Internet Issues Relevant to Teaching Students Currently in China

**Speed**
Internet speed is on average slower than in the US. As Rutgers uses Google coding and products on many pages, videos and Rutgers websites often require long loading and buffering time that may affect users’ overall experience.

**Great Firewall**
Due to internet censorship, China has established what is known as the Great Firewall of China. The firewall blocks access to many commonly used websites accessible in the United States. In order to bypass restrictions, users commonly use a Virtual Private Network (VPN) to connect to outside servers directly. In recent years, many VPN services have been largely restricted and are even illegal to use in China.

**VPN**
Students may have access to the Rutgers VPN or a private VPN service provider to connect to blocked content. However, as VPN will only encrypt the connection, connection speeds are still often slow and are overall becoming less stable. While VPN services may be available today, it can also be blocked tomorrow.

At certain locations (including some Chinese university campuses), students are unable to access any VPN provider/services.

**Restricted Sites**
The list of blocked sites is an ever-growing list. While this list is not exhaustive, it does cover popular sites that are not accessible. [https://en.wikipedia.org/wiki/List_of_websites_blocked_in_mainland_China](https://en.wikipedia.org/wiki/List_of_websites_blocked_in_mainland_China)

Primarily, it should be assumed that Rutgers students in China will not be able to access any of the following commonly accessed resources:

- Google.com / Google Drive / Google Calendar (and all google services)
- Gmail (scarletmail)
- YouTube (including embedded YouTube videos in Canvas, Sakai, etc.)
- Facebook / Twitter
- Wikipedia
- Box.com
- Dropbox
- Vimeo
- New York Times

**Commonly Used Rutgers Resources that are Available**
While we cannot ensure long term accessibility, the following Rutgers resources are currently accessible. These resources may however experience longer buffering periods than on average if using in the United States.
• Canvas (service and video buffering speed may be slow depending on connection and location)
• Sakai (service and video buffering speed may be slow depending on connection and location)
• Blackboard
• One Drive
• Zoom (services may be blocked starting this month. speeds may be slow depending on connection)
• WebEx (speeds may be slow depending on connection)
• Qualtrics
• Teams (Microsoft)

Note: certain elements in the above list may be unavailable if, for example, the embedded content is from any of the blocked services noted above (Google, YouTube, etc.).

Solutions
For students that are in China and unable to access certain content, the following solutions maybe utilized.

1. Recommend students to forward their emails to an address they can access. If students are unable to, you may be able to collect a list from students and have OIT setup a forward.
   a. Note, some students personal email addresses may be flagged as spam if replying to your email from the forwarded personal email address. You may want to check spam folder occasionally.

2. Avoid using YouTube if possible, and upload videos directly to Canvas or Sakai.
   a. If not possible to completely avoid YouTube, consider downloading and putting in OneDrive for students to access.
   b. Videos can also be uploaded onto the Rutgers Global Youku channel if provided to rose@global.rutgers.edu in advance. Youku is a Chinese video hosting service.

3. If posting any assignments that require students to access articles on websites like NYT, consider creating a pdf of the article to upload to Canvas or Sakai.

Rutgers Global and OIT are Currently Exploring Initiatives
In order to avoid some of the obstacles noted above, and to ensure student access, Rutgers Global is working on couple initiatives to help faculty and students, primarily for the ROSE program.

1. ROSE students only will be assigned a non-scarletmail Rutgers email account. Students scarletmail emails will be forwarded automatically to this newly assigned @rutgers email address. Once implemented, Rutgers faculty will be less burdened with alternative email addresses. Timeframe is expected by September 1.

2. Exploring to utilize a service that would allow ROSE students to access resources like sakai and canvas more efficiently without major buffering or disruptions. This option would also potentially allow students to access content like YouTube videos if embedded in Blackboard, Canvas, Sakai or similar platforms. This is still being tested and not guaranteed that it will work or for how long it may work. This possibility should also not be widely advertised as to avoid attention and lessen possibility of future restrictions.