5440-42 Educational Technology Specialist

1. *The holder is authorized to plan and implement instruction and evaluate student learning in the use and integration of educational technologies in grades PK-12.*

2. In order to qualify for this endorsement, the candidate shall demonstrate the following:

3. Knowledge Standards:

   3.1. **Demonstrates knowledge of topics, concepts, and skills essential to the effective integration of technology in the teaching and learning process, as delineated in current national professional standards, including but not limited to the International Society for Technology in Education (ISTE) Standards for Coaches:**

   3.1.1. The history and cultural significance of ~~information~~ educational technologies and the impact of ~~information~~ educational technology on learning, today's society, cultural diversity, and ~~ecological~~ sustainability

   3.1.2. Methods to address content standards and student technology standards through the integration of technology

   3.1.3. Identifying strategies for initiating and sustaining technology innovations and managing the change process in schools and classrooms

   3.1.4. Ways technology can be used to ~~support~~ implement high-quality, standards-based curriculum, instruction, and assessment in all content areas, including instructional design principles that rely upon research-based learning theories to guide the use of computers and other technologies in education

   3.1.5. Knowledge of ~~Proficiency in~~ current innovative, and effective ~~technologies~~educational technologies and pedagogies, including those that support online and blended learning, collaborative processes, and support the diverse needs and interests of students

   ~~Strategies for troubleshooting and maintaining various hardware and software configurations~~

   3.1.6. Strategies and theories for supporting all students in the integration of technology including Assistive Technology and Universal Design for Learning~~Ways assistive technologies can be used to support the learning of children with various forms of disabilities~~

4. Performance Standards:

   4.1. ~~Supports~~ Guides **the effective integration of technology throughout all areas of the school's curriculum as delineated in Vermont's *Framework of Standards and Learning Opportunities*. Specifically, the educator:**

   4.1.1.**Visionary Leadership** ~~Identifies, helps design, implements, and evaluates authoring, programming, and problem solving environments for use in the classroom~~

   4.1.1.1. Contributes to the development, communication, and implementation of a shared vision for the comprehensive use of technology to support a digital-age education for all students by advocating for policies, procedures, programs, and funding strategies

~~to support implementation of the digital learning plan~~Designs and implements, and collaborates with classroom teachers to design and implement, tasks or projects that incorporate various technologies as tools to facilitate and enhance students' research, critical thinking, problem solving, analysis, collaboration, communication, and presentation skills

4.1.2. **Teaching, Learning, and Assessments** ~~Assists classroom teachers and other staff to develop effective means of assessing students' learning of technology concepts and skills across the curriculum, and to assess technology's impact on the enhancement of student learning~~

   4.1.2.1.   Collaborate with teachers and model the design and implementation of technology-enhanced learning experiences using a variety of research based, learner-centered instructional strategies and assessment tools to address the diverse needs and interests of all students ~~Collaborates with classroom teachers and other staff to conduct needs assessments that identify instructional problems for which information technologies might be appropriate components of the solution~~

   4.1.2.2.   Collaborate with teachers and model the effective use of technology tools and resources to continuously assess student learning and student ability to choose and use appropriate technology ~~Adapts to new technologies and helps teachers to integrate them into the educational process, as appropriate~~

   4.1.2.3.   Collaborate with teachers and model the effective use of technology tools and resources to collect and analyze student achievement data, interpret results, and communicate findings to inform instructional practice and maximize student learning ~~Collaborates with special educators and student support professionals to identify and implement technologies to support the learning of students with various forms of disabilities~~

4.1.3. **Digital Age Learning Environments** ~~Applies and models the ethical use of educational technologies~~

   4.1.3.1.   Collaborate with teachers and model the use of online and blended learning, digital content, and collaborative learning networks to support and extend student learning as well as expand opportunities and choices for online professional development for teachers, administrators, and staff ~~Demonstrates sensitivity to inequities in technology access in schools by incorporating and modeling specific instructional strategies that promote equity~~

   4.1.3.2.   Collaborate with teachers and administrators to select and evaluate digital tools and resources that enhance teaching and learning and are compatible with the school technology infrastructure ~~Collaborates with other school and district staff to evaluate the effectiveness of the school and/or district's implementation of its information technology plan~~

   4.1.3.3.   Research and recommend the use of adaptive and assistive technologies to support student learning in coordination with a student support team

4.1.3.4.   Troubleshoot basic technology problems common in digital learning environments

4.1.4. Developing Professional Learning

4.1.4.1.   Design, develop, and implement technology-rich professional learning programs that model principles of adult learning and promote digital age best practices in teaching, learning, and assessment

4.1.5. Digital Citizenship

4.1.5.1.   Model and promote strategies for achieving equitable access and ethical use of digital tools and resources and technology-related best practices for all students and teachers