

Youth, Civic Participation and Electronic Government

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Abstract

This paper addresses the role of citizen engagement in the design of electronic government services. A model of civic participation is suggested, one that combines major tenets of participatory design techniques with generally-accepted principles of citizen engagement. The model is utilized as a conceptual lens to analyze a specific case study involving the engagement of young Canadians in the design and development of the Government of Canada's Youth e-Cluster – a centralized web portal containing a comprehensive offering of youth-related information, programs, and services. Youth between the ages of 15 and 24 across Canada are participating in the project via a secure online workspace. Based on this case analysis, implications are drawn for future e-government citizen engagement activities. Lessons learned centre on the difficulties of fostering active and sustained civic participation over an online environment and the ways of overcoming such challenges.

Keywords

Civic participation, Participatory design, Electronic government, Youth, Portal, Canada

Introduction

The recent advent of new information and communication technologies such as the World Wide Web holds much promise in facilitating improved access to government information and

services and promoting greater citizen democracy and engagement (Gronlund, 2002; Simon, 2000). One aspect of this scenario is heightened participation of citizens in the design process of new electronic-based government services. This paper examines this issue by analyzing a specific case study of a Canadian government portal development project for youth citizens where young Canadian citizens are engaged in design via communication over a Web-based electronic environment. Implications for facilitating citizen participation in electronic government design over online environments are suggested near the end of the paper.

A Model of Civic Participation

Before discussing specifics of the portal project, a model of civic participation is presented. This model is derived from the Information Systems literature on participatory design techniques and the general principles surrounding citizen engagement activities gleaned from knowledge of national and international examples. The model is used by the authors as a conceptual framework for focusing observations on the case study.

The discipline of participatory design (PD) offers good insights on the need for and benefits of promoting the active involvement of users in the information systems development process. For the most part, system designers have traditionally developed systems in isolation of users. At best, a designer may question users on what they want, but the difficulties in generating an adequate and representative list of requirements for design from simple interviewing is well documented (Davis, 1982; Galliers, 1987). Users find it difficult to articulate their information needs when asked; further, they are often unaware of the technological solutions practically available for consideration. More commonly, due to lack of time and resources, designers assume what users want and forge ahead into the production of database designs, computer interfaces, and program code.

PD represents a relatively new approach towards systems design where “the people destined to *use* the system play a critical role in *designing* it” (Schuler & Namioka, 1993, p. xi). By doing so, the traditional designer/user relationship is reversed: users are viewed as “the experts – the ones with the most knowledge about what they do and what they need – and the designers as technical consultants” (p. xi). The roots of PD originate from system projects conducted in Scandinavia in the 1970s and 1980s, such as DEMOS, FLORENCE, and UTOPIA, where there was (and continues to be) an explicit commitment to workplace democracy through the direct and effective participation of workers in design activities and decision-making (Kuhn & Muller, 1993, p. 26). From there, the area of PD has grown rapidly in terms of the development of various approaches to heightening user engagement in system design, such as prototyping, mock-ups, JAD, and other co-development efforts (Muller, Wildman, & White, 1993).

Greenbaum and Kyng (1991) provide a thorough and notable discussion on designing computer systems in collaboration with users in their edited book *Design at Work*. There, they stress the need for users to become “full partners in a cooperative system design process where the pursuit of users’ interest is a legitimate element” (p. ix). Ehn and Sjogren (1991, p. 247), two contributing authors to *Design at Work*, provide sage advice for promoting successful PD in practice based on Russell Ackoff’s (1974) concept of idealized design of social systems:

- It makes a difference for participants
- Implementation of the results are likely
- It is fun to participate.

The first two points refer to the political side of having users participate in design. The project must make a difference for participants. If they perceive the system as having little benefit or relevance to their daily lives, the likelihood of engaging users actively in the project is remote at best. Further, if participants perceive their inclusion in the process as only a gesture of goodwill

or a half-hearted attempt at understanding user needs, participants will not “buy-in”. Participants need to feel their contributions are meaningful and will be put into action, not just recorded and put aside.

The last point concentrates on the design process itself; it must be fun for users to participate. To secure the active engagement of users in design, steps must be taken to overcome obstacles of hard work and boredom that is inherently part of any systems project.

Another concern evoked by PD advocates is the need to foster healthy cooperation between user and designer. Greenbaum and Kyng (1991) suggest the following ways to facilitate cooperative action in design: 1) create opportunities for mutual learning between users and traditional designers; 2) utilize design tools and language familiar to participants; 3) facilitate events where users can envision future situations of working with the final system – this would allow users to experience how emerging design may affect their lives in practice; and 4) start the design process with the current practice of users – that is, understand how users currently conduct activities that the future system will help users perform, and use that knowledge as a springboard for determining ways to make improvements.

Insights on ways to encourage citizen participation in electronic government design can also be obtained from the public sector. Public involvement has always played an important role in government planning. In fact, options for engagement and civic participation have existed in various forms both within Canada and on an international scale for decades. These options are characterized by close and ongoing interaction between citizens and governments and are focused on joint-agenda-building; collaborative development of policies and programs; shared ownership of process, outcomes and ongoing responsibilities.

In general, there have been two fundamental changes over the past decade which have promoted the heightened role of citizen engagement in governmental affairs. First, citizens have

become more educated and aware, and desire a more meaningful role in governance itself (Alcock & Lenihan, 2001, p. 19). Second, new information and communication technologies, such as the World Wide Web, are available to public sector institutions to engage their citizenry. Overall, these two fundamental changes have promoted generally-accepted principles of citizen engagement:

Fair Citizen Representation

- Strive to create a recruitment process that reflects the diversity of the citizen population and encourages the involvement of all citizens, including marginalized groups;
- Provide opportunities for citizen involvement across national, regional and local levels;
- Encourage involvement of all citizens with particular emphasis on marginalized groups;
- Provide universal access for citizens to participate, including both in-person and virtual interaction.

Meaningful Citizen Participation

- Provide meaningful roles for citizens to participate, and ensure that process is genuine and effective;
- Provide appropriate orientation, training and supervision for citizens, especially those that may lead other citizens to participate;
- Allow for varying degrees of participation including consultation, dialogue, decision making and accountability;
- Promote leadership and skills development for all participants.

Combining these principles of citizen engagement with the insights gleaned from the PD literature mentioned above, the authors present a model of civic participation for governments to follow (see Figure 1).



Figure 1: A Model of Civic Participation for Electronic Government Design

The model summarizes the key characteristics required for successful citizen engagement in electronic government design. The PD literature contributes the need for a “meaningful project” where participants believe the resulting system will serve a benefiting purpose in that it will make a difference to their daily lives. It also contributes the need to promote “fun” or playfulness in design and some initial methods by which “cooperative design” between users and technical developers can be achieved. The principles of citizen engagement offers the need to maintain “fair citizen representation” across constituents in terms of both recruitment and involvement of a diverse and representative set of users, and universal access to those user groups through various means. Both sets of literature recognize and contribute the need for “meaningful citizen participation”, where participant contributions are viewed as likely to be implemented and there is infrastructure in place to foster citizen contributions to design such as the provision of training and orientation sessions, and an acceptance to support varying degrees and ways of involving citizens in design.

This model was utilized by the authors as a conceptual framework for analyzing the chosen case study site: the Government of Canada's Youth e-Cluster project. As such, the model provides a lens of analysis for structuring and organizing observations on this particular electronic government initiative.

Case Study Background

The Youth e-Cluster is a centralized web portal to be launched in March 2002 spearheaded by the Department of Human Resources Development Canada (HRDC). This portal is a key instrument through which quality information and service delivery will be made available to young Canadians providing access to a full range of information, services, and programs offered by the Government of Canada. Youth between the ages of 15 and 24 from across Canada are participating in the project via a secure on-line environment. To date, no other federal organization in Canada has attempted to engage such a large number of citizens in the development of a product in this manner.

Why study the Youth e-Cluster Project?

This project was an ideal candidate study site from which to gain insights on the effectiveness of citizen engagement in the design and delivery of electronic government services for several reasons.

First, the Government of Canada provides a rich context for the promotion of electronic government through its plans to become the most electronically connected government in the world connected to its citizens by 2004. Coined Government On-Line (GOL), the vision is "to continually improve the quality of interaction between Canadians and their government by enabling Canadians to request and receive services and information when and where it is most convenient for them, wherever they live" (Government-of-Canada, 2000). GOL represents the

Canadian government's institutional response to the shift towards knowledge-based economy and advancements in information technology. There are three phases or "tiers" to the initiative, each representing a further evolution towards integrated, client-centred electronic service delivery. Tier One objectives include the establishment of the federal government's on-line presence by December 2000 and the promotion of a client-centred approach to presenting information. Tier Two involves the delivery of key federal programs and services securely over the Internet by December 2004 and the promotion of a client-centred approach to presenting information and services, including clustering and integration. Lastly, Tier Three involves the promotion of inter-jurisdictional electronic service delivery and innovative pilots to improve service to clients.

Second, the Government of Canada, through the Privy Council Office, has re-established citizen participation as a priority across the organization. Departments and their policy teams have been tasked with developing their own strategies for engaging Canadians in an effective manner in order to "help the Government of Canada explore the potential of citizen engagement" (PCO, 1998, p.11) These participatory efforts are defined as activities which:

- increase the opportunities for citizens to talk with one another and decision-makers by ensuring a two-way flow of communication among participants;
- provide for open-ended process in which there are no pre-determined outcomes;
- allow for serious, substantive and deliberative discussions;
- are supported by factual, balanced information that is written in plain language and delivered in a transparent, meaningful and timely way;
- are based on a mutual learning between citizens and decision-makers;
- assume that citizens add value and bring important perspectives to the policy development process (Policy Research Initiative, 2001).

Third, youth are becoming a strongly-advocated demographic group for inclusion in the design and delivery of government programs and services. Research produced by the Council of

Europe's Steering Committee for Intergovernmental Cooperation in the Youth Field indicates that youth is considered a transitional period in life during which the ties that integrate individuals to society and the working world should be formed. The economic, social and cultural environment of youth is constantly changing; what worked yesterday may not work today; thus there is a constant need for re-evaluation (Council of Europe, 1997, p. 6). And who better to re-evaluate than youth themselves? Many believe youth are in the best position to do this. They perhaps are the best candidates to understand their own needs and approaches inherent to the successful design and delivery of youth programs and services. Therefore, there is growing support for projects and programs to arise out of young people's own identification of issues and needs and their chosen response to them.

Fourth, Canada places a high-priority ranking on youth participation in the delivery of government services. For example, Canada acted as a signatory to two international documents emphasizing the importance of involving youth in policy and program development: specifically, the *United Nation's World Program of Action for Youth in 2000 and Beyond*; and the *Lisbon Declaration on Youth*. Similarly, the Centre for Excellence for Youth Engagement, a Health Canada funded initiative run by the Student's Commission, operates under the principle that "every young person has something to contribute to the active betterment of Canadian society". Their research indicates that youth that actively participate are less likely to suffer from health, career, family or societal distress (Health Canada 2001).

Fifth, the youth engagement component of the Youth e-Cluster project represents a marriage between the need for citizen involvement and the use of technology in the process of dialogue and interaction. This marriage fits very well given the nature of the audience (youth) and their level of comfort and ability with computers, the Internet and virtual interaction.

Sixth, a centralized repository of all youth-related information, services and programs offered by the Government of Canada was badly needed. Initial research identified two strong factors. One was the need to coordinate online service delivery for youth. Less than half of the federal government's sites contained youth information accessible from the homepage. No sites covered all available departmental youth resources and the majority required users to use a search engine. Users would need to understand the structure of the Federal Government, its programs and services or make a concerted effort to invest more time than necessary in locating the resources directed to their needs. The other was that youth were technically inclined and had a clear desire to seek out information through non-traditional mediums:

- Internet usage doubles every 100 days and young Canadians are drastically increasing their usage of the Internet;
- 87% for 16 - 20 year olds have access to the Internet;
- 60% of youth are on the Internet for more than 3 hours per week;
- 82% of youth access the Internet for study and related purposes;
- 97% of youth believe that having access to computers and the Internet will become as commonplace as having a telephone;
- 82% agree that having access to the information highway will improve a person's employment prospects (Youth Culture, NetGeneration Survey, May 2000).

It is important to note that the Privy Council Office makes a distinction between Government On-line and eGovernment activities. GOL represents "the use of information and communications technology to improve services and access to them while eGovernment is about the changing relationship between government and citizens" (PCO May 2001). By combining a youth engagement component that takes advantage of communications technology to produce a coordinated on-line service delivery tool for Canadian youth, the Youth Cluster project could effectively meet Government On-line targets, test a new model for eGovernment in a Canadian

context and capitalize on the knowledge, energy, and expertise that young people possess if they are provided with effective and appropriate opportunities for involvement.

What is the Youth e-Cluster Project?

The Youth e-Cluster is a centralized web portal containing all youth related information, programs and services offered by the Government of Canada. The site, being launched in March 2002, categorizes and presents youth-related information on the Internet in a manner that is easy to access and targeted to youth. HRDC is the lead department and is supported by a partnership of eighteen other federal government departments and agencies. These partners are responsible for providing web site content as well as functional guidance throughout the development process. They will also be active in marketing and promoting the product once it is completed. HRDC provides overall coordination, administration, logistics, on-going management and support to youth involved in the design of the project; youth can participate in-person or virtually through the Internet. Elements of the project include: a youth-based web site architecture and functional applications; information accessible at national, regional and community levels; and the redesign of HRDC's own online youth-related information. The project is funded by the Treasury Board Secretariat.

A number of distinct components bear on the success of the project, including:

- Interdepartmental collaboration and coordinated on-line service delivery;
- A governance structure that incorporates the affected client group directly in the product development and maintenance processes; and
- A layered marketing approach that converges existing communications media to maximize reach and user response.

Table 1 identifies the major milestones of the project.

Milestone	Date
Complete initial project planning and partnerships arrangements	Nov. 2000
In-person Youth Team in place	Feb. 2001
Virtual Workspace Development	June 2001
On-Line Youth Team in place	July 2001
Website Prototype	Nov. 2001
Content Management Plan	Nov. 2001
Systems Support Level Agreements	Nov. 2001
Testing and Modifications	Dec. 2001
Youth Cluster Soft Launch	Jan. 2002
Begin Marketing and Advertising Campaign	Jan. 2002
Final Modifications	Feb. 2002
Youth Cluster Full Public Launch	Mar. 2002

Table 1: Major Milestones of the Youth e-Cluster Project

The e-Cluster is part of the overall redesign of the Government of Canada's on-line presence which includes the Canada Site, three information Gateways and a series of clusters intended to meet the needs of particular client groups by providing access to information and services from various different departments in a seamless and client-centered fashion. (See Figure 2). More details of the history, success factors, and strategic considerations surrounding the Youth e-Cluster in context of the GOL initiative can be found in Detlor & Finn (2002).

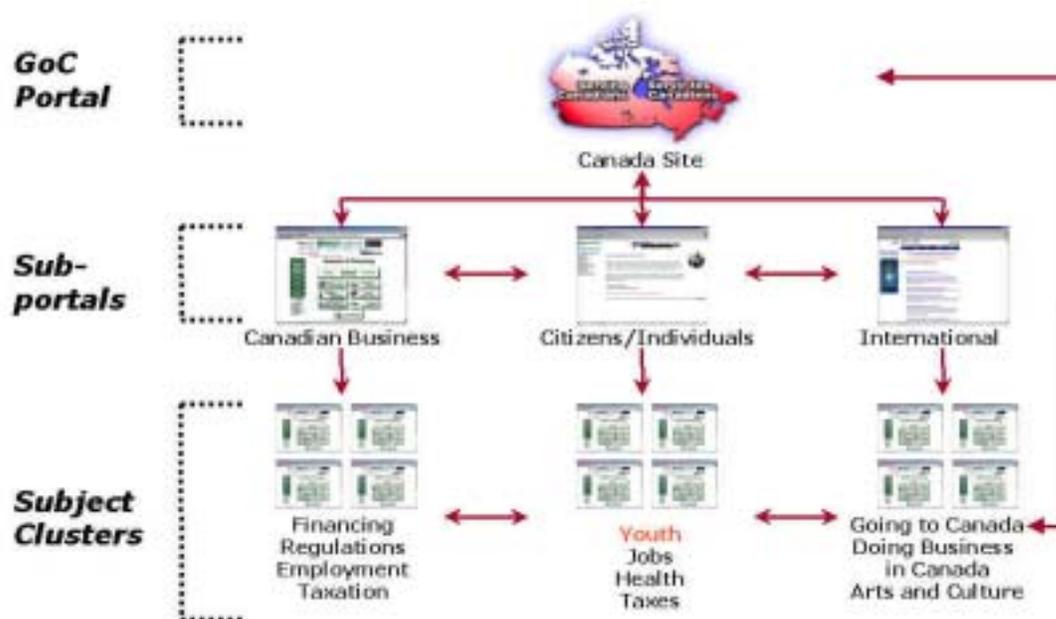


Figure 2: Structure of the Government of Canada's portal sites (TBSC, 2000).

Engagement of Youth in Design

In terms of participant structure, there were two youth teams involved in the project. The first was an in-person team of 19 individuals between the ages of 18 and 24 living in the National Capital region of Ottawa. The second was a group of approximately 400 individuals between the ages of 15 and 24 living across Canada. We refer to these two groups as the Core and Virtual Youth Teams, respectively.

The Core Team was recruited through a network of local youth serving agencies (e.g., YMCA, National Youth in Care, Odawa Native Friendship Centre) as well as through career and info-fairs at local community colleges and universities. The goal was to reach as broad an audience as possible and to maximize the diversity of the applicants. Print packages were distributed and a website was set up for online applications (see Figure 3). The application was designed to find out what kinds of issues the individual was interested in and why the person felt it was important

to involve youth in the process. It was also made clear that computer skills or previous involvement in civic activities were not requirements.



Figure 3: Website created to recruit Canadian youth to join the project

Over 200 applications were received through the process and were reviewed. The criteria for review focused on diversity, an individual's imagination, interest and desire to contribute, and unique perspectives on information issues affecting young Canadians; not on computer skills or past history of participation. It was also stressed that an important goal of the establishment of the youth team was to foster and develop learning and skills for youth that participate. Nineteen individuals were selected to become members of the Core Youth Team and in late February they began working on the project.

In order to encourage a wide spectrum of individuals to participate, it was necessary to provide some youth members with additional technical support. Specifically, some members of the Core Youth Team did not have access to computers and the Internet and it was necessary to assist

them in this area. Through the interdepartmental partnership within the Government of Canada, Industry Canada's Computers for Schools program provided Internet-ready computers free of charge to Core Youth Team members in need for the duration of the project.

Throughout the spring and early summer, the work of the Core Team concentrated on several things: orientation and training; initial website architecture and applications selection; creation of a Virtual Workspace Plan including timelines; activities and rewards and incentives for online team members in order to keep them interested given that they were not going to be paid. The team also received media training, information sessions on the Internet and web design and brainstormed on logos, website addresses and taglines. Core Youth Team members were also invited to attend Interdepartmental Working Group meetings of the HRDC with representatives from other federal government partners, as well as take part in senior official briefings related to the project. The primary function of the group however was to act as team leaders to Virtual Youth Team members.

The Virtual Youth Team was recruited in much the same manner as the Core Youth Team. The network of national youth serving agencies distributed recruitment information to youth in through their local offices across Canada. Applications were received on-line and in-paper format and were reviewed by staff within the project secretariat. Individuals were notified in late June via email that they had been selected to participate and a package describing the project and how to access the Virtual Workspace was sent to them in the mail. This was done in order to ensure the security of user names and passwords. Gradually over a period of weeks, as individuals received their packages in the mail they began to come online, sign-on to their team rooms and introduce themselves to one another.

The Virtual Workspace itself is a username and password protected discussion board environment. Each Virtual Youth Team member was assigned to a team and to a specific team

leader. The only streaming done with respect to team selection was based on language in order to ensure that individuals could participate in the language of their choice (French or English). They were able to create profiles of themselves and have names and design logos for each of their team rooms. The space was divided into team rooms and had a lounge for general discussion (see Figures 4 and 5). The software also allowed for document sharing, real time chat, polling and some visual customization. There was a team leaders' room that was only functional and visible for the Core Youth Team members. Virtual Team members had the ability to read any other material on the site but they could only post in their own team room and the lounge. There was a full-time moderator (another youth), known to the team members as the Virtual Moderator, who answered questions and provided technical assistance on a continuous basis.

Virtual Youth Team members were given an activity every ten days. They were given a week to answer the questions or complete the tasks and do so in their team rooms. They were free to discuss their activity with team members and their team leaders provided guidance and encouragement throughout the process. Once the activity was completed, team leaders submitted a summary report to the project staff at HRDC. These reports were also posted in each team room by the team leaders and were available for review by Virtual Team members. The Virtual Moderator provided a roll-up of the team leader reports and a monthly status report on the workspace as a whole.



Forum tracker	Find people	List screens	Search	Help
Chat	List teams	Web files	Administrate	Log out

Code of Conduct

Code de Conduite

Hello!

Looking for your team room? Keep scrolling to the bottom of the screen and click on your team room.

Don't forget - assignments are posted on a bi-weekly basis. So, stay tuned and check out the activity room on the main page.

Questions about the project and your role? Ask your team leader! They've been working with us on the project since February and are now seasoned Youth e-Cluster Representatives. They are a major contributor to this project and are here to guide you!

And, as always, if you run into any technical glitches, please e-mail the Virtual Moderator. Shawn can be reached at:

Thank!

Youth e-Cluster Secretariat

Bonjour!

Vous cherchez votre salle d'équipe? Faites défiler l'écran jusqu'en bas et cliquez sur le bouton de votre salle d'équipe.

Rappelez-vous que les tâches sont affichées toutes les deux semaines. Restez alors branchés et rendez-vous à la salle des activités sur la page d'accueil.

Vous avez des questions au sujet du projet et de votre rôle? Adressez-vous à votre chef d'équipe! Les chefs d'équipe travaillent avec nous au projet depuis le mois de février et sont maintenant des représentants aguerris du site Web jeunesse. Ce sont d'importants collaborateurs qui peuvent vous guider!

Une fois de plus, si vous êtes aux prises avec des difficultés techniques, n'hésitez pas à communiquer par courriel électronique avec Shawn, modérateur virtuel.

Merci!

Secrétariat du site Web jeunesse

Welcome [Kim Finn - HRDC](#)
Youth Team Virtual Workspace - Espace de travail virtuel jeunesse

Team Space-Espace d'équipes

Summits

- [Code of Conduct](#)
- [Team 10 - Equipe 10](#)
- [Team 11: Hero Attack](#)
- [Team 12: C.O.N.F.E.C.T.](#)
- [Team 16: The CyberCaesar Champions](#)
- [Team 17: Maid Muriel and her Merry Maids and Men](#)
- [Team 18: Internet Patio and ICU](#)
- [Team 19: The Phoenix Online](#)
- [Team 1 - One in Dialogue](#)
- [Team 2 - President's Choice No Name](#)
- [Team 3- Trinity](#)
- [Team 4 - The Quad Squad](#)
- [Team 5 - Equipe 5](#)
- [Team 6 - B42](#)
- [Team 7 - The Civil 7s](#)
- [Team 8 - Eight-mates-a-milkin'](#)
- [Team 9 - The Cana-Sers](#)
- [Team Leaders/Chefs d'Equipe](#)
- [Equipe 13: Lucky 13](#)
- [Equipe 14: Les Webactifs](#)
- [Equipe 15 - Team 15](#)

Teams

- [Team Leaders](#)

[Forum Tracker](#) | [Find People](#) | [List Screens](#) | [Search](#) | [Help](#) | [Chat](#) | [List Teams](#) | [Web Files](#) | [Administrate](#) | [Logout](#)

[Activity Overview](#)

Figure 4: Virtual Workspace – Introduction page with links to each team room

Number	Title	Replies	Author	Activity Date
1242	Thank!		James	09/25/01 09:13 AM
1230	REST TEAM LOGO?	(10)	Khoa	09/24/01 05:01 PM
1241	Activity 12 - L'activité 12		HRDC_Administrator	09/24/01 10:13 AM
1239	Nous sommes de nouveau en ligne! / We're here!	(2)	Lianna	09/23/01 03:55 PM
1240	Team Leader Photos - Les Photos de les Chef d'équipes		HRDC_Administrator	09/21/01 02:45 PM
1234	What should happen next?	(9)	Mike	09/21/01 12:21 PM
1238	Activity 9/10 Prize Winners / Gagnants des prix pour activités 9 et 10		Lianna	09/20/01 01:39 PM
1237	Just a suggestion.		Cedric	09/19/01 06:36 PM
1236	are you informed?	(4)	Brandon	09/19/01 06:33 PM
1233	THE DAY THE WORLD STOOD STILL II	(7)	Mike	09/17/01 08:20 PM
1231	Your input to Activity 8 / Vos commentaires au sujet de l'activité 8	(1)	Lianna	09/16/01 03:52 PM
1235	Direction Jeunesse - le logo gagnant! / YouthPath Logo Win!		Lianna	09/13/01 12:00 PM
1232	Is Everyone Okay? Especially Ottawa??	(9)	Mike	09/12/01 10:32 AM
1229	accountability framework	(4)	HRDC_Administrator	09/11/01 08:12 PM
1227	Thanks Shawn, Lianna and Kim!	(7)	Jessica	09/09/01 04:47 PM
1219	Anyone from Quebec	(5)	Cedric	09/04/01 11:06 PM
1224	government youth sites?	(4)	Kevin	09/04/01 12:34 PM
1223	New Brunswickers		Nathalie	08/29/01 09:47 AM
1222	Shawn or someone - can you answer this...	(1)	Robyn	08/29/01 07:54 AM
1221	Great Work! Ben Howell		Lianna	08/27/01 02:45 PM
1216	Jay and Silent Bob Strike Back	(4)	Nicholas	08/27/01 11:41 AM
1218	Anyone from Alberta	(7)	Crystal	08/27/01 01:04 AM
1213	Chat Feature	(2)	Ryan	08/25/01 01:15 AM
1217	Canada First 2002		Bronwyn	08/23/01 10:13 AM
1212	quotes of the day for sunday	(1)	Kevin	08/20/01 10:19 AM
1211	quote of the day		Kevin	08/18/01 11:50 AM
100	Hello! Welcome! Where are you from?		HRDC_Administrator	08/25/01 11:10 AM

Figure 5: Lounge - Section where members could discuss things freely with all online team members.

Initially the activities were designed to foster team building and a general understanding of the project. Subsequent activities followed the timeline for the project (refer back to Table 1) and were specifically related to the design of the e-Cluster and other elements such as marketing and communications. Virtual Team members contributed to the development of the top and second level subject headings for the site, determined what functional applications the eCluster would contain (message board, webcasting, etc.) and selected the URL and logo for the website. The basis for each activity were ideas generated through brainstorming with the Core Team. The ideas were refined slightly and then put to the Virtual Team for further discussion and decision making (see Figures 6 and 7).

The image shows two screenshots from a SiteScape forum. The top screenshot displays a list of activities in a table format. The bottom screenshot shows a detailed view of a forum post titled '8. Activities 3 and 4' by HRDC_Administrator, dated July 25th, 2001. The post contains instructions for a brainstorming activity and lists various subjects for discussion.

Subject	Date	Author	Subject	Date
19	Activity 12 - L'activité 12	HRDC_Administrator		09/24/01 10:13 AM
18	Le 11 ^e semaine Activité	HRDC_Administrator		09/20/01 04:41 PM
16	Activité 11	HRDC_Administrator		09/20/01 04:39 PM
15	Les activités 9 et 10	HRDC_Administrator		09/20/01 04:37 PM
14	Activites 9 & 10	HRDC_Administrator		09/20/01 04:36 PM
13	Activité 8	HRDC_Administrator		09/13/01 10:31 AM
12	Activité 8	HRDC_Administrator		09/13/01 10:29 AM
11	Les activités 5, 6 et 7	HRDC_Administrator		07/20/01 09:59 AM
10	Activites 5, 6 & 7	HRDC_Administrator		07/20/01 09:53 AM
7	Les Activités 3 et 4	HRDC_Administrator		07/20/01 04:18 PM

8. Activities 3 and 4
 HRDC_Administrator
 Posted on 07/25/01 10:24 AM
 Modified by HRDC_Administrator on 07/20/01 02:35 PM

Activity 3
 Your Team Leaders and the Youth e-Cluster Secretariat have been doing a lot of work to determine what type of content should be included in the site. We are now looking for your ideas and suggestions!
 Here's the scenario:
 You have 1 week to brainstorm about content for the site. Try to come up with as many ideas as you can for content you think should be included on the Youth e-Cluster relating to the subjects listed below. There are no wrong ideas. Write down as many ideas as you can come up with. Don't worry about debating too much in your team room... the point of the exercise is to get as many ideas as possible

Subjects
 Jobs
 Social Services/Community
 Arts and Culture
 School/University/Education
 Government
 News
 Travel
 International/Multi-cultural
 Leisure and Recreation

Don't forget – you can always modify your responses. So, if you think of something to add to a category, just edit and add to your post!

Questions about the activity? Contact [redacted]

Due Date: Wednesday, July 25th, 2001

Activity 4
 Your Team Leaders developed an Accountability Framework that explains their roles and responsibilities and commitment to the project. We would like you to draft up your own Accountability Framework. Each team will work on the framework and the Youth e-Cluster Secretariat will roll up the information and send out a copy for everyone to review. This piece will serve as a guide to your work.

Attached you will find a copy of the Team Leader's Framework. This will serve as a template to help you work through the process. Also attached is an overview of what the Online Youth Team is and your roles and responsibilities. We've also attached a quick overview of the project and it's main messages.

If you have any problems opening the attachments or have questions about this activity, please e-mail [redacted]

Due Date: Wednesday, July 25th, 2001

Attachments:
 Accountability Agreement.txt
 role of online youth team.txt
 key messages.txt

[View top of page]

Figure 6: Activities are posted every ten days

The screenshot displays a virtual workspace interface for 'Team 11'. At the top right is the SiteScape logo. Below it is a navigation bar with tabs: Summit, Next unseen, List unseen, Search, and Help. Underneath are buttons for Add, Modify, Delete, and More. The main content area is titled 'Team 11 Messages - Les messages de l'équipe 11'. It shows a list of messages with columns for Number, Title, Replies, Author, and Activity Date. The messages are numbered 1 to 106, with the most recent at the top. The chat history shows various discussions, including questions about dinner preferences, influential people, and team activities.

Number	Title	Replies	Author	Activity Date
106	Which woman from the last 1,000 years would you most like to have dinner with?	(3)	Andrea	09/24/01 11:23 PM
106	Which of the Top 5 Most Influential People would you have put at the top?	(2)	Andrea	09/24/01 11:22 PM
109	Which man from the last 1,000 years would you most like to have dinner with?	(2)	Andrea	09/24/01 11:21 PM
110	Activity 12	(1)	HRDC_Administrator	09/24/01 05:18 PM
107	Which moment in the last 1,000 years do you most wish you had witnessed?	(1)	Andrea	09/24/01 05:16 PM
105	What are you up to? Did YOU tip over a cow on Saturday?	(2)	Andrea	09/24/01 05:13 PM
103	The best thing to do on a Saturday night is it....	(5)	Andrea	09/24/01 12:38 PM
99	Have you seen the DISCUSSION BOARD?	(3)	Andrea	09/21/01 11:13 PM
100	"Puffs.....what are they good for? Absolutely nothing!!" You decide	(4)	Andrea	09/21/01 11:12 PM
104	So many choices I just can't DECIDE! Somebody help me		Andrea	09/17/01 09:46 PM
101	Activity 11	(1)	Nicolle	09/17/01 05:17 PM
97	I've been doing some serious snooping around	(4)	Andrea	09/17/01 05:11 PM
91	It's the most wonderful time of the year... & New Calendar	(2)	Andrea	09/17/01 01:28 PM
98	What's up...?	(1)	Matthew	09/14/01 09:18 PM
93	Activity 11...	(3)	Amy	09/12/01 06:10 PM
92	activity 11	(1)	HRDC_Administrator	09/12/01 06:02 PM
94	What has happened today	(2)	Andrea	09/12/01 05:20 PM
15	Every team 11 member: LOOK AT THIS!!	(4)	Andrea	07/31/01 12:51 PM
36	OH I ALMOST FORGOT!		Andrea	07/15/01 10:19 PM
36	HEY AMY!!!!!!!!!!!!!!		Andrea	07/15/01 10:10 PM
34	New to this		Suresh	07/12/01 07:03 PM
31	I'm back	(2)	Tom	07/11/01 01:30 AM
17	Which color do you guys want for the background of our workspace?	(5)	Andrea	07/10/01 12:20 AM
19	Background Color	(1)	Nicolle	07/03/01 09:29 AM
18	Introduction		Nicolle	07/03/01 07:47 AM
16	Team 11 is rocking the virtual workspace!		Andrea	07/02/01 09:47 PM
9	Away	(1)	Sabrina	06/30/01 08:13 PM
14	Hello from Cape Breton again		Jason	06/29/01 06:01 PM
13	Hello!		Suresh	06/27/01 09:25 PM
12	Hi all		Imran	06/26/01 08:45 AM
11	a.s.		Kim	06/25/01 09:48 PM
10	Hi everyone...		Kim	06/25/01 08:46 PM
8	Hello from Cape Breton	(1)	Jason	06/23/01 11:42 AM
7	Hey all	(1)	Greg	06/22/01 03:28 PM
5	hello	(1)	Tom	06/21/01 07:46 PM
6	Hi everyone!		Amy	06/21/01 05:09 PM
4	Hi Everyone!		Candace	06/21/01 03:54 PM
3	Here we go...	(1)	Andrea	06/21/01 02:24 PM
2	Yeah! You guys are here!	(1)	Andrea	06/20/01 08:03 PM
1	Lets get to know each other	(1)	Sabrina	06/20/01 05:03 PM

At the bottom of the chat window, there is a 'View entry' field with an 'OK' button and a link to 'View top of this page.'

Figure 7: Team Room Example - Each team had their own room where members could post and respond to activities as well as discuss the project with one another

The rewards and incentives plan developed by the Core Youth Team provided prizes to Virtual Team members based on participation for each activity. Team Leaders nominated an individual in their team for each activity to receive a small prize. Larger prizes were planned for

outstanding effort every two months and Virtual Team members also had the opportunity to compete for a trip to Ottawa for the launch of the e-Cluster in March 2002. Team leaders also provided regular encouragement and praise to their team members in the workspace and via e-mail.

HRDC found it necessary to provide the Core Youth Team with additional training in order to effectively moderate in an on-line environment. The training was developed and provided by a company that specializes in youth and on-line youth engagement activities and covered the following topics: “keeping them interested”; “dealing with group dynamics”; “creating fast turnarounds”; “encouraging participation”; “creating reports”; and “using the right technology”. It was found that skill and training on virtual moderation was required to give team leaders the necessary tools to promote active dialogue on-line.

It was interesting to observe how youth utilized the Virtual Workspace for social interaction beyond topics relating to design. Youth Team members, both Core and Virtual, used the space to share information about school, life, relationships and recent events. This allowed them to get to know one another and ultimately had a positive effect on the work being done. Part of the project’s goals was to provide an environment where young people could come together from across the country and learn from one another while working together. This was encouraged and fostered explicitly in the workspace.

While the off-the-shelf software solution used for the Youth e-Cluster Virtual Workspace had all of the necessary elements for online discussion, the level of customization available was limited and the aesthetic qualities were not geared towards a youth user group. The Virtual Youth Team and their Team Leaders used other forms of communications technology to facilitate work and social dialogue outside of the virtual workspace provided. These included chat rooms, instant messaging services (e.g. MSN messenger, ICQ), NET meetings via web cam, their

personal websites and e-mail. In response to the need for increased levels and varied methods of communicating with one another, HRDC also provided each team with the opportunity to hold a conference call and speak with one another as a group.

It was found necessary and imperative to inform both the Core and Virtual Youth Teams of the progress of the project on a repeated and consistent basis. Given the size and scope of most public sector institutions it would have easy to assume that such information was onerous or unnecessary for team members. This was proven not to be true. The regular posting and sharing of project updates ensured that team members were aware of the project's overall progress and could see the effect of their participation. This was a fundamental component to keeping members active and engaged.

Membership in the online setting was fluid and fluctuated throughout the project. Over the summer, a drastic decline in activity was observed. This was due to summer vacations, relocation and a general change in participants' attitudes over the summer months. Participation has increased since September. It was also not unusual for individuals to participate on a sporadic basis. For example, one member could be very active for two or three assignments, disappear for a period of time and then return again and continue participation. Unlike the in-person Core Team, membership of the Virtual Team tended to ebb and flow. This was somewhat frustrating for team leaders as they were uncertain what kind of response each activity would garner. It also required that activities not be tied to one another. In order to maximize participation, it was important to have individuals do tasks which allowed them in effect to pop in and out without losing the ability to understand and complete the activity for a given week.

Further, activity in the online environment occurred over non-regular business hours. Core Youth Team meetings took place on Saturdays and the Virtual Workspace was available twenty-four hours a day.

Case Analysis and Lessons Learned

To analyze the observations surrounding the inclusion of young Canadian citizens in the design and delivery of the Youth e-Cluster, the model of civic participation for electronic government design outlined in Figure 1 was utilized as a conceptual guide. It is important to note that at the time of writing of this paper, the project is only at the halfway point of its lifecycle. Thus it is impossible to analyze completely the implications and effectiveness of the initiative at this stage. That being said, the overall analysis is summarized in Figure 8. In general, it was found that the Youth e-Cluster project exhibits many of the characteristics advocated by the model and thus proves to be a good example of how to foster active and sustained citizen engagement in the design of electronic government services.



Figure 8: Application of the Model of Civic Participation to the Youth e-Cluster Project

One of the strong points of the project was its focus on securing *fair citizen representation*. This was illustrated through broad calls for participation across the country over various print, Web-based, and face-to-face mediums. A limitation on this call was the need to constrain recruitment of Core Team members to the National Capital region of Ottawa; however this was primarily for logistical reasons and thus was a legitimate constraint. Of relevance was the purposeful recruitment of a diverse group of participants (i.e., not those just with technical interests in the Web) and the concern for universal access of participants reflected through the acquisition of computers and Internet access to Core Youth Team members as a means of securing their participation.

Another strength was the project's focus to ensuring *meaningful participation*. Youth participants segmented into Core and Virtual Teams had very clear roles to play in design. Moreover, these roles were purposeful and added value to the final design. The activities directed to youth participants clearly translated into the layout and functionality of the e-Cluster interface. In terms of engaging youth in design, the HRDC provided sufficient training to Core Team members to increase the likelihood of Virtual Team members' effective participation in the online environment. Further, tasks and activities were developed which were not dependent on one another; this allowed for varying degrees of participation to occur. Last, the project contributed to participant skill development. For example, utilization of the Virtual Workspace environment increased participants' familiarity with the Web; participation in an electronic government project increased participant knowledge of government workings and introduced many of the youth to their first experience with Web site design.

The project also exhibited clear instances of supporting *fun and playfulness in design*. First, the tool was innovative and offered a creative workspace through which to design. The environment facilitated social interaction, both project and non-project related. Second, there was tolerance from the HRDC in allowing flexibility in youth participation. No ramifications resulted for those

who participated in bursts of activity. Third, there was ample rewards (e.g., prizes) and offerings of praise and recognition to youth participants. All these contributed towards supporting aspects of fun in design which in turn helped sustain participant engagement in the long run.

Good effort was also expended in fostering *cooperative action* between users and civil service project team members. For example, to facilitate cooperation, a two-tier structure of users (Core and Virtual Teams) was created whereby intense interaction between Core Team members and HRDC employees could occur due to the relatively small number of Core Team members and their close proximity to the National Capital area. This interaction included opportunities for Core Youth Team members to learn about the project purpose through on-site orientation sessions and attendance at Interdepartmental Working Group meetings. Further, since Core Team member were youth themselves, they could easily relay assignments and tasks in language familiar to the other youths in the Virtual Teams. This concept was also evidenced in the provision of the Virtual Moderator (an HRDC employee) who was also a youth; it was thought that such a person could more easily relate to youth team members. The use of the Virtual Workspace was a good example of the use of a familiar design tool (the Web), one in which the majority of youth participants would be comfortable in engaging. Other examples of cooperative activity included the provision of regular information postings on project updates to youth members, as well as the creation of activities where youth could brainstorm on the functionality of the e-Cluster. The latter provided opportunities for youth to envision future situations of working with the system. Despite these good efforts, some improvements still could be made in the area of cooperative action as supported by the model, namely by providing more opportunities for HRDC members to learn about youth participant perspectives on government operations and focusing initial design on youth's current practice and experience in utilizing federal government information services.

In terms of being a *meaningful project*, the Youth e-Cluster exhibited sizeable strength. The recruitment blitz, extensive effort to engage youth citizens (particularly those of the Core Team), and provision of a secure online work space, all strengthened participants' belief that their input indeed was valued and needed. Further, through regular updates and access to project status information, participants could directly see the impact of their contributions on the design of the e-Cluster. This validated participant importance and heightened the meaningfulness of the project to those youth involved as implementation of their ideas seemed likely.

From this analysis, the Youth e-Cluster was found to be an exemplary case study site exhibiting many of the fundamental components outlined in the model of civic participation for electronic government design. Recall that the model was derived from major tenets of participation design and citizen engagement principles. Overall, the e-Cluster project dealt with specific issues surrounding user engagement in eGovernment design: fair representation; meaningful participation; cooperative action; meaningful project, and fun in design. As such, the project is a good candidate to be used as an example for other eGovernment design initiatives that wish to engage citizenry in the design process.

However, despite this success, several key lessons were learned from the project which could further improve the likelihood of success of other eGovernment initiatives. These lessons centre on the difficulties of fostering active and sustained civic participation over an online environment and supporting citizen engagement in general. These lessons should be considered in addition to the five principle tenets suggested in the model of civic participation.

- Emphasis should be placed on training online moderators to effectively engage participants in design over this medium.
- Social activity in a virtual workspace should not only be tolerated but encouraged. While it may seem frivolous, the same discussions that allow you to create personal

friendships with your co-workers in an office environment are also necessary in an on-line environment. If you do not provide this space, it will be created regardless.

- The on-line community will expand beyond the boundaries of the space provided and other forms of communications technology will be used in conjunction with the primary tool. This is not necessarily negative, however, in order to encourage your user group to communicate primarily within the space provided, software and on-line environments should be selected carefully or a substantial amount of work may occur off-site. A more youth oriented workspace with visuals that were customizable by the user and less corporate looking, would have been a better choice given the audience for the Youth e-Cluster project. Communication off-site can make it difficult for you to capture data and results and to monitor progress and participation.
- Consideration should be given to the amount of time and effort required to successfully recruit large numbers of citizens on a voluntary basis for participation in a government initiative. Recruitment methodology must also involve creative components that take advantage of partnerships and networks in order to reach and attract participants. Incentives are a key component to recruiting individuals to participate in policy and program development initiatives within the public sector and to keep them engaged over the long term. This may include financial compensation, prizes, awards, rewards, recognition, etc.
- Sufficient resources and staff flexibility should be top concerns as well. Involving individuals directly in design requires that a regular level of interaction and dialogue exist between the project team and the participants. This level of support is similar to that of the interdepartmental partnership and requires a similar level of staff time, competence and dedicated financial resources. Given that some citizens, as in the case of youth

team members, are in school or employed, there must be a willingness and ability to work irregular hours.

- Upper management support from government departments and agencies should be considered mandatory. Direct citizen engagement in the design and development of policies, programs and products complicates the process and has implications for our system of representative democracy. It requires resources, commitment and a level of transparency unsurpassed to date within public sector institutions. Upper management should secure these in advance of the project start. Further, the support of senior management is imperative in order to create the 'space' needed. In terms of the Youth e-Cluster, the dissemination of research findings and well-tailored briefings played an important role in stressing the benefits of including users in design to management and securing the requisite financial and human resources to execute the project.

Conclusion

Overall, this paper addresses the role of citizen engagement in the design of electronic government services. A model of civic participation was devised and utilized to analyze a specific case study involving the engagement of young Canadians in the design of the Government of Canada's Youth e-Cluster. The analysis highlighted the viability of the model in identifying key aspects required in an electronic government design initiative involving the participation of citizens. These aspects, in general, are the provision of a meaningful project which incorporates fair citizen representation, purposeful participation, fun, and cooperative action between citizen and traditional designer. The analysis of the case study also identified lessons learned from the project which may be utilized to overcome challenges in facilitating active and sustained civic participation. It is the authors' hope that such insights are helpful to

others contemplating the engagement of citizens in future electronic government design initiatives.

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