

## **Cybersecurity Awareness through Laboratories and Cyber Competitions in the Education System: Practices to Promote Student Success**

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**Abstract :** Cybersecurity is one of the greatest challenges society faces in an age revolving around technological development. With cyber-attacks on the continuous rise, the nation needs to understand and learn ways that can prevent such attacks. A major contribution that can change the education system is to implement laboratories and competitions into academia. This method can improve and educate students with more hands-on exercises in a highly motivating setting. Considering the fact that students are the next generation of the nation's workforce, it is important for students to understand concepts not only through books, but also through actual hands-on experiences in order for them to be prepared for the workforce. An effective cybersecurity education system is critical for creating a strong cyber secure workforce today and for the future. This paper emphasizes the need for awareness and the need for competitions and cybersecurity laboratories to be implemented into the education system.

**Keywords :** awareness, competition, cybersecurity, laboratories, workforce

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