# OFFICE OF

## Professional Learning

## November 2023 Education Bulletin —

Welcome to the November 2023 edition of the Luzerne Intermediate Unit (LIU) Office of Professional Learning's (OPL) monthly education bulletin. The intent of this communication is to provide subscribers with:

- Professional learning opportunities offered by our department,
- Provide school leaders with educational policy support, and
- Provide tips for practicing educators.

This edition will focus on Artificial Intelligence and its influence in the classroom. Other items included are:

- Trauma 110: The Impact of Social Media
- Meet a member of the OPL team





Scan w/ a smart phone

#### ARTIFICIAL INTELLIGENCE

#### WHAT IS ARTIFICIAL INTELLIGENCE?

If you are new to the concept of Artificial Intelligence (AI) and want a fun experience to familiarize yourself with this technology, go to <a href="https://quickdraw.withgoogle.com">https://quickdraw.withgoogle.com</a>. This website uses the concept of machine learning to recognize a "doodle". Yes, a doodle. Click on "Let's Draw!" on the page to find out more. Go ahead and doodle. After completing 6 doodles, you will get a summary of whether or not the website could identify your drawing. Now, click on a drawing. As you scroll down the page, you will see how the application is learning. If you drew a piano, it will show you all of the other pianos drawn that were used as points of reference to identify your image. If you wish to view all of the available drawings this application has "learned", go <a href="https://quickdraw.withgoogle.com/data">https://quickdraw.withgoogle.com/data</a>.



Image generated using Leonardo. Ai

IBM defines AI as, "a field, which combines computer science and robust datasets, to enable problem-solving." This is not a new concept. In fact, the question, "Can computers think?", has been asked since the dawn of computing back in the 1950s. So why is it important now? <u>Access.</u>

Have I used AI technology? Virtual assistants such as Alexa, Siri, and Google Assistance are examples of daily use of machines that use AI. There is an increasing integration of AI in the automotive industry that will eventually lead to the promise of self-driving vehicles. E-commerce uses data from your social media likes, search histories, and comments to recommend products you might like or find useful. Mobile technology

now uses facial recognition as a security layer to access your cellular device. And, or course, the internet. This is where use of AI is growing fastest and has a direct influence on education. However, as with any new technology, there are positive and negative aspect of the increasing prevalence of AI at our fingertips.

### PROS & CONS

#### ARTIFICIAL INTELLIGENCE—ITS INFLUENCE ON LEARNING

Any influence circumventing student learning goals has potential to negate or depress student achievement. For example, we all want students to become good and efficient communicators—especially in the area of writing. We also like to use student writing as a tool to assess how they have assimilated what we had hoped for them to learn. If students are using a chat bot, like ChatGPT, to answer writing prompts, then the "bot" is performing the craft of writing—not the student. There was a similar concern when calculators were first commonplace in homes. If kids used a calculator on their homework, then they are surely not practicing the basics of mathematics. The machine is practicing for them. While it took several decades, in large, we've overcome the fear of the dreaded calculator and now use it as an instructional tool. Yes, we've had to rethink how and when this tool is to be used. Perhaps, the same is true for communication.

For example, prompt engineering is a significant aspect of using Artificial Intelligence. Programmers and users alike must be able to understand how the generative language in AI works, and how to use aspects of this language to get the results they desire. According to **ZDnet.com**, the skills embedded in prompt engineering include clear use of language, engagement in collaborative use of language, an understanding of different writing styles, understand how machines use logic, and build patience and perseverance in use of language.

Presently, AI has easy-to-find influence in designing a written passage in a specific style (Google Bard or ChatGPT), generate images or graphics (Leonardo.Ai or DALLE 3), and music (SOUNDDRAW or boomy). This is only the tip of the AI iceberg, from AI models that can use human breath to detect illness to playing games this technology is a growth industry with educational implecations that require serious consideration. Consideration both in terms of hindering educational progress and leveraging this technology as a tool to improve student learning.

The OPL Education Bulleting will frequently feature technology that is of great value to classroom teachers, look for additional thoughts, tools, and uses about AI in the STEM News section of this periodical.

## STEM NEWS

#### THE STEELS STANDARDS ARE STEM!!!

The "new Science standards" have been named, the Science, Technology & Engineering, and Environmental Literacy & Sustainability standards or STEELS standards. There are several aspects or dimensions that informs the perfor-

STEELS Hub Science, Technology & Engineering

Visit https://pdesas.org/instruction to learn more about the STEELS Standards.

mance expectations students are to meet within each standard. For example, in 5th grade Physical Science, "Students who demonstrate understanding can measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved."

This performance expectation pulls from an integration of three dimensions of learning: (1) Science and Engineering Practices or SEPs, (2) Disciplinary Core Ideas or DCIs, (3) Crosscutting Concepts or CCCs. These include concepts like mathematical/computational thinking, understanding structure, scale, and proportion. All areas you will find in a STEM-based learning experience. Further, schools are also charged with teaching Technology & Engineering stand-

ards. These are highly focused on: (1) the nature and characteristics of technology and engineering, (2) applying,

maintaining, and assessing technological products and systems, (3) integration of knowledge, technologies, and practices, and (4) design in technology and engineering in education. The Curriculum Frameworks for Science and Technology & Engineering are posted on PDE's STEELS hub (https://pdesas.org/Page/Viewer/ViewPage/58). We will

#### TRAUMA 110

#### THE IMPACT OF SOCIAL MEDIA

New to our LIU Trauma Informed series is Trauma 110: The Impact of Social Media. The influence of social media

sites on our children is a growing concern. This usage also an increases likelihood children are exposed to media posts that may cause feeling of aloneness, anxiety, and even addiction.

Trauma 110 includes a historical look at how the human race has been connected, a definition of what social media is, and the positive and negative aspects of this form of media consumption and contribution has on our children. Additional topics include how social media is marketed to and used by our students, addressing the potential for social media addiction, and support ideas for the caregivers of our children. Partic-



ipants will be able to identify causal aspects of a child's relationship with family members that can either promote healthy or harmful use of social media. The primary message of this workshop and any other course in our Trauma series is that the well-being of our children is paramount and participants will leave with a greater understanding of how to support this message.

WHO IS WHO?

#### LIU OFFICE OF PROFESSIONAL LEARNING

In each issue of the OPL Education Bulletin, you will get a chance to meet a member of our team. In this issue, we would like to introduce Dr. Jessica Jacobs, LIU Asst. Director of Literacy and Instruction, and the work she does in the LIU region and beyond.

Credentials: Undergraduate degree from Bloomsburg University, ESL Certification from Misericordia University, M.Ed. at Wilkes University, Curriculum and Instruction Supervision Certification from Marywood University, and Doctorate from Liberty University

Years of Service: Classroom teacher (12 years), Instructional Coach/Mentor (4 years), LIU Literacy Specialist (5 years), LIU Asst. Director of Literacy and Instruction (5 years), Adjunct Professor of graduate level courses in literacy and ESL best practices for the University of Pennsylvania (14 years)

Other Areas of Interest: In addition to being a leader in literacy-based best practices, Dr. Jacobs facilitates curriculum writing in Social Studies and English Language Arts. She also provides professional development in the areas of Trauma, Mindfulness, and ESL instruction.

Additional Project Areas: Co-facilitated Governor's Institute for Educators with Jim Knight on Instructional Coaching and Mentoring, presented over 20 times on the National and State Level, and enjoys supervising and working alongside the LIU Training and Consultation staff.

### **NEED SUPPORT**

#### LIU OPL NETWORK TRAININGS (NOV-DEC, 2023)

Did you know that the Office of Professional Learning regularly offers workshops at several locations? Areas of educator support include all core content areas, support for students with special needs, and class-room management.

- Using the SETT Framework for AT Tool Selection, 11/7/2023
- Reading Specialists Network, 11/7/2023
- Cultivating Kindness, Compassion, and Joy in Teaching, 11/8/2023
- Gifted Network Meeting, 12/5/2023
- Open-Ended Item Writing and Scoring: Math Grades 6-8 PSSA, 12/7/2023
- Health and Physical Education Knowledge and Skills-Based Outcomes, 12/14/2023

We also hold monthly network meetings for Curriculum Coordinators and quarterly network meetings for school Principals.







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