# **Resources for Evidence-Based Teaching in STEM**

#### **CORE READING:**

**Teaching and Learning STEM: A Practical Guide** by Richard M. Felder and Rebecca Brent <a href="https://www.amazon.com/Teaching-Learning-STEM-Practical-Guide/dp/1118925815/ref=sr\_1\_1?">https://www.amazon.com/Teaching-Learning-STEM-Practical-Guide/dp/1118925815/ref=sr\_1\_1?</a> ie=UTF8&qid=1492193063&sr=8-1&keywords=Teaching+and+Learning+STEM

**Scientific Teaching** by Jo Handelsman, Sarah Miller, and Christine Pfund <a href="https://www.amazon.com/Scientific-Teaching-Jo-Handelsman/dp/1429201886/ref=sr\_1\_1?">https://www.amazon.com/Scientific-Teaching-Jo-Handelsman/dp/1429201886/ref=sr\_1\_1?</a> ie=UTF8&qid=1492193153&sr=8-1&keywords=scientific+teaching

**Teaching Blunders to Avoid: Ten Worst Teaching Mistakes** by Richard M. Felder and Rebecca Brent <a href="http://www.celt.iastate.edu/teaching/effective-teaching-practices/teaching-blunders-to-avoid-ten-worst-teaching-mistakes">http://www.celt.iastate.edu/teaching/effective-teaching-practices/teaching-blunders-to-avoid-ten-worst-teaching-mistakes</a>

**Vision and Change in Undergraduate Biology Education** by the AAAS (for Biology instructors) <a href="http://www.sfsusepal.org/wp-content/uploads/2013/08/Revised-Vision-and-Change-Final-Report.pdf">http://www.sfsusepal.org/wp-content/uploads/2013/08/Revised-Vision-and-Change-Final-Report.pdf</a>

## **Debunking Handbook**

https://www.skepticalscience.com/docs/Debunking Handbook.pdf

Assertion-Evidence Approach to Presenting Scientific Information <a href="https://www.assertion-evidence.com/">https://www.assertion-evidence.com/</a>

#### **COURSE RESOURCES:**

National Center for Case Study Teaching in Science (NCCSTS) http://sciencecases.lib.buffalo.edu/cs/collection/

**Course Source** (for Biology instructors)

http://www.coursesource.org/

**Decibel Analysis for Research in Teaching (DART)** 

https://dart.sfsu.edu/

## **CATME Smarter Teamwork**

http://info.catme.org/about/

### **Low Cost Alternatives to Clickers:**

Socrative: https://socrative.com/

Poll Everywhere: <a href="https://www.polleverywhere.com/">https://www.polleverywhere.com/</a>

Mentimeter: <a href="https://www.mentimeter.com/">https://www.mentimeter.com/</a>

## **Open Source Textbook Websites:**

Openstax: <a href="https://openstax.org/">https://openstax.org/</a>
Openstax CNX: <a href="https://cnx.org/">https://cnx.org/</a>

College Open Textbooks: <a href="http://www.collegeopentextbooks.org/textbooks/">http://www.collegeopentextbooks.org/textbooks/</a>

Merlotx: <a href="http://merlotx.org/find/textbooks.html">http://merlotx.org/find/textbooks.html</a>

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