

# Philosophical Reflection about Death and End-of-Life Experiences in Medical Education: A Brief Report of Medical Students' Experiences in a Flipped Classroom

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## ABSTRACT

Death and end-of-life care are crucial yet often overlooked topics in healthcare education. This study explores the integration of philosophical reflection into a Flipped Classroom (FC) model within a graduate course on *Collective Health* at Universidade Federal de São Paulo (UNIFESP), Brazil. Employing reflexive practice research, the authors, as both learners and researchers, critically examined their engagement with the sensitive theme of death through structured discussions and reflective analysis. The FC model, combined with the independent study of philosophical texts such as “*A Cure for Death?*” by Jacqueline Lagrée and “*About the Death of a Friend*” by Montaigne, facilitated a unique learning environment. This approach encouraged cognitive and emotional engagement, fostering critical thinking, empathy, and personal growth. Virtual synchronous sessions provided an interactive space for participants to connect philosophical insights with their professional experiences, enriching their understanding of end-of-life care. The results highlight the transformative potential of the online FC model in addressing emotionally charged themes like death. By creating a supportive and collaborative environment, the FC model enabled participants to develop resilience and sensitivity essential for navigating the complexities of end-of-life care. These findings underline the value of integrating philosophical reflection and reflexive practice into healthcare education and call for further research to explore the long-term benefits of such pedagogical approaches.

**Keywords:** Flipped Classroom, Reflexive Practice, Philosophical Reflection, Health Education, Death, Terminal Care, Virtual Learning

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## Introduction

In recent years, the integration of online education into formal healthcare education has become increasingly significant. Online education offers numerous advantages, such as accessibility, scalability, overcoming time and space limitations, and adapting to the circumstances of learners (1). However, when

applied to the field of medical sciences, which can involve emotionally charged topics, it is essential to adopt a sensitive approach to the virtual environment. E-learning, utilizing various synchronous and asynchronous tools and platforms, provides flexibility in learning and facilitates discussion and exchange of ideas, sharing experiences, and information through

the creation of collaborative environments (2).

Medical sciences strive to enhance and improve life; however, death and end-of-life experiences remain the philosophical and challenging topics in this field that consistently raise many questions for students. Despite its importance, it is often less addressed due to the heavy workload in clinical settings, the urgency of treatment actions, and time and space limitations. In this context, the theme of death, a subject of fundamental importance but also great sensitivity, comes to the forefront. As the healthcare sector progressively adopts online education for training and professional development, it becomes clear that addressing the intricacies of delivering high-quality, sensitive content related to death in a virtual setting is a pressing concern.

Death is an inescapable reality in healthcare, and professionals must confront it regularly. Whether working in hospitals, hospices, or long-term care facilities, these professionals are faced with the profound challenges and complexities associated with death (3). However, discussions about the subject are often overlooked or avoided due to remaining societal discomfort and cultural taboos. This avoidance can lead to a lack of preparedness among healthcare professionals in handling end-of-life situations, leading to suboptimal care for both patients and their families.

An interdisciplinary approach is a valid pathway when addressing sensitive subjects like death in the context of medical e-learning due to its capacity to respond to complexity. Therefore, including philosophical discussions of emotionally charged themes in medical education can be crucial to enabling healthcare providers to be more humane, less defensive, and more prepared to deal with such themes.

Integrating philosophical reflection about death into healthcare education can enable students to engage in deep contemplation and develop a healthier relationship with mortality (4). Philosophical thinking offers a unique perspective that encourages critical thinking and self-reflection. By exploring

fundamental questions about life, death, and the human condition, students can gain a more comprehensive understanding of the existential dimensions of healthcare. Such contemplation allows them to confront their fears, anxieties, and biases related to death, thus enabling a more empathetic and compassionate approach to patient care (5).

It fosters resilience and equips future healthcare providers with the necessary tools to navigate the complex emotional terrain of end-of-life scenarios, especially in the virtual education environment, where that can be particularly challenging.

In this context, the Flipped Classroom (FC) approach in the virtual environment serves this purpose effectively. In the FC model, students take on the role of independent learners, acquiring knowledge by studying the material before the class sessions (6). These sessions are then dedicated to active engagement through discussions and problem-solving activities. The FC has proven to help motivate students to study and is welcome when dealing with complex themes (7). The FC fosters interactive engagement between instructors and students, contrasting with traditional unidirectional teaching methods (8, 9). It encourages students to acquire knowledge before class independently and enhances their readiness to participate in meaningful discussions and analyze real-life scenarios (7). In the realm of medical education, the FC model stands out as a valuable resource, and current research indicates it has the potential to significantly enhance learner performance when compared to traditional teaching methods (10-13).

One of the challenges of applying the FC model is the lack of available time to read the material before meetings. Blair and colleagues highlight the importance of addressing time constraints in flipped classrooms within Graduate Medical Education. They suggest that preparation time should be accounted for or integrated into the didactic schedule to implement the FC model effectively (14).

This article delves into the intricacies of delivering high quality death-related

content in a virtual setting and highlights the role of e-learning in enhancing students' preparedness for end-of-life situations.

## Methods

### *Study Design and Setting*

The research was carried out from September to December 2022 as part of a graduate course on Collective Health at Universidade Federal de São Paulo (UNIFESP), Brazil. It employed reflexive practice as its methodological framework (15), facilitated by a focus group that promoted open dialogue among participants. A total of 12 medical students participated in the program, engaging in educational activities and reflecting on the theme of death and end-of-life care. The two clinical professionals (clinical neuropsychologist and clinical pharmacist) who were the primary participants transitioned into the role of reflexive practice researchers, critically examining their learning experiences and the pedagogical approach used in the course. Semantic and content analysis were utilized to explore the reflections generated during the course, with a focus on understanding the impact of the FC model and philosophical discussions.

The primary aim of the classes was to facilitate a better relationship with the theme of death, promote patient-centeredness education, and prepare healthcare professionals to navigate end-of-life experiences with greater sensitivity and understanding.

The FC model was applied, in which the students engaged in a prior structured curriculum that included textbooks and relevant instructional materials. The primary sources were two philosophical texts: "*A Cure for Death?*" by Jacqueline Lagrée (16) and "*About the Death of a Friend*" by Montaigne (17). Rather than focusing on stoic philosophical texts, the professor selected sensitive texts to encourage spontaneous philosophical thinking and deeper emotional engagement among the participants.

The participants were given one week

to study the material independently before the first class. During this week, their regular class on *Humanities and Health* was suspended, providing three dedicated hours to prepare and engage with the content. This adjustment ensured sufficient time for thorough preparation ahead of the virtual meetings.

In the synchronized virtual classes, the professor introduced the theme and facilitated discussions, encouraging the participants to share their insights and perceptions. Constructive feedback was provided as necessary to guide and deepen the reflective process.

### *Participants and Sampling*

Twelve graduate students from medical fields who had enrolled in the *Humanities and Health* course were considered participants in this reflexive practice. Consistent with the nature of reflexive practice research, two participants who specialized in clinical neuropsychology and clinical pharmacists served as moderators and authored the reflective report, fulfilling dual roles as both learners and reflective researchers.

### *Tools/Instruments*

To facilitate an in-depth exploration of the authors' experiences and reflections on the theme of death and end-of-life care, prioritizing an engaging and supportive learning environment, two philosophical texts, "*A Cure for Death?*" by Jacqueline Lagrée (16) and "*About the Death of a Friend*" by Montaigne (17), selected to stimulate reflective thinking and philosophical contemplation through open-ended and free questions focused on the experience of death and end-of-life.

Two live sessions through a synchronous virtual classroom using Google Meet provided an interactive environment where participants could directly engage with the instructor and each other, fostering meaningful discussions.

### *Data Collection*

The personal records of students' learning

experiences (reflective journals) were integral to the process, offering a private space for documenting individual thoughts and emotional responses to philosophical texts and classroom interactions. These journals supported the authors in processing their learning experiences and deepening their self-reflection. The recorded comments from students in the forum, which was set up to complement the discussions in the virtual classroom, were collected.

### *Data Analysis*

The qualitative data generated was analyzed using a content analysis framework. This approach enabled the systematic exploration of the themes and components emerging from students' reflections and discussions.

### *Results*

The reflexive practice research methodology provided the authors, as health professionals, with an opportunity to critically examine their engagement with the sensitive theme of death. Through this reflective process, the integration of philosophical texts and interactive discussions was found to deepen professional understanding and highlight the importance of fostering compassionate, respectful spaces for conversations about mortality.

Discussing and reflecting on death as a profound and natural human experience encouraged authors to engage in philosophical thinking, drawing on their personal experiences and perspectives regarding the loss of loved ones. This approach fostered a deeper understanding of and familiarity with the complexities of death and dying.

The selected philosophical texts provided a sensitive and nuanced lens through which to explore end-of-life experiences. These readings facilitated both cognitive and emotional engagement, enabling students to confront their thoughts, memories, and reactions related to the passing of loved ones and patients. Reflection and dialogue within the course framework created a supportive

space for personal growth, nurturing the development of emotional resilience and critical thinking skills in the context of mortality.

To ensure meaningful engagement, a non-judgmental environment was established, allowing open dialogue and exploration of various philosophical perspectives on death. This approach encouraged students to appreciate the existential challenges faced by patients and their families during end-of-life journeys. The virtual FC model proved remarkably effective, as it allowed students to actively participate in discussions while grounding their reflections in both theoretical knowledge and personal experiences.

The process of guiding discussions, where students shared personal stories about loved ones and how these experiences shaped their understanding of death, reinforced the value of addressing death not only as a medical reality but as a profoundly human experience. By combining personal and philosophical perspectives, this approach enriched sensitivity toward end-of-life care, offering valuable insights into both professional practice and the education of healthcare providers.

This exploration confirmed the transformative potential of reflexive practice in healthcare education. The FC model, with its emphasis on pre-class preparation and in-class interaction, was shown to effectively engage learners and provide a framework for addressing emotionally charged themes. These findings underscore the importance of integrating philosophical reflection into healthcare education, particularly when dealing with the complexities of death and end-of-life care.

Transcriptions of the reflexive practice serve as evidence of such impact:

*"... I felt like I was part of the construction of knowledge. I learned from sharing experiences with others and hearing the experiences of my peers, which made it easier for me to understand the concept of death. I feel that I can face it better now".*

*"I got to share personal experiences from a philosophical point of view, which made it more meaningful".*

*"I found it really delicate to be able to share personal experiences about people I loved and how they taught me about death, making everything so humane, so delicate, respectful, and even beautiful".*

*"I really thought the class made me more sensitive to being able to deal with the passing of my patients and to communicate it to my patient's families as a human experience..."*

Students' comments were analyzed using qualitative content analysis and exploration of their responses at two levels: themes and components (Table 1).

## Discussion and Conclusion

The virtual FC approach proved to be particularly effective in facilitating philosophical discussions about death within the context of healthcare education.

By enabling students to engage with philosophical texts independently before virtual class sessions, the FC model fostered active participation and more profound reflections during synchronous discussions. This approach allowed participants to explore their thoughts and emotions on sensitive topics, ultimately enhancing their preparedness for end-of-life care scenarios.

The findings of this study align with other investigations of flipped learning in health professional education (6-14). These studies highlight the transition from teacher-centered to learner-centered strategies, emphasizing the importance of pre-class preparation and active in-class engagement in promoting critical thinking and meaningful participation. They also stress the necessity of aligning pre-class, in-class, and post-class activities with clear learning objectives to maximize the impact of the FC model. Similarly, our research demonstrated that the structured integration of philosophical readings and interactive virtual discussions led to a more profound reflection on complex themes such as death.

**Table 1:** Students' Experience of Sharing Reflexive thoughts in the Online Environment

Themes	Components
Interaction and Participation	Encouraging Collaboration: "Group discussions allowed us to collectively reflect on death, making the experience richer through shared insights and diverse perspectives."
	Enhanced Engagement: "The interactive nature of the virtual classes helped me stay focused and actively participate in conversations about sensitive topics."
Flexibility and Accessibility	Balancing Commitments: "The online format allowed me to manage my time better, ensuring I could prepare for class while balancing other responsibilities."
Learning Environment	Open and Inclusive Atmosphere: "The structured approach helped create a judgment-free space where I felt comfortable sharing my experiences."
	Supportive Setting: "The professor's encouragement made it easier to engage with such a challenging and emotional topic."
Skill Development	Strengthening Reflective Thinking: "Reading the philosophical texts before class improved my ability to analyze and interpret abstract ideas critically."
	Developing Communication Skills: "Sharing personal reflections during discussions enhanced my confidence in discussing sensitive topics with others."
Opportunities for Deep Reflection	Connecting Theory to Practice: "Reflecting on my own experiences in light of the philosophical texts helped me better understand my reactions to death."
	Personal Growth: "The reflective journaling exercise deepened my awareness of how I approach emotionally difficult conversations."
Preparation for Challenges	Emotional Readiness: "The philosophical discussions prepared me to address patients' and families' emotions during end-of-life care."
	Professional Awareness: "The course provided insights into how I can integrate sensitivity and compassion into my future clinical practice."

The opportunity to share personal experiences and perspectives fostered a sense of empathy and understanding. The supportive online environment cultivated by the FC model encouraged open dialogue and critical thinking, contributing to a more comprehensive understanding of end-of-life care. The combination of personal and philosophical exploration proved to be transformative, not only in enhancing participants' cognitive and emotional engagement but also in preparing them to approach end-of-life scenarios with greater compassion and empathy.

Overall, this study demonstrates the potential of the FC model to effectively address emotionally charged themes in healthcare education. By integrating philosophical reflection into the virtual classroom environment, the FC model enriched learning experiences and equipped participants with the tools needed to navigate the complexities of end-of-life care. Further research is recommended to explore the long-term impact of this approach on knowledge retention, emotional resilience, and professional practice in healthcare education.

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### Authors' Contribution

CMM contributed to the conceptualization of the study, drafting of the manuscript, and qualitative analysis of the students' reflections. SAN contributed to critical revisions of the manuscript. ML assisted in the acquisition and organization of data from the students' reflections and supported the interpretation

of results. All authors participated in the discussion of findings and reviewed the manuscript. They approved the final version for submission and agreed to be accountable for the integrity and accuracy of the work.

### Conflict of interest

The authors declare that they have no conflicts of interest to disclose.

### Ethical Considerations

The anonymity and confidentiality of participants were preserved throughout the data collection and publication processes. All individuals involved were informed that their voices would be recorded. The researchers were attentive to power dynamics and actively fostered a collaborative atmosphere that honored the participants' perspectives and experiences. The authors acknowledge their affiliation with the Universidade Federal de São Paulo (UNIFESP), Brazil, as confirmed by certificate number KLS9:165L:Y9PO:GLWD, issued on December 8<sup>th</sup>, 2024.

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### Availability of Data and Materials

Due to privacy and ethical considerations regarding participant confidentiality, these data are not publicly accessible.

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