National Educational Association of Disabled Students

Community Learning Networks Initiative
Office of Learning Technologies
Developmental Phase Project Final Report

CampusNet Project

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Prepared by

Chris Gaulin, Myrtis Fossey,
Jennison Asuncion, and Frank Smith

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Introduction

The National Educational Association of Disabled Students (NEADS) is a consumer organization with a mandate to encourage the self-empowerment of post-secondary students with disabilities. NEADS advocates for increased accessibility at all levels so that disabled students may gain equal access to college and university education and employment after graduation. To achieve these challenging goals, NEADS takes on many exciting projects, all of which provide students with disabilities the tools they need to succeed in their post-secondary studies. NEADS is charged with providing an online information clearinghouse for students with disabilities. It is able to fulfill this challenge through its comprehensive Web site (www.neads.ca). The Association's Web site is the platform for its newest initiative, the CampusNet Project.

CampusNet strives to be a uniquely Canadian, online collaborative community, bringing together campus-based organisations, committees, groups of students with disabilities, and other interested parties. The objective is to provide an interactive community of learning where information on projects, approaches, techniques, successes, and challenges can be shared and exchanged across geographies. We utilized a network of some 80 organisations and accessibility committees to develop CampusNet.

It is important to note that post-secondary education is essential for people with disabilities to participate in Canada's labour market. The recently released publication *In Unison 2000: Persons With Disabilities In Canada* states: "overall, people with higher levels of education are more likely to participate in the paid labour market and educational attainment among persons with disabilities has been increasing. The 1996 Census clearly shows the strong correlation between educational attainment and labour force participation rates among persons with disabilities." (p. 33-34)

Campus-based organisations of disabled students and access committees are frequently engaged in projects that promote awareness of disability issues and concerns in the academic environment. In addition, these groups -- through their promotion of accessible education and equitable opportunities for people with disabilities in colleges and universities -- ensure greater participation in the labour market while in school (summer and part-time employment) and after graduation. These groups are also involved in on-campus employment fairs, awareness-raising events that include the participation of employers and students, and the promotion of cooperative education programs. These groups participate in skills development and preparation for careers after post-secondary education. Campus groups often advise placement or career services centres on matters affecting students and graduates with disabilities. CampusNet enables student to share information on these types of projects.

With the development of CampusNet we expected that employers would have invaluable contact information for on-campus recruitment campaigns. And the benefits to students with disabilities and community organisations across the country are clear.

Objectives

In keeping with NEADS' commitment to projects that help students with disabilities directly, the CampusNet Project set out to achieve objectives that would benefit students. With a grassroots approach, CampusNet aims to achieve the following:

1. Develop a free online collaborative network of campus-based college, university and cégep organisations and committees of students with disabilities;

2. Provide a forum for immediate dissemination of reports and other material from these organisations and committees;

3. Leverage the power of the Internet by providing tools through which knowledge and information can be shared and built upon by students across Canada;

4. Provide training and expertise to allow campus groups/committees to develop their own web presence in our community; and

5. Create a community-learning environment where practices, techniques, and expert knowledge can be exchanged for the betterment of the Canadian post-secondary students and graduates with disabilities population.

Project Structure and Deliverables

The first step in the process of developing this community consisted of a bilingual needs analysis, involving direct communication with existing organisations and committees of students with disabilities at post-secondary institutions in all provinces and territories. This phase took two months and will allow for:

1. The collection of current contact information which assisted with subsequent phases;

2. The identification of groups and committees that we may not be familiar with, thus building upon our network;

3. The determination of what aspects of learning and knowledge transfer different groups were seeking; and

4. The determination of technological needs and realities that exist for these groups as they attempt to access the Internet.

During the first phase, we made direct contact with groups and utilized a questionnaire that could be administered over the phone and distributed to the groups and committees to ensure that we received complete information. This questionnaire included questions relating to the activities of groups and committees with respect to transition from school to work activities involving students with disabilities. The initial contact with groups was used to inform them about the CampusNet Project. Participants were also informed of the excellent online resources that are currently available for students and graduates with disabilities on the NEADS web site (www.neads.ca). These resources include information on access to post-secondary programs, financial assistance available for post-secondary study and specialized employment programs and opportunities.

The second phase of the project allowed for the development of the technological backbone. This is an integral part of the project as it produced the engine that drives CampusNet. This phase included:

1. A detailed design phase based on our expertise in accessible web-design and data collected from our first phase, consisting of story-boarding the look-and-feel of the various components of the community (Appendix D);

2. The development of an efficient management system for organisations and committees to submit material for timely online publication and for maintenance of these documents;

3. Determination of the necessary technical requirements to provide Web hosting space for groups/committees that do not have such a facility at their educational institution;

4. Development of any learning aids or tools to support groups/committees with little to no web page design knowledge (e.g., basic html); and

5.   Identification and testing of the most effective online collaborative tools (e.g., bulletin boards, real-time chats) which will comprise the crux of our intended knowledge transfer.

The second phase was expected to take approximately three months and was carried out in consultation with the NEADS Web site Manager, National Coordinator, and subject matter experts as required.   Phase two ran concurrently with phase one and part of phase three.

In the third phase of the project, we developed and implemented the content of CampusNet, fed directly from the work from phase two.   This included collecting links to existing Web site addresses for student organisations/committees, activity reports, and other existing material.   The NEADS Web site Team coded all documents to comply with pre-existing accessible design specifications that fit within the structure of CampusNet. Additionally, we implemented all interactive components of the community, and, where necessary, hosted and provided guidance to those organisations/committees seeking to develop their Web presence through CampusNet. This phase was expected to take two months.

The fourth and final phase of the project was a formative evaluation.   This enabled us to determine how useful CampusNet is to participants in terms of knowledge transfer. Through telephone interviews and observations by our team, data and ideas for keeping CampusNet current and useful for learning were collected and acted upon.   This took one month, but is assumed to be an ongoing activity.

The final report will be made available to students, service providers, employers, and organisations that support for persons with disabilities in the NEADS network.   It will be available free of charge from our office and posted on the NEADS Web site in a variety of formats (Adobe Acrobat, HTML and Microsoft Word).

To enable CampusNet to expand and remain open to new organisations, groups, and committees, every effort will be made to inform disability service providers at colleges and universities, employers, and related organisations of the ongoing project work.

As part of this developmental project, two consultations were held.   One meeting was held in conjunction with a meeting of the NEADS Board of Directors in November 2001.   For this consultation during the fall Board meeting, we invited the Canadian Association of Disability Service Providers in Post-secondary Education (CADSPPE) to participate. Representatives from these organisations consulted with an advisory committee of our Board of Directors.

The budget for this project supported travel and accommodations for these consultations. Additionally, the budget has been structured to include the cost of translation work on a questionnaire, content submitted by groups and accessibility committees, text on the Web site describing CampusNet, and the final report.

Method

In the Fall 2001 and Winter 2002 semesters we conducted structured telephone interviews with 11 Anglophone and 3 Francophone college and university students with various disabilities. Each represented either a campus-based advocacy groups or accessibility committees. Note that e-mail was used in 2 cases to accommodate those who could not use a telephone. Respondents came from 14 different institutions: 10 universities and 4 colleges. The focus of these interviews was on collecting information about the structure and background on existing groups/committees, and assessing the need for CampusNet.

Procedure

During a period of 2 months a total of 213 college and university disability service providers were contacted. They were asked whether a disability-related committee, group, or organization existed on-campus. If this was the case, we explained the nature of the CampusNet project, and asked them to pass on information to the highest-ranking student with a disability (e.g., President or Chair) on the group/committee. Due to confidentiality, we had to facilitate initial communications via the disability service provider. Among the information provided to service providers was a toll-free telephone number that students could use if they were interested in participating in the needs assessment. 20 colleges and 25 universities indicated that they either had a disability-related group/committee, accessibility committee, and/or a student with a disability on a Student or other Council. It is important to note that 104 college and 24 university disability service providers confirmed having no group or committee at their institution.

If a student contacted us, the project was explained again. If the student was interested in participating in an interview, a date and time was scheduled with them. Interviews lasted between 15 and 40 minutes. Before, an informed consent form was read to the participant. Responses were quantified using predetermined categories (questionnaire is available as Appendix A).

Interviews with students consisted of 27 questions. There were 17 closed-ended and 10 open-ended questions. Closed-ended questions used a six-point Likert scale, with one being very useless and six being very useful, or were simple Yes/No questions. Questions covered such topics as: the history of the group/committee; methods of communication used to inform other students with disabilities on campus about work and activities of the group; any employment-related initiatives being undertaken; as well as a host of questions about their views on the use and utility of the CampusNet community. Students also told us about whether they had access to the Internet and a computer; whether they or someone else in the group/committee had HTML knowledge; and whether they had visited the NEADS web site.

Participants

From the 45 institutions that indicated having a group, committee, or student with a disability on a Student or other Council, 14 students took part in our needs assessment. six came from an advocacy/support group of students with disabilities. seven sat on accessibility or similar committees. 1 represented students with disabilities on a Student or other council.

Results

Demographic Information

Of the groups surveyed, although most had some sort of contact information available, only 54% actually had a web page, and out of that group only 58% had dedicated web pages specifically for the group or association in question. This means that at least 56% of student groups do not have any presence on the Internet, and less than a third (31%) of the total sample actually have a web page of their own.

Despite this lack of a presence on the Internet, these groups have an average of 25 members who are students with disabilities, 8 members who are students without disabilities and 10 members who are staff, advisors, counselors, faculty, and interested members of the community at large. An average of 43 persons per post-secondary institution willing to advocate for the special needs and interests of students with disabilities and students in general on campus.

These groups, committees, and associations meet as a group at least twice a year and many once a week. On average, these groups get together 6 times a year to ensure continuity from one semester to the next. They have been in existence for an average of 6 years but many of the older groups (e.g. 22 years old) have changed mandate over the years and a few have only recently come

into existence (since November 2001) as a result of their participation in this pilot investigation. All groups are unanimous in their desire to have advocacy as their predominant mandate.

There is no uniform way for these groups to communicate with the students across campus and most admit with embarrassment that they must resort to "old fashioned" ways of getting their messages out to the other students. The groups surveyed tell of communicating with other students on campus about upcoming events via word of mouth, posters in strategic locations such as the Disabled Student Services Offices, and newsletters. Additionally, a minority of these groups have developed their own mailing lists and use these to communicate with other students on campus. These mailing lists are developed and updated based on a voluntary system where interested parties ask to be added to the list.

Computer/Internet Availability and Usage

As is the case for most post-secondary students, all of those surveyed here use computers and the Internet on a daily basis for school-related work and personal communications. This, in spite of the fact that not all the institutions they attend provide them with personal internet accounts or even an accessible computer with internet access at school. However, those groups that did not have access to accessible computers at school had access from home. For the most part, there was at least one member per group that was sufficiently proficient in HTML to help with the creation of the group's web page in the CampusNet community. In cases where such a person was not available, CampusNet would provide the technical expertise free of charge, much to these groups' delight.

Current Projects and Future Aspirations

Although only half of the groups surveyed participate actively in projects dealing with the transition from school to work, all would like to do more. The involvement that exists currently in this important sphere of advocacy consists predominantly of cooperative work with advocacy groups outside the educational institution. Workshops are held and information sessions are organized with the participation of these student groups. Essentially, the groups "host" the outside organisations. Most groups concede that they are always willing to give out information when asked but that the resources allowing them to be able to do so in any organized manner are limited.

Once again, there was unanimous agreement that more should be done to help students with disabilities make the transition from school to work successfully. Students reported that they would like to see more involvement on their

groups' parts in activities such as workshops, orientation days, and career events. Some groups were eager to form a subcommittee devoted exclusively to developing activities or projects catering to the issues related to making this pivotal transition. All groups agreed that it was not a lack of will on their parts but rather a lack of financial independence that forces them into a more "behind the scenes" position in the organization and implementation of such outreach events.

Creating a Community

The very idea of a "virtual community" delighted all the groups surveyed. Eighty-six percent (86%) of the groups surveyed reported that a community such as CampusNet would be "very useful" for their group. The remaining fourteen percent (14%) felt that this would be "useful". None of the groups surveyed thought that a virtual community would be "useless". Students reported that this type of community would be a great means of sharing information; finding out what other Canadian groups like theirs are doing; how to go about solving problems in novel and creative ways; and how to avoid re-inventing the wheel. Additionally, they felt that this type of community would increase student involvement over the long-term, and would allow smaller groups to be part of a larger community and thereby allow for a larger advocacy movement across Canada to exist.

In light of the inability for most of these groups to communicate effectively with their own student bodies, it is not surprising that only half the groups surveyed currently communicate with off-campus groups such as theirs in other institutions across Canada. Of those who do communicate with other groups, this consists primarily of e-mail and telephone communications. Face-to-face meetings with other students (e.g. conferences) are a real challenge for most of these groups as there is no tradition of doing so and, as usual, funds are limited.

When asked how useful it would be for their particular group to be able to communicate with members of other groups via CampusNet, there was unanimous agreement that this would be "very useful". It was felt that this virtual community would allow them to communicate with each other without incurring the expenses of travel or long-distance telephone calls. Those groups that didn't already communicate with other groups felt that the existence of such a network would finally allow them to know what was going on outside their own institution and thereby gain all the benefits of information sharing already mentioned above.

All the groups surveyed agreed to provide reports and information about their group's activities and projects, which would be placed in the community for the other visitors to read. They felt that having access to similar information about other groups in the community would be "very useful" to them and their group

as they saw this as one of the best ways to share information and even to help new groups just getting started.

The majority of groups surveyed (79%) felt that the existence of their own web page independent of their institution through CampusNet would be "very useful". The remaining twenty-one percent (21%) felt that having their own web page as part of the CampusNet community would be "useful". None of the groups surveyed thought that this would be "useless". Students felt that having all the links to groups across Canada in one location would be very helpful for future students; they would gain information and know more about the available resources of a given institution before enrolling/applying. Essentially, groups thought this was a great way to promote their group and its work to others. They also thought this was a legitimate way of gaining some independence and continuity over many generations of students. Additionally, one group felt that having their own space on the web provided to them through this network would help them financially as they would no longer have to pay for their own web space.

The surveyed groups had some suggestions as to what features they would like to see as a part of the CampusNet community (see Table 1). Most of the sample suggested a listserv component and a live chat or Bulletin Board System (BBS) type of component where network members could consult with each other on a regular basis. Others suggested a picture gallery, a suggestions box, and a monthly "feature section" where information/updates about certain topics of interest or special announcements could be posted.

Finally, groups were asked about their concerns regarding the CampusNet community. Essentially, students wanted to ensure that there were going to be security measures in place on CampusNet in terms of privacy and the maintenance of confidentiality for members of the community. Additionally, one student expressed concern regarding the sustainability of the community (e.g. once funding for the CampusNet project was exhausted, would the whole community continue to be available).

Table 1

Excerpts of students' answers to the question "Do you have any suggestions for features that you would like to see as part of the CampusNet Community?"

- *"A listserv component might be good. As CampusNet grows more and more we will see more, maybe a picture gallery so others can get an idea about who they're dealing with, links to representatives/contacts, an "issues" board so we can feel free to write about those issues, a "merits board" for student prizes, accomplishments, etc."*

- *"None at this point - sounds good for everybody."*

- *"A BBS, a suggestions box online, links to everyone. Interesting information board and links to external sources that could be useful such as the CNIB."*

- *"Questions board, a BBS type of thing, and maybe an issues board for people with invisible disabilities."*

- *"Create a mailing list and a 'chat line' where people could share ideas live."*

- *"A Chat room; a place to communicate about our lives with others"*

- *"De l'information sur les types d'handicaps, technologies, financement, et lois"*

- *"De l'informations sur les emplois"*

- *"Pictures, short reports, e-mail on updates, and a live chat room."*

Discussion

In the current knowledge-based economy where technology use is of greater and greater importance (especially in higher education), it would seem logical to find more student-based advocacy groups making use of the World Wide Web to get their messages across. The unfortunate truth of the matter is that less than half of the existing campus-based support groups of students with disabilities (which are in and of themselves few in number) even have their own dedicated virtual space on the Internet. It is no wonder that these groups have difficulty advocating on their own behalf in their own schools, let alone on behalf of others across the nation.

Although the committees, associations, and groups surveyed all thought it would be desirable to communicate amongst themselves, they do not as of yet have a standardized way of doing so. It was generally agreed upon that a

community such as CampusNet would provide the means to share information with groups at other institutions and thereby allow for larger scale advocacy. Also, it was generally felt that the creation of specialized web pages forming part of a larger whole would render credibility and independence to the aforementioned groups.

Financial constraints predominate in the relative inability of these groups to get involved in larger scale outreach projects or even to advocate or publicize their efforts and achievements. If a network were available to unite all these groups and create a larger movement, their resources might be pooled. If a cost-benefits analysis were to be undertaken, it would undoubtedly show that not only is there greater strength in numbers (an increase in productivity), but that as in the business-world, buying in bulk and avoiding the costs associated with the middle man greatly alleviate total expenditure. A network such as CampusNet could become an anchor that is available free of charge to these groups. As a result, it is likely that groups will be in a position not only of having access to more information and resources but they will have the means of reaching a wider audience. Additionally, if CampusNet can be the umbrella bringing these groups together for a sustained period of time, many of the long-term problems these groups face, such as attrition in membership after graduation of key members might be overcome. These groups will then be able to invest their energies in the larger issues.

Members of these groups made it clear that there were many obstacles preventing them from getting down to the business at hand. They also pointed out that the virtual unification of groups across Canada would be a blessing for a variety of reasons, not the least of which would be the sense of camaraderie and the feeling that they are part of a community, a part of something meaningful and inspiring.

Students have a good idea about the kinds of resources and information that would truly be helpful to them in their studies, and when asked about the features they would like to see as a part of CampusNet, they proved creative and yet practical in their suggestions (see Table 1). Suggestions of a practical nature included: access to updated information on certain areas of interest, a listserv and mailing list. Suggestions of a less practical but nonetheless essential nature such as: a bulletin board system (BBS), live chat, direct links to others in the network, and a suggestions box indicate the interest these students have in each other. It would be a mistake not to take into account their point of view as they are going to be the end users of this network. As we are committed to creating an affordable forum for students to share ideas, and as a virtual community such as CampusNet has received the approval of these groups, it is perhaps time to put it to the test.

Implementation

With recommendations from our survey of representatives from student organisations across Canada, as well as consultations with NEADS' advisory committee, we set out to develop an online community that would respond to the specific requirements of campus groups. The results of our survey of campus-based student organisations strongly indicated a need for a better means of communication between groups. They also pointed to a desire from these groups to be able to publicize their organisations online and to the general public.

All aspects of CampusNet were designed for use by Internet users. Since our survey indicated that all groups had at least some form of Internet access, there was no identified need for the system to be available through other means.

Providing the information

In our consultations it was clear that there was a need for information on what campus groups across the country were doing. Having access to activity reports, bulletins, announcements, and other public documents that student organisations produce can assist in the development of newer and growing organisations. To respond to this need, an online directory of campus-based student groups was developed. Through this system, each organisation/committee/group has its own contact card (Figure 2 in Appendix C) containing: full contact information for the group; a brief description (profile) or the groups; a link to the group's website, if they have one; and a listing of public reports.

In addition to the information about each group, CampusNet comprises a section devoted entirely to student leadership development. This section contains information on disability rights in Canada, as well as helpful techniques for starting and maintaining student run disability organisations on campus.

Building a network

Building a network that could support the needs of the campus groups we interviewed proved quite challenging. Groups requested instantaneous posting of information without compromising a fully accessible an easy-to-use interface. Groups also wanted to have control of their own content and for the system to be confidential.

Throughout the development phase, CampusNet was housed on a secondary server and tested thoroughly. The online interface was built up separately from the NEADS web site. CampusNet contains two categories of content: materials for public viewing and member-only content (Figure 1 in Appendix C). Public sections include those containing information about student leadership, the directory of student groups, and information about CampusNet itself. The only member-only section is what we call "The CampusNet Café".

The CampusNet Café was designed as an electronic bulletin board system that provides users with an easy to use interface with many advanced features. It is broken down into the following interactive forums:

- Campus Physical Accessibility

- Campus Computer, IT, and Website Accessibility

- On-Campus Disability Sensitivity Training

- Fund-Raising

- Fire & Safety Issues

- Faculty and Administration-Related Issues

- Access to Extra-Curricular Activities

- Transportation Issues

- On-Campus Accommodation Issues

- Campus Housing Issues

- Employment & Career Initiatives

- Starting-up, Maintaining, and Continuing a Group

- Collaboration with Other Campus-based Groups

- Miscellaneous

Within each of these forums users have the ability to ask questions, post ideas and strategies, and submit documents in any file format exclusively for viewing by other members (Figure 3 in Appendix C). The forum, built on SQL databases and a series of PHP scripts, provide content on demand to users. They can also be used as a means of discussion between members. Any group can take part in ongoing discussions in each forum, and private messages may

be exchanges as well. The system also allows for participants to have a photo of themselves added to their profile so that it appears under their name when posting. This gives CampusNet a human face and makes it a friendlier atmosphere to share in.

Promoting CampusNet as a Community of Learning

On Friday, January 25, 2002 NEADS held a "Student Leadership and Employment Forum" at the Courtyard Marriott Hotel in Toronto. The forum included two panels, one on the development of campus-based organizations of students with disabilities and the second on employment opportunities after graduation. Student leaders from universities and colleges in Toronto participated in this forum. Fifty people were in attendance. Human resources and employment equity personnel from companies representing different sectors of the Canadian economy were well-represented and they held a dialogue with students on transition from school to work issues. Participating organizations included: GE Canada, Career Edge/Ability Edge, City of Toronto, Human Resources Development Canada (Youth Initiatives), Bank of Montreal, Canadian National Institute for the Blind (Employment Programs), Centre for Independent Living (Navigating the Waters employment program staff).

This consultation provided an excellent opportunity to discuss the CampusNet Project with forum participants. Two members of the CampusNet Project team were in attendance on January 25th to present material on the project work and answer any questions about the initiative. This meeting produced some excellent feedback on our work to date and was a worthwhile supplement to data and comments already gathered through CampusNet telephone and e-mail interviews.

On February 23rd, 2002 a presentation was made about the project to the Quebec Association For Post-Secondary Students With Disabilities (AQEIPS) Board of Directors by Chris Gaulin. Subsequently, AQEIPS became part of the CampusNet community and has developed its website through the project (www.aqeips.qc.ca). The AQEIPS web site is available in both English and French and demonstrates the success of at least one of the project's objectives. AQEIPS will be co-hosting our upcoming Quebec Student Leadership Forum on April 6th at the Cégep du Vieux Montréal. No doubt there will be considerable dialogue regarding the CampusNet initiative and the launching of the online community. Once again, employers, student leaders and community groups will be around the forum table.

On March 15th, 2002 another successful Student Leadership and Employment Forum was held in Victoria, British Columbia at the Coast Harbourside Hotel. This meeting also involved student leaders, community organizations, employers and employment programs. Once again, there was an opportunity

to share information on the CampusNet Program with meeting participants. Forty-five people attended the Victoria forum. A member of the NEADS board - who serves on the CampusNet advisory committee - was a panellist at the meeting. This was a great opportunity to do some project networking and information sharing.

Throughout the project the NEADS web site and e-mail distribution list (NEADS-L) were used to promote the benefits of CampusNet. A brochure outlining the purpose and features of the online community was developed by the project team for distribution to all student groups and disability service providers (submitted as Appendix B). This brochure acts as a recruitment tool to encourage new member groups to join and therefore allow CampusNet to grow. It will continue to be used past the development phase in order to further the objectives of the project.

On April 1, 2002 student groups, committees, and organisations from across the country will be invited to log onto www.neads.ca/campusnet and take part in a uniquely Canadian online community.

Conclusions and Recommendations

Clearly, this project has been a great success. In a short six-month period of research and development we have surveyed student leaders and groups at several post-secondary institutions across Canada. Through our consultations with students we have developed a viable online community that promotes online community-based learning. The enthusiasm for the CampusNet initiative is tremendous and will undoubtedly lead to quality exchanges in the online community. This Web site has great potential for the future as it can be a catalyst for significant progress in the advancement of accessibility of post-secondary education in Canada and, more importantly, the full participation of students with disabilities and their groups/committees in that process.

The CampusNet community also offers significant potential to support the goal of successful transition from school to work for graduates with disabilities. It can help foster better communication between these groups and employers nationally.

The National Educational Association of Disabled Students (NEADS) would like to thank the Office of Learning Technologies (OLT), and its Community Learning Networks Initiative program, for enabling the Association to conduct this research and create the CampusNet community. Based on the recommendations from this project, we expect to approach the OLT with a new proposal in the upcoming fiscal year to move this initiative beyond a developmental activity into a pilot phase project.