

Accelerating Learning for Students with Limited Internet Access

Comparing how Microsoft Windows 11* devices and Chromebooks* support offline access to educational content and materials.

Objective

The goal of this paper is to assess the built-in effectiveness and ability of offline access to learning materials using Microsoft Windows* 11 with OneDrive* or Google Chrome* OS with Google Drive* (e.g., the Chromebook* solution) – the two most common operating systems in K-12 education.

Key Findings

1. Microsoft solutions, such as OneDrive, allow users to sync folders from their computer to OneDrive as well as OneDrive folders onto the device for offline access. The process takes only 8 steps and an average of time of 1:28 minutes.
2. Google Drive offline access requires users to first download an extension and then turn on offline access in the Drive settings. The process takes 45% more steps and approximately 22% longer to set up and use.
3. Both OneDrive and Google Drive offline access allow users to select files or folders to automatically sync to their device for offline access. Any changes made while offline will save to the web version the next time the device connects to the internet.
4. The offline access and editing experience using the desktop version of Microsoft Office tools exceeds the limited features of offline Google Docs and Google Slides*. Offline access to translation tools and Accessibility Checker are necessary to ensure a more equitable experience for students with limited or no internet access at home.
5. Microsoft Windows 11 offers a richer array of offline tools, such as the Adobe* Creative Cloud desktop tools and CAD tools like Fusion 360, than the Chrome or Android* apps available on Chromebooks.

Conclusion

As educators continue to depend upon digital learning resources to meet their students' learning needs, close attention must be given to the ongoing impact that limited home internet access—particularly for students of color, those living in poverty, and rural communities—has on learners.

When comparing offline file access to learning content, accessibility, on-device storage, and offline creation and editing, Windows 11 devices provide a superior experience for learners than the equivalent experiences on Google Chromebooks.



Download a copy of the full report including a step-by-step description and analysis of Windows 11 and Chromebook tools to check for accessibility from the K-12 Blueprint.

k12blueprint.com/learning-next

