

*Conference Name: EduCon Ho Chi Minh – International Conference on Education, 20-21 January 2026*

*Conference Dates: 20-Jan- 2026 to 21-Jan- 2026*

*Conference Venue: PARKROYAL Saigon, 311 Đ. Nguyễn Văn Trỗi, Phường 1, Tân Bình, Hồ Chí Minh, Vietnam*

*Appears in: PUPIL: International Journal of Teaching, Education and Learning (ISSN 2457-0648)*

*Publication year: 2026*

*Anja Pfennig, 2026*

*Volume 2026, pp. 01*

*DOI- <https://doi.org/10.20319/ictel.2026.01>*

*This paper can be cited as: Pfennig, A.(2026). Videos in Inverted Classroom Settings – Advantages of Lightboard Lectures Versus Lecture Videos. EduCon Ho Chi Minh – International Conference on Education, 20-21 January 2026. Proceedings of Teaching & Education Research Association (TERA), 2026, 01*

## **VIDEOS IN INVERTED CLASSROOM SETTINGS – ADVANTAGES OF LIGHTBOARD LECTURES VERSUS LECTURE VIDEOS**

**Anja Pfennig**

*School of Engineering and Life Science, HTW Berlin, University of Applied Sciences,*

*Wilhelminenhofstr. 75A, 12459 Berlin, Germany*

*[anja.pfennig@htw-berlin.de](mailto:anja.pfennig@htw-berlin.de)*

---

### **Abstract**

*HTW Berlin has successfully designed and manufactured a Lightboard, enabling lecturers to create engaging and accessible teaching units. A Lightboard, or learning glass, is a high-refractive transparent glass panel surrounded by LED lights, typically made from high-quality Opti-Glass allowing instructors to write with fluorescent markers while being filmed from the front. Lightboard videos, which allow lecturers to face students directly, have proven superior to traditional lecture recordings and animated lecture videos. Advantageous Lightboard videos maintain lecturer-student eye contact, offer clear and manageable content, and are easy to produce with minimal post-production. These videos, typically under 10 minutes, prevent students from feeling overwhelmed, making them an effective alternative to traditional recordings.*

### **Keywords:**

Lecture Films, Lightboard Lectures, Undergraduate Teaching, Material Science, Mechanical Engineering