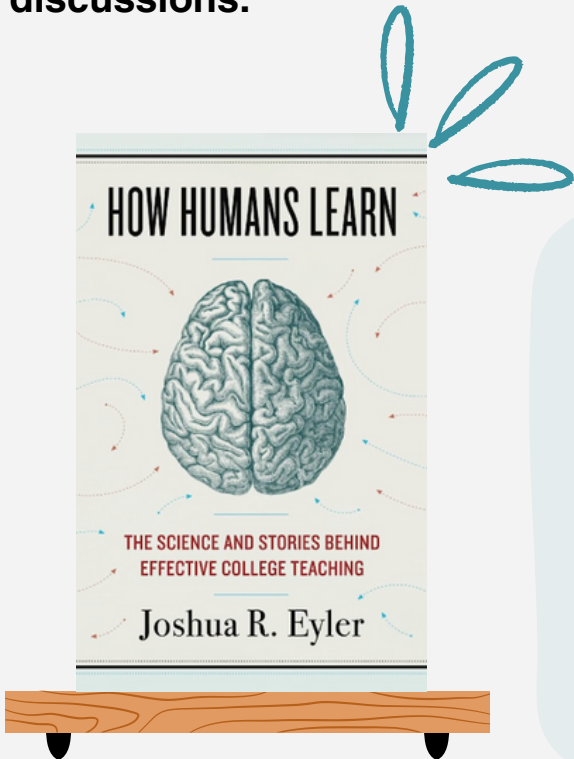


How Humans Learn

Discussion Guide

The OTL Book Club read and discussed *How Humans Learn: The Science and Stories behind Effective College Teaching* (Eyler, 2018) in Fall 2021. You can use this document to guide your own reading or start a book club with colleagues. These questions were written by educational developers from the Office of Teaching and Learning at the University of Guelph to help facilitate discussions.



About This Book

This book shares research from developmental psychology, anthropology, and neuroscience on how humans learn. Eyler also incorporates examples from his own teaching and case studies from college and university professors from various disciplines. Five sections focus on important aspects of human learning: curiosity, sociality, emotion, authenticity, and failure. Each section includes a 'Getting Started' section that includes practical teaching strategies.

Discussion Questions

Introduction



1. The introduction highlights the importance of connection of material to students, humour, students feeling like their voices matter, connection with students, experiential approach and authentic experiences to student learning. Which one of these resonates the most with you in terms of your experience as a student/experience as a teacher?



Discussion Questions

Chapter 1: Curiosity

1. What role do you think trait-level curiosity might play in learning? How could we teach to students who are 'naturally' more curious about a topic while also teaching to students who are less curious?
2. Given the importance identified of being able to ask questions to be able to close an 'information gap' and restore equilibrium, how can we be sure we are providing students this opportunity to maximize this ability?

Chapter 2: Sociality

1. What role do you think trait-level curiosity might play in learning? How could we teach to students who are 'naturally' more social about a topic while also teaching to students who are less social?
2. This chapter includes a discussion of Vygotsky's zones of proximal development. The author suggests that "part of our goal as teachers may be to help students become more aware of their own zones, their own strengths." (p.81). What are some challenges of helping students do this metacognitive work? Have you identified any strategies to make this easier for yourself or your students?

Chapter 3: Emotion

1. The author argues that "the student is infinitely more important than the subject matter" and "education is fundamentally about students, not bits of information" (p. 131). Do you agree or disagree with these arguments? Why? In what ways is higher education set up to be about the students versus the subject matter.
2. How can we balance caring for students and ourselves given the emotional commitment and regulation required to enact a pedagogy of care?

Discussion Questions

Chapter 4: Authenticity

1. With the overwhelming evidence that active learning is more effective than prolonged lecturing, why do you think prolonged lecturing persists as such a common teaching strategy? What would need to happen in higher education to shift the balance from lecturing to another teaching strategy?
2. What are some examples of authentic learning experiences you could or have used in your courses? How are authentic learning experiences more than 'case studies'. Are there any immersion learning experiences you have been able to incorporate in your teaching?

Chapter 5: Failure

1. Can you think of any examples from your discipline where students come to class with inaccurate mental models about a certain concept? If so, how have you tried to re-train the students to accept the more accurate mental model?
2. Given that it is out of our control to impact most of what is at the bottom of Maslow's hierarchy of needs (sleep, food, shelter), how can we use knowledge of this hierarchy to help our students learn? What strategies/practices could we use to impacts, say fear, stress etc.?



How Humans Learn Suggested Teaching Strategies

Suggested Strategies

How Humans Learn contains a diverse array of strategies to help create a supportive and impactful classroom environment for your students. Below we have selected a few strategies highlighted in the book alongside their respective page numbers. We encourage you to dive deeper into the book and explore the larger collection of useful strategies and techniques to transform your classroom.

Strategy

Description

Page

Understand Student Expectations	To design an inclusive class community, involve students in discussion about what behaviours will help them develop a sense of belonging in the class.	90
Name Tags	Provide students with cardstock name tents to help you learn your students' names.	134
Trigger Warnings For Content	Include trigger warning on sensitive course material and statements within your syllabus. If you are unsure where to start, consult past students on which content can benefit from warnings.	146

<p>Navigating Experiential Content</p>	<p>Include experiential opportunities for students in your course (Museum trips, community partner collaborations).</p>	<p>160</p>
<p>Bring Your Own Research Into the Classroom</p>	<p>Mention your research, the questions you are interested and the realities of the obstacles and challenges in your field to students.</p>	<p>163</p>
<p>Test Out Active Learning Strategies</p>	<p>Choose an active learning strategy to try during classes and receive student feedback.</p>	<p>168</p>
<p>Implementing Pedagogies of Failure</p>	<p>Pose a question to students that can only be partially answered to demonstrate critical thinking and challenge them. Use discussions to map out possible solutions and apply concepts from lecture.</p>	<p>207</p>