Original Paper

Beyond Banking Education: Interactive Approaches in

**University Lecture Practices** 

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Received: October 22, 2025 Accepted: November 22, 2025

Online Published: December 03, 2025

doi:10.22158/wjer.v12n6p128

URL: http://dx.doi.org/10.22158/wjer.v12n6p128

Abstract

Many scholars suggest that interactive lectures allow educators to help students develop their critical thinking, knowledge application, and critical consciousness of social injustice. These skills are difficult to cultivate in the traditional didactic lectures, which are a pedagogical manifestation of the banking education concept. This exploratory research aims to explore the feasibility of implementing interactive lectures at universities. Conducting six interviews with instructors and undergraduates at one university. Utilising a thematic analytical approach uncovers three themes, which reflect several challenges to the implementation of interactive lectures. This study contributes to teaching practice by offering suggestions for implementing interactive lectures, including specific interactive teaching

activities and factors that impact their implementation.

Keywords

interactive lecture, banking education, higher education, critical thinking

1. Introduction

Didactic lectures have been criticised due to their low knowledge retention (Bradshaw et al., 2021) and

cognitive engagement (Gordon et al., 2022). From Freire's (1970, 2000) lens, this lecture is a form of

banking education, in which instructors often present information as unquestionable truths, distinct

from lived experience, leading students to passively internalise information uncritically. Given that the

traditional lecture remains the predominant pedagogy in higher education (Connolly, 2024), it is

imperative to emancipate students attending didactic lectures from replicating inequality (Freire, 1970).

According to Freire (1970), instructors ought to transform their didactic teaching pedagogy, thereby

helping students liberate themselves. Attaining this state of liberation facilitates the cultivation of

students' critical thought processes, proficiency in applying acquired knowledge, and a profound

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critical awareness of societal inequality-defined as the discernment of social injustice and the undertaking of appropriate interventions (Shih, 2020). Critical thinking involves purposeful, reasoned, and goal-directed thinking to make informed judgments or decisions (Halpern, 2001).

Applying interactive lectures can liberate students in class, transforming the traditional teacher-led lecture into a collaborative, interactive, and captivating learning experience (Russell et al., 2016). These brief interactive activities provide students with opportunities to think, observe, and respond (Linsenmeyer, 2021). The group discussion and the provision of concrete examples to explain lecture content (hereafter referred to as a case study) are two interactive activities that can be used in the interactive lecture (Tremblay-Wragg et al., 2019). The group discussion offers opportunities for students to express and justify their own ideas and to argue others' views (Gillies, 2011), while the case study promotes students to consider the diversity of contexts when applying theories to address the issues in cases (Smith-Maddox & Solórzano, 2002). These interactive activities are practical for lecturers to apply in lecture practice because these activities are brief and take up only a small portion of the lecture (Linsenmeyer, 2021). Brief interactive activities can be embedded into the didactic lectures with minimal changes, eliminating the necessity for an extensive transformation of the existing pedagogical structure (Mostert, 2007).

However, universities generally cannot provide adequate training and time for lecturers to transform their current didactic pedagogy into their lecturing practice (Brownell & Tanner, 2012). Insufficient training may cause lecturers to fail to learn which elements construct an interactive lecture (Yarnall et al., 2007) or to adopt an unconvinced attitude (Winter et al., 2002). The lack of time for teaching leaves lecturers without sufficient preparation time, as interactive teaching requires (Pundak & Rozner, 2007). Given the promising effects of interactive lectures and the significant obstacles to their implementation, this study aims to explore their feasibility in teaching practice and identify the factors that affect their implementation.

# 2. Theoretical Framework: Freire's Pedagogy of the Oppressed and Liberation

One of the strongest condemnations of didactic teaching comes from Paulo Freire, who is known for introducing the idea of banking education. According to Freire (2020), banking education involves teachers overly focusing on unchanging, inactive concepts, presenting them as undisputed facts and subsequently 'deposited' into students for passive intake (or recitation). Students are hindered from developing critical thinking because they are not permitted to actively consider ideas or assess information (Barnett, 1994). In addition, Freire (1970) maintains that banking education presents classroom topics as disconnected from students' experiences and reality, thereby depriving students of chances to apply their knowledge in real-world settings. Freire (1970) also posits that banking education leads students to progressively embrace the submissive role imposed in the classroom and adjust to existing situations instead of proactively cultivating their critical awareness of social injustice (Diemer et al., 2015). Critical consciousness encompasses several abilities: critical reflection, which is

the awareness of social disparities; critical motivation, which is an individual's drive to tackle perceived unfairness; and critical action, which involves steps taken to rectify social inequities (Watts et al., 2011). Several empirical data substantiate Freire's (1970) arguments that the traditional didactic teaching method suppresses students' progress in critical thinking, the capacity to apply knowledge, and critical consciousness. According to research by Bligh (2000) and McKeachie and Svinicki (2014), didactic lectures are less potent than other pedagogy when instructional aims involve developing the application of knowledge and critical thinking skills. In addition, Martin and Beese (2020) report that when it comes to learning material on social justice issues such as race, gender, and class, didactic lectures are not successful in deepening students' grasp of the subject.

In his critique of banking education, Freire (1970) put forward liberation education, primarily seeking to emancipate students from oppression. Specifically, Freire's liberation pedagogy allows "acts of cognition, not transferrals of information", facilitating students to disrupt their established thought processes in order to cultivate their capacity for critical thought (Jones, 2007). Moreover, this pedagogy emphasises developing students' awareness of their real-life circumstances, which supports them to think about how to apply their knowledge in practical ways. Besides, implementing this pedagogy liberates students from the shackles of a culture of silence. It enables them to resist the social structure that once oppressed them, thereby fostering a critical consciousness of social justice (Shih, 2020). Although Freire's ideas are decades old, the emphasis on student liberation remains valuable in today's higher education. Nowadays, the didactic lecture remains the dominant university teaching approach in most disciplines (Crawford & Parsell, 2025), thereby reproducing inequality and oppression in society (Freire, 1970). To disrupt the cycle of inequality, it is vital to emancipate students in lectures, particularly by cultivating their critical awareness of their marginalised state, which serves as a significant move towards their liberation both within higher education institutions and beyond (Freire, 1970).

# 3. Counteracting the Didactic Lectures: Embedding the Interactive Activities into the Lecture

Some publications indicate that educators may integrate group discussions and case studies as two interactive modalities to challenge traditional didactic lectures and facilitate a liberating educational paradigm in practical application (Doran et al., 2011; Hamann et al., 2012). In the classroom, the objective of group discussion serves to cultivate a wealth of insights pertinent to resolving questions presented by the educator (Burkhalter et al., 2002). By integrating group discussion within traditional didactic lectures, students gain the opportunity to articulate and substantiate their diverse viewpoints, concurrently engaging with and assimilating the ideas proposed by other group members, which promotes the development of critical thinking faculties (Reznitskaya et al., 2009). Additionally, students are customarily expected to implement their acquired understanding, including conceptual frameworks from lecturers, to analyse concrete cases through a case study (Linsenmeyer, 2021). Through the application of theoretical constructs in real-world contexts, learners acquire a profound

comprehension of the disparity between abstract knowledge and its operational utility, consequently augmenting their capacity for knowledge transfer across varied settings (Biggs & Tang, 2011; Thistlethwaite et al., 2012). According to Smith-Maddox and Solórzano (2002), the exposition of students to social justice cases facilitates an enhanced comprehension of social inequality and promotes critical examination of their ingrained convictions and presumptions concerning social justice.

Although interactive activities yield benefits, some research implies that their practical application may be unattainable (Bledsoe, 2011; Lammers & Murphy, 2002). Lammers and Murphy (2002), for instance, indicated that when higher education institutions prioritise teaching in their yearly assessments, instructors often adopt more didactic lecture formats and incorporate fewer interactive classroom activities. This phenomenon might arise from the view, shared by certain lecturers, that lecturing serves as an effective mechanism for the direct transmission of information to students (Roach et al., 1993). Moreover, lecturers with more teaching experience are more inclined to use didactic rather than interactive lectures. This may be because, as they gain experience, they become more inclined to adhere to their used teaching approaches, namely, didactic lecture (Lammers & Murphy, 2002). Besides, Bledsoe (2011) demonstrates that interactive techniques may compel the lecturers to wait until latecomers arrive to class before beginning the activity, which will make lecturers, who are more likely to use interactive approaches, tend to have some teaching time to wait for tardy students, which may reduce educators' willingness to implement interactive lectures.

Many existing research publications investigate the feasibility of interactive activities. However, some of them define the interactive activities as the independent pedagogy, ignoring the possibility of embedding a variety of interactive strategies into the traditional didactic lecture (Busch et al., 2015; Clow & Wachter, 1996). Moreover, in this research topic, the majority of publications explore the feasibility of these activities quantitatively, for example, by determining the frequency with which they are applied in practice (Ernst & Colthorpe, 2007; Huxham, 2005; Sharma et al., 2010).

Given these prior research gaps, this present study aims to explore the feasibility of implementing interactive activities in a lecture. The research questions are as follows:

- 1) From the perspective of lecturers, what factors influence lecturers to use interactive activities in practice?
- 2) From the perspective of students, what factors influence them to engage in interactive activities in practice?

## 4. Methodology

#### 4.1 Participants

This study employed a maximal variation sample. A maximum variation sample means identifying critical dimensions of variation and then seeking cases that distinguish from one another as much as possible (Suri, 2011). The maximum variation sampling promotes the generation of significant shared themes that cut across cases and the acquisition of their significance from heterogeneity (Patton, 2002).

Given that differences in social and racial identity affect individuals' higher education experiences and perceptions (Aregbeyen, 2010; Marambe et al., 2011), the researcher identified these dimensions as the key sources of variation. This research involved six participants, with two lecturers and four undergraduates in one university, who have different social and racial identities. This variation allows the researcher to collect data from various perspectives and identify essential patterns from participants' perceptions of their lecture experience (Palinkas et al., 2013; Suri, 2011). The researcher initially contacted potential participants via e-mail, and they could then independently decide whether to participate in this study.

## 4.2 Data Collection and Analysis

The researcher employed the interview as the data collection method. Because the interview allows participants to yield contextually portray and deeply interpretate their lecture experiences (Schultze & Avital, 2011) and enables the researcher to explore crucial events that happened in their experience (Holloway & Galvin, 2017).

Regarding the specific interview type, the researcher selected a face-to-face semi-structured interview. In a face-to-face interview, there is no significant delay between questions and answers, implying that participants must respond directly and quickly to the researcher, thereby avoiding discrepancies in data caused by extended reflection (Opdenakker, 2006). Second, the researcher used the semi-structured interview, allowing him/her to ask additional questions that were not predetermined and thus collect rich data associated with new themes generated in these interviews that may not have been considered by prior studies (Gray, 2018; Patton, 2002). In addition, all of the interviews were audio-recorded and transcribed verbatim with permission, which ensures the accuracy of my interview transcripts to a large extent (Opdenakker, 2006). The researcher used Otter to record and transcribe the interviews, substantially reducing the time required to transcribe the tape recordings.

The researcher applied thematic analysis as a qualitative data analysis method (Braun & Clarke, 2006). Thematic analysis is an approach for determining, analysing, and reporting themes within data (Braun & Clarke, 2006). Thematic analysis is well-suited for examining experiences from diverse participants to identify common or shared meanings, allowing the researcher to identify essential themes related to the feasibility of interactive activities (Cooper et al., 2012).

#### 5. Result

#### 5.1 Time Limitation

The lecturer participant contended that the interactive activities will only take up a small fraction of the lecture's time, leaving most of the time for didactic teaching. In the extraction of interview transcripts below, the researcher anonymised the two lecturer participants as L1 and L2, while those four student participants as S1, S2, S3, and S4.

I would say maybe 60 to 75% would be lecture, and maybe 30% or 25% would be activity. (L2)

This perception aligns with prior findings that interactive lectures typically remain didactic despite the

presence of minor interactive activities (Miller & Metz, 2014). Nevertheless, the lecturer participant also suggested concern that introducing interactive activities can occupy their teaching time:

At the same time, you know, there is a lot of material to cover often in these lectures. We do need to cover a lot of new information.... 75% (of the lecture) is just the sort of balance that I have had since I struck. (L2)

Murray and Brightman (1996) also identify this concern and its reason: lecturers are often asked to deliver a large amount of content. Besides, numerous research findings indicate insufficient lecture time for educators to implement interactive activities (Duggan et al., 2007; Dancy & Henderson, 2010; Rahman, 2020), suggesting that this lecturer's concern is justified. Hence, as Dancy and Henderson (2010) argue, the lack of lecture time to implement interactive activities really hinders instructors from applying them in lecture practice. In addition to the time limit of employing these activities in practice, the interview transcripts revealed that the time cost of designing an effective interactive activity is another barrier for lecturers to implement the interactive activity:

And I think that is probably a weakness in some units (design). Yeah, I know I can do better. There is not enough time... (L1)

So yeah, it takes a lot of time to design a useful activity and to make sure that it fits in with the lecture correctly. (L2)

Rahman's (2020) findings also indicate that the amount of design time constrains the lecturer's ability to implement interactive activities. The participants' statement also challenges the argument of Cortright et al. (2005) that lecturers need only invest a little time to develop interactive activities, since numerous free, peer-reviewed resources are available on websites. Conversely, L2's statement illustrates that, even though lecturers are provided with sufficient materials, they may face difficulties in implementing them because the website resource may be incompatible with their established content and expectations.

### 5.2 Students Expectation

The transcripts demonstrate that student expectations can be perceived as another factor influencing a lecturer's choice to employ interactive activities in practice.

..... I also think the students have an expectation of a certain amount of lecturing, rather than activities. And, yeah, I think that is just the 60 to 75%. (L2)

I think it is more of a cult of cultural expectation, but if we were to encourage more diverse voices and less hierarchy between teachers and learners... then, obviously, those cultural expectations would need to change... (L2)

This part of the data reveals that lecturers consider students' expectations regarding the lecturer's structure. L2's way of making a teaching decision aligns with prior ways of developing pedagogy, which is an 'inside out' method, with those on the inside (educators) presuming they know what students need and what they expect the educator to provide (Zeithaml et al., 1990). Although this 'inside out' approach has been criticised, this study's transcripts suggest that it can accurately assess

students' expectations regarding the lecture structure to a certain extent.

I expect that 80% of the time will be spent on lectures and 20% on other activities. (S3)

I expect that in lectures, lectures should take up 80% of the time. (S4)

Beyond the fact that students' expectations impact lecturers' teaching decisions, my transcripts further suggest an important reason why students' expectations matter: students' expectations of a lecture will influence their engagement in it.

Think you know, like we said, that some students are unused to taking time (for) certain types of learning or would prefer not to.... (L2)

Just making sure that everyone knows what is expected when they are doing the task? Otherwise, they will (reduce participation in activities).... (S2)

Nonetheless, this transcript shows that students' expectations may not absolutely constrain the lecturer's use of interactive activities. Because the lecturer participant also stated that they not only passively accepted but also proactively managed students' expectations of lecture structure:

At the start of the unit, I will lay out, you know, my expectations. So they know that at some point, I am going to ask them to take part in a different type of activity other than me just talking to them.....And just so students are not surprised... If I did not say anything to them in week one, then they might be a bit shocked. And they might not be very successful. (L2)

Phipps et al. (2001) and Van Dijk et al. (2001) also argue that it is essential for lecturers to inform students in advance of what they can expect from their lectures. Because, in general, students are not accustomed to being assigned to work in lectures. In contrast, lecturers informing students of these activities in advance will allow them to become familiar with the interactive teaching method and to know how to handle the atypical teaching situation. In a similar vein, Vardi and Ciccarelli (2008) contend that it is essential to manage students' expectations before applying interactive approaches, especially to undergraduate students. When students are introduced to interactive activities for the first time, they require a great deal of lecturer direction to understand the expectations of the regulation, which is provided through explicit task requirements. In addition, Van Dijk et al. (2001) state that lecturers need to articulate their expectations for students' behaviour during these activities (e.g., expect students to ask questions actively). It seems important for students to actively engage in activities (e.g., asking questions) when they attempt not to fully follow the lecturer's reasoning process, and to cultivate their critical thinking.

#### 5.3 Regulation for Group Discussion

Previous research shows that under an instructor's effective guidance, group discussion can promote students' active engagement in class learning, foster critical reflection on learning materials, and thus extend their current knowledge (Hamann et al., 2012; Pollock et al., 2011). This finding, in turn, suggests that the lecturer needs to regulate the group discussion to ensure its potency. Lecturer participants stated that when they implement the interactive activity of group discussion, they tend to use several strategies to regulate the discussion so that it functions well, such as tutor questioning, time

warnings and scaffolding:

Because there has to be a conversation about the evolution of ideas, things have to change and evolve. So the student has to say something. So I can say something else, (and) then they have to say something. It has to be a dialogue. So I can say what is good and what can be better. (L1)

And then also did another thing, which is called scaffolding.... like making a frame, and so, it is an explanation for them. And then, I usually give time warnings...And then the last thing... often go around to the different groups, sometimes sit with them, sometimes listen to them, sometimes ask them that question. See if they need any help with them. (L2)

In terms of students' perception, existing research finds that time warning and scaffolding effectively keep discussion on track (Sajjad, 2010; Whitley et al., 2015) and ensure the discussion time is fully leveraged for the study. Student participants also stated this point:

Yeah, like we were told before we were given the task, or Yeah, we were given the task, what was expected and what the learning outcomes were and things like that... Is that what the time warning is? Yeah, Yeah, I think that is good as well. (S2)

Nevertheless, my transcripts also show that the large class size negatively impacts the feasibility of group discussion.

In the big groups, you can not really hear what is happening... Maybe some discussions are not very critical, but you can not listen to everything. (L1)

..... we were discussing for the whole semester, and the teacher was just going around looking around (and) asking you what you discussed (and brief summary)....the teacher did not provide anything more, more helpful. (S3)

Specifically, student participants found that sometimes lecturers' tutoring focuses on listening and repeating their ideas, which has been criticised by Michaelsen and Sweet (2008). They contend that lecturers' tutoring should be focused on addressing students' knowledge gaps. Similarly, Phipps et al. (2001) argue that implementing cooperative learning "requires a constant 'temperature reading' of the students' perceptions" (p. 15). The existing research also reveals that large class sizes negatively affect lecturer tutoring during students' group discussions. For instance, lecturers found it difficult to form relationships with students and provide tailored feedback to the knowledge level of specific students in large classes (Wright et al., 2017).

Besides, the transcripts reveal that, from some students' perspectives, they were willing to participate in the case study activity because they think it can develop their critical consciousness of social injustice issues and their ability to apply knowledge, suggesting the feasibility of this activity.

Yes, I think it helps a lot because when we can understand contexts in different countries, we can be aware of how a certain theory could be connected with different sets of practice. (S4)

I feel like it is; yeah, they definitely made me aware of some of the social justice in the real world. Because they would like (to) talk about (it)....(S1)

.....(these cases related to social injustice issues inspire me,....) I can just like (to) follow some Instagram

account about social injustice or attend some meetings, or attend some activities...(S4)

However, the transcripts show that other students criticised the diversity of the case context:

I think I am not as aware and knowledgeable about different contexts .... or maybe even just focusing on like, a core like three or four (contexts), and then developing more into it so that I become more knowledgeable instead of just knowing....(S1)

Prior studies contend that the diversity of case contexts is beneficial for students' ability to apply knowledge and to develop critical awareness of social justice (Demetriadis et al., 2008; Sleeter, 2013). Despite this, from the S1's perspective, lecturers who pay too much attention to enhancing the diversity of case contexts will lead to insufficient in-depth analysis of each case, hindering students' deep understanding of cases and engagement, and thus reducing the feasibility of this interactive activity.

#### 6. Conclusion

## 6.1 Summary of Findings

The thematic analysis identified two interactive activities used by teachers in practice: group discussion and case study. Previous research suggests the strong feasibility of these two activities, as they are brief, easy to integrate into the didactic lecture, and can benefit the development of students' competencies, such as critical thinking, knowledge application, and critical consciousness of social justice. However, the thematic analysis of this present study illustrates that the feasibility of these two activities may not be as strong as prior research suggests. Specifically, first, the feasibility of both is constrained by teaching time and students' expectations for lecture structure. Second, although lecturers can use time warnings and scaffolding strategies during the students' discussion to ensure the feasibility of group discussion to a certain extent, the large class size will strongly limit this activity's feasibility and cannot be avoided. Third, although some students are not satisfied with the lecturer's use of diverse cases, the majority of student participants reported that the various cases prompted them to engage in the lecture, suggesting the relative feasibility of this activity.

## 6.2 Limitations and Future Research

Due to its exploratory nature, this study was conducted at a single higher education institution, involving two lecturers and four students, which limits its generalisability. Future research should interview more participants from diverse races, religions, and genders at colleges or universities in various countries.

### References

Aregbeyen, O. (2010). Students perceptions of effective teaching and effective lecturer characteristics at the University of Ibadan, Nigeria. *Pakistan Journal of Social Sciences*, 7(2), 62-69. https://doi.org/10.3923/pjssci.2010.62.69

Barnett, R. (1994). *The limits of competence: Knowledge, higer education and society*. Open University Press.

- Biggs, J., & Tang, C. (2011). Teaching for quality learning at university. McGraw-Hill.
- Bledsoe, K. E. (2011). Managing problem-based learning in large lecture sections. *Bioscience Education*, 18(1), 1-11. https://doi.org/10.3108/beej.18.1
- Bligh, D. A. (2000). What's the use of lectures? Jossey-Bass Publishers.
- Bradshaw, M. J., Hultquist, B. L., & Hagler, D. A. (2021). *Innovative teaching strategies in nursing and related health professions* (8th ed.). Jones & Bartlett Learning.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Brownell, S. E., & Tanner, K. D. (2012). Barriers to Faculty Pedagogical Change: Lack of Training, Time, Incentives, and...Tensions with Professional Identity? *CBE-Life Sciences Education*, 11(4), 339-346. https://doi.org/10.1187/cbe.12-09-0163
- Burkhalter, S., Gastil, J., & Kelshaw, T. (2002). A Conceptual Definition and Theoretical Model of Public Deliberation in Small Face-to-Face Groups. *Communication Theory*, 12(4), 398-422. https://doi.org/10.1111/j.1468-2885.2002.tb00276.x
- Busch, J., Hanna, P., & Anderson, N. (2015). ILectures--Exploring the Interactive Lecture Using Web-Based Broadcasting Technology. Australian Association for Research in Education.
- Clow, K. E., & Wachter, M. K. (1996). Teaching methodologies used in basic marketing: An empirical investigation. *Journal of Marketing Education*, 18(1), 48-59. https://doi.org/10.1177/027347539601800107
- Connolly, D. (2024). Unveiling the Commonly Adopted Teaching Methods, Strategies, and Tools in College-Based Higher Education: Insights From a Delphi Study. In *Practitioner Research in College-based Education* (pp. 57-90). IGI Global.
- Cooper, H., Camic, P. M., Long, D. L., Panter, A. T., Rindskopf, D., & Sher, K. J. (2012). *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological.* Washington American Psychological Association.
- Cortright, R. N., Collins, H. L., & DiCarlo, S. E. (2005). Peer instruction enhanced meaningful learning: ability to solve novel problems. *Advances in Physiology Education*, 29(2), 107-111. https://doi.org/10.1152/advan.00060.2004
- Crawford, J., & Parsell, M. (2025). Lectures in higher education: A 22-year systematic review. *Journal of Applied Learning & Teaching*, 8(1). https://doi.org/10.37074/jalt.2025.8.1.25
- Dancy, M., & Henderson, C. (2010). Pedagogical practices and instructional change of Physics Faculty. American Journal of Physics, 78(10), 1056-1063. https://doi.org/10.1119/1.3446763
- Demetriadis, S. N., Papadopoulos, P. M., Stamelos, I. G., & Fischer, F. (2008). The effect of scaffolding students' context-generating cognitive activity in technology-enhanced case-based learning. *Computers & Education*, 51(2), 939-954. https://doi.org/10.1016/j.compedu.2007.09.012
- Diemer, M. A., McWhirter, E. H., Ozer, E. J., & Rapa, L. J. (2015). Advances in the conceptualization and measurement of critical consciousness. *The Urban Review*, 47(5), 809-823.

- https://doi.org/10.1007/s11256-015-0336-7
- Doran, J., Healy, M., McCutcheon, M., & O'Callaghan, S. (2011). Adapting case-based teaching to large class settings: An action research approach. *Accounting Education*, 20(3), 245-263. https://doi.org/10.1080/09638180.2011.583742
- Duggan, P. M., Palmer, E., & Devitt, P. (2007). Electronic voting to encourage interactive lectures: A randomised trial. *BMC Medical Education*, 7(1). https://doi.org/10.1186/1472-6920-7-25
- Ernst, H., & Colthorpe, K. (2007). The efficacy of interactive lecturing for students with diverse science backgrounds. *Advances in Physiology Education*, 31(1), 41-44. https://doi.org/10.1152/advan.00107.2006
- Freire, P. (1970). Pedagogy of the oppressed (Mb Ramos, Trans.). Continuum.
- Freire, P. (2000). *Pedagogy of freedom: Ethics, democracy, and Civic Courage*. Rowman & Littlefield Publishers.
- Gillies, R. M. (2011). Promoting thinking, problem-solving and reasoning during small group discussions. *Teachers and Teaching*, 17(1), 73-89. https://doi.org/10.1080/13540602.2011.538498
- Gordon, S. J. G., Bolwell, C. F., Raney, J. L., & Zepke, N. (2022). Transforming a Didactic Lecture into a Student-Centered Active Learning Exercise—Teaching Equine Diarrhea to Fourth-Year Veterinary Students. *Education Sciences*, 12(2), 68. https://doi.org/10.3390/educsci12020068
- Gray, D. E. (2018). Doing research in the real world. SAGE Publications.
- Halpern, D. F. (2001). Assessing the Effectiveness of Critical Thinking Instruction. *The Journal of General Education*, 50(4), 270-286. https://doi.org/10.1353/jge.2001.0024
- Hamann, K., Pollock, P. H., & Wilson, B. M. (2012). Assessing student perceptions of the benefits of discussions in small-group, large-class, and online learning contexts. *College Teaching*, 60(2), 65-75. https://doi.org/10.1080/87567555.2011.633407
- Holloway, I., & Galvin, K. (2017). *Qualitative Research in Nursing and Healthcare* (4th ed.). John Wiley & Sons Inc.
- Huxham, M. (2005). Learning in lectures. *Active Learning in Higher Education*, 6(1), 17-31. https://doi.org/10.1177/1469787405049943
- Jones, S. E. (2007). Reflections on the lecture: Outmoded medium or instrument of inspiration?

  Journal of Further and Higher Education, 31(4), 397-406. 
  https://doi.org/10.1080/03098770701656816
- Lammers, W. J., & Murphy, J. J. (2002). A profile of teaching techniques used in the university classroom. *Active Learning in Higher Education*, 3(1), 54-67. https://doi.org/10.1177/1469787402003001005
- Linsenmeyer, M. (2021). Brief activities: Questioning, brainstorming, think-pair-share, Jigsaw, and clinical case discussions. *IAMSE Manuals*, 39-66. https://doi.org/10.1007/978-3-030-62916-8\_5
- Marambe, K. N., Vermunt, J. D., & Boshuizen, H. P. (2011). A cross-cultural comparison of student learning patterns in Higher Education. *Higher Education*, 64(3), 299-316.

- https://doi.org/10.1007/s10734-011-9494-z
- Martin, J. L., & Beese, J. A. (2020). Moving beyond the lecture: Inspiring social justice engagement through counter-story using case study pedagogy. *The Educational Forum*, 84(3), 210-225. https://doi.org/10.1080/00131725.2020.1730531
- McKeachie, W., & Svinicki, M. (2014). McKeachie's teaching tips: Strategies, research, and theory for college and university teachers. Wadsworth.
- Michaelsen, L. K., & Sweet, M. (2008). The essential elements of team-based learning. *New Directions for Teaching and Learning*, 2008(116), 7-27. https://doi.org/10.1002/tl.330
- Miller, C. J., & Metz, M. J. (2014). A comparison of professional-level faculty and student perceptions of active learning: Its current use, effectiveness, and barriers. *Advances in Physiology Education*, 38(3), 246-252. https://doi.org/10.1152/advan.00014.2014
- Mostert, M. P. (2007). Challenges of case-based teaching. *The Behavior Analyst Today*, 8(4), 434-442. https://doi.org/10.1037/h0100632
- Murray, R., & Brightman, J. R. (1996). Interactive teaching. *European Journal of Engineering Education*, 21(3), 295-308. https://doi.org/10.1080/03043799608923415
- Opdenakker, R. (2006). Advantages and Disadvantages of Four Interview Techniques in Qualitative Research. Forum Qualitative Sozialforschung Forum: Qualitative Social Research, 7(4). https://doi.org/https://doi.org/10.17169/fqs-7.4.175
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013).
  Purposeful sampling for qualitative data collection and analysis in Mixed Method Implementation
  Research. Administration and Policy in Mental Health and Mental Health Services Research,
  42(5), 533-544. https://doi.org/10.1007/s10488-013-0528-y
- Patton, M. Q. (2002). Qualitative research and evaluation methods. SAGE.
- Phipps, M., Phipps, C., Kask, S., & Higgins, S. (2001). University students' perceptions of cooperative learning: Implications for administrators and instructors. *Journal of Experiential Education*, 24(1), 14-22. https://doi.org/10.1177/105382590102400105
- Pollock, P. H., Hamann, K., & Wilson, B. M. (2011). Learning through discussions: Comparing the benefits of small-group and large-class settings. *Journal of Political Science Education*, 7(1), 48-64. https://doi.org/10.1080/15512169.2011.539913
- Pundak, D., & Rozner, S. (2007). Empowering Engineering College Staff to Adopt Active Learning Methods. *Journal of Science Education and Technology*, 17(2), 152-163. https://doi.org/10.1007/s10956-007-9057-3
- Rahman, S. (2020). Improving the power of lecture method in Higher Education. *Teaching Learning and New Technologies in Higher Education*, 135-147. https://doi.org/10.1007/978-981-15-4847-5 10
- Reznitskaya, A., Kuo, L., Clark, A., Miller, B., Jadallah, M., Anderson, R. C., & Nguyen-Jahiel, K. (2009). Collaborative reasoning: A dialogic approach to group discussions. *Cambridge Journal of*

- Education, 39(1), 29-48. https://doi.org/10.1080/03057640802701952
- Roach, S. S., Johnston, M. W., & Hair, J. F. (1993). An Exploratory Examination of Teaching Styles Currently Employed in Marketing Education: Developing a Typology and its Implications for Marketing Students. *Journal of Marketing Education*, 15(3), 32-38. https://doi.org/10.1177/027347539301500305
- Russell, J., Van Horne, S., Ward, A. S., Bettis, E. A., Sipola, M., Colombo, M., & Rocheford, M. K. (2016). Large Lecture Transformation: Adopting Evidence-Based Practices to Increase Student Engagement and Performance in an Introductory Science Course. *Journal of Geoscience Education*, 64(1), 37-51. https://doi.org/10.5408/15-084.1
- Sajjad, S. (2010). Effective Teaching Methods at Higher Education Level, 11, 29-43.
- Schultze, U., & Avital, M. (2011). Designing interviews to generate rich data for information systems research. *Information and Organization*, 21(1), 1-16. https://doi.org/10.1016/j.infoandorg.2010.11.001
- Sharma, M. D., Johnston, I. D., Johnston, H., Varvell, K., Robertson, G., Hopkins, A., Stewart, C., Cooper, I., & Thornton, R. (2010). Use of interactive lecture demonstrations: A Ten Year Study. Physical Review Special Topics-Physics Education Research, 6(2). https://doi.org/10.1103/physrevstper.6.020119
- Shih, Y.-H. (2020). Encounter with Paulo Freire's critical pedagogy: Visiting the Brazilian Social Context (1950s-1970s). *Universal Journal of Educational Research*, 8(4), 1228-1236. https://doi.org/10.13189/ujer.2020.080413
- Sleeter, C. (2013). Teaching for social justice in Multicultural Classrooms. *Multicultural Education Review*, 5(2), 1-19. https://doi.org/10.1080/2005615x.2013.11102900
- Smith-Maddox, R., & Solórzano, D. G. (2002). Using critical race theory, Paulo Freire's problem-posing method, and case study research to confront race and racism in Education. *Qualitative Inquiry*, 8(1), 66-84. https://doi.org/10.1177/107780040200800105
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63-75. https://doi.org/10.3316/qrj1102063
- Thistlethwaite, J. E., Davies, D., Ekeocha, S., Kidd, J. M., MacDougall, C., Matthews, P., Purkis, J., & Clay, D. (2012). The effectiveness of case-based learning in health professional education. A Beme systematic review: Beme Guide no. 23. *Medical Teacher*, 34(6). https://doi.org/10.3109/0142159x.2012.680939
- Tremblay-Wragg, É., Raby, C., Ménard, L., & Plante, I. (2019). The use of diversified teaching strategies by four university teachers: What contribution to their students' learning motivation? *Teaching in Higher Education*, 26(1), 1-18. https://doi.org/10.1080/13562517.2019.1636221
- Van Dijk, L. A., Van Der Berg, G. C., & Van Keulen, H. (2001). Interactive lectures in engineering education. *European Journal of Engineering Education*, 26(1), 15-28. https://doi.org/10.1080/03043790123124

- Vardi, I., & Ciccarelli, M. (2008). Overcoming problems in problem-based learning: A trial of strategies in an Undergraduate Unit. *Innovations in Education and Teaching International*, 45(4), 345-354. https://doi.org/10.1080/14703290802377190
- Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and future directions. New Directions for Child and Adolescent Development, 43-57. https://doi.org/10.1002/cd.310
- Whitley, H. P., Bell, E., Eng, M., Fuentes, D. G., Helms, K. L., Maki, E. D., & Vyas, D. (2015). Practical team-based learning from planning to implementation. *American Journal of Pharmaceutical Education*, 79(10), 149. https://doi.org/10.5688/ajpe7910149
- Winter, D., Lemons, P., Bookman, J., & Hoese, W. (2002). Novice Instructors and Student-Centered Instruction: Identifying and Addressing Obstacles to Learning in the College Science. *Journal of the Scholarship of Teaching and Learning*, 2(1), 14-42. https://scholarworks.iu.edu/journals/index.php/josotl/article/view/1590
- Wright, M. C., Bergom, I., & Bartholomew, T. (2017). Decreased class size, increased active learning? intended and enacted teaching strategies in smaller classes. *Active Learning in Higher Education*, 20(1), 51-62. https://doi.org/10.1177/1469787417735607
- Yarnall, L., Toyama, Y., Gong, B., Ayers, C., & Ostrander, J. (2007). Adapting Scenario-based Curriculum Materials to Community College Technical Courses. *Community College Journal of Research and Practice*, 31(7), 583-601. https://doi.org/10.1080/10668920701428881
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. The Free Press.