

# Luke Bronowski

Luke teaches physical education to 8th grade through seniors, incorporating fitness, wellness, and sports instruction. With a background in personal training, he emphasizes foundational movement patterns and proper exercise technique for younger students, gradually shifting toward student-centered instruction. By junior and senior

year, students develop personal workout programs, set SMART goals, and assess their progress.

Luke's curriculum blends fitness activities with sports like badminton, pickleball, and group games, ensuring a mix of competition and physical development. He recognizes that many students lack fundamental motor skills and works to build a strong foundation before focusing on gameplay.

One of Luke's key challenges is the need for more adaptive physical education. Many students with medical conditions, such as POTS syndrome, are exempt from P.E., and he is interested in using human-centered design (HCD) to create more inclusive solutions. He has explored options like chair-based fitness to ensure students with physical limitations can still engage in meaningful exercise rather than being completely excused. He sees HCD as a way to approach these issues by deeply understanding student needs and designing solutions that foster participation and accessibility.

Luke also acknowledges the complexity of health education, particularly in relation to body image and eating disorders. While junior and senior health days address these topics, he believes a more individualized and thoughtful approach could be beneficial, and he sees HCD as a potential tool to rethink how these conversations are structured.

Within his department, Luke collaborates with two other teachers to manage six classes (three shared) and navigate the school's block and anchor day schedules. His ultimate goal is not just to prepare students for competitive athletics beyond high school but to instill lifelong habits of physical activity and wellness, using human-centered design to make P.E. more inclusive and impactful for all students.



#### MELISSA SCHOEPLEIN

Melissa has been teaching for 20 years, with the past eight at Uni. She currently teaches 8th-grade Intro to Social Studies and two electives: Contemporary Issues and a senior project course. The senior project class engages students in internships and field experiences, ranging from academic research to community service, and even legal work.

Her 8th-grade Social Studies curriculum includes an Oral History Project, which takes up a quarter of the school year. Each year, students explore a new topic, conduct interviews, and produce a podcast. She is considering a design thinking approach to reimagining this project—possibly involving student leaders in a structured strategy session to enhance its impact. She hopes to bring in external facilitators to guide students through the HCD process, allowing them to take ownership of shaping the project's future direction. In Senior Project, Melissa has used some of the exercises from Stanford's Designing Your Life curriculum which applies design thinking to career reflection and development.

Melissa also helped lead a group of students through a design project focused on the implications of AI in education through a 1 week class. Students conducted research, created survey questions, and gathered data on AI's role in the classroom. They then analyzed their findings and developed a set of insights aimed at fostering more ethical, effective, and critical use of AI in schools.

Melissa has found design thinking intuitive since she first encountered it eight years ago. While she appreciates its emphasis on empathy and inquiry, she sometimes finds the enthusiasm around it overstated. Nevertheless, she values its creative and intellectual stimulation and wants to help others grasp its benefits. She also acknowledges that failure is essential for learning but feels that, at Uni, there may be less willingness by students to embrace it fully.



# TOM KIESEL

Tom has been teaching for 24 years. He has experience teaching physics, chemistry, and computer science, with a background in both engineering and programming. At previous schools, he was involved in competitive computer science clubs and engineering challenges, including Bell AVR competitions and Vertical Robotics. These programs paired students with industry mentors to design and build

functional products, such as delivery drones for firefighting applications.

Tom is fascinated by Human-Centered Design (HCD) and recognizes its role in his teaching. He emphasizes the importance of having a "why" behind projects, whether they are product designs or humanitarian efforts, as a way to engage students. He enjoys developing meaningful coursework that connects students to real-world applications, even though he prefers teaching over curriculum design.

Over the summer, Tom participated in SCALE, a semiconductor education program at Purdue, where he developed an HCD-focused lesson in just three days. He plans to implement this lesson next semester at Uni.

In his Computer Literacy 2 class, students design their own projects, pitching ideas and planning their execution. This naturally aligns with HCD, as students create solutions with a user-focused approach. Past projects have included smart shoes with GPS tracking for parents and a musical instrument designed for the orchestra teacher.

Tom sees HCD as an essential part of his teaching philosophy, particularly in courses where students design and build projects. While his current computer literacy class already aligns well with these principles, he is excited to incorporate HCD into his new microelectronics course next semester.



#### LISA MARYE EVANS

Lisa has been teaching for 28 years, starting as a college instructor before transitioning to high school. She teaches visual arts, including Studio Arts, 2D and 3D Art, Design Thinking, and Interrelated Arts, a course she co-teaches with theater and music instructors.

Her interest in human-centered design (HCD) stemmed

from her long standing fascination with design, though she initially viewed it through a more traditional lens. Through her collaboration with a professor in fine and applied arts, she came to understand HCD as a problem-solving approach that incorporates design principles in a more collaborative, empathetic, and structured way. Lisa values HCD for the way it fosters deeper engagement and teamwork among students. She sees it as a more holistic approach to problem-solving, emphasizing shared participation and synthesis over the traditional divide-and-conquer method. This perspective has influenced her classroom projects, particularly those that encourage students to design solutions with real-world impact.

One of her HCD projects involved redesigning an underutilized outdoor space at the school. Students researched how other schools had transformed similar areas, developed proposals, and presented their ideas to administrators. Lisa found the project valuable in demonstrating the power of design thinking for envisioning improvements.

Lisa also incorporated HCD into a project focused on increasing student participation in physical education. Her students began by gathering insights through surveys and interviews with their peers, aiming to understand barriers to engagement. To deepen their research, they also interviewed a kinesiology professor for expert perspectives. Using their findings, students created research posters outlining key challenges and proposed recommendations for improving participation in future years.

Though Lisa admits she struggles with ambiguity, she recognizes the value of embracing uncertainty in the design process. She is particularly interested in helping students use art as a tool to find and make meaning, encouraging them to explore complex ideas visually. She also wants to find ways to translate visual insights into concrete discussions, believing that visual design holds valuable information that can support more informed, thoughtful decision-making.



# LEAH NICOLE AVILA

Leah has been teaching for nine years, with experience in Algebra 1, Algebra 2, Precalculus, AP Calculus AB, and Intro to Data Science. She previously taught in Los Angeles before relocating, drawn by the small class sizes and encouragement to experiment with new teaching methods. She has also incorporated human-centered

design (HCD) in education through the SMASH program, a summer initiative for minority high school students that integrates design thinking into STEM learning.

Leah values the human aspect of learning, emphasizing the importance of making math feel relevant and actionable for students. She wants students to see that their work can have real-world applications rather than just solving abstract problems. In her classes, she encourages students to move beyond finding the "right" answer and consider solutions that account for broader human and societal factors.

Leah has implemented HCD in her math curriculum through projects such as students analyzing grocery store products to explore sustainability over time. They examined not only the materials used in packaging but also how size and shape impact waste and consumer decision-making. The project encouraged students to think critically about how packaging design affects both the environment and everyday choices, helping consumers make more informed and sustainable decisions.

Additionally, students designed coffee mugs, applying Newton's Law of Cooling while considering the needs of different users, such as people who want their coffee to stay hot longer or cool down more quickly. Additionally, Leah had students design roller coaster experiences for different populations by having students use empathy maps to understand more about the needs and wants.

Leah also helped lead a group of students through a design project focused on the implications of AI in education through a 1 week class. Students conducted research, created survey questions, and gathered data on AI's role in the classroom. They then analyzed their findings and developed a set of insights aimed at fostering more ethical, effective, and critical use of AI in schools.

Leah is excited to continue integrating HCD into her teaching and is looking forward to implementing new HCD projects in her Math 3 class.