Dear Colleagues,

Let your faculty meetings be a time when information and conversation spark innovation.

The ISACS Spark is an initiative to provide our member schools with quick and engaging professional development opportunities to spark conversations in 15 minutes or less. These “sparks” can be used as food for thought or as opportunities to engage in larger conversations among peers. ISACS sends Sparks throughout the school year and we hope you will find them helpful in stimulating conversations around exciting research related to teaching and learning. As we head into the month of the school year often referred to as “the dip” in optimism, we offer the following videos to lift your spirits!

April’s Topic – Math Awareness Month

Communicating a growth mindset helps students believe that everyone is a “math person”. Innovation is an increasingly important factor in the growth of world economies. It is especially important in key economic sectors like manufacturing, materials, energy, biotechnology, healthcare, networks, and professional and business services. The advances in and applications of the mathematical sciences have become drivers of innovation as new systems and methodologies have become more complex. As mathematics drives innovation, it also drives careers. For more information, visit [www.mathaware.org](http://www.mathaware.org)

- **Clip #1:** [Boosting Messages From “How To Learn Math for Students](#) - Hear from Stanford’s Jo Boaler as she and her students address the value of a Growth Mindset in math. (4:24 minutes)

- **Clip #2:** [Encouraging children to persist through math challenges](#) - What do your students do when they are feeling stuck? (6:25 minutes)

- **Clip #3:** [Pixar: The Math Behind the Movies](#) - Pixar Research Lead Tony DeRose delves into the math behind the animations, explaining how arithmetic, trigonometry and geometry help bring Woody and the rest of your favorite characters to life. (7:33 minutes)
Clip #4: **Teaching Fraction Problem Solving** - Third grade teacher, Jan Saul, shows how multiple approaches help students wrestle with math problems. Student lead solutions promote engagement and learning. (4:48 minutes)

*Length of time for the four clips: approximately 23 minutes*

We hope these ideas ignite thinking and conversations in your school!

Regards,

The ISACS Professional Services Committee & the ISACS Professional Development Team

The ISACS Spark has been developed by the Professional Services Committee (PSC). The PSC is comprised of teacher leaders from around the region who are passionate about professional development. All sites and clips have been reviewed and deemed appropriate for sharing.

**PAST SPARKS**

March 2016 Spark:
March’s Spark focuses on dyslexia. Dyslexia is a language-based learning disability that includes poor sight word reading, decoding, oral reading fluency and spelling. 20% of the total population struggles with symptoms of dyslexia. According to the U.S. Department of Education more than 2 million students ages 3-21 have learning disabilities and many of them are associated with reading.

- **Clip #1:** **The Big Picture - Rethinking Dyslexia** - This trailer offers a glimpse at the movie directed by James Redford and featuring personal stories of children, experts, and famous individuals who struggled to overcome the implications of a dyslexia diagnosis. (1:48 minutes)

- **Clip #2:** **Overcoming Dyslexia, Finding Passion: Piper Otterbein at TEDxYouth@CEHS** - Piper Otterbein was diagnosed with a learning disability in first grade. She struggled all through elementary school and was finally diagnosed with dyslexia in seventh grade. Finally in high school she had an epiphany and decided to focus on her strengths rather than all of her challenges. (7:12 minutes)

*Length of time for the two clips: approximately 9 minutes*

Additional articles of interest:

- **Dyslexia and the Wider World of Creativity and Talent**
- **Who Helps Kids With Dyslexia Gain Reading Fluency**
- **Why Recognizing Dyslexia in Children at School Can Be Difficult**

February 2016 Spark:
February’s Spark focuses on Random Acts of Kindness Week, February 14-20, 2016 with an emphasis on EMPATHY.

- **Clip #1:** **“Unsung Hero” - Thai Life Insurance Commercial** - This three-minute spot follows a good Samaritan whose daily deeds go largely unnoticed - mainly because he’s not looking to be recognized. Instead of searching for recognition, he places himself in the shoes of those who need his help, expressing empathy toward their position. Eventually, though, the man’s kindness is rewarded when he sees the power of his actions. (3:05 minutes)
Clip #2: Understanding the Difference between Sympathy and Empathy - For educators, this animated video acts out a well-articulated section of Dr. Brené Brown’s lecture on the difference between an empathetic and a sympathetic response. It wraps up a difficult subject to pinpoint the consequences of both responses. Empathy is the ability to place yourself in someone else’s shoes and to understand relate as best as you can to how that person feels in the situation. (Make sure to scroll to the middle of the page to view the video) (2:52 minutes)

Clip #3: Sesame Street: Mark Ruffalo: Empathy - For students, this Sesame Street video with Mark Ruffalo provides an easy to understand explanation of empathy. The best part: at the end, you can do the happiness dance with Murray and Mark! (2:28 minutes)

(Length of time for the three clips: approximately 8 ½ minutes)

January 2016 Spark:
January’s Spark focuses on Millennials. Who are the Millennials and what is their impact on our school communities? Hear about the unique circumstance of hosting 4 generations in our workplaces, and then learn about the values and behaviors of our students, our youngest employees and parents who may be millennials!

Clip #1: Four Generations in the Workplace, What’s That Like? - Is there really a generational divide in the workplace? Find out what it’s like with millennials, Gen-Xers, Baby Boomers, and Traditionalists all working in the same place. (2:06 minutes)

Clip #2: How are Millennials Different From Other Generations? - Right now, Millennials are between the ages of 15 and 34. This year, they are set to outnumber the baby boomer generation, which is in decline. Are Millennials set to take over the world? (3:15 minutes)

Clip #3: Millennials or Generation Y, Who They Are and Why They're Hated - Discover, distill, and understand who they are. Generation Me. Trophy Kids. Generation Stuck. Whatever they are called, Millennial Generation is changing the way people think and work. They’re poised to be the most educated generation in American history. (10:06 minutes)

(Length of time for the three clips: approximately 15 ½ minutes)

This email has been sent to heads of school, division heads, assistant/associate heads, deans of faculty, deans of studies, directors of professional development and ISACS teacher representatives.