E. (2005). Comparative analyses of live-action and animated film remake scenes: Finding alternative film-based teaching resources. *Educational Media International*, 42(1), 49-69. <https://doi.org/10.1080/09523980500116662>
- Klauer, K. J., & Phye, G. D. (2008). Inductive reasoning: A training approach. *Review of Educational Research*, 78(1), 85-123. <https://doi.org/10.3102/0034654307313402>
- Lee, V., & Lo, A. (2014). From theory to practice: Teaching management using films through deductive and inductive processes. *The International Journal of Management Education*, 12(1), 44-54. <https://doi.org/10.1016/j.ijme.2013.05.001>
- Machila, N., Sompaa, M., Muleya, G., & Pitsoe, V. (2018). Teachers understanding and attitudes towards inductive and deductive approaches to teaching social sciences. *Multidisciplinary Journal of Language and Social Sciences Education*, 1(2), 120-137. https://www.researchgate.net/publication/333982556_Teachers_Understanding_and_Attitudes_Towards_Inductive_and_Deductive_Approaches_to_Teaching_Social_Sciences
- Prince, M. J., & Felder, R. M. (2006). Inductive teaching and learning methods: Definitions, comparisons, and research bases. *Journal of Engineering Education*, 95(2), 123-138. <https://doi.org/10.1002/j.2168-9830.2006.tb00884.x>
- Prince, M. J., & Felder, R. M. (2007). The many faces of inductive teaching and learning. *Journal of College Science Teaching*, 36(5), 14-20. <https://www.proquest.com/docview/200341167?pq-origsite=gscholar&fromopenview=true>
- Rockler, N. R. (2002). “It’s just entertainment”: Perspective by incongruity as strategy for media literacy. *Journal of Popular Film and Television*, 30(1), 16-22. <https://doi.org/10.1080/01956050209605555>
- Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & Organization Studies*, 2(4), 419-427. <https://doi.org/10.1177/105960117700200404>

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