

## When Tech Resources are Limited in the Home

With so many children out of school, schools are doing the best they can to provide education online. Some schools were more prepared than others because they had been using online learning systems for various aspects of education for years, from handling snow days to augmenting interactions in the classroom.

A current concern being voiced in the public arena is “What about the children without access to the Internet or even a device at home like a computer, tablet, or smartphone?” Fortunately, that does not describe many of our private Christian school children but we should be concerned about this anyway. Why? We have families with several children needing to access one computer and with the advent of one or two parents at home, now one of them may need to share that computer as well. That creates a great deal of tension if our schools use many applications that depend on a great deal of face-to-face interaction. We need to provide a mix of instruction that can be downloaded and completed offline so that each family member can use the computer for a short period of time and share it with other family members.

Here are some ideas that will help schools who are serving families with limited technology devices or Internet access. Some are websites that facilitate offline usage and others are simply ideas.

1. Many schools can make their school laptops and iPads or other tablets available. To move from machines that are set up for carts to machines that are set up for home use, be sure to see Apple’s guidelines on machine management. (Check other manufacturers for similar information.)
2. Kolibri – <https://learningequality.org/kolibri/> this is a version of Khan Academy that is meant to be used primarily offline. Kolibri installers, updates, and content can be downloaded once to a device in an area that has an Internet connection. That “seeded” device can then share new content and updates with other devices over an offline local network. (See the website for details.)
3. Create materials that can be accessed via Smartphones. If teachers are aware that many students will be accessing their materials via phones, they will format the materials in a format that is accessible on a phone. They will choose a Learning Management System (LMS) that works on mobile devices.
4. Use a “Grab N Go” approach. Some school districts are creating a flashdrive full of curricular activities by grade level for a couple of weeks that parents pick up (in a car line or similar method). In two weeks when the work is complete, the parents return that flashdrive and pick up another one. This works if the student has a computer but no Internet.
5. Paper packets, with a similar approach, can be made available for students. This is appropriate if the student doesn’t even have a computer or personal device at home. One of the best places to find these resources are the resources that come with the textbooks your school has already purchased. They are probably aligned with the curricular objectives for the units you are planning to teach and your school has permission to copy them and send them home. PDP (ACSI Textbooks) has modified their copyright policies to allow copying of pages to make this easier during this crisis. Contact [pdp@acsi.org](mailto:pdp@acsi.org)
6. Some schools have moved to project-based learning or a more portfolio approach. They have identified the biggest curricular objectives they have not yet covered and are asking students to complete projects that dig deeply into a project or several projects that are aligned with those objectives. For some classes, such as math, students may still be required to work through their texts and lessons. A project that focuses on a biblical response to this crisis is one example that could be encouraged, at a variety of age levels. Students could even be encouraged to think of ways they could continue community service on- line or in their neighborhoods. Then they could write about what that

means to them. We need to be mindful of the ways students are processing this socially, emotionally, and spiritually. Those who have little contact with their class still need to engage in meaningful projects that will be read and responded to by their teachers/classmates.

7. If students have limited access to the Internet, they can download plans for the week. These can be simple bulleted lists for tasks, open book activities or even exams, and other activities which can be completed offline which could be e-mailed back to the teacher the next time the Internet is available. This would relieve the congestion of the computer use in a house with many people and a parent that may need to work at home.
8. Internet companies such as Comcast and AT&T are offering free service to customers during this crisis. Companies such as Verizon and TMobile are extending service to existing customers, ensuring that no one loses service at this time. Families should contact service providers in their area if they don't have the Internet. There may be a solution during this crisis to increase service.
9. For any of these methods, when ongoing help is not accessible online, those with questions need to be able to get help from their teacher via Facebook, Twitter, WhatsApp, and of course, the telephone!