

## Chapter 12

# Self–Analysis Technology, Roles, and Cybersecurity in the Virtual Learning Environments

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### ABSTRACT

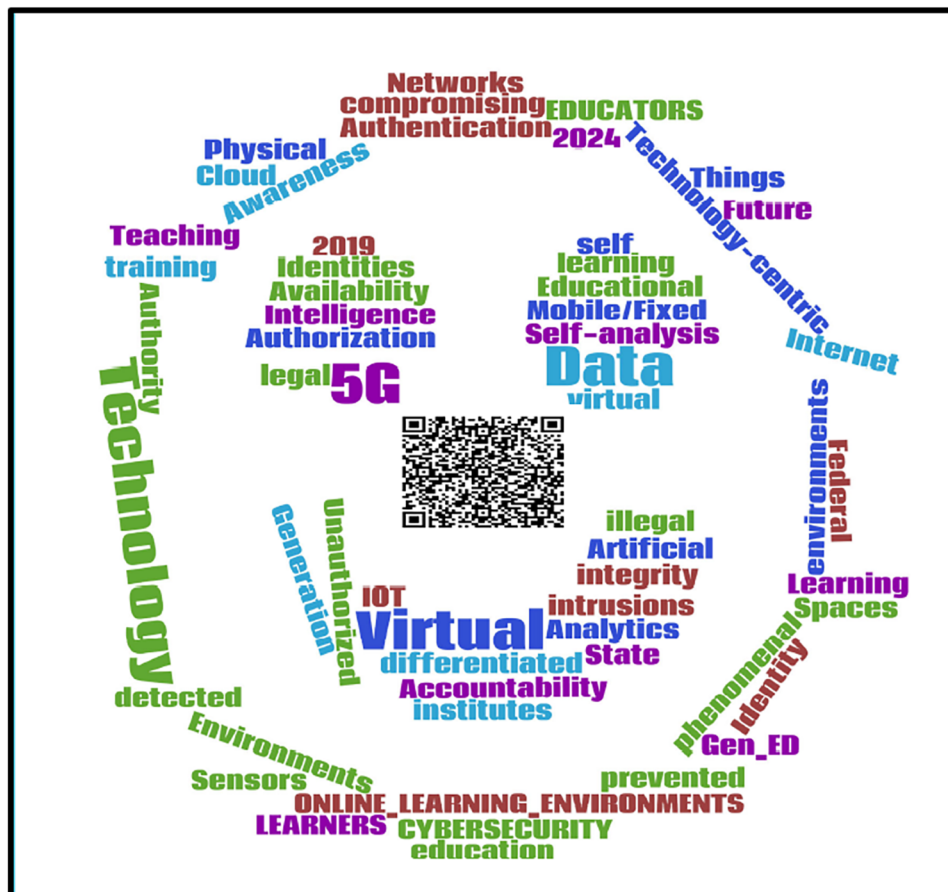
*The focus is on how technology impacts the learner and educator identities, especially focusing on safety, privacy, and the cybersecurity of the technology-centric learning environments. Questions arise which will need to be resolved by designers of these systems. This chapter was completed at the end of the annual CES, Consumer Electronics Show, held January 2019 at Las Vegas. The justification for this approach was to assert the influences products displayed at this consumer show will have on future identities of the self among learners and educators. Concepts such as self-analysis technology are proposed and discussed, and challenges affecting learners and educators related to identity, authentication, authorization, and accountability are highlighted. It is concluded that solutions to these challenges are not a single entity but instead a combination of diverse continually evolving techniques.*

## INTRODUCTION

The ever-evolving computer technology has dramatically changed how the World, Society, and Individuals in general interact. An annual barometer is the CES, Consumer Electronics Show, held from January 8th to January 11th, 2019, in Las Vegas, (CES, 2019). At a 'high-level,' some of the main topics from the show were related to 5G and Internet of Things, Accessibility, Blockchain and Crypto technology, Artificial, and Machine Intelligence, Augmented and Virtual Reality, Gaming, Content, and Wearables.

At the detailed level, we look at a few of these products and how they might affect the identities and roles of Learners and Educators as well as the associated learning environments, once implemented. Figure 1 is a word cloud of the trending learning, technology and cybersecurity concepts during the year 2019 and beyond.

Figure 1. Trending concepts in 2019 and beyond



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