



Raptor Lab is a **FREE** online scientific research and investigation tool that your grade 6-12 students will love! Raptor Lab uses role play and inquiry-based learning by putting them in the shoes of real-world scientists to solve real-world problems. *It's easy to include in your distance learning plans!*

View instructions for creating an account and student management at <https://z.umn.edu/RaptorLab>. Access the Teacher's Toolbox by clicking on your name once signed in. **Questions?** Contact us at raptorlab@umn.edu.

PART 1: Vet in Training

Vet in Training models the process of scientific investigation through the work of veterinarians at TRC's world-renowned wildlife rehabilitation clinic. Students role play being a vet in training working alongside Dr. Ponder as she diagnoses, treats, and rehabilitates a patient. Throughout the process, students record evidence in their patient's medical record, summarize the evidence gathered to support their patient's diagnosis (an evidence-based conclusion), and watch how their diagnosis informs their patient's treatment.

Part 2: Wildlife Researcher

Wildlife Researcher shifts the role of students from being a vet in training to being a wildlife researcher investigating a question raised by their patient's diagnosis. Guided by Dr. Pat Redig, a world-renowned expert in bald eagle toxicology, students conduct a model research project into the lead poisoning of bald eagles. Students conduct background research, consider a research question, create a hypothesis, identify materials and methods, graph their data analysis, and discuss how their data confirms or rejects their hypothesis. The data students analyze is real; therefore the conclusions students make are real and relevant.

PART 3: Outdoor Investigator

Outdoor Investigator allows students to conduct their own mini-investigation and share their results and conclusions online. The environment guides students through completing each step of their investigation. Students apply their new knowledge and skills, while teachers get a final project to assess student learning. *Currently under construction.*

Raptor Lab Learning Objectives

- Engage students in the process of scientific investigation, using authentic scenarios, interactive role play, and technology
- Promote higher-level thinking through evidence gathering, data analysis and interpretation, and the communication of big-picture ideas
- Develop critical thinking skills and collaboration
- Guide students in designing, developing, and implementing an outdoor investigation
- Instill an action-based conservation ethic developed through the experience of investigating a real-life environmental issue
- Highlight positive role models in science and women in science and leadership position