



VIDEO SUMMARY

Hands-On and Experiential Learning

Resource person: Joe Ruhl | Biology teacher and science educator | Curated from TEDx Talks
Hands-On and Experiential Learning | Active Learning Strategies | pedagogy

Joe Ruhl describes a biology classroom organised around student choice, shared learning objectives and frequent interaction. He gives students a menu of routes through each unit, including tutorials, web activities, videos, laboratory work, simulations, games, reflection sheets and creative demonstrations. Every route still has to address the unit's required ideas.

Ruhl groups the design around five capacities: choice, collaboration, communication, critical thinking and creativity. Choice gives students some ownership over how they work. Collaboration and communication make their reasoning visible. Critical thinking and creativity ask them to interpret, build and explain. The hands-on activities earn their place by giving students a useful encounter with the content and producing evidence the teacher can examine.

The arrangement also changes how Ruhl spends class time. While students work, he listens to conversations, asks questions, checks progress and coaches small groups. A teacher who spends less time speaking to the entire room can spend more time responding to individual thinking.

The final part of the talk concerns relationships. Ruhl argues that subject knowledge and activity design gain force when students can see a teacher's genuine interest in the discipline and experience ordinary acts of care. His examples include learning students' interests, noticing their efforts and being present at events that matter to them.

Ruhl sometimes connects activity options to learning styles. Current evidence does not support assigning students to fixed VARK-style categories. His stronger contribution is the design of meaningful choice, varied access and several ways to practise a common objective.