Website without the net

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Background

- TESS-India (Teacher Education through School-based Support in India)
- Working to improve practice of primary and secondary school teachers
- Started in 2012, running over 7 key states



Background

- Project led by The Open University's International Development Office
- Funded by UK Aid
- Create multilingual teacher professional development programme
- Commitment to release content online (Open Educational Resources)





Website

- Project had already created a website
- Focused on project stakeholders time to shift focus to the teachers
- Initial phase:
 - Make the site mobile friendly
 - Import the learning materials
 - Videos hosted on YouTube it can detect bandwidth and provide lower quality videos where appropriate
 - Provide fast & simple route to find relevant content

Content discovery

- Target users might have connectivity but...
- Don't assume users will have significant time/budget to browse site

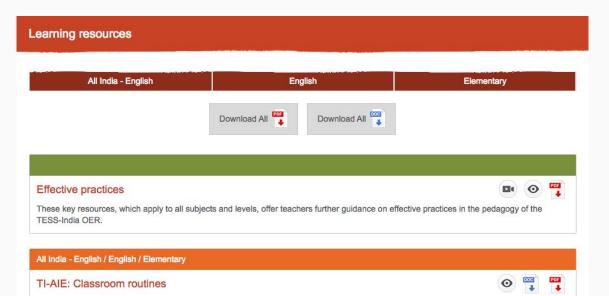
Content discovery

Simple filters to find relevant content (state, subject and level)



Content discovery

List of content relevant to user's selection of state, subject and level



Content 'take away'

Option to download zip file of all content relevant for the user



Result: website for teachers

Mobile



Desktop



Ambition

Deliver the website to users in no bandwidth locations using:

- Fixed media
- Standalone wifi hotspots

Create static site

- Alternative site templates
- Process to save all pages out as HTML files
- Copy all site assets such as images
- Process to handle embedded YouTube videos
- Generate PDF and Word zip files for every combination of filters
- Learning Materials listing page client side filtering
- No site search

Result: website on fixed media



Create standalone WiFi hotspot

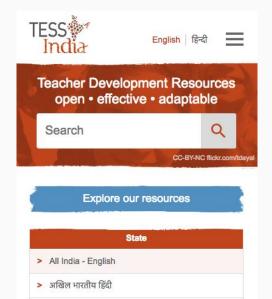
- Raspberry Pi (Raspbian OS) configured as a WiFi access point webserver
- Process to generate site similar to static site build process (minimise processing demand on low power device)
- Implement site search using SQLite
- Site files on SD card

Result: website on wifi hotspot



One site - three modes of delivery

Internet



Fixed media



Standalone WiFi hotspots



Outcomes

- TESS-India's in-country team are delighted
- Aiming for wider distribution subject to funding
- Get tech team involved as early as pos
- Reduce the pressure on low power device.
 - Design site to minimise what needs to be done by 'server-side'
 - Use process to create static site to do any remaining 'heavy lifting'
- Help users find relevant content that they can 'take away' and use offline.

Resources

TESS-India website:

www.TESS-India.edu.in

The Open University's International Development Office:

www.open.ac.uk/about/international-development