Agenda

- - Faculty development

- - EMATEs

- - Virtual Teaching and Learning Environment

- - VR Career Exploration

- - VR Training Simulator

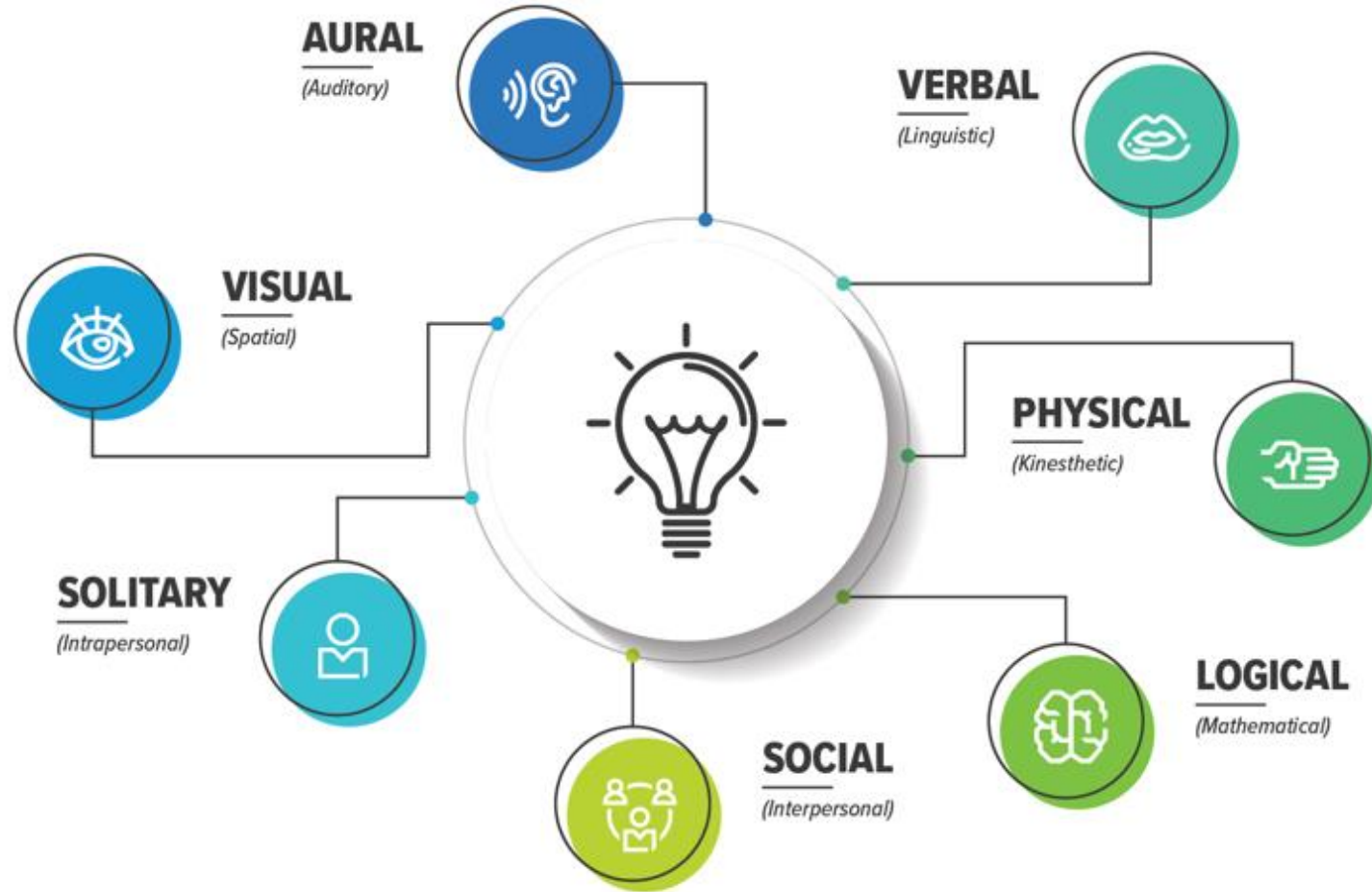- - Competency-based scenarios

Faculty Development

https://www.cssia.org

https://www.ncyte.net

EMATEs

http://e-mate2.myemates.org.amazonaws.com

Learning Styles

AURAL
(Auditory)

VERBAL
(Linguistic)

VISUAL
(Spatial)

PHYSICAL
(Kinesthetic)

SOLITARY
(Intrapersonal)

LOGICAL
(Mathematical)

SOCIAL
(Interpersonal)

Expand the Interactive Activity Library
- 30 New Items -

01 Encoding/ Decoding

02 Linux Commands

03 Cryptography

04 Number Systems

05 IDS/IPS

ESTABLISHED RING CONTENT

06 TCP Handshake

07 Open-Source Intelligence

08 Protocol Analysis

09 Wireless Security

10 And More!
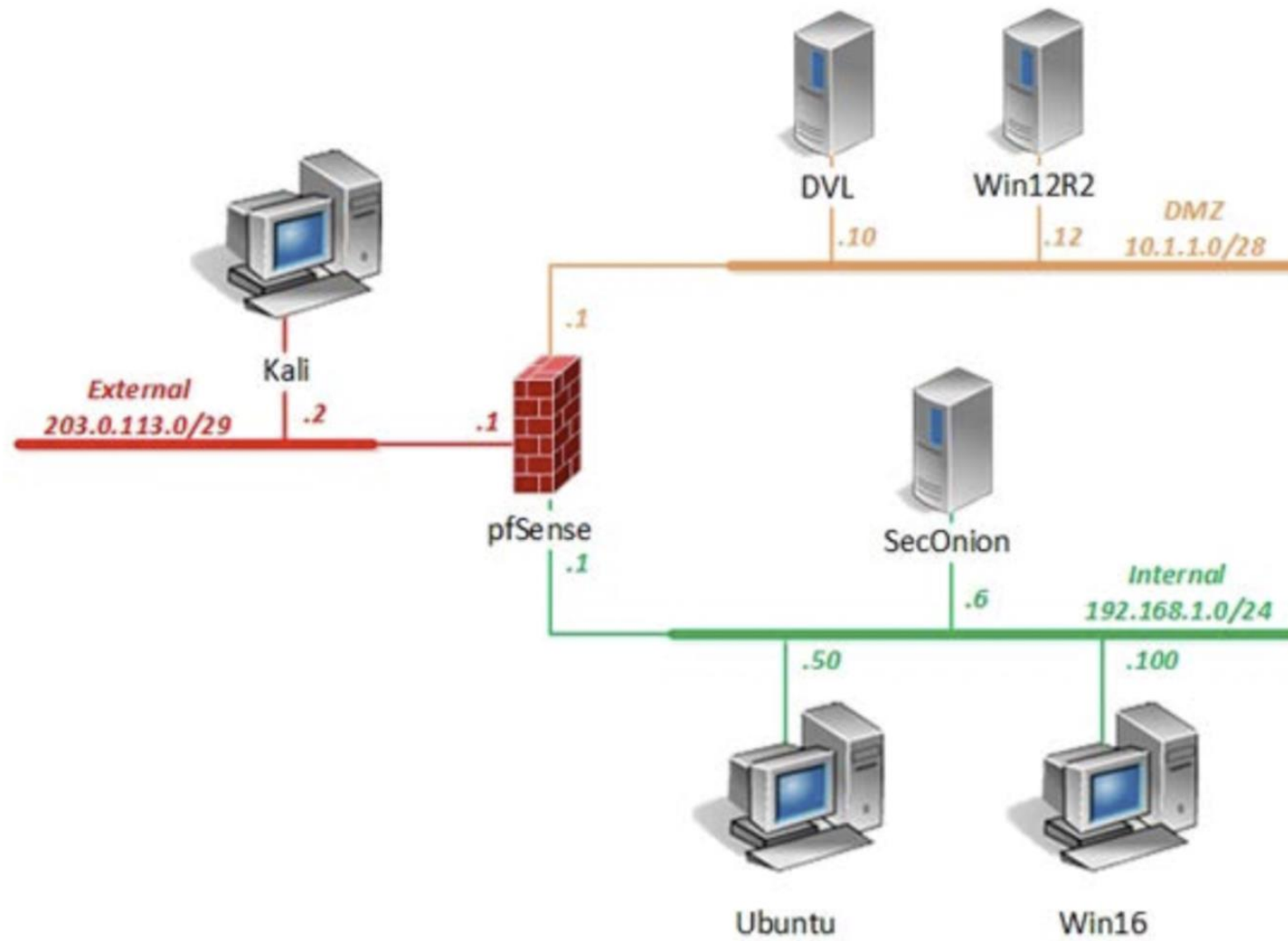
RING NATIONAL CYBERSECURITY TEACHING & LEARNING INFRASTRUCTURE

5 State Cyber Ranges Host RING Content

25 CAE Institutions Host RING Content

Support 400 HS Teacher Accounts

Lead Institution
Cyber Range
High Capacity Partners
CAE Institution
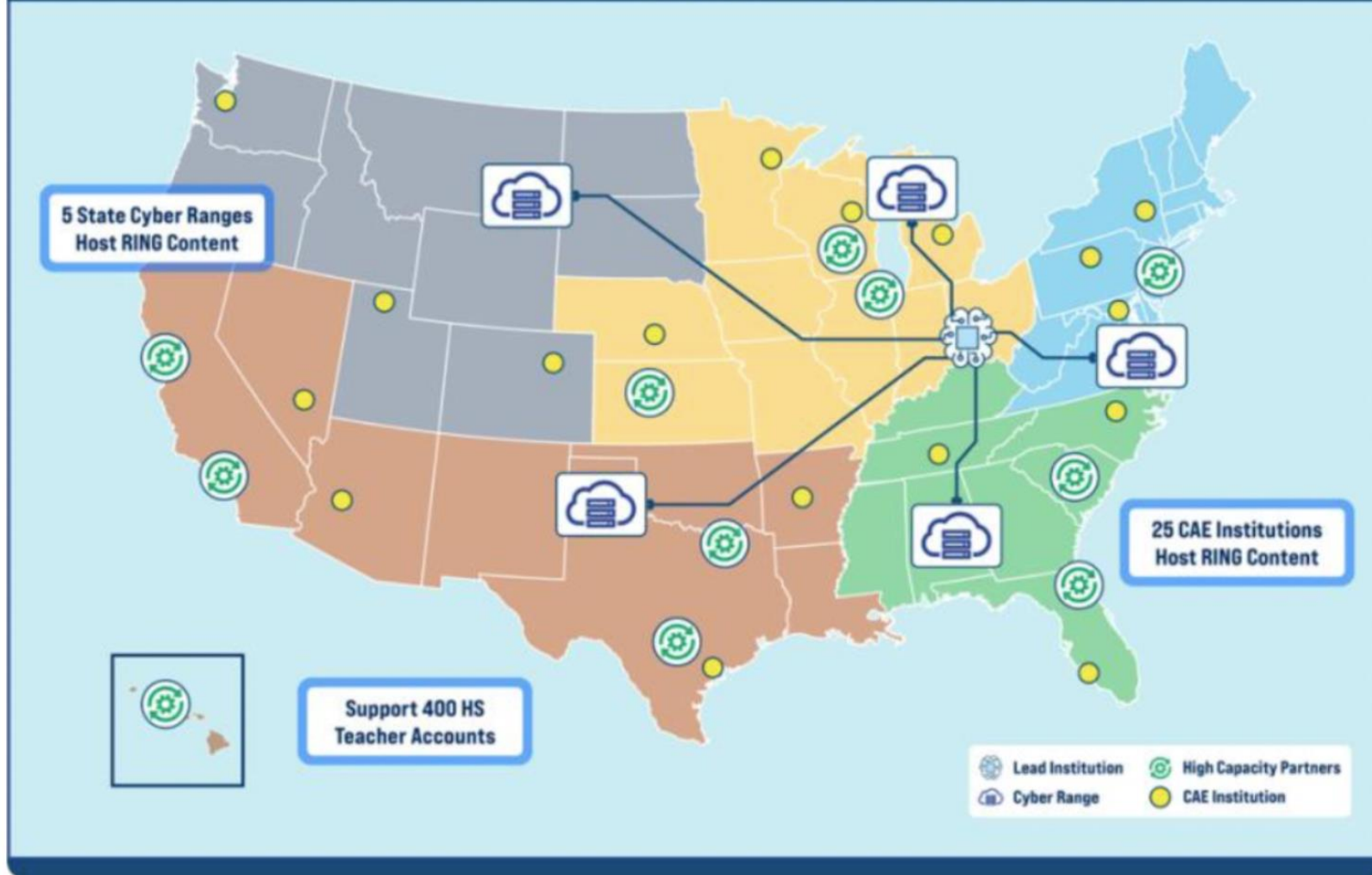
BRIDGING THE DIGITAL DIVIDE
National Equity in Hands-On Relevant Teaching and Learning Resources

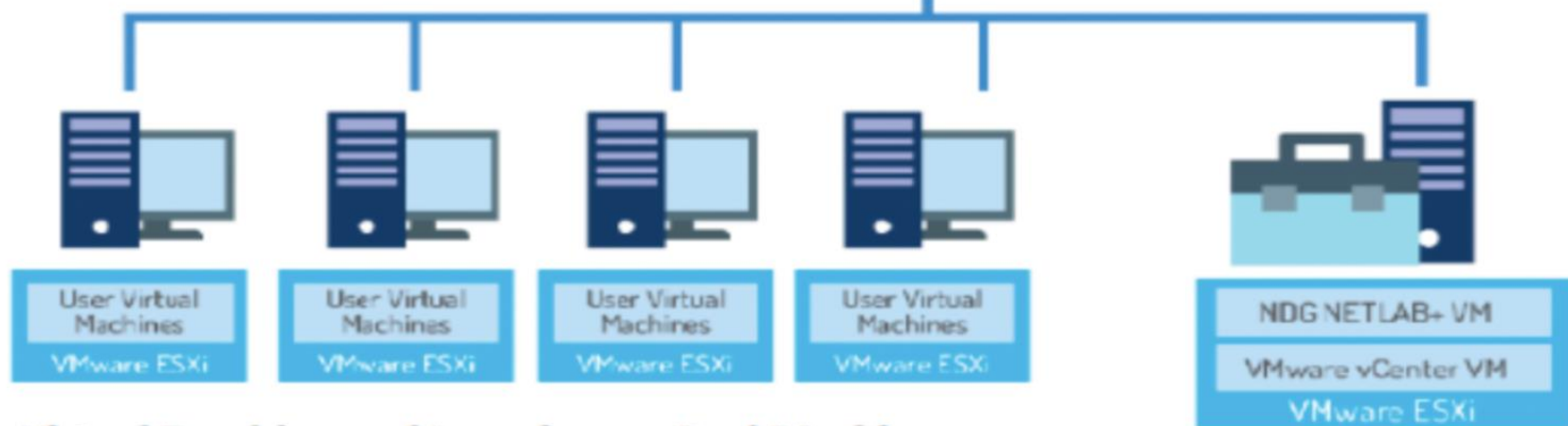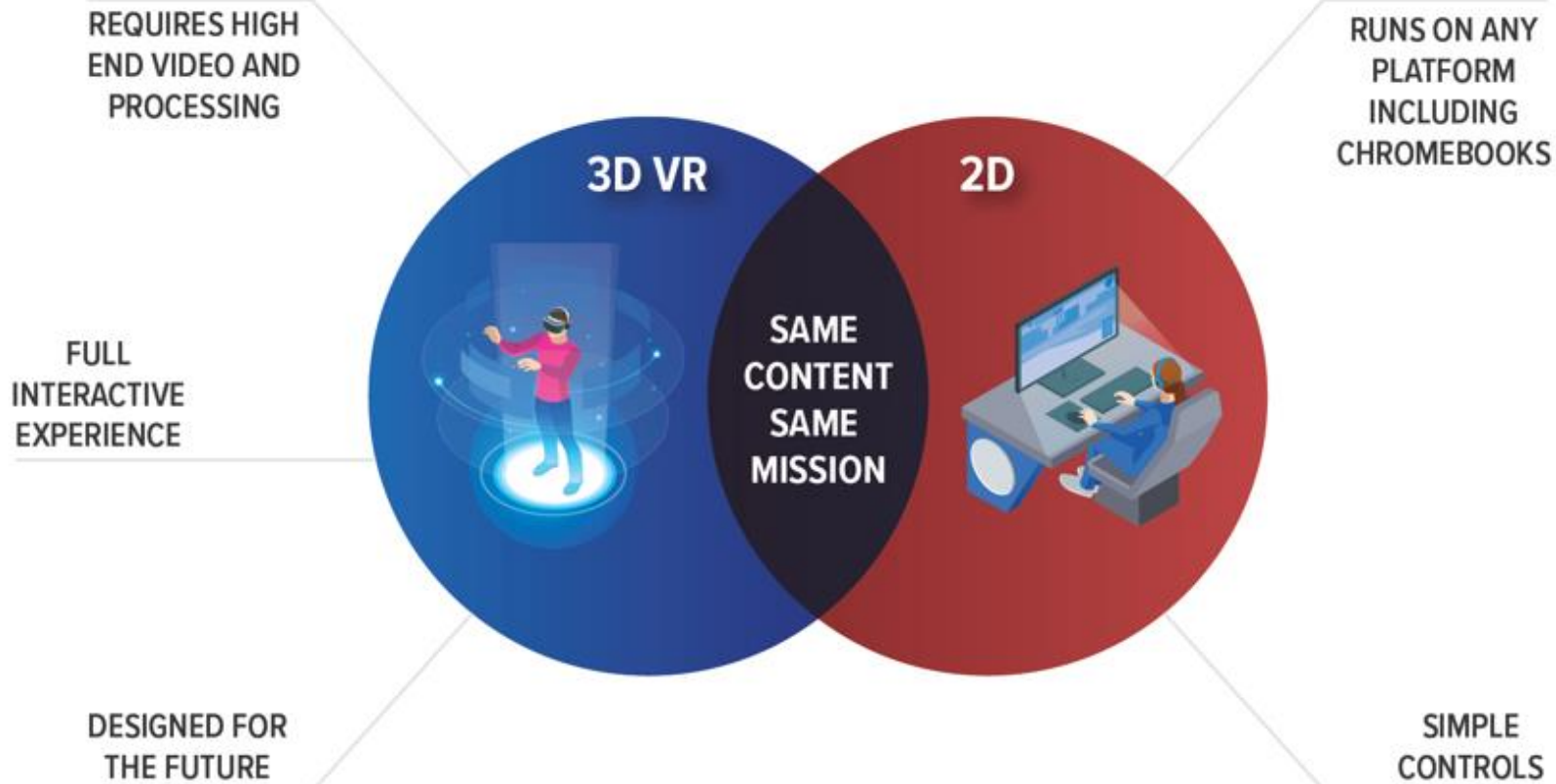Sandbox - Protects Local HS Operational Network

Faculty Scheduling

Support

Simple Browser Interface

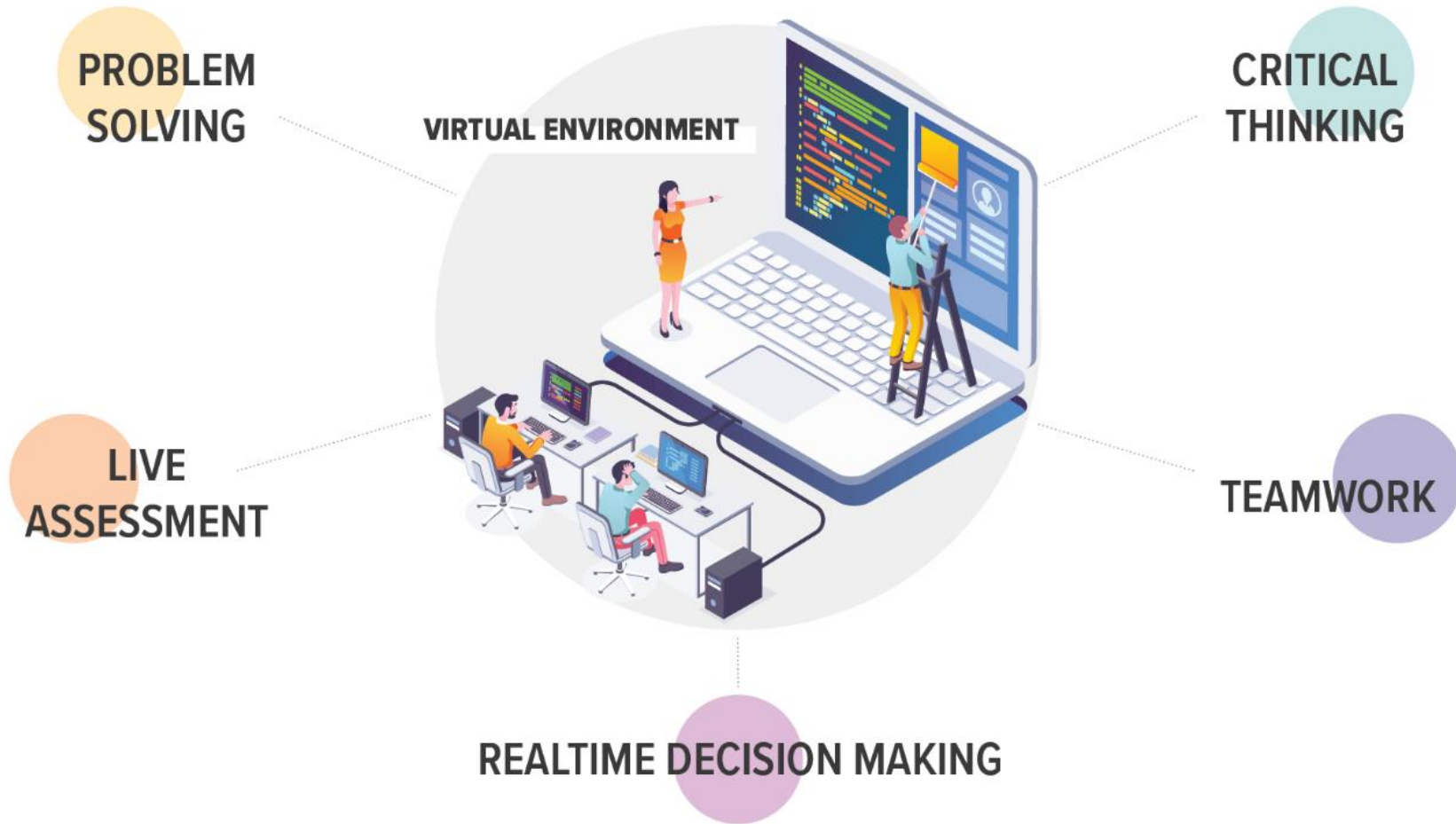User Virtual Machines
VMware ESXi

User Virtual Machines
VMware ESXi

User Virtual Machines
VMware ESXi

User Virtual Machines
VMware ESXi

NDG NETLAB+ VM
VMware vCenter VM
VMware ESXi

Virtual Teaching and Learning on Real Machines

Host Management

RING Virtual Cyber Security Career Orientation Experience 3D/2D Enhancement

REQUIRES HIGH END VIDEO AND PROCESSING

RUNS ON ANY PLATFORM INCLUDING CHROMEBOOKS

3D VR

2D

FULL INTERACTIVE EXPERIENCE

SAME CONTENT SAME MISSION

DESIGNED FOR THE FUTURE

SIMPLE CONTROLS

Student Competencies Exercises

PROBLEM SOLVING

CRITICAL THINKING

VIRTUAL ENVIRONMENT

LIVE ASSESSMENT

TEAMWORK

REALTIME DECISION MAKING

Cybersecurity Teaching and Learning Simulator (CTLS)