# LEFT BRAIN RIGHT BRAIN: FACT OR FICTION? Online Course Syllabus

# **Course Description**

We have all heard the saying, "practice makes perfect." Perhaps more accurately we should say, "good practice makes it more easily retrievable!" There are research-backed practice strategies that support the long-term retention of information regardless of how we see our personal strengths.

This course focuses on the beautiful complexity of our brains beyond any one hemisphere, and how effective practice supports the attainment of any skill we – or our students – work to learn. Learning science-backed strategies will be presented with interactive opportunities to evaluate resources and revise instruction to positively impact student outcomes.

- INHERENT ABILITIES AND THE BRAIN: What do we know and believe about the brain?
- **DEBUNKING LEFT-RIGHT BRAIN DOMINANT LEARNING:** What risks face students who believe they are predisposed toward or away from certain types of content?
- LEARNING TO LEARN: GOOD PRACTICE MAKES BETTER!: What are research-based strategies that help learners better retain and use knowledge?
- EVALUATING RESOURCES AND REVISING OUR PRACTICE: Do the current edtech products used in our instruction, and with students, utilize strategies backed by the learning sciences?

# **Course Structure**

This course consists of four modules that include content, interactive learning activities to check for understanding along the way, and an assessment at the end of the course to capture the big ideas from the course content. You will be given as many opportunities as needed to earn 80% on the end-of-course assessment.

# **Course Goals and Outcomes**

By the end of this course, educators will learn how to:

- 1. Understand the *left-right brain dominance* hypothesis and its impact on learning beliefs.
- 2. Debunk the concept that people tend to use one side of their brain more than the other.
- 3. Integrate learning sciences strategies that address how students' brains learn best.
- 4. Apply learning sciences strategies to edtech selection to further support student retention and use of new knowledge.



## **Participant Profile**

This course is designed for PK-12 educators looking to improve student learning outcomes using strategies backed by learning science research.

# **ISTE Standards and Competencies**

This course is designed and developed around the ISTE Standards, with a strong emphasis on the <u>ISTE Standards for Educators</u> and the <u>ISTE Standards for Students</u>.

## **Module Descriptions**

#### MODULE 1: INHERENT ABILITIES AND THE BRAIN

In this module, we review brain anatomy and the beginnings of the left-right brain dominance hypothesis.

#### MODULE 2: DEBUNKING LEFT-RIGHT BRAIN DOMINANT LEARNING

In this module, learning sciences research is summarized, with provided examples, about why Left-Right Brain Dominance Hypothesis is a myth.

#### MODULE 3: LEARNING TO LEARN: GOOD PRACTICE MAKES BETTER!

In this module, we investigate specific learning science strategies to effectively support the learning process.

#### MODULE 4: EVALUATING RESOURCES AND REVISING OUR PRACTICE

Throughout this module, we will collectively work to refine our practice and use a checklist to evaluate edtech resources with regards to multiple modalities.

## **Completion Criteria**

To receive your certificate of completion, you must take and achieve a score of 80% or higher on the final assessment within one year of registering for the course. For those who complete the course and earn a certificate, you will receive a \$10 discount on a year of ISTE basic membership.

### Disclaimers

This course is a production of the International Society for Technology in Education (ISTE). This course contains examples and resource materials that are provided for participants' convenience and information. The inclusion of any material is not intended to endorse any views expressed, or products or services offered. These materials may contain the views and recommendations of various subject matter experts as well as hypertext links, and websites to information created and maintained by other public and private organizations. The opinions expressed in any of these materials do not necessarily reflect the positions or policies of ISTE. ISTE does not control or guarantee the accuracy, relevance, timeliness, or completeness of any outside information included in these materials.



NOTE: A variety of applications are highlighted throughout this course. Prior to using any of them with students, it is imperative that participants check the account requirements for each application against their school/district student data privacy policy to insure the application complies with district policy. In addition, some applications' Terms of Service may require parental permission to be COPPA and FERPA compliant for students younger than 13 years of age.

Content in this course is subject to change at instructor's or ISTE's discretion.