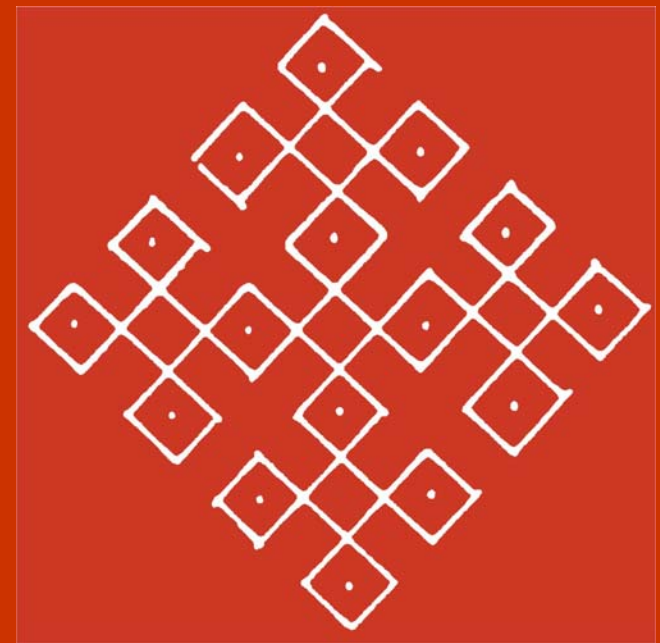


Open Source Solutions (OSS) powered by Language Computing (LC) for Children

with special reference to rural areas



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Requirement of appropriate infrastructure:

- Computers in the classroom
- Projectors
- Educational software (Indian language enabled)
- Teaching materials
- Computers for individual or team-work
- Technical Support
- Accessories (printer, scanner, digital camera, etc)
- Local network, Internet, etc.

Some Identified Thrust Areas

- Useful/Relevant Content (E-Learning)
- Content Maintenance
- Awareness Campaigns/Centers (Users and Practitioners)
- Software and Hardware Upgradation
- Training for Trainers/Teachers
- Forums, Mailing Lists for interaction
- Physically Challenged Children

Area 1

Useful and Relevant Content

Despite having an inventive technology infrastructure, are unable to attract target users because of general lack of relevant contents (specifically organized contents).

Suggested OSS and LC Solutions

Solutions	OSS	Work carried out in Indian Languages
Content/Course Management Systems (CMS) or Learning Management Systems (LMS)	Zope/Plone, Drupal, Mediawiki, Moodle, etc.	Marathi*, Hindi, Gujarati, Bengali, etc
Office Suites	OpenOffice.org, Abiword, etc.	Marathi*, Hindi, Gujarati, Bengali, etc
Audio-Visual Contents	Animation Softwares like Blender etc.	Marathi*, Hindi, Gujarati, Bengali, etc
Educational Channels (viz. NCERT) Broadcasting	Audio-Visual tutorials on curriculum	Marathi*, Hindi, etc
Writing Aids	Spell Checker Dictionary Thesaurus	Marathi*, Hindi, Gujarati, Bengali, etc

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Content Maintenance

Qualitative contents needs to be archived, maintained and indexed for searching purpose especially for **e-books**.

Suggested OSS and LC Solutions

Solutions	OSS
Digitized Hard Copies	OCR's-Optical Character Recognition
CMS/LMS	*Zope/Plone, Moodle, etc
Open Type Documents (odt)	OpenOffice.org
Programmatic way	GNU/Linux Tools

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Area 3

Awareness Campaigns/Centers (Users and Practitioners)

All segments (female, kids, minors, physically challenged, Sr. Citizens) should be made aware of OSS and LC significance that too in their mother tongue. **Since children has social impact during their learning phase.**

Suggested OSS and LC Solutions

Solutions	OSS
Workshops, Seminars for ALL	Using Indian Language Enabled Systems and Tools*
Language Earning Tools	*Edutainment softwares like gcompris, etc
Documentaries	Audio-Visual recording, Editing tools of GNU/Linux
Audio-Visual Contents	*Animation Softwares like Blender etc.
Educational Channels (viz. NCERT) Broadcasting	*Audio-Visual tutorials on curriculum

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Area 4

Software and Hardware Upgradation And Optimization

Upgradation of existing OSS solutions powered by Language Computing as per the requirement is crucial for better features and support.

Suggested OSS and LC Solutions

Solutions	OSS
Add-On Modules	*GNU/Linux based upgrades (Office suites, browsers, device drivers, etc)
Thin Client Machines	*Linux Terminal Server Project (LTSP) is an add-on package for Linux that allows many people to simultaneously use the same computer
Fonts	Fonts Encoding Converters*

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Training for Trainers/Teachers

Trainers, Teachers, Operators, grassroots practitioners need to understand the basic technology, such as how to navigate the Internet, use writing tools or to optimize the use of the available tools to solve the purpose. In-service Training using OSS/ICT applications in their local language will motivate them.

Suggested OSS and LC Solutions

Solutions	OSS
Operational knowledge of text processing	Indian Language enabled GNU/Linux based tools (Office suites, browsers, CMS, etc)*
LMS/E-learning Tools Moodle, Mediawiki etc*	LMS/E-learning Tools Moodle, Mediawiki etc*
Subject Learning Tools	*Edutainment tools like gcompris, tuxmaths, tuxpaint, etc

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Area 6

Platform for interaction

User groups should have a platform where their technical or the other difficulties can be discussed and sorted out. Also there is a need of such platforms to popularize or document best practices in education field in their own language.

Suggested OSS and LC Solutions

Solutions	OSS
Meeting sessions	*Best practices
Forums	Zope/Plone based forums*
Mailing Lists	Viz. Fsf-edu -- Free Software for Education

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Physically Challenged Children

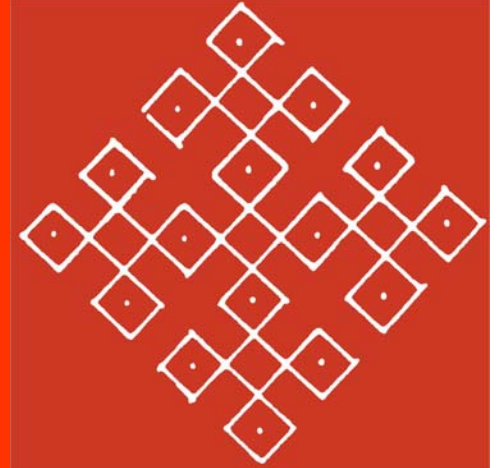
Physically challenged also has right to prosper and grow with knowledge in a way that normal children acquires, easily and happily that too in their own language.

Suggested OSS and LC Solutions

Solutions	OSS	Work carried out in Indian Languages
Braille Tools	Keyboards, etc	All IL
Accessibility Aids(magnifiers, speech interfaces, etc)	GNU/Linux based tools enabled for Indian Languages (gnomes's Gnopernicus, kde's kttd, etc)	Marathi*, Telugu

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Conclusions



- **A Mothers Perspective:**

Community-based development is driven by flourishing and sustainability of local languages.

Child becomes conceptually sound when acquires knowledge through her/his mother tongue. (viz. Japan)

- Consolidated efforts with help of grassroots practitioners and stakeholders from education, government, technologists also user community including children and teachers plays crucial role in the mission.

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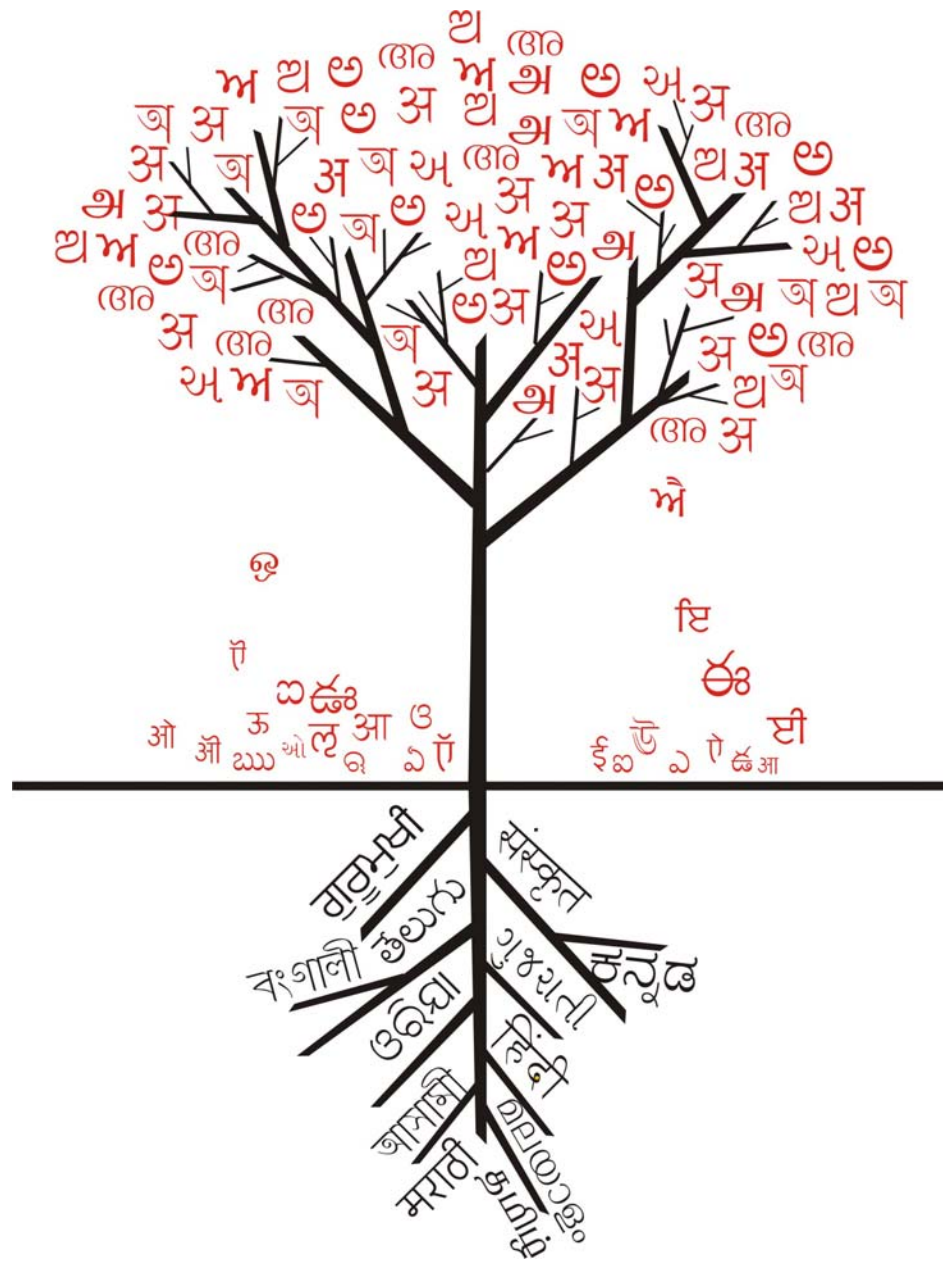
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