"World Change Starts with Organized Documents"[1]
202 Case Study - Fall 2015
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Overview

Room to Read, an international development non-profit that focuses on literacy and gender equality, implements five different programs (girls' education, literacy instruction, libraries, infrastructure, and local language children's book publishing) across 11 different countries and in at least 3x that many languages. Room to Read's greatest resources are the brilliant in-country staff who have largely designed and implemented programs independently of the Global Office up until now. However, as the organization has grown over the past 15 years, it has become more and more challenging to start field operations in new regions or countries, and Room to Read's rate of growth has slowed drastically. With 122 million children lacking basic literacy skills worldwide, Room to Read needs to envision new ways of reaching more kids. One solution for scaling more efficiently is to standardize program design and teach other organizations to implement Room to Read's model. The chosen method for doing so was to create program implementation packages documenting Room to Read's model.

What is being organized?

Room to Read set out to standardize program design across countries by creating modules to help internal and external teams implement programs with efficacy and fidelity to program design[2]. In the past, in-country teams received lengthy unstructured, un-standardized narrative documents from various departments at the Global Office that provided best practices and vague guidelines. In order to create new standardized resources, the Global Office team first had to review existing resources and select which components to include.

These new documents function as a proxy for the role played by human staff who have always been the holders of knowledge as well as the executors of the programs. These humans were, and continue to be, Room to Read's greatest resource. However, the organization faces challenges in onboarding of new staff without resources descriptions that describe the activities staff conduct and how they

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[1] A play on Room to Read's tagline "World Change Starts with Education Children".
[2] With 1500 employees worldwide, it is difficult to ensure that all staff have a common understanding of the program design, and therefore implementation activities vary widely. When I use the phrase "fidelity to design", I'm referring to staff both understanding program design as well as implementing activities that stay true and reinforce that design.

conduct them. The purpose of the new resources is to help ensure that staff understand expectations and how to deliver on them, as well as to bridge the gap between the depth and breadth of human knowledge and experience of some staff and the lack of such on the part of other staff, so that a consistent and proven model is being implemented across all countries. Therefore, these new documents are both resources descriptions and resources in and of themselves.

The modules are semi-structured narrative documents (MS Word) that are highly standardized but also must be capable of having some level of specificity with regard to cultural context and language, and must be flexible enough to be maintained and updated easily over time. After being collaboratively drafted by staff in the San Francisco, New Delhi, Phnom Penh, Washington DC, and Pretoria offices, they are then translated into local languages and contextualized according to constraints imposed by the educational system, cultural norms, and unique properties of the languages being taught in schools. Some examples of contextualization include:

- Some languages of instruction have 20 characters to be taught while some have 45 characters. Each language requires different types of illustrations.[3]
- Photos used in the materials should reflect the communities served in each country.
- Girls' Education content should be specific to the known challenges faced by girls in each region. For example, in South Asia girls often drop out of school due to early marriage, in Southeast Asia they drop out in order to contribute to their families' income by joining the workforce (often in the sex tourism industry), and in Southern Africa girls drop out due to early unplanned pregnancy.

The modules include different types of documents that have different types of users in mind. There are:

- Training modules for Room to Read's in-country staff (to train field staff in field offices).
- Implementation modules for teachers, librarians, and principles in the resource-poor rural schools that Room to Read partners with.

Why is it being organized?

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[3] Due to large variance in languages for the Literacy Instruction program, the Global Team developed modules that outlines methods for creating curriculum rather than the curriculum itself.

Historically, it was largely left up to in-country teams to decide how to use the existing resources in order to execute most impactfully in their communities. This model had some benefits, for example, it leveraged the knowledge, skills, personalities, and experience of Room to Read's diverse staff. However, it had many drawbacks such as:

- It was challenging to communicate to investors about what was standard in Room to Read's model and approach. For example, if an investor asked how many days of training are provided to teachers on literacy instruction (how many are needed), in India the answer might be 7 due to constraints imposed by the government, while in Laos it might be 10.
- Impact and efficiency measurements varied widely across countries. Monitoring implementation performance of the country teams provided difficulties because it was not clear what was expected and therefore what should be monitored and measured.
- Training new staff to implement programs with fidelity to design required a lot of human resources because much of the knowledge lived in humans' brains rather than in permanent proper documentation.
- Allowing other organizations to implement Room to Read's model was impossible. Not only did this keep Room to Read from scaling, but it left room for competitors to spread their program models, thereby potentially constraining Room to Read's ability to fundraise effectively.

How much is it being organized?

Room to Read has 5 programs, and those programs have on average 42 modules (documents) each. This is subject to change as the organization continues to use research, monitoring, and evaluation data to inform and adapt program design. Each of these modules are translated into the local languages of the 11 countries Room to Read currently works in (as well as translated externally into languages for countries other organizations are working in). Some countries have only one language to translate into (ex. Khmer in Cambodia) while other countries have multiple languages (ex. Hindi, Bengali, Gujarati, Tamil, and Telugu in India). The modules must be well organized in order to support ongoing maintenance and updation[4], which also necessitates a system for managing feedback and enabling commenting and collaboration. There is not yet a system or process in place for ongoing updation.

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[4] There are many words made up by in-country staff who have English as a second language that have become part of Room to Read's culture and internal controlled vocabulary. "Updation" is one of those, so I have used it here.

When is it being organized?

Resource selection began after Room to Read made the decision to standardize programmatic content. During the conception phase for the new resources, architectural thinking was employed in regard to resource description and document engineering. There was a concurrent organizing system setup at the outset to track development of the modules and communicate out to the entire organization on progress made. After publication, resources continue to be organized on an ongoing basis as maintenance and updation happens (at both the Global Office and Country Office level). They must be organized in such a way to support the interaction of retrieving and sharing with external organizations as needed.

Who (or what) is organizing it?

As noted earlier, resource selection and content creation was done by a team at the Global Office in San Francisco in collaboration with satellite Global Offices. They planned to do a rigorous evaluation of best practices worldwide, and to select the best document components based on that evaluation. However, the team was extremely constrained by a tight turn-around time (the result of funding having been stalled in the pipeline while funders waited for modules to be rolled out) and had few financial resources to complete the project. Instead, a team at the Global Office collected all the guidance documents and best practices documentation that the country teams already had that were translated into English, and pulled content out of observations of effectiveness during GO staff visits to the field. Notably, they relied heavily on turning documentation by one GO staff member in Southeast Asia into global program modules. This last point meant that much of the content is specific to SE Asia and requires a high level of contextualization in the other regions (South Asia and Africa). For example, the library modules do not include any guidance about a particular library variant (Classroom Libraries) that is not implemented in SE Asia but is heavily implemented in South Asia due to physical space constraints.

Where is it being organized?

Room to Read engaged in architectural thinking about resource selection and description, and document engineering for the modules themselves, by carefully selecting resources from available documents and identifying new document components (such as topic, user, total time, materials, objectives). They avoided the trap of choosing a new information technology solution before they had done this architectural thinking. However, one area I've identified for improvement is in designing an

implementation layer of the organizing system for these new resources that better considers interaction design principles to enable ongoing maintenance, knowledge management, and use of the resources. One of the largest pain-points is document management – the Global Office does not know where or how the Country Offices are organizing and storing their versions. They considered using Box.com for document management, version control, and collaboration, but did not have anyone to centrally organize and manage the system. Instead, some staff used Dropbox[5] to collaborate, while others used Room to Read's shared drive that is notoriously difficult for Country Teams with slow internet connections to use. Foregoing implementation of a document management system may have been a deliberate trade-off decision made due to time/monetary constraints and lack of technical capacity, but it has caused unforeseen challenges and inefficiencies that I will attempt to mitigate in my artifact.

Acknowledgements

Special thanks to Clara Bennett and Florence Wu at Room to Read, who happily allowed me to interview them for this case study and and who even genuinely seemed interested in reading it afterward!

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[5] Some staff used Dropbox simply because Dropbox happened to donate a number of free business licenses

Summary

Though Room to Read has made great strides in standardizing program content in order to scale better and have more impact, I believe an alternative architecture for organizing these resources and an interface for accessing them would enable more effective interactions. Fortunately, the work document engineering has already been done, therefore, with a small increase in structure and abstraction, an interface can be easily implemented.

One of the biggest pieces of feedback that the Global Office has received from Country Office is that the organization and structure of the MS Word Templates makes them difficult for the country teams to use (formatting is easily disrupted by small changes), and that managing collaboration by multiple people and offices is nearly impossible. Another of the most oft-cited pain-points is document management – the Global Office does not even know where or how the Country Offices are organizing and storing their versions.

It is clear that Room to Read is not currently able to track the ways in which these resources are being modified and used, and there is no system in place for collecting feedback and improving the resources. Rather than a series of MS Word documents that are managed independently by each Country Office, I propose use of a shared global database which all users can access in order to view, collaborate, and use the same version of the resources. As Room to Read is already using Salesforce.com for its Research, Monitoring, and Evaluation data, as well as some project management and operational uses, I recommend using Salesforce.com for this as well. In this way, we can leverage user's pre-existing comfort with the technology as well as all the data Room to Read is already housing in the system.

With this in mind, I signed up for a free Developer account with Salesforce.com which allowed me to create a mock-up of a new solution for adding structure to the module content. This solution will allow everyone to view and work on the same resource, rather than different versions of it. It will also allow content to updated once, rather than several times at every country office. Modules can be generated by merging the content into templates, and this can be specific to each country, meaning that when a user generates a module for India, it will pull in the content marked as for "India". There is functionality that allows for there to be different versions of each activity, for example, that are each tagged for a specific country or multiple countries.

Room to Read Implementation Packages Re-Design

Structured Module Data (General)

Module
Session 8: Print-Rich Environment

Sections [2] | Activities [2]   Customize Page | Edit Layout | Printable View | Help for this Page

Module Detail	Edit	Delete	Clone

Information

Module Name	Session 8: Print-Rich Environment	Intended User	Field Facilitator
Program	Libraries	Length (minutes)	90
Topic	Print-Rich Environment	Materials	A4 paper; Crayons/Colored pencils; Markers; Non print-rich materials; Print-rich materials

Objectives   By the end of the session participants will be able to:

- Define print-rich environments
- Distinguish between print-rich and not print-rich materials
- Display variety of print-rich materials in the library
- Create print-rich materials with students

Edit	Delete	Clone

Sections	New Section				Sections Help

Action	Name	Countries	Length (minutes)	Materials	Content
Edit | Del	Introduction	Bangladesh; Cambodia; India; Indonesia; Laos; Nepal; South Africa; Sri Lanka; Tanzania; Vietnam; Zambia	5		During this workshop, we have talked about several ways we can make the library welcoming for children. For example, we display books with the covers showing. What
Edit | Del	Conclusion	Bangladesh; Cambodia; India; Indonesia; Laos; Nepal; South Africa; Sri Lanka; Tanzania; Vietnam; Zambia	5		In this session we talked about what a print-rich environment is, why it is important and how to help create a print-rich environment in the library.

Activities	New Activity				Activities Help

Action	Activity Name	Countries	Length (minutes)	Materials	Participants	Content
Edit | Del	Introduce Print-Rich Environment	Bangladesh; Cambodia; India; Indonesia; Laos; Nepal; South Africa; Sri Lanka; Tanzania; Vietnam; Zambia	20		Whole Group	Put participants into small groups if they are not in groups already. Our libraries should be print rich to help children develop a habit of reading. In many countries, p
Edit | Del	Making Print-Rich Materials	Bangladesh; Cambodia; India; Indonesia; Laos; Nepal; South Africa; Sri Lanka; Tanzania; Vietnam; Zambia	50		Whole Group	Now let's talk about making sure the libraries all have print rich materials. Let's look at the manual section titled, "Create a Print-Rich Environment". Befor

Each module will have a "Module" record with general information about that module

A tool will be implemented that allows teams to generate documents by taking the data in the record and merging it into a document template. I would recommend *CongeMerge* as a vendor for this.

Structured Module Data (Activities)

Activity Detail	Edit	Delete	Clone

Activity Name	Making Print-Rich Materials
Module	Session 8: Print-Rich Environment
Materials	
Participants	Whole Group
Length (minutes)	50
Countries	Bangladesh; Cambodia; India; Indonesia; Laos; Nepal; South Africa; Sri Lanka; Tanzania; Vietnam; Zambia
Content	

Now let's talk about making sure the libraries all have print rich materials.

Let's look at the manual section titled, "Create a Print-Rich Environment". Before the library opens, you will likely not have worked with children so you will need to create all the print-rich materials.

What could you display even before the children start using the library? Listen to responses. Possible answers: label features of the library such as the wall or windows,

poster with book care rules, poster with book levels, poster with library rules.

What could you create with the children and then display? Listen to responses. Possible responses include sentences written by children, stories written by children,

labels written by the teacher, handicrafts with labels and wall stories.

Let's look at the checklist in the manual. Look at the checklist that is part of ongoing maintenance. Now we are going to practice an activity in which children create print-rich materials that can be displayed in the library.

Let's pretend I am the teacher and you are the students.

Put students in groups of 5-6.

Ask groups to select a book they like and bring it back to where they were sitting.

Watch as I fold my paper. Fold paper over like this:

You will fold your paper like this and draw a picture between the folds.

Draw a picture related to this story. It can be something you see in the pictures, or know about the story or another idea that you have related to this book. Do not draw below the fold. This is where words will go.

After you draw your picture you can write a sentence in big letters about the picture. Or I can come around and write your sentence in it.

Here's an example. Show example with a drawing and large text underneath:

Each module will have separate records for each activity. This will allows for a change-able number of activities to be pulled into the documentation template upon generation.

Each activity record will include the countries for which it applies. This will allows for contextualization. In the example, this activity is standard across all countries, but in the future if a country needs to add different content or images, they can duplicate this record and make changes to the new version.

Changes can be tracked easily by user and date in Salesforce. Additionally, alerts can be sent to country staff when the Global Office makes changes to any field, notification country teams that they need to make changes to their translated versions and re-contextualize.

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[Module Name]

PROGRAM	TOPIC	USER	TOTAL TIME
[Program]	[Topic]	[User]	[Length (minutes)] Minutes

Materials	• [Materials] • [Materials] • [Materials]
Objectives	[Objectives]

Introduction

[Length (minutes)] minutes

[length] minutes

[Participants]

[Materials]

[Introduction - Content]

[Activity 1 - Name]

[length] minutes

[length] minutes

[Participants]

[Materials]

[Activity 1 - Content]

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Session 8: Print-Rich Environment

PROGRAM	TOPIC	USER	TOTAL TIME
Libraries	Print-Rich Environment	Facilitator	90 Minutes

Materials	• Print-rich materials • Non print-rich materials • A4 papers, markers, crayons/colored pencils for groups
Objectives	By the end of the session participants will be able to: • Define print-rich environments • Distinguish between print-rich and not print-rich materials • Display variety of print-rich materials in the library • Create print-rich materials with students

Introduction
5 minutes

5 minutes

Whole Group

Materials:

During this workshop, we have talked about several ways we can make the library welcoming for children. For example, we display books with the covers showing. What are some other ways we make the library welcoming for children? Listen for responses. Possible answers: display books so children can reach them and see the covers or titles, arrange furniture so children can walk around the library easily and there is an open area for activities.

Now we are going to talk about another way we can make the library welcoming for children – by creating a print-rich environment. This session will look at what is a print-rich environment, the purpose of having a print-rich environment and how to make the library a print-rich environment.

Activity to Introduce Print-Rich Environments
20 minutes

20 minutes

Whole Group

Materials:

Put participants into small groups if they are not in groups already.

Our libraries should be print rich to help children develop a habit of reading. In many countries, print rich classrooms and libraries are an important part of learning to read and write.

Write "print-rich" on flipchart or display on A4 paper.