



**Challenge:** For costly surgical procedures such as catheter implantation, how can instructors increase the success rate for new students learning the technique?

**Solution:** For Dr. Carrie Northcott and Dr. Brian Jespersen at Michigan State University, the solution was clear: have JoVE create a concise, professional video of the method to expedite transfer of knowledge, reduce expense of wasted time and materials, and ensure consistency of the implantation technique.

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*“Initially it took multiple tries, whereas now when we teach this technique with the JoVE video we have a success rate between 90 to 100 percent.”*

-Dr. Carrie Northcott, Michigan State University

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## Results/Benefits:

- Jespersen and Northcott used the video in their classrooms to teach their catheterization method to their students and share the technique with colleagues remotely.
- With use of JoVE video, overall student success rate for catheter implantation increased from 40% to 90%.
- The learning curve for students to successfully implant a catheter for the first time was reduced from 8 tries down to 1.
- With trials costing \$50 each, the 9 researchers of the Northcott Lab collectively saved \$3,150 by using JoVE. The Jespersen Lab, which trained 10-14 new students per year, saw annual savings of \$10,500. Combined, the labs saved Michigan State an estimated \$13,650.