INFORMATION STRATEGIES CURRICULUM

Critical thinking and project management skills for developing and implementing successful information-based projects

Sheryl Day

August 2014

HENRY M. JACKSON SCHOOL OF INTERNATIONAL STUDIES (JSIS)

The Henry M. Jackson School of International Studies (JSIS) combines the social sciences, humanities, and professional fields to enhance our understanding of our increasingly interconnected globe. The school is named for late Senator Henry M. Jackson, in recognition of his interest and support for the school and for the field of international affairs. The Jackson School's commitment to regional, cross-cultural, and comparative studies extends well beyond the boundaries of its many formal academic programs. The school has eight Title VI National Resource Centers (NRCs)—Canadian Studies; East Asia Center; Center for West European Studies; International Studies; Middle East Studies; Ellison Center for Russian, East European & Central Asian Studies; South Asian Studies; and Southeast Asian Studies—Devoted to outreach and public education activities. Each NRC receives Foreign Language and Area Studies (FLAS) fellowships, awarded to graduate students throughout the University. The Jackson School is the number one recipient of NRC and FLAS awards in the country.

TECHNOLOGY & SOCIAL CHANGE GROUP

The Technology & Social Change Group (TASCHA) at the University of Washington Information School explores the design, use, and effects of information and communication technologies in communities facing social and economic challenges. With experience in over 50 countries, TASCHA brings together a multidisciplinary network of researchers, practitioners, and policy experts to advance knowledge, create public resources, and improve policy and program design. Our purpose? To spark innovation and opportunities for those who need it most.

ABOUT THE AUTHOR

Sheryl Day is a Ph.D. candidate at the University of Washington Information School.

ACKNOWLEDGEMENTS

KEYWORDS

Information Strategies Curriculum, Information Strategies, information problems, information needs, ICT, ICTs, ICTD, ICT4D, social change, Myanmar, Burma, project management, information solutions

RECOMMENDED CITATION

Day, S. (2014). *Information Strategies Curriculum: Critical thinking and project management skills for developing and implementing successful information-based projects.* Seattle: Henry M. Jackson School of International Studies & the Technology & Social Change Group, University of Washington Information School.

COPYRIGHT, LICENSE, DISCLAIMER

THE HENRY M. JACKSON
SCHOOL OF INTERNATIONAL STUDIES
UNIVERSITY of WASHINGTON

TECHNOLOGY &
SOCIAL CHANGE GROUP
UNIVERSITY of WASHINGTON
Information School

Contents

Information Strategies Curriculum

Overview

The Information Strategies Curriculum was developed to address the challenges many societies face with the digital revolution. Here, we provide a general description of the curriculum and an example of its implementation for 25 professionals from Myanmar as part of the *Information Strategies for Societies in Transition* project. The curriculum is designed to be flexible enough to allow for tailoring the curriculum with country-specific, context-relevant content. Interested in exploring how this program could be deployed in other countries? Contact Chris Coward at ccoward (at) uw (dot) edu.

Why is this curriculum important?

The digital revolution has ushered in unprecedented access to information and mobile technologies. In 2015, there were approximately 807 million websites live on the internet. Currently, there are over 1 billion websites live on the internet, and the number of new websites and other information resources going live is increasing exponentially. Similarly, in 2015, the number of Apple and Android apps reached 1.5 million and 1.6 million, respectively, and the trends for mobile app development are expected to continue through 2016 and well into the foreseeable future. These skyrocketing trends demonstrate a widespread accessibility to digital information and app development tools.

While this accessibility is a boon for novice and would-be developers and information enthusiasts, the digital information landscape and app space are also littered with content-heavy websites and information resources and feature-rich applications that fail to meet expectations and subsequently go unused. All too often, well-intentioned efforts aimed at effecting positive social change tend to leap immediately to particular information and technological solutions without a clear understanding of the context and problems they are trying to address. This lack of strategic development in information projects and the high risk of failure can be extremely costly and time-consuming for organizations with urgent needs and limited resources. Skilled information professionals can mitigate these issues within and for organizations by providing informed analyses and appropriate solutions to information problems. The Information Strategies Curriculum prepares individuals to be information professionals by equipping participants with the critical thinking and project management skills required for developing and implementing successful information-based projects in the digital age.

What is the curriculum?

The curriculum is a 70-hour (ideally spread over four or more weeks) workshop-style program modeled after the University of Washington Information School's capstone experience for understanding and developing successful information-based projects from idea to implementation. Participants work through a sequence of six modules to: 1) identify information problems; 2) develop problem statements; 3) propose real-world project-based solutions relevant to a participant's organization; 4) create project charters detailing project scope, stakeholders, risk assessment, and success factors; 5) outline project plans; and 6) create and manage project schedules.

Who is it for?

This workshop is intended for those in organizations who have direct decision-making responsibilities for devising programs that use information and communication technologies for social change. Participants should have a basic level of digital information literacy and an interest in applying ICTs to social problems. Advanced technological expertise is not required.

How is it structured?

The program is designed for groups of 15-30 participants, and it is conducted in a hands-on, workshop-style environment. The four-week program meets daily in three-hour sessions and involves a combination of lectures,

case studies and examples, videos, discussions, hands-on practice, and individual and group work. Participants can expect to spend additional time outside of the workshop completing individual and team deliverables.

What are the learning objectives?

Project teams create and develop real-world project proposals and plans for implementation post-workshop according to the project schedules they develop. The core learning objectives include how to:

1. Identify information problems
2. Develop problem statements
3. Propose real-world information projects relevant to participants' organizations
4. Create project charters detailing project scope, stakeholders, risk assessment, and success factors
5. Plan for project implementation
6. Create and manage project schedules

What topics are covered?

	FORMING PROJECT TEAMS	TOPICS COVERED
WEEK 1	Laptops & connectivity Group & workshop communication Project teams formation **Group activities:** ▪ Skills assessment interviews ▪ Partner introductions ▪ Wicked problems, problems vs. needs ▪ Problem definition: Using the 5 W's ▪ Problem definition refinement **Presentations: Problem statements** **Deliverable: Problem statements**	Workshop overview Introduction to project management: 1) What is a project? 2) Why project management? 3) Nine project attributes 4) Project success factors 5) Key performance indicators Terminology Problem identification: 1) Problems vs. needs 2) Problem statements 3) 5 W's (Who, What, When, Where, Why) 4) Wicked problems Project management process Project charter preview
	PROJECT PROPOSALS	**TOPICS COVERED**
WEEK 2	**Group activities:** ▪ Selecting final problem ▪ Problem statement refinement	Project charter elements: 1) Overview

	▪ Draft project charter **Presentations: Project proposals** **Deliverable: Project proposal**	2) Resources 3) Assumptions, constraints, dependencies, impacts, and risks 4) Deliverables, expected outcomes 5) Reviews and approvals Goal statements Project scope
WEEK 3	**PROJECT PLANS** **Class activity:** Build out case study personas, scenarios, and work breakdown structure **Presentations:** **1) Personas & scenarios** **2) Paper prototype** **Deliverable: Stakeholder analysis**	**TOPICS COVERED** Design techniques: 1) Personas 2) Scenarios 3) Rapid prototyping Paper prototyping Wireframing Stakeholders Resources
WEEK 4	**PROJECT SCHEDULES** Creating & managing project schedules **Deliverables:** **1) Work breakdown structure** **2) Final project charter** **Presentations: Project presentations**	**TOPICS COVERED** Work breakdown structure GANTT charts Presenting and discussing projects

Application of Information Strategies Curriculum: Myanmar professionals

Why Myanmar?

Formerly Burma, the country of Myanmar is emerging from decades under military rule, undergoing unprecedented rapid change on many fronts, politically, economically, and in access to information. Less than two percent of the population was online in 2012, a figure that is expected to exceed 60% by 2016. The rapid spread of internet access is almost entirely due to mobile phone expansion, confirming that most Burmese will first encounter ICTs in the form of a mobile device or smartphone. This unprecedented diffusion of internet and mobile telephony portends that Myanmar will contend in a few short years with a wide range of information-related issues that other nations had 20 or more years to manage. This manifests on the individual level where there are low levels of information literacy (tackled through another curriculum developed as part of the *Information Strategies for Societies in Transition* project that focused on Mobile Information Literacy). It manifests on the organizational level, where there is little expertise to develop and manage information projects. The Information Strategies Curriculum responds to this need, and is suited for all types of organizations - government agencies, non-profits, civil society organizations, the media, public and community libraries, and other organizations with a social agenda.

Myanmar cohort team projects

The curriculum is designed for teams to produce real-world project proposals and plans. For the Myanmar cohort, the two themes were peacebuilding and elections, and each project was required to incorporate a role for public libraries. The 25 individuals formed five groups and tackled one of the two themes. Focusing on specific applications allowed the participants to apply the lessons they were learning in the workshop, present tangible project proposals at a public event, and bring home ideas that they could pursue in Myanmar, as well as raising the visibility of public libraries as a key resource in the information landscape. The experience was a valuable opportunity for the fellows to understand the importance of the different stages of defining and addressing information problems, before jumping to a technology solution, and internalizing the difficulties involved in creating meaningful and workable solutions.

At the outset, the project teams were inclined toward a particular technology solution (e.g. mobile app), but as a result of the workshop the final solutions demonstrate a much richer understanding of their information problems and needs. These solutions feature a mix of new and old media, digital and physical spaces, and other elements that would position the proposed programs for success.

The five projects developed during the workshop were:

THEME 1: PEACEBUILDING INFORMATION PROJECTS	
Project 1: Supporting the Peace Process by Building Trust	
Objective	To build mutual understanding and trust through generating and sharing stories from various ethnic groups via radio
Background	Currently, in Kachin, armed ethnic conflicts continue to persist despite the recent high-level peace agreement. Tolerance is an important element in building a democracy and requires

	mutual understanding amongst various groups. Sharing stories can have a humanizing effect that can prove far more effective at ending conflicts than formal policies alone through changing hearts and minds. This project identified the following issues: ▪ Weak in implementation for peace ▪ Social norms of ancient mindset exist ▪ Misunderstanding among armed groups
Information Problem	In Kachin State, no forum exists for sharing and exchanging stories amongst the armed ethnic groups. In addition, there is a low literacy rate and print newspapers do not reach most areas in Kachin State.
Proposed Solution	This project will address this information gap by using radio as the platform for gathering from and sharing stories with the various ethnic groups in Kachin State.
Project 2: Narrowing Down the Information Gap among the Conflict Parties to Enhance Trust and Understanding in Myanmar Peace Process	
Objective	To address information gaps related to peace talks between armed group leaders and their troops and between armed group leaders and the government through creating information resources such as apps and bulletins and sharing them through various channels such as libraries, NGOs, monasteries, youth networks, and churches.
Background	The peace process in Burma is the most important issue for national reconciliation to create a sustainable democratic society where people with diversity can live in harmony. However, it cannot be resolved overnight and all parties involved in the process as well as the general public should be satisfied with the ultimate result. In order to achieve this, information about peace with transparency and easy access to that information among the diverse ethnic armed groups and within the same armed group should be shared and disseminated effectively. Not having the information discussed and agreed to by the leaders on the peace table distributed properly to the troops who actually suffer on the ground causes some clashes and misunderstandings between the responsible and accountable officials and the troops as well as the ethnic people from the civil-war-torn areas. As a consequence, the ultimate peace agreement with different parties like the government and other ethnic armed groups will be less likely to happen and if a common ground is not reached within the same party, especially between the leaders and the followers. In addition to this, it would be more difficult for them to negotiate with other groups with different interests and even harder dealing with the state. Without fulfilling the information gap, there will be no national reconciliation; this means no peace, which might entail political instability. Without a solution to this problem, the vicious cycle will repeat itself over and over.
Information Problem	Currently citizens in Myanmar do not have access to the information generated at the high-level peace talks. This project focuses on an information gap that exists: 1) within armed groups (between troop leaders and troops) and 2) between the armed groups' leaders and the government due to top-down communication or a bureaucratic mechanism which leads to unnecessary delays in reaching an ultimate peace agreement between the parties. Thus, narrowing the information gap between these stakeholders and linking the updated information about peace with transparency and easy access is crucial for peace to become a realization. The information here includes the theoretical information such as the different

	models of federal systems, the nature and impact of cease fire agreements, the interests and values of different stakeholders in the political dialogues, the updated information about the topics discussed in the agenda, the behaviors evidenced at the table and the results after each discussion need to be included.
Proposed Solution	To fill this information gap among the parties in the peace process, the team will gather the current information from the peace talks by strategically approaching the direct stakeholders such as the government officials, the leaders from the armed groups and the mediators like MPC and political parties. Contacting and getting information from those sources will be feasible due to the fairly close communication between some members of the team and the sources. Secondly, the information gathered will be disseminated to those team members associated with libraries in targeted areas, using social media, doing field assessment research, interviewing different sources of persons in the affected areas and publicizing the final outcomes (limited) to the targeted people. In doing so, the positive attitudes from different parties towards peace will increase in one year's time during the project, which will mean more trust in the different parties; it may take much more time to build up an ultimate peace however. Finally, the information gap between the troops and the leaders and the leaders from different parties will be reduced to a satisfying stage by using apps, bulletins, workshops, and other activities as tools created by this project.

Project 3: Active Citizenship for Peace and Democracy

Objective	To improve civic participation in politics through developing a civic education curriculum and providing workshops to educate participants on peacebuilding information through local libraries.
Background	Today, Myanmar is transforming into a democratically ruled country through the 2010 change process. According to the new political system (Democratic System) and to level up the peace process of the country's situation with the other democratic countries, Myanmar citizens have to enforce the state building and peace building process. Information is the most crucial part in the trust building process especially in the armed conflict area. The misinformation and disinformation can lead to misunderstanding and a low radius of trust among the different stakeholders. Myanmar has the longest series of civil-wars in the world, starting in 1948 and continuing to the present. In Myanmar Political History background, the low level of trust began more than 300 years ago between the minority ethnics who are living in conflict areas and the bamar majority.
Information Problem	Because the formal education system never addressed the civic participation in politics, people especially in the conflict area have poor civic knowledge and peace information which can be a barrier to the peace building process and nation building process in our country. This project identified the following problems: ▪ Lack of Civic Education Curriculum ▪ Lack of Qualified People Who can deliver the civic education
Proposed Solution	We will be fill the gap through an informal education system in Kayin State, as a pilot project by: ▪ Curriculum Development ▪ Delivering a Pilot Workshop for Civic Education

	▪ Delivering Developed Curriculum through Public Libraries

THEME 2: ELECTIONS INFORMATION PROJECTS	
Project 4: Pre-Election Activity Mapping for 2015 Election in Myanmar	
Objective	To address gaps in information flows among key stakeholders and eliminate overlap in pre-election activities in Myanmar through developing information resources, a central website, and providing election activities analysis.
Background	Myanmar will hold their next election hopefully in November or December 2015. Since it is a turning moment of the country's transition toward democracy, many international and local organizations are interested in supporting and implementing election related activities in Myanmar. However, there is still a gap in information sharing and coordination among the organizations amid limited capacity of the Union Election Commission's (UEC) Information and Communication Technology (ICT) Department. As a result, the activities and funding allocation are likely to be ineffective due to overlapping and gaps in terms of activities and geographic areas. If there is no intervention for improving information flows and coordination, voter turn-out rate will be decreased; cancelled votes will be increased; and there is a high possibility for fraud/cheating in vote counting. As a result of uncoordinated preparation activities, the election may not be free and fair. Poor credibility of election results may lead to political instability and may have negative impacts on the transition toward democracy.
Information Problem	Poor information flow among key stakeholders creates gaps and overlaps in pre-election activities.
Proposed Solution	This project will provide reliable pre-election activities information among key stakeholders, address gaps in information flows amongst key stakeholders and eliminate overlap in pre-election activities in Myanmar through: ▪ Developing information resources ▪ Creating a central website ▪ Providing election activities analysis
Project 5: Enhancing Civic Participation in Democratic Process	
Objective	To increase voter understanding of civic responsibilities within a democracy and to improve the lack of accessible information on candidates and representatives through creating an information resource to provide candidate information and civic rights that would be available via public libraries.
Background	The end purpose of the Enhancing Civic Participation in the Democratic Process project is to enhance public participation in the state-building process. In this day and time, we are experiencing significant changes in the country politically and economically, but the need to change socially is still great. As our country has made dramatic changes in political and

	economic fields, the need for changes in our social institutions, social behaviors and social relations to adjust with those changes is essential. And the key to attain beneficial social changes for our country and to slip out of the erosion of capacity is active citizenship because we need participation of the people in state building, nation building and the democratization processes through effective and peaceful means. When we say active citizenship we mean a citizen who knows their rights and responsibilities.
Information Problem	Citizens have a low level of understanding of their rights and responsibilities as a citizen in a democracy. To focus on one particular topic, the eligible voters from constituencies don't have sufficient information about their candidates and representatives to elect them or to check their accountability and their right to express their needs. During the 2012 and 2010 elections the citizen knowledge on election and Rights has created long lists of problems and later become one of the root causes of current major issues in Myanmar such as the Constitution amendment, Electoral system and social unrests. There is no information channel between the delegates and the voters that actually work; even though there are some information centers like public/private libraries and government offices the people don't know that they can ask for information there.
Proposed Solution	1) Use libraries as information centers to offer election related information on constitutional rights and bureaucratic procedure to the local population interactively. 2) Create software that can make election-related information, constitutional rights, and bureaucratic procedure-related information easier to access for all users.