

For quick reference, here are checklists for each key implementation factor: leadership, curriculum and assessment, research and evaluation, professional learning, information communications technology, and sustainable resourcing.



## Addendum

### Project RED: Global Toolkit for Education Transformation Checklist

## Leadership

In centralized and decentralized education systems, effective school directorship is essential to create successful education programs and enable greater student achievement. Professional learning and university-level preparation and, on-the-job and intern experiences are required to development high-quality leaders. Additionally, today's school directors must be skilled in change agency to facilitate second-order changes and help each educator scaffold to new practices and expectations.

Governments are advised to mandate the following skill development for school directors.

- Community and organizational communications
- Knowledge of research around effective ICT programs
- Incorporation of project managers
- Designing and implementing teachers' professional growth for effective ICT practice
- Targeted observation skills in recognizing effective/ineffective ICT practices
- Building communities of professional practice for building human capacities for change and program success
- Change agency

### Leadership Recommendations for Centralized Education Systems

- National education technology plan
- Higher education incorporate effective ICT training for school directors
- National portal for leaders around ICT practices

### Leadership Recommendations for Decentralized Education Systems

- Create, disseminate a national education technology plan
- Incentivize higher education to create ICT leadership curricula
- Incentivize local/regional/state/provincial systems to establish school leader ICT expertise standards
- Provide tools for regional organizations to provide professional growth opportunities for school leaders in ICT implementation and "change agency"
- Recommend online portals and management systems for leaders to access resources and collaborate around ICT

# Policy

Policies are principles or rules that drive education decision making and practice. Policies and procedures enable and guide schools in carrying out plans. Technology policies are important drivers of practice, expectations, and stakeholders' behavior. The key question for governing bodies is not whether the benefits of technology outweigh the costs (research and best practices prove this) but how to implement programs to ensure effectiveness and results. Policies at every level-national, state, regional, local, and at the classroom level matter greatly regarding the efficacy of education technology implementation. Sound, consistent policies and practices can make a difference between success and failure of such programs.

## Local and School Level Policies

Key questions to guide development of filtering policies and practice:

What is appropriate for students and teachers to view, read, and write online?

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How does the school set and promote the above expectations through policy and practice?

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Is there a difference if students and teachers bring their own devices or use school-issued devices?

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What will be the parents'/caregivers' roles in the filtering expectations?

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How does this get communicated and enforced?

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## Creating the Acceptable Use and Other User Policies

Define and describe the reasons for providing your school or school access to digital, networked, and abundant content.

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Describe the instructional and management benefits and the reason why the information infrastructure is mission critical.

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Describe the benefits—aligned practices and applications that are being provided for and encouraged, and who can utilize them.

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Describe conditions for experimenting and evaluating practices and applications not identified in the document.

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## Policy – continued

Define and describe broader information–ethics issues within the context of the school’s/district’s information infrastructure, including but not limited to: copyright, information integration, and respect for the infrastructure.

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Describe the information infrastructure of the school or district, including hardware, software, and support staffing.

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Define and describe practices and applications that are prohibited and the consequences of using the information infrastructure in these ways.

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Define and describe technical and procedural practices that will be applied to the information infrastructure to monitor and restrict use and abuse.

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Provide support materials or access to support materials to assist faculty, staff, and students in learning to make appropriate, productive, and safe use of the information infrastructure.

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## Curriculum and Assessment

The most important role of government is to create and enforce policies to ensure that students are maximizing their learning.

### Recommendations for Centralized Education Systems

- Standardized curriculum and instruction
- Technology-transformed interventions to be used every day with struggling students
- Technology-transformed solutions are used in all classes
- Digital curricula and content is aligned with standards, provides real-time assessment and data, and adapts to individual students

### Recommendations for Decentralized Education Systems

- Provide a curriculum framework and instructional guidelines, allow flexibility of implementation
- Provide school leaders with Project RED's data around key implementation factors and a playbook for ICT strategizing and practice
- Provide schools guidelines for selecting digital resources:
  1. The curricula and content must match the desired learning outcomes
  2. The content platform must provide real-time assessment data that students and teachers can use to adjust instruction and learning activities
  3. The content should elicits student creativity and critical thinking, and be adaptive to each student's level of understanding

## Research and Evaluation

### Recommendations for Centralized Education Systems

- National online assessment portal (formative and summative)
- National high-stakes testing online
- Use common end-of-unit summative tests and formative assessments
- Independent researchers to conduct a program evaluation

### Recommendations for Decentralized Education Systems

- Purchase and/or partner with federal government to acquire an online assessment portal (formative and summative)
- Create and use common end-of-unit summative tests
- Provide teachers with formative assessment resources
- Create and implement internal program assessments for each key implementation components
- Hire and/or partner with federal government to bring in independent researchers to conduct a program evaluation

## Professional Learning

### Recommendations for Centralized Education Systems

- National professional learning project plan
- Ministry of Education skills in:
  1. Project RED Design
  2. Change leadership
  3. Hardware and software solutions
  4. Individualized and personalized instruction
- National train-the-trainer model
- National PD in advance of student device deployment
- National PD access through online, face-to-face, and blended models
- National teaching standards and accountability measures
- National standards for high quality teachers; certification/accreditation

### Recommendations for Decentralized Education Systems

- Provide school leaders with a professional learning model that incorporates the Project RED Design
- Incentivize PD through conditional funding tied to program development and dissemination
- Nationwide virtual network for the delivery of professional learning
- National virtual repository for curriculum, lesson plan samples, and resources

### Centralized and Decentralized Systems

- Professional learning programs are driven by data and research
- Time, resources, incentives, and requirements, based on standards, are available for all educators
- PD opportunities are accessible through blended models
- PD opportunities can be personalized
- Establish local, national and global professional learning communities

## Information and Communications Technology (ICT)

### Recommendations for Centralized Education Systems

- Direct the assessment of current ICT status with desired outcomes
  1. Software
  2. Cloud enablement (virtualization, automation, provisioning, single sign-on, metering, etc.)
  3. Digital content, instructional software, and other digital resources
  4. Monitoring and management software
  5. Security
  6. Data Backup
- Develop a 5-15 year term strategic plan to move toward 1:1, with interim goals (10:1, 5:1, 2:1)
- Build out the national technology infrastructure
- Project manage the strategic plan

### Recommendations for Decentralized Education Systems

- Assess current ICT status with desired outcomes
  1. Software
  2. Cloud enablement (virtualization, automation, provisioning, single sign-on, metering, etc.)
  3. Digital content, instructional software, and other digital resources
  4. Monitoring and management software
  5. Security
  6. Data Backup
- Determine maximization of existing ICT
- Create a 5-15 year term strategic plan to move to 1:1
- Investigate and disseminate Internet access school options
- Investigate feasibility of school run network with the Cloud school servers
- Possibly partner with the central government or a consortium of schools to build out the infrastructure, and implement larger area network with standardized platforms

## Sustainable Resourcing

### Recommendations for Centralized Education Systems

- Develop a long-term strategy for the creation and support of a state or national network that provides universal access to the Internet
- Secure long-term funding sources
- Mandated efficiency usage of the technology to enable funding reallocation
- Incentivize local leaders to find cost savings and efficiencies through the use of technology
- Provide equitable funding to schools to support their technology efforts

### Centralized and Decentralized Systems

- Construct a plan to obtain and renew needed resources
- Choose technologies to optimize effectiveness and costs over the long term
- Choose digital curriculum, online testing and assessment resources, and integrated data management systems (Learning Management System, Student Information System, etc.)