Collaborative and Inclusive Design of an International Shared Measurement System

American Evaluation Association
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2:40-4:10

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Agenda

- **Introduction to Bill and Melinda Gates Foundation**
  - **Introduction to Global Libraries**
- **Overview of Design Process for the Common Impact Measurement System (CIMS-pronounced "SIMS")**
  - **Developing the Indicators**
  - **Prioritizing the Indicators**
  - **Define Methodology Specifications**
- **Vision and Next Steps**
  - **The Data Collection System**
- **Impact Assessment Specialist Panel**
- **Questions**

EVERY PERSON DESERVES THE CHANCE TO LIVE A HEALTHY, PRODUCTIVE LIFE.

BILL & MELINDA GATES *foundation*

ALL LIVES

HAVE EQUAL VALUE

Global Development Program

Increasing opportunities for people in developing countries to overcome hunger, poverty, and disease.

Global Libraries
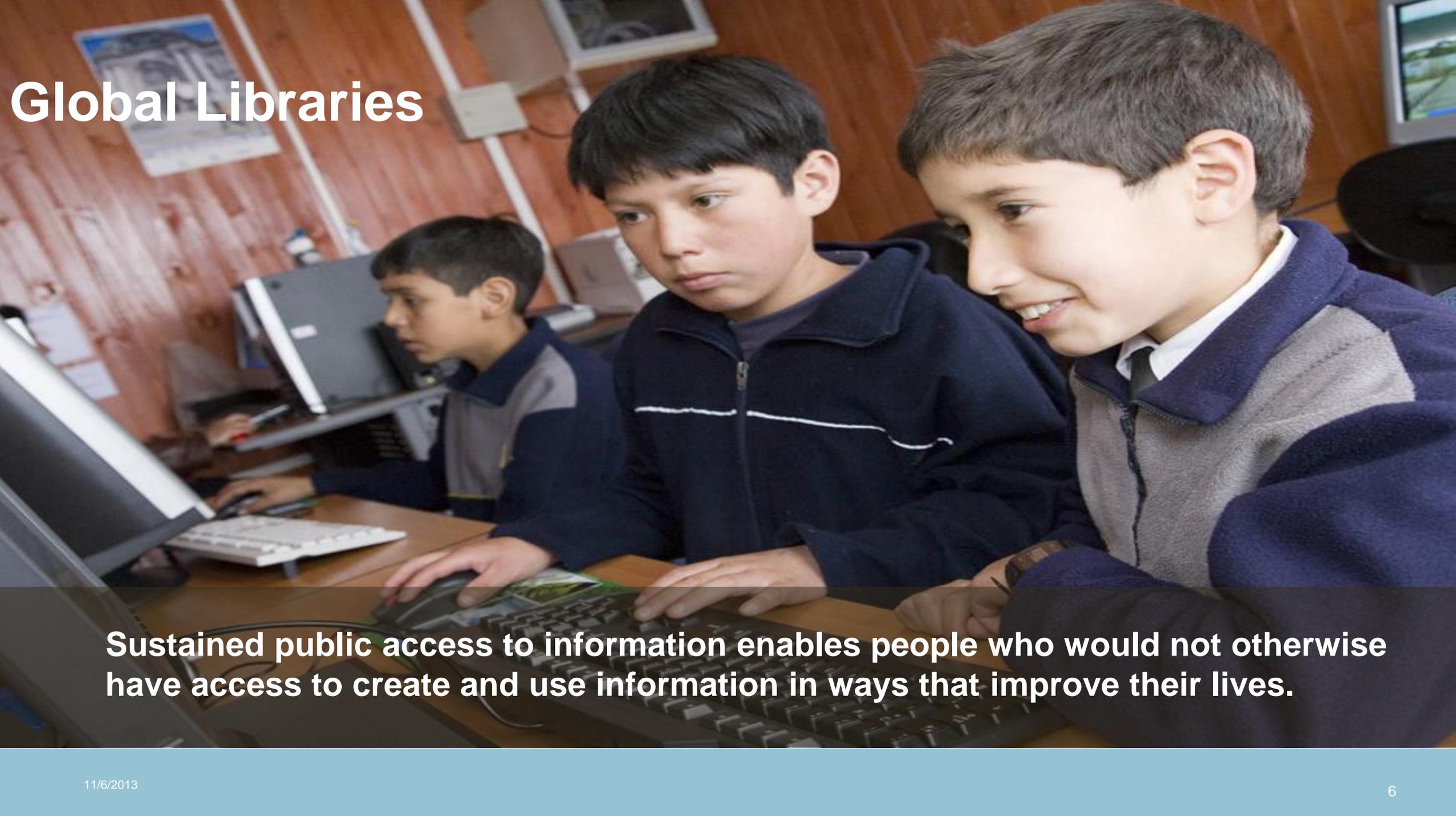
Sustained public access to information enables people who would not otherwise have access to create and use information in ways that improve their lives.

Why Public Libraries?

- Access to information is at the core of their mission

- Trusted institutions that are used by people in the community

- Sources of ongoing financial support, including public funding

- Appropriate venue that uses technology to promote access to vital and useful information
  - Trained staff
  - Community involvement

- Librarians and staff can play a critical role in helping individuals develop skills and confidence

U. S. Library Program

Total PCs Granted: 47,200
Buildings Receiving a Grant: 10,915
Training Opportunities: 62,000

"If you can reach a public library, you can reach the Internet"

Promoting Information Access at Scale: Country Grants

- **Wide-scale initiative to support provision of public access to computers and the Internet through public libraries, working in developing and transitioning countries that show a need and readiness to improve public libraries throughout the country.**

- **Our funding helps fund gaps for technology in libraries, including:**
  - Hardware and software
  - Internet connectivity
  - Training for library staff
  - Advocacy and outreach
  - Impact assessment

Components Necessary for Success

Building capacity beyond mere access is key to improving lives

- Impact planning and assessment
- Community engagement
- Appropriate infrastructure
- Computer and Internet access in public libraries
- Advocacy and partnerships
- Locally produced and relevant content
- Technology training
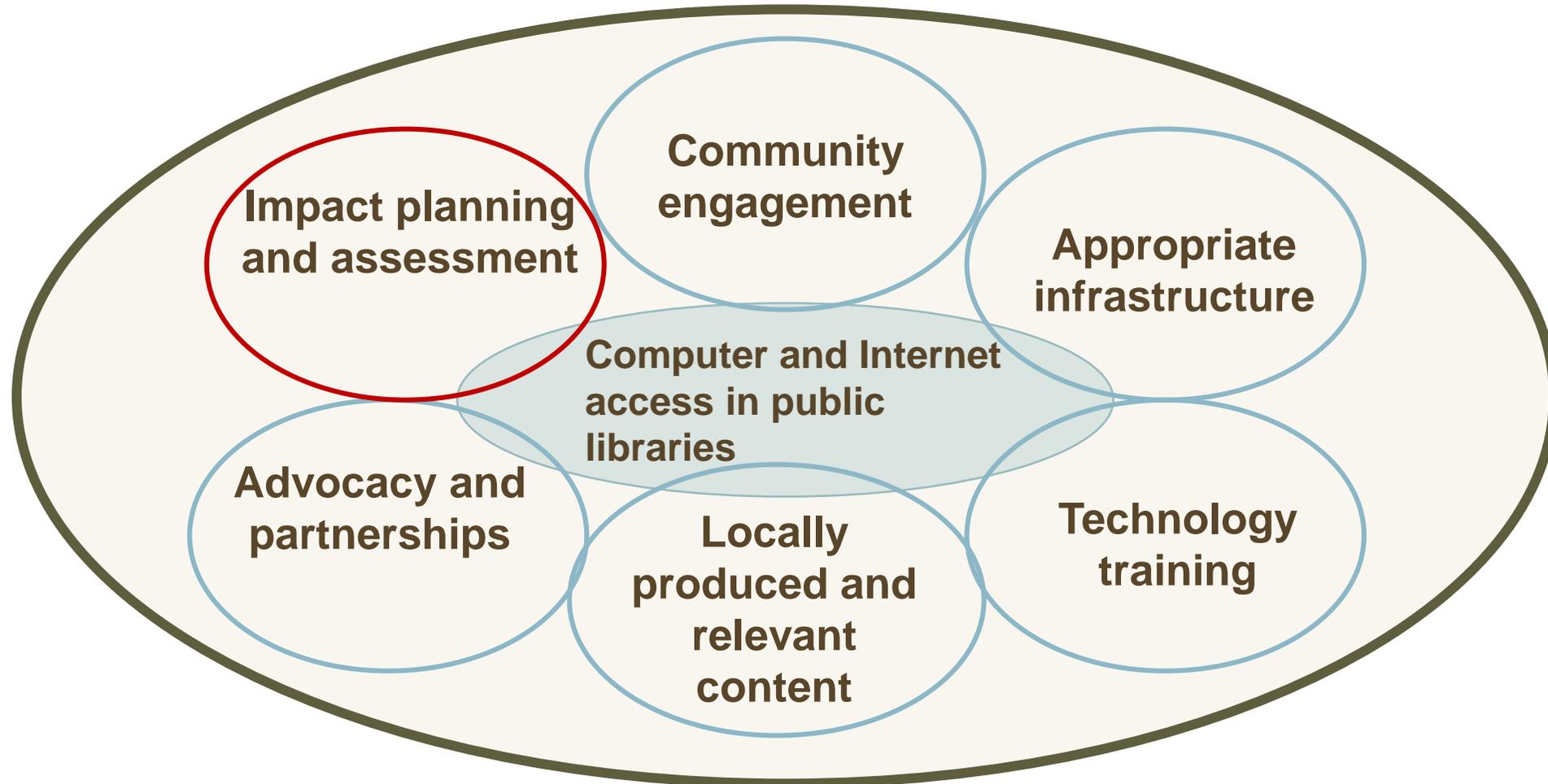
Geographic Reach

Planning and Country Grants:

- Botswana
- Bulgaria
- Chile
- Colombia (p)
- Indonesia (p)
- Jamaica
- Latvia
- Lithuania
- Mexico
- Moldova (p)
- Poland
- Romania
- Turkey (p)
- Ukraine
- United States
- Vietnam

Early donations and ATLA awards:

- Australia
- Argentina
- Bangladesh
- Brazil
- Canada
- China
- Colombia (ATLA Bogotá 2002 and Medellín 2009)
- Denmark
- Dominican Republic
- Finland
- Guatemala
- Greece
- Holland
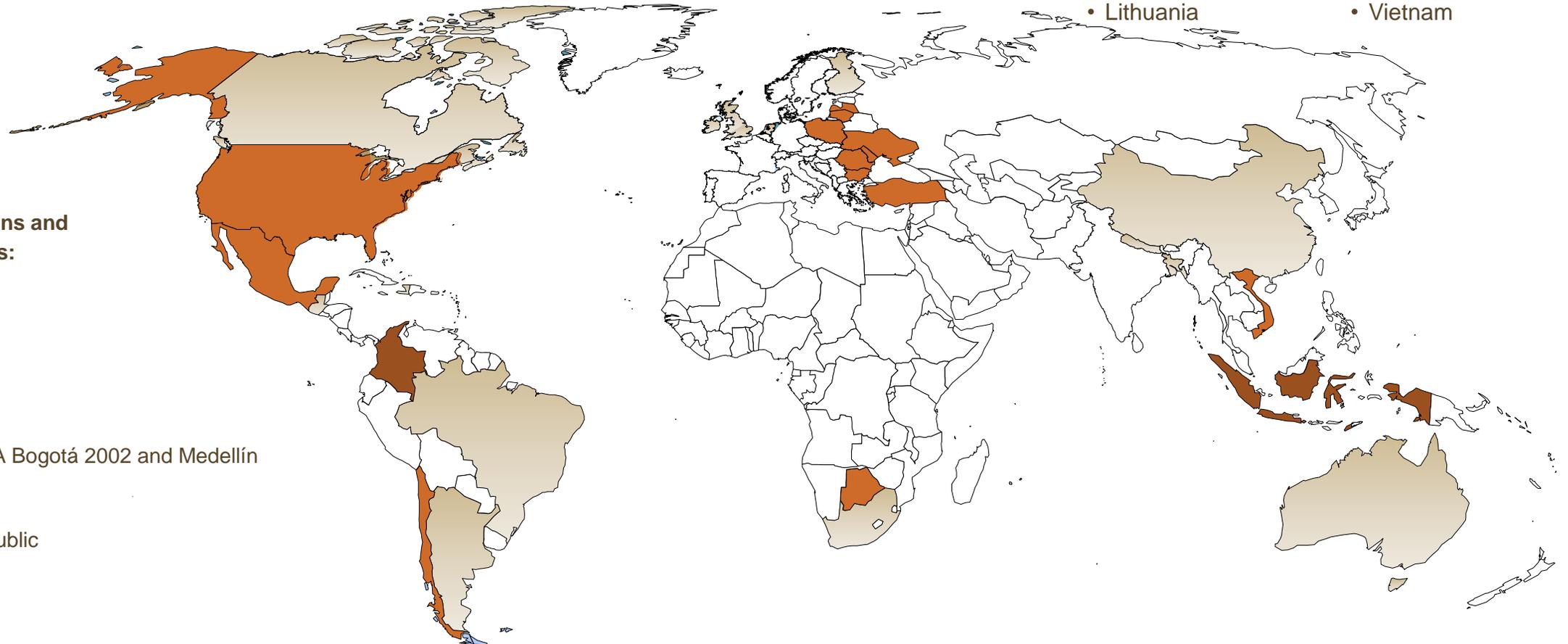
Stats from these Global Country Grants[*]

LIBRARIES CONNECTED 12,964

LIBRARY STAFF TRAINED 20,011

WORKSTATIONS INSTALLED 48,866

USERS TRAINED 1,522,761

…but no way of comparing or aggregating user outcomes across countries

The New Common Impact Measurement System (CIMS): Libraries at the Center of People's Lives

The Goal of the System Is to Provide GL and Grantees with Standardized Data to Better Track Individual and Collective Progress

Standardized data will allow GL and grantees to:

Aggregate data to determine grantees' shared impact and enhance the ability to advocate for the importance of public libraries

Track data over time in order to identify and monitor trends

Compare data across countries to see how we can learn from countries that are achieving results and share lessons with other sites

Use a single, definitive source of data for ease of use in speeches and advocacy so that there is no confusion about how the numbers are calculated or where they come from

Leverage a new online reporting system to capture, analyze and display data, giving POs and grantees visibility into definitive – and dynamic – results

A Collaborative and Systematic Process Was Used to Arrive at the Common Impact Measures (CIM) Framework

Development of Indicators

Prioritization of Indicators

Define Methodological Specifications

- **Developed an outcomes framework and organized into four levels:**
  - Skills and Confidence
  - Behavior and Internet Use
  - User Benefits
  - Societal-Level Benefits
- **Developed an indicator framework within these outcome levels, vetted, and circulated to country teams and GL staff for review and prioritization**

- Asked Country teams and GL staff to **place indicators in one of three categories**:
  - **Required** for all countries
  - **Included** in an optional menu
  - **Not included** in the Common Impact Measures Framework
- Analyzed the results and **narrowed down the number of indicators** based on a set of decision rules

- Design **specifications for the indicators:**
  - Identify the sample for each indicator
  - Determine the frequency and method of data collection
- **Create survey questions** for the common indicators
- Work with country teams to **embed new questions into existing measurement processes**

Through CIMS, Grantees Have Identified and Prioritized Critical Outcomes and Indicators for Measuring Improvements in Library Users' Lives across Seven Areas

Issue Area	*Example Outcome*	*Example Indicators*
Digital Inclusion	Library visitors know how to use technology to fulfill their goals	• # of library visitors who **learn basic computer skills** as a result of public library services • # of library visitors who **learn general internet skills** as a result of public library services
Culture and Leisure	Library visitors are aware of community or civic activities	• # of library visitors who are **aware of community or civic activities** as a result of technology provided at the public library
Education	Library visitors participate in informal learning opportunities	• # of individuals who use technology at the public library to **search** for informal education resources • # of library visitors who use public library services to **participate** in informal learning opportunities
Communication	Library visitors communicate with family and friends	• # library visitors who **email** with family and friends using technology at the public library • # of library visitors who communicate with family and friends through **Skype, instant messaging, Facebook or other online tools** (excluding email) using technology at the public library
Economic Development	Library visitors find and apply for job opportunities	• # of library visitors who use services at the public library to **find** job listings or employment opportunities • # of library visitors who use services at the public library to **apply** for a job
Health	Library visitors find health information that meets their needs	• # of library visitors who **find health information that meets their needs** (e.g., related to prevention, treatment, health providers) as a result of public library services
Government & Governance	Library visitors access government resources and information	• # of library visitors who **search for government information** using technology at the public library • # of library visitors who **use a government service** through technology at the public library

Indicators focus on absolute numbers (#) rather than percentages (%) so that GL can aggregate data to determine overall percentages for all grantees

Development of Indicators

Inclusivity Was the Core Guiding Principle for the Design of the CIMS

To facilitate and incentivize adoption and *use* (via buy-in and shared ownership)

To ensure the indicators are truly relevant to in the country context and not just created by the foundation

To minimize burden on grantees

To leverage grantees' expertise

Global Libraries grantees' Impact Assessment Specialists and other critical stakeholders were engaged in the design process as often as possible

Summary of Stakeholder Engagement in CIMS Design

Process

- The Common Impact Measures Framework was designed in collaboration **with over 15 members from country teams, GL staff, and external experts**
- The indicator framework was sent to **15 external stakeholders and 13 countries** for prioritization. Each country provided consolidated results from multiple members of the country team

Domain-Specific Prioritization of Indicators

- **17 respondents provided initial voting on which of the 265 potential indicators** should be (1) Required, (2) Optional, or (3) Taken out of the Common Impact Measures Framework
- **48% of the votes were for a proposed indicator to be "required",** so FSG worked to narrow the number of "required" indicators to a more manageable number of 41 indicators "required" and 53 as "optional"
- The "required" indicators are collected through **20 survey questions** (11 content questions and 9 common demographics questions)

Methodology/ Survey Design

- Defining the methodology specifications became a work stream of its own in order to make CIMS clear and consistently implemented
- Practical Validity standard for the purposes of feasibility

We Used Many Types of Data Collection and Organizing Processes

❖ Direct engagement from grantee Impact Assessment Specialists at Impact Work Group meetings

❖ Individual Impact Assessment Specialist phone call interviews

❖ Impact Assessment Specialist Skype group calls

❖ Online asynchronous voting exercise with all Impact Assessment Specialists, Advocacy Specialists, and Program Directors

❖ Online asynchronous voting exercise with GL staff and leadership (During this phase Impact Assessment Specialists were encouraged to seek input from country grant team members, and to report back each group's consensus votes.)

❖ Impact, Advocacy, and Policy staff and leaders color-coded the indicator votes/comments to help the FSG team hone and prioritize

FSG tracked and summarized the various amounts of stakeholder engagement throughout the process

The Input of Country Teams Was Critical to This Process, Helping to Shape CIMS Over the Course of More Than a Year

Convening in Seattle where grantees help to develop CIMS outcomes

Grantee team input on how to prioritize CIMS indicators

Some specialists provide feedback through the TechWG GL Toolkit space

Grantee convening: discuss and refine CIMS methodology

CIMS finalized; begins to be piloted

Methodology developed and finalized

Mar '12 · **Apr/May** · **Jun/Jul** · **Aug/Sept** · **October** · **November** · **December** · **January '13** · **February** · **March** · **April**

Five grantees review proposed CIMS outcomes and indicators (drafted by FSG and GL)

Voluntary calls with grantees to discuss CIMS prioritization

Grantee calls: gather feedback on CIMS methodology

Optional grantee feedback via email on decisions made by GL in response to convening discussions

Launch- GL Director Emailed Grant Directors

GL's Impact, Advocacy, and Policy Leaders and Staff contributed to and guided the process. GL program officers were strategically included as well.

Prioritization of Indicators

Respondents Overwhelmingly Voted for Most of the Indicators to Be " Required for All Countries"

Voting Results

Domain Area	Distribution of Votes by Category		
	In	Optional	Out
Digital Inclusion	56%	29%	15%
Culture and Leisure	44%	38%	18%
Education	49%	35%	16%
Communication	64%	20%	16%
Economic Development	43%	37%	20%
Health	36%	43%	21%
E-Government	48%	37%	15%
Average	**48%**	**35%**	**18%**

Key Observations

- From the 265 indicators that were voted on, the 17 respondents voted for **many of the indicators to be "required" and few indicators to be "out" of the framework**

- Some countries did **not vote for a single indicator to be "out"**

- Votes by individuals, and across countries, were **at times inconsistent on similar themes between different domains.** For example:

  - The relative prioritization between "Use" or "User Benefit" differed by domain

  - Indicators related to time or money saved were prioritized in some domains but not others

  - Indicators in the logic-chain of "able to search / search / use / find" were prioritized differently in different domains

- **Confidence** indicators were consistently a lower priority than **skills** indicators

Given the large number of required indicators, FSG's analysis reduced the total number of required indicators to a more manageable number

A Structured Process of Narrowing Down the Indicators Resulted in 41 Required Indicators for the CIMS Framework

Process of Narrowing

1. A set of **decision rules were used** to systematically arrive at recommended indicators:

   - All **7 domain areas** must be represented
   - Indicators with the **highest number** of "in" votes were selected to be "in," though FSG used discretion to reduce redundancy in indicators
   - There would be a **minimum of 3 required indicators** for each domain area
   - **Not all "levels"** (i.e., Skills, Use, User Benefit, and Societal-Level Benefits) must be represented
   - **No maximum number** of indicators per domain

2. After applying the decision rules, there were still 78 indicators, so FSG used **two approaches to reduce the number of indicators required by all countries:**

   - Consolidated all domain-specific "skills and confidence" indicators into a single broader skills / confidence indicator in Digital Inclusion
   - Prioritized the "search" and "use" indicators, over "able to search" and "find"-type indicators when votes for a concept were spread across the "able to search, search, find, use" model

Final Framework: Grantees Are Required to Report on 41 Indicators and May Choose to Report on Any of the 53 Optional Indicators

Required Indicators

	Digital Inclusion	Culture and Leisure	Education	Communi-cation	Economic Development	Health	E-Government
# of Indicators:	12	3	6	3	8	4	5

(41 Total)

Optional Indicators

	Digital Inclusion	Culture and Leisure	Education	Communi-cation	Economic Development	Health	E-Government
# of Indicators:	8	3	13	2	18	9	5

(53 Total)
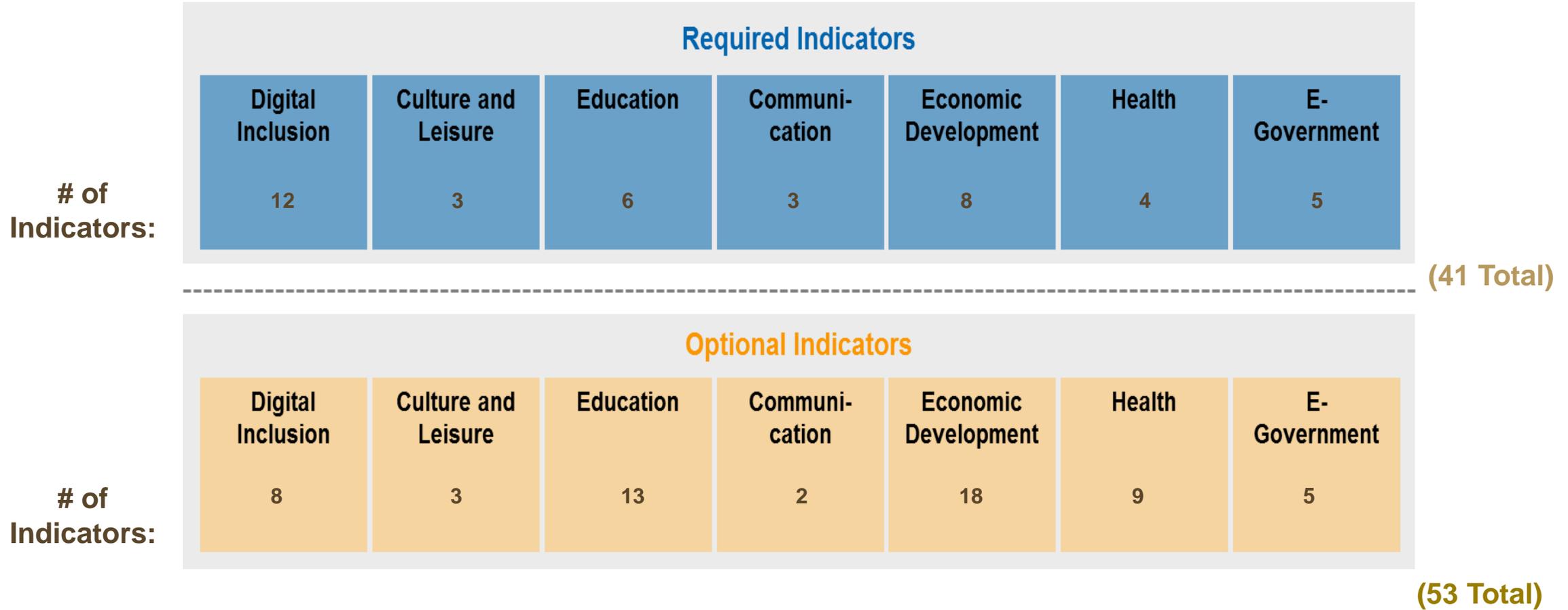
Define Methodology Specifications

GL Worked with Grantees to Clarify All Methodology Specifications

Question wording: Grantees use translations of the exact wording of CIMS survey questions	**Data collection instrument: Electronic or paper survey (determined by grantee)**
Frequency of data collection: Annually	**Target population**: Random sample of library visitors, as outlined above

Guidelines related to establishing a sample of <u>libraries</u> in which to administer the survey:
 	
    -**Eligible libraries** – GL-supported libraries required (including an additional comparison set of non-GL-supported libraries is optional)
    -**Sample size** – Grantees define a sample that collectively represents the diversity of GL-supported libraries in their country (no minimum required)
    Geography – Use of stratified random sampling approach recommended (not required)
    -**Size of library** – Use of stratified random sampling approach recommended (not required)
	Guidelines related to establishing a sample of <u>survey responses</u>:
	
	    -**Sample size** – minimum of 400 responses required
	    -**Randomization** – random sampling approach required
	    Seasonality, days of the week, and times of day – grantees determine the approach that will yield a representative sample of library visitors
	    -**Library visitor age** – 13 years and older recommended (not required)

Handling missing data: Missing data are omitted, i.e. labeled "No response." It is likely and appropriate that each survey question will have a different "n," or sample size	

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Indicators Were Turned into Survey Questions

I have used technology (e.g., WiFi, Internet, computers, Facebook, Skype) at the public library in the last 12 months to: *(Please select all that apply)*

- create online content (e.g.., posting on a wall or comment board, blogging, updating an online profile, uploading photos, designing websites or web content)
- learn about the news
- communicate with my family and friends using email
- communicate with my family and friends using Skype, Facebook or other online tools (excluding email)
- communicate with others for business purposes
- search for agricultural information (e.g., farming equipment or techniques, crop prices, weather information)
- buy products or services
- sell products or services
- search for government information (e.g., laws or regulations, descriptions of government programs and services, forms, or government jobs)
- use a government service (e.g., download/ fill out/ submit forms, pay taxes, or request documents/licenses)
- participate in governance processes (e.g., research politicians or citizens' rights, interact with public authorities or elected officials, learn how to volunteer for political events, or participate in political movements)

If you indicated that you communicate with family and friends using email, Skype, or other online tools, please continue to Question #6b. Otherwise, please skip to Question #6c.

Vision: Blending Stories & Stats

420 millions
China Internet users

337 millions
European union

110 millions
India

76 millions
Brazil

32 millions
Mexico

5 millions
Portugal

Hand made infographic by Jose Duarte

CIMS Results Reporting, Storage, Visualization, and Use

A new information management system must enable GL and its grantees to report, store, organize, analyze, and use impact assessment data, including Performance Metrics (PMs) and CIMS data.

Specific Objectives:
- Provide a structured and efficient method of assembling, aggregating, and analyzing grantees' results data
- Enable GL staff and grantees to produce, view, interpret, save, and download data and reports
- Minimize duplication in effort and scope with other data collection projects and reporting solutions at the Bill & Melinda Gates Foundation

Current status:
- Gathered system requirements and evaluated potential solutions (including off-the-shelf products)
- Hired vendor for project management and data management
- Hired software developer

Intended Users:
- Foundation leaders and program officers; grant directors; advocacy specialists; impact specialists; advocacy and communications consultants
- Potential future users: in-country library system stakeholders

Working on Wireframes for CIMS Visualization…

Next Steps

1. Start Collecting Data
2. Design & Build the Online Reporting Tool
3. Select User Group Testing of the Tool
4. Launch the Tool

2013   2014   Q3 2014

| GATHER REQUIREMENTS | → | DESIGN | → | BUILD | → | TEST & IMPLEMENT |

Improvements and Iterations
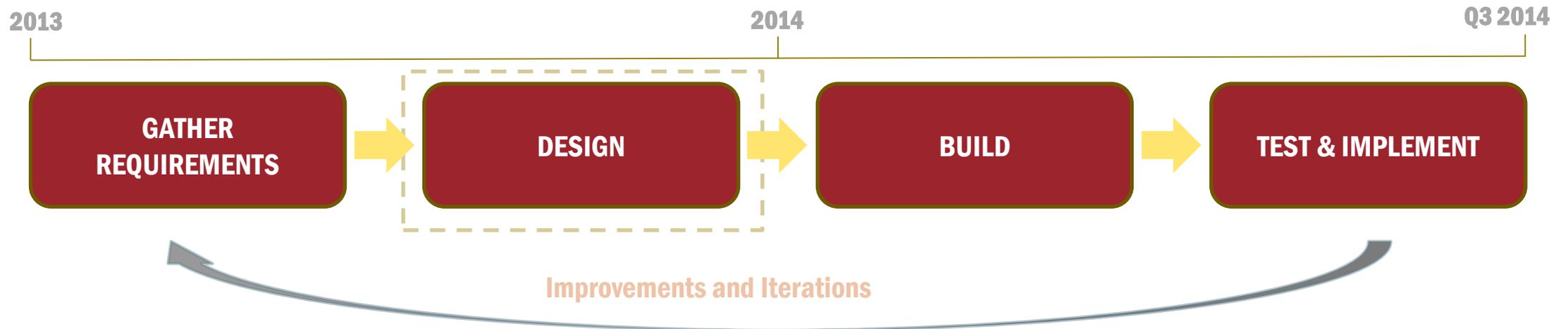
Lessons Learned

- Build in plenty of time; engagement takes time!
- Pick your battles, make sure that you know what you MUST stand firm on and then be softer on other issues where possible (both in design and implementation)
- Offer "optional" indicators (and/or some way for people to add their own custom categories/indicators) from the outset to encourage buy in
- Offer people criteria to help them prioritize and winnow down
- Use a "decision-making matrix" when getting feedback so that everyone feels heard and can see why something has ended up a certain way
- Methodology ended up being ½ the work and the most contentious part
- Expect to make small tweaks when you implement (be flexible with certain community contexts that limit your ability to be 100% consistent)
- Use long-term/existing grantees to provide energy and insight for new ones

Panel Discussion and Full-Group Q&A

- **Moderator: Jeremy Paley, Global Libraries, Bill & Melinda Gates Foundation**

- **Panelists:**

  - **Resego Taolo, Botswana**

  - **Branimira Vezhdarova, Bulgaria**

  - **Kristīne Pabērza, Latvia**

  - **Tetiana Liubyva, Ukraine**

For more information, please contact Jeremy Paley at jeremy.paley@gatesfoundation.org