The dramatic rise in online access (requires an advanced web application firewall (WAF)) to help ensure access to information and learning at higher education institutions remains easy and safe.

The stark rise in traffic:

<table>
<thead>
<tr>
<th>Year</th>
<th>Students Enrolled in Online Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>16.6%</td>
</tr>
<tr>
<td>2020</td>
<td>48%</td>
</tr>
</tbody>
</table>

By June of 2020, 97% of U.S. college students switched to online instruction, with 98% of learning institutions having moved the majority of in-person classes online by April 1. ¹

This shift affected not just classes but all university operations. Web applications helped provide the access to the various systems each group needed, but also created vulnerabilities.

Students:
- Online conferencing tools for classes
- Library systems and other classroom management tools
- Non-classroom systems including student accounts, registration, and attendance

Staff and Faculty:
- Enterprise resource planning (ERP) systems
- Personal identification information (PII) that comes with managing student matriculation
- All other university business including budget systems, student records, grades, planning and development

Research teams:
- Large amounts of highly sensitive data to manage and protect.
- Research theft is very common, and on the rise.
- Scalability on the cloud is easier for more data storage.
- WAF system can protect the data and allow for easier access on the cloud.

FortiWeb Cloud on AWS brings the application security needed to create a secure environment for users to gain access to university resources and operations.

AWS Cloud environment requires no hardware or software allowing for easy scalability.

FortiWeb Cloud on AWS is easy to deploy and manage.

AWS Well-Architected Framework provides a solid foundation.

AWS provides automated security tasks that make it easier for security teams and DevOps to create and deploy code faster and more securely.

Fortinet
Why Higher Education Needs to Address Web Application Security Now More Than Ever

Couple this with a 32% rise in Ransomware attacks from 48% in 2019 to 80% in 2020. And, Education Services is the only industry where malware distribution to victims was more common via web sites than email. ¹