Gateways: International Journal of Community Research and Engagement

Vol 10 (2017)

© 2017 by A Dodd. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 Unported (CC BY 4.0) License (https:// creativecommons.org/licenses/ by/4.0/), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercial, provided the original work is properly cited and states its license.

Citation: Dodd, A 2017, 'Finding the community in sustainable online community engagement: Not-for-profit organisation websites, service-learning and research', *Gateways: International Journal of Community Research and Engagement*, vol. 10, no. 1, pp. 185–203. doi: 10.5130/ijcre.v10i1.5471

Corresponding author: Alice Dodd; Alice.Dodd@unisa.edu.au

DOI: http://dx.doi.org/10.5130/ ijcre.v10i1.5471

ISSN 1836-3393 Published by UTS ePRESS http://epress.lib.uts.edu.au/ journals/index.php/ijcre/index

Finding the Community in Sustainable Online Community Engagement

Not-for-profit organisation websites, service-learning and research

Alice Dodd University of South Australia

The current environment of changes to Federal Government policy and reduction in funding to Australian universities has led to public universities contemplating new strategies to cope with budgetary challenges (Mamun & Rahman 2015). Within this environment, the role for research and education is being debated, particularly by those in the higher education sector with an interest in engaging their communities and promoting the public good, despite less public funding (Engagement Australia 2015). At the same time, the not-for-profit (NFP) sector has been subjected to significant funding cuts (ACOSS 2014; Murray 2014), creating a greater need for support and engagement from other sectors such as education.

This article argues that there is an important role for universities in this environment to engage with their communities through activities such as service-learning and, most significantly, that effective engagement both requires and generates valuable research. As Furco (2010, p. 381) argues in 'The engaged campus', public engagement can be used to advance the public service, teaching and research components of higher education's tripartite mission. The case study presented in this article demonstrates that effective engagement and teaching is reliant on good research. While often framed as competing with each other, effective teaching, public service and research are interdependent.

SERVICE-LEARNING AND THE ENGAGED CAMPUS

There are now many definitions and a wide array of practices under the umbrella of service-learning, but it can be seen as both 'a pedagogy and philosophy that links classrooms with communities and textbooks to the "real world"' (Butin 2010, p. xiv). Service-learning has its roots in what Ernest Boyer (1990, 1996) termed the 'scholarship of engagement', in which universities become vigorous partners in addressing pressing social, civic, economic and moral problems of their communities. The underlying approach in service-learning engages students in experiential learning by integrating coursework and critical reflection with meaningful community service through which

both students and community benefit (Deeley 2010; Furco 1996, 2001, 2010; Kenworthy-U'Ren 2003; Soska, Sullivan-Cosetti & Pasupuleti 2010). The key point that distinguishes service-learning at its best is that 'there is an equal emphasis on service and learning, providing benefits to both the recipients and providers of the service' (Furco, 1996, p. 5). Students may gain learning and developmental benefits, including: improved understanding of academic content (Blouin & Perry 2009, p. 121); skills in critical thinking, problem solving and analysis; increased self-esteem and confidence; communication and teamwork skills (Deeley 2010, p. 44); and increased awareness of social issues and career options (Furco 2010, p. 385). Ideally, the recipient community partners benefit from tangible professional products for use in their local community (Kenworthy-U'Ren 2000, 2003).

Indeed, because service-learning has been shown to be beneficial for students' learning and forging links between higher education institutions and the communities they serve, it is now a well-established pedagogical practice internationally and across all disciplines (Holland 2016; Rogers & Andrews 2016). As Holland (2016, p. 76) points out, the national and international discourse on community engagement has expanded around the globe, with the establishment of organisations such as the International Association for Research on Service-Learning and Community Engagement (IASLCE), the Engaged Scholarship Consortium and the Talloires Network encouraging research and the exchange of knowledge on the topic.

Service-learning, when done effectively, can extend beyond teaching and service to incorporate research that addresses authentic and complex social issues of relevance to the community and, therefore, the university it serves. Furco (2010) argues that service-learning is a community-engaged approach that provides opportunities for more significant, higher quality research that benefits society. In Furco's (2010, p. 383) ideal model of the engaged campus, service-learning would be guided by and initiate community-engaged research. Under this model, communities participate as valued research advisers, partners or co-investigators who can help identify appropriate research questions, engage in the research process and interpretation of findings, and provide perspectives on the implications for future research and practice. In turn, academics and their research departments benefit from exposure and access to social contexts and issues that guide research which is significant in addressing challenges in the community and public interest. Of particular relevance to the research discussed here, not-for-profit organisations may benefit from access to Information Communication Technology (ICT) products, knowledge and skills that they otherwise have limited access to due to lack of personnel or resources (Chang et al. 2014; Dodd 2014; Hettche & Clayton 2013; Nejmeh 2012).

The key factor underpinning engaged service-learning and research, as noted by Furco (2010, p. 384), is 'how the

voices of members of the community, their expertise and their needs are incorporated, valued and honoured'. Yet one of the problems identified in discussion of service-learning projects is that the voices and perspectives of community partners are often missing. Service-learning initiatives are often evaluated for their outcomes for student learning, without addressing challenges or outcomes for the community organisations (Blouin & Perry 2009; Bushouse 2005; Littlepage, Gazley & Bennett 2012; Stoecker et al. 2010). The problem is that without listening to and engaging the community partners in dialogue throughout the servicelearning project and beyond, there is potential to do more harm than good. This is particularly the case with ICT and computerbased projects, where the real costs of a website or database are not in its initial development but in its ongoing maintenance and support (Connolly 2012, p. 339). In addition, Connolly notes that these student-created products can often shift an organisation's limited resources away from their main organisational purpose to supporting and upgrading the new technological system. Thus, such service-learning projects, rather than assisting organisations, place significant stress on organisations' limited resources in terms of available time, personnel and materials. This is where dedicated, systematic and methodical research that engages the community partners could produce far better ongoing outcomes for the organisations, students and the university involved.

This article now focuses on research conducted for a PhD between 2008 and 2014 based on the Sustainable Online Community Engagement project to demonstrate how genuine community engagement and service, teaching and research are interdependent.

SUSTAINABLE ONLINE COMMUNITY ENGAGEMENT AND SERVICE-LEARNING

The Sustainable Online Community Engagement Project (SOCE) is a partnership between the Office for Volunteers, State Government of South Australia and the University of South Australia's School of Communication, International Studies and Languages, which has been operating since 2001. Students of the University of South Australia create websites and other communication products for not-for-profit community organisations as part of their courses. The websites are hosted by the university at no cost to the organisations, and training and ongoing help desk assistance is provided by the project staff (Marriott 2007; Marriott & Patterson 2004; Wood & Dodd 2010a, b). Any not-for-profit South Australian organisation, excluding political parties, can apply. Between 2001 and 2015 SOCE assisted more than 400 South Australian community groups, and at the time of writing hosted 160 organisations' websites on <u>www.communitywebs.org.</u>

SOCE fulfils the university's learning and teaching strategy objectives of providing 'experiential learning' opportunities through 'practice based learning and service learning through

volunteer work' (UniSA 2009, p. 1). In theory, it also contributes to the university's mission of engaging with its communities to address the major issues of the time (UniSA 2017), in particular, the need for not-for-profit community organisations to build capacity in using internet-based ICT (Australian Government Productivity Commission 2010; CISA et al. 2007; Denison 2008; Denison, Stillman & Johanson 2007; Denison & Williamson 2013; Dimitrov 2008). A review of the literature (Dodd 2014) on ICT and service-learning projects in universities suggests that, while there have been many courses and initiatives where students build websites for not-for-profit organisations, for example, the Civic Nexus project (Farooq et al. 2007; Xiao & Farooq 2013) and Techshop in the USA (Stoecker et al. 2010), the websites that are developed are not hosted by the universities or their affiliates. Similarly, there are well-established initiatives, such as UTS Shopfront in Australia (see http://www.uts.edu.au/partnersand-community/initiatives/uts-shopfront-community-program/ welcome), and many courses in which students build ICT products for not-for-profit organisations; however, the SOCE project is unique in its ongoing hosting of the websites built and provision of help desk assistance. It is this hosting and training that enables the ongoing relationship with organisations, which in turn provides opportunities for research, genuine assistance to organisations and benefits to students. SOCE could thus serve as a model for the ideal service-learning initiative suggested by Furco (2001, 2010), in which community partners, students and the university are mutually benefited. Unfortunately, at the commencement of the research discussed below, SOCE appeared to be doing more harm than good by leaving organisations with websites they could not maintain.

THE RESEARCH PROBLEM

A significant problem experienced in the SOCE project was that, despite some ongoing assistance and training, the community groups reported that they often found it difficult to sustain effective use of their websites (Dodd 2014). This is a problem that affects the broader not-for-profit sector and community organisations in Australia (Denison 2008; Denison & Johanson, 2007; Denison, Stillman & Johanson 2007; Denison & Williamson 2013; Digital Business Insights 2011; Knox 2005) and internationally (Greenberg & MacAuley 2009; Manzo & Pitkin 2007; Waters 2010; Zorn, Grant & Henderson 2012; Zorn & Richardson 2010). In 2007, a proposed solution to this was to develop an online community for the participating organisations, which would be a 'self-supporting member-driven collaborative online environment' enabling organisations to share information about web-based technology (Marriott 2007, pp. 250–51). This online community of practice would follow Preece's (2000) model of online 'Community-Centred Development': initially a prototype would be created, starting with a focus group of interested key community group members, or as

Kim (2000) describes them, 'leaders', to elicit models suitable for the online community. The hope was that these leaders might then guide new members in the online community, with contributions from academic staff decreasing as participation from community members increased (Marriott 2007). However, from the perspective of the author and project officer for SOCE, who was the main point of contact between community organisations and the university, the value of this for community members was questionable, prompting this research that sought to determine if the organisations hosted by SOCE were using their websites effectively and sustainably and to devise strategies for assisting them to do so (Dodd 2014).

Prior research conducted in SOCE was either evaluative, focused on quantitative, reportable outcomes (such as number of websites built) to satisfy the government department funding the project, or focused on student learning outcomes (see Marriott, Patterson & Temple 2004), with little follow-up on how successfully community organisations were using their websites on an ongoing basis. The project staff's comprehension of the community clients' needs and aspirations regarding website use and ongoing management was quite limited, and seemed to be based primarily on a single multiple-choice question in an online survey conducted in 2003, and again in 2005 and 2006. This survey asked how satisfied organisation members were with their website and gave options of responding from 'very dissatisfied' to 'very satisfied'. Respondents could provide qualitative answers in a final question that asked for other comments. In 2003, 30 community organisation members responded, followed by 37 in the 2005 survey; however, only 11 responses were obtained from the 2006 survey. This fall in responses and apparent lack of engagement raised questions about how websites were used by organisations. In particular, the results from the surveys suggested that the maintenance of the websites was the community organisation members' major concern. Furthermore, informal communication with community members through help desk, phone or email demonstrated a disconnect between academics' understanding of technology requirements and the experiences and needs of community members.

It was felt that research focusing specifically on the longer term outcomes for the community partners was required. This research should incorporate the community organisations' perspectives and encourage their participation as co-investigators in order to initiate ongoing learning for all stakeholders if there were to be genuinely sustainable outcomes.

METHOD

The subsequent research used a mixed-method ethnographic action research (EAR) approach in three phases in order to determine: how the organisations were using their websites; whether this matched their aspirations for their sites; and any successful strategies used by the organisations to manage their

websites. As part of this, the research would gain feedback on the original proposal of developing a 'self-supporting collaborative member-driven online environment' whereby community members 'would move forward from a simple web-based online presence into the realm of collaboration and information sharing using current online technology' (Marriott 2007, p. 251). The research was based on Gurstein's (2003, 2007) community informatics approach, in which 'effective use' is 'the capacity to integrate ICT into self or collaboratively identified goals' (Gurstein 2003). It is the users of technology who understand most clearly what applications or uses would be most beneficial in particular local contexts. Guided by the EAR approach, there was a focus on 'simultaneous action and research in a participative manner' (Cohlan & Brannick cited in Hearn et al. 2009, p. 10) in order to find practical solutions to real-life problems (Hearn et al., 2009, pp. 10-11). There was also the intention to initiate an ongoing learning process for all participants, which would lead to 'new abilities to create knowledge' (Reason & Bradbury 2008, p. 5).

The first phase of the research was a content analysis and review of the editing records of the 135 organisational websites hosted on SOCE. The analysis examined 52 different variables, such as organisation type and stated mission, types of pages, interactive features, frequency of editing and longevity of the website being maintained. All website pages were examined, as well as all emails and hyperlinks, to determine whether they were functioning. This enabled the researcher to contact the organisations to discuss and resolve issues such as incorrect email addresses or broken links, as part of the research process.

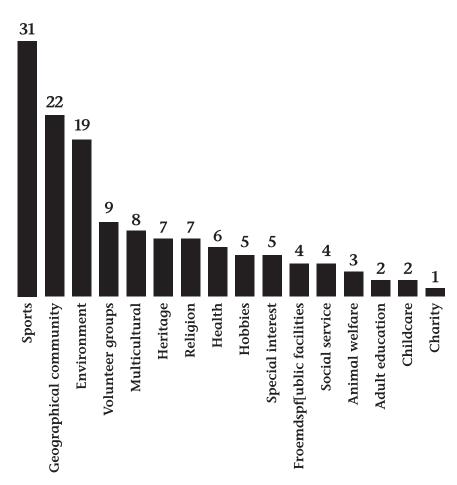
The second phase was an online survey consisting of 10 open questions and nine partially open questions which was sent to 145 community organisation members responsible for the management of these websites, resulting in 48 responses. The questions aimed to learn more about the organisations, their working environment, the organisations' aspirations for their websites, opinions on interactive features and social software, barriers to maintaining a web presence and factors which would contribute to successfully maintaining their websites.

The third and final phase of the research consisted of semistructured, in-depth interviews with 18 of the website managers from 12 selected organisations. Interviews explored these issues further, as well as eliciting ideas on what the university project could do to help organisations become self-sufficient and confident in managing their websites.

SELECTED RESULTS AND DISCUSSION

The research findings have led to a better understanding of what the organisations wanted and needed from their website presence, the challenges faced in maintaining their websites and strategies that were most likely to assist them in sustaining an effective web presence.

Significantly, the website content analysis and survey research revealed that the 135 organisations hosted by SOCE were representative of the majority of not-for-profit organisations. Approximately 90 per cent of NFPs globally operate without paid staff (Lyons 2001; Smith 1997, 2000, 2002). In Australia there are between 600 000 and 700 000 not-for-profit organisations, the majority of which are small, all-volunteer organisations, and yet they contribute between 3.8 and 4.1 per cent of the Gross Domestic Product (Australian Government Productivity Commission 2010; McGregor-Lowndes 2014). Such organisations participate in all fields of life and include sports clubs, church groups, professional and scholarly associations, health-related interest groups, cultural and ethnic groups, environmental groups and policy advocacy groups (Lyons 2001, pp. 71–96; Lyons & Passey 2006, p. 90). The small, voluntary and diverse nature of these organisations was found to be representative of organisations hosted by SOCE. Figure 1 shows the types of organisations hosted that require assistance with websites.



The content analysis and review of the websites also revealed some alarming information, demonstrating that the SOCE project was anything but sustainable.

Key results included:

-60 per cent (80/135) of the websites had not been updated in the previous year

-more than a third of the sites had been used only for one year and abandoned or were never used at all (still contained Latin script,

Figure 1: Types of organisations hosted in the Sustainable Online Community Engagement program in 2009

which is used as placeholder text by the student when designing the website)

- -42 per cent (58) were obviously out of date or had serious technical problems
- -33 per cent (45) of the sites had incorrect email addresses and 33 per cent (45) had no email listed *i.e. two thirds of the organisations were uncontactable via email on their websites.*

Far from being ready to share information with each other in an online collaborative community, these organisations needed first to engage with and manage their own online presence. Furthermore, the research found that the SOCE project was potentially doing more harm than good. Like so many ICTrelated service-learning projects that cause harm (Connolly 2012), the SOCE project was diverting organisations' limited resources from their purpose into struggling to maintain websites. In addition, most of these websites would have given the visitor a very poor impression of the organisations behind them. This situation was also doing a disservice to the students involved in building the websites, who could not use their work as part of their professional portfolio. The students would later learn that their work had not been of assistance to the organisation, despite being promoted as such by academic staff as a 'feel good factor' for students at the time. Indeed, as raised by Marullo and Edwards (2000) in their discussion of social justice focused service-learning, the ramifications of this kind of failure may extend beyond the particular course by leaving the student with a negative impression of service-learning and the perception that the university's actions contradict its rhetoric. Further, in the broader community, the SOCE project could obviously do harm to the reputation of the university, and the government funding of this program could be viewed as a waste of taxpayers' money.

The survey results of the second phase of the research also suggested that the proposed development of a self-supporting, collaborative member-driven online environment encouraging members to share information about managing their websites would not be useful for community members, primarily due to their lack of time and interest in online interaction. The website managers (n = 48) were most often self-trained volunteers, donating their time and resources in order to sustain a web presence for the organisation. Three-quarters of the website managers (n = 36) used their own home computers to manage the websites. Only two organisations had websites managed by people paid specifically for that work. In the other 46 organisations the websites were managed either by committee members who performed other roles within the organisation (n = 19) or other volunteers (n = 25). Furthermore, 43 out of 48, or 90 per cent, of the people managing the websites were juggling this duty with many other responsibilities in the organisation. These voluntary roles and duties included president, secretary, volunteer manager, chairperson, manager of services, treasurer and events coordinator.

Significantly, 20 people (41.6 per cent) indicated they did not know what kind of software they used to edit their websites, so it was not surprising to learn that significant barriers to maintaining websites included lack of technical knowledge and skills (n = 20) and lack of time (n = 13). Other important barriers included lack of resources (n = 10) and lack of personnel to manage the websites (n = 6). Typical responses to the question asking about barriers to maintaining websites included that of an Australian Breastfeeding Association (ABA) branch website manager, who explained the most significant barriers were:

Time and experience. Time—as a volunteer, I have to combine this with my paid employment and my study. (SR12)

A regional community website manager explained that barriers were:

Skills and knowledge to make the changes. Time is always an issue undertaking several roles within the committee on a volunteer basis means that the website updates get neglected. (SR1)

The survey also revealed that most organisations aspired to present information in a simple easy-to-use website, rather than to use complex interactive features, such as forums, which require time to monitor and moderate. In many cases, the website was viewed as a means to disseminate information rather than encourage online communication and was designed to avoid more time-consuming or costly methods of communication. For example, a Landcare group website manager explained that the purpose of the site was to:

provide a resource for school project etc. enquiries; provide a contact point (less phone calls etc.); provide some on-line resources (limited); promote working bee dates etc (SR25)

Another stated that the main reason for the website was:

so people don't ring me up – lots of people want free advice & information (school projects etc.). Can't afford the time. (SR16)

Indeed, when asked what kinds of interactive features groups wanted in their websites, a third of the website managers (n = 16) stated that they did not view interactive features, other than an email contact for the organisation, as useful. This rejection of interactive features was not due to a lack of strategic understanding or knowledge about the potential of interactive website features, as many of these web managers later revealed in the interviews that they used forums, blogs and social media such as Facebook for other purposes. Rather, it was a deliberate strategy for effective use within the resource limitations of their organisations.

The survey also revealed that, while one-third of the website managers understood the potential benefits of interactive features and the possibility of linking their website to social media but

rejected this option, another third said they might benefit from learning more through structured workshops delivered by the SOCE project staff or university students. More than one-third (*n* = 17 or 35.4 per cent) of these website managers were not confident enough in their knowledge of interactive features to make suggestions in response to the open question, 'What interactive features (e.g. forums, chatrooms, listservs) do you think a good website, for your organisation, should have?' Four people did not respond and eight wrote short comments such as 'don't know', 'haven't thought about this', 'not sure' and 'no idea', indicating that a quarter of the respondents were either not familiar enough with, or interested sufficiently in, interactive features to comment.

Other people were interested in the potential of interactive features but either lacked knowledge or expressed reservations. For example, one person was interested in social software and explained:

We would like to communicate with other masters swimmers – maybe like facebook but I don't know how to do it. (SR43)

A Community Visitors' Scheme website manager gave a lengthy answer explaining that she was still learning about these features and they may be useful in helping isolated people interact; however, the available time and skills of volunteers was an inhibiting factor. The organisation's priority was:

interaction that does not require you to be on line 24 hours & time to collect the information people are requesting. (SR27)

The survey responses revealed that there were different levels of experience and skills in using interactive features and social media among website managers, but suggested that those with little experience would benefit more from guided, structured presentations and workshops delivered by educators, rather than unguided exposure through observation in an online 'community' of website managers.

The third phase of the research, the interviews, explored other strategies for assisting organisations and confirmed that developing an online community for members to share information would not help them sustain their websites. It was clear that organisations were already time poor and those that were successful in maintaining their websites had deliberately stripped off time-sensitive information and interactive features as a time management strategy. Explanations given in the interviews included:

I sort of peeled off all the stuff that was time sensitive and just wanted to keep it so that it was just a static website, so that—yeah, you can get information from it. (Andrew, Landcare group, interview 20 July 2009)

That website has no interactive features and it has nothing that moves, it has no scripts, because I'm not prepared, at this stage anyway, to learn it. (Brian, Friends of Conservation Park, interview 6 May 2009)

We do not need to make daily changes – we set it up so that most info would be OK for a longer amount of time. That said, there's more updating we can do. We just don't have the time and it seems to be serving its purpose. (Rebecca, Regional Town Progress Association, email interview, 1–5 September 2009)

The interviews also revealed that website managers who were successfully managing websites for organisations already used online networks and forums to assist them. In short, the potential 'leaders' (Preece 2000) of the proposed community of practice were not sufficiently motivated to participate or lead others in yet another online community. Two of the website managers who were intrinsically interested in website management and technology responded to the idea of the online community:

But who would contribute? (Brian, Friends of Conservation Park, interview 6 2009)

You also find that the volunteer groups aren't much interested in each other, I reckon. So just because you're a volunteer, you're a volunteer because you're interested in one thing, not because you're interested in what other volunteers are doing. (Andrew, Landcare group, interview 20 July 2009)

In response to the idea that some website managers might be interested in sharing knowledge, Andrew replied:

Yeah, but quite a lot of time he's got enough to do on his own, without some other person asking him questions. (Andrew, Landcare group, interview 20 July 2009)

Ultimately, an analysis of the results of each phase of the research suggested that, in direct contrast to aiming for more online interaction between organisations and their communities, the SOCE project needed to focus on devising strategies to assist organisations to maintain a basic 'brochure'-like website. Options such as linking a basic website to social media sites could then be explored as part of this.

This research study concluded that not-for-profit organisations need to be able to manage a basic web presence effectively before introducing and managing more interactive features. Rather than create yet more unmanageable technology 'solutions' for community organisations, the research revealed that the most useful strategies for helping third sector organisations maintain an effective, sustainable online presence include:

-assistance with website hosting

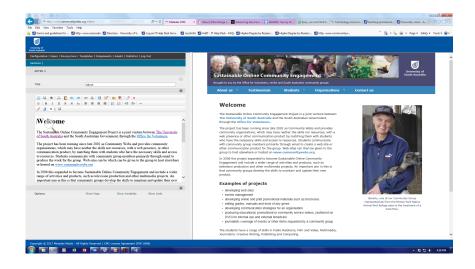
-use of content management systems

- —developing strategies for shared management and succession planning in the organisations
- —delivery of hands-on training and information sessions about Web2.0 social networking platforms.

ACTIONS IMPLEMENTED THROUGH RESEARCH

As a result of this research, the SOCE project changed to using a content management system (CMS), developed and delivered more user guides and regular hands-on training sessions for community organisation members, and incorporated shared management strategies and succession planning into its community education.

A CMS enables the end-user (in this case a community organisation volunteer) to log into the website directly and edit the content using a What You See Is What You Get (WYSIWG) interface, without any knowledge of Hyper Text Markup Language (HTML). Prior to implementing a CMS, SOCE websites had to be edited using software such as Frontpage and files needed to be downloaded to the user's computer, edited and uploaded to their website again. In contrast, the community organisation volunteer now logs directly into their website and edits using an interface that looks much like the MS Word program. Initially, SOCE used a customised CMS developed by a company in collaboration with the project but, due to feedback from community organisations and the web design teaching staff, changed to using Word Press because it is easier for community organisations to use and is widely used by website development companies. This benefits both community organisations, which usually have volunteers who are untrained in website management maintaining their websites, and students, who can show they are job ready and able to design for a common content management system. Figure 2 shows the editing interface of the custom-built CMS adopted by SOCE before changing to Word Press.



Two hands-on training sessions each semester are held at the university for community groups who have had websites developed, and training participants are given a print version of a quick guide to editing their site, which is also available online. Participants

Figure 2: Editing interface of the custom-built CMS first adopted by SOCE

are also invited to complete hard-copy surveys at training and an online survey evaluating their involvement that semester. In addition, all of the community organisations hosted are invited to complete an online survey about their websites and their ability to maintain them once a year.

Formal research examining the success of these measures is in progress, and it appears that the proportion of groups successfully sustaining their websites is much higher. For example, preliminary results from the 2014 online survey (130 surveys sent to website managers with 50 responses) showed that 92 per cent of the responding website managers had updated their websites in the previous year, while 50 per cent had updated their organisation's website in the previous two months. Encouragingly, 36 out of 43 of the website managers, or 83 per cent, indicated that the website was 'very simple' to 'moderately simple and easy' to update.

These results suggest that implementing the content management system and more hands-on training through action research is genuinely assisting organisations to be more selfsufficient and successful in managing their websites.

CONCLUSION AND IMPLICATIONS

The implementation of actions resulting from the research undertaken, such as changing to use of a content management system, is significant because the SOCE program remains in demand from community organisations and often cannot fulfil this demand logistically. In 2015, there were more applicants than students (e.g. 23 organisations applied for websites but only 13 students were enrolled in the particular course that was participating). Thus, there are opportunities for many more students in tertiary education to develop their skills and knowledge by creating communication products for not-for-profit organisations in service-learning. In doing so, universities and their students will be addressing an authentic societal challenge to benefit their communities. Significantly, many of the challenges and barriers to not-for-profit organisations maintaining websites reported in this research are cited in other Australian (CISA et al. 2007; Denison & Williamson 2013; Digital Business Insights 2011) and international research (Manzo & Pitkin 2007; Waters 2010; Zorn & Richardson 2010). This supports the notion that there is scope for service-learning projects that genuinely assist organisations by providing access to ICT skills, knowledge and resources available through universities and their students.

New forms of digital engagement are one of the most significant and demanding developments for the not-for-profit sector (Info Exchange, Connecting Up Australia & TechSoup NZ 2015; Mayer & Simsa 2014), particularly with decreases in funding from government and other sources. A report from Connecting Up, the peak organisation advocating for the not-forprofit sector in Australia, concludes that this will require increased productivity and efficiency through 'digital proficiency' (Info

Exchange et al. 2015). Many universities are in the position to connect the knowledge and skills of their staff and students with community organisations; however, the case study presented here demonstrates that this engagement requires dedicated research. Service-learning initiatives can create benefits for students, the community and universities, but the perspectives and voices of the community participants must be sought and provide guidance throughout such projects. Otherwise, as noted by Stoecker et al. (2010), projects may simply become vehicles in which universities use communities to serve students or their own interests and there is potential to do serious harm.

The SOCE project also demonstrates that effective community engagement creates opportunities for applied research that can address issues of concern to the local community and broader society. Advocating service-learning as practice that serves the teaching, research and community service tripartite missions of universities, Furco (2001, p. 70) argues that servicelearning involves 'the theoretical and practical exploration and investigation of social issues through a particular disciplinary lens' and that faculty can use the service-learning experiences of their students to engage their own expertise in the research of important community issues. However, the potential of servicelearning to initiate genuinely useful research extends beyond this. Furco (2001, 2010) and Chupp and Joseph (2010) argue that service-learning has benefits for staff by creating longer term sustained partnerships with communities. In this process, the community partners help identify and research problems of significance to them. Ideally, the community and academic staff, and their departments, become partners in a participatory action research process.

While the research reported in this article modestly aimed for the ideal of participatory action research, it was inspired and enabled by the researcher encountering a real problem while working on a service-learning project. The continuity of access to the participants and research sites allowed the researcher to commence a three-year PhD research project in order to find strategies to help not-for-profit organisations sustain an effective web presence. The process involved examining many aspects of the project, including the technologies used, the interaction between staff, students and community organisation members, and the ongoing training and knowledge management in community organisations (see Dodd 2014; Wood & Dodd 2010a, b).

The Sustainable Online Community Engagement Project continues to help organisations become more digitally proficient and to provide students with real-world experiential learning opportunities, suggesting that universities have a significant role that integrates both teaching and research in providing services and engaging with their communities. However, effective community engagement must be based on research of what the particular community involved genuinely wants, and must be

assessed for outcomes for those community partners. Research and community engagement should not be framed as mutually exclusive but understood as part of the same process.

REFERENCES

ACOSS 2014, Australian Community Sector Survey 2014, viewed 20 April 2017, http://www.acoss.org.au/acoss-reports-submissions/.

Australian Government Productivity Commission 2010, Contribution of the Not-for-Profit Sector Productivity Commission Research Report, Australian Government, Canberra, viewed 20 April 2017, <u>http://www.pc.gov.au/inquiries/completed/not-for-profit/report</u>.

Blouin, D & Perry, E 2009, 'Whom does service learning really serve? Community-based organizations perspectives on service learning', *Teaching Sociology*, vol. 27, no. 2, pp. 120–35, doi: <u>https://doi.org/10.1177/0092055X0903700201</u>

Boyer, E 1990, *Scholarship reconsidered: Priorities of the professoriate*, Carnegie Foundation for the Advancement of Teaching, New York.

Boyer, E 1996, 'The Scholarship of Engagement', *Bulletin of the American Academy of Arts and Sciences*, vol. 49, no. 7, pp. 18–33, doi: <u>https://doi.org/10.2307/3824459</u>.

Bushouse, B 2005, 'Community nonprofit organizations and servicelearning: Resource constraints to building partnerships with universities', *Michigan Journal of Community Service Learning*, vol. 12, no. 1, pp. 32–40.

Butin, D 2010, *Service-learning in theory and practice*, Palgrave Macmillan, New York. doi: <u>https://doi.org/10.1057/9780230106154</u>

Chang, Y, Chen, Y, Wang, F, Chen, S & Liao, R 2014, 'Enriching service learning by its diversity: Combining university service learning and corporate social responsibility to help the NGOs adapt technology to their needs', *Systems Practice Action Research*, vol. 27, pp. 185–93. doi: <u>https://doi.org/10.1007/s11213-013-9278-8</u>

Chupp, M & Joseph, M 2010, 'Getting the most out of service learning: Maximizing student, university and community impact', *Journal of Community Practice*, vol. 18, pp. 190–212. doi: <u>https://doi.org/10.1080/1070</u> 5422.2010.487045

Community Information Strategies Australia Inc, Work Ventures, Centre for Community Networking Research (Monash University), Non-Profit Roundtable through ACOSS (Australian Council of Social Service), Albany Consulting and Energetica 2007, *3STEP: A model for ICT capacity development in Australia's Non-Profit Sector: A National Non-Profit ICT Coalition*, Barton, ACT, viewed 20 April 2017, <u>http://www.connectingup.org/learn/downloads/national-nonprofit-ict-coalition-report-2006.</u>

Connolly, R 2012, 'Is there service in computing service learning?', *SIGSCE* '12 Proceedings of the 43rd ACM Technical Symposium, pp. 332–432. doi: https://doi.org/10.1145/2157136.2157238

Deeley, S 2010, 'Service-learning: Thinking outside the box', *Active Learning in Higher Education*, vol. 11, no. 1, pp. 43–53. doi: <u>https://doi.org/10.1177/1469787409355870</u>

Denison, T 2008, 'Barriers to effective use of Web technologies by community sector organisations', Prato CIRN Community Informatics Conference: ICTs for Social Inclusion: What is the Reality?, Prato, Italy.

Denison, T & Johanson, G 2007, 'Surveys of the use of information and communications technologies by community-based organisations', *The Journal of Community Informatics*, vol. 3, no. 2.

Denison, T, Stillman, L & Johanson, L 2007, 'The Australian non-profit sector and the challenge of ICT', *First Monday*, vol. 12, no. 5, pp. 1–11.

Denison, T & Williamson, K 2013, 'Website management issues for community-based, non-profit organizations based in rural and regional areas', *Information Communication and Society*, pp. 1–21, doi: <u>https://doi.org/10.1080/1369118X.2012.687005</u>

Digital Business Insights! 2011, Full report of nonprofit e-business in Australia 2011, viewed 20 April, <u>https://www.connectingup.org/learn/downloads/</u>full-report-nonprofit-e-business-australia-2011

Dimitrov, R 2008, 'The strategic response: An introduction to non-profit communication', *Third Sector Review*, vol. 14, no. 2, pp. 9–47.

Dodd, A 2014, We don't need bells and whistles: An analysis of website use by third sector organisations, PhD thesis, University of South Australia, Adelaide.

Engagement Australia 2015, 12th International Conference: Changing Times Changing Agendas Call for Proposals, <u>http://www.engagementaustralia.org.au/conference.</u>

Farooq, U, Ganoe, C, Xiao, L, Merkel, C, Rosson, M & Carrol, J 2007, 'Supporting community-based learning: Case study of a geographical community organization designing its website', *Behaviour* & *Information Technology*, vol. 26, no. 1, pp. 5–21. doi: <u>https://doi.org/10.1080/01449290600811503</u>

Furco, A 1996, 'Service-learning: A balanced approach to experiential education', in B Taylor & Corporation for National Service (eds), *Expanding boundaries: Serving and learning*, pp. 2–6, Cooperative Education Association, Washington.

Furco, A 2001, 'Advancing service-learning at research universities', *New Directions for Higher Education*, vol. 2001, no. 114, pp. 67–78.

Furco, A 2010, 'The engaged campus: Toward a comprehensive approach to public engagement', *British Journal of Educational Studies*, vol. 58, no. 4, pp. 375–90, doi: <u>https://doi.org/10.1080/00071005.2010.527656</u>

Greenberg, J & MacAulay, M 2009, 'NPO 2.0? Exploring the Web presence of environmental nonprofit organisations in Canada', *Global Media Journal* – *Canadian Edition*, vol. 2, no. 1, pp. 63–88.

Gurstein, M 2003, 'Effective use: A community informatics strategy beyond the digital divide', *First Monday*, vol. 8, no. 12, viewed 20 April 2017, <u>http://firstmonday.org/ojs/index.php/fm/article/view/1107/102</u>

Gurstein, M 2007, *What is community informatics (and why does it matter?)*, Ch. 2, Polimetrica, viewed 20 April 2017, <u>http://eprints.rclis.org/10919/</u>

Hearn, G, Tacchi, J, Foth, M & Lennie, J 2009, Action research and new media: Concepts, methods and cases, Hampton Press, Cresskill, NJ.

Hettche, M & Clayton, M 2013, 'Web site design and content management analysis: Opportunities for service-learning projects', *Journal of Advertising Education*, vol. 13, no. 1, pp. 26–35.

Holland, B 2016, 'Factors influencing faculty engagement: Then, now and future', *Journal of Higher Education Outreach and Engagement*, vol. 1, no. 20, pp. 73–81.

Info Exchange, Connecting Up Australia & TechSoup NZ 2015, *ICT in the not-for-profit sector*, viewed 20 April 2017, <u>https://www.connectingup.org/blog/technology-more-important-ever-not-profits-report</u>

Kenworthy-U'Ren, A 2000, 'Management students as consultants: A strategy for service-learning in management education', in P Godrey & E Grasso (eds), *Working for the common good: Concepts and models for service-learning in management*, American Association for Higher Education, Washington, DC, pp. 55–75.

Kenworthy-U'ren, A 2003, 'Service-learning and negotiation: Engaging students in real world projects that make a difference', *Negotiation Journal*, vol. 19 no. 1, pp. 51–63. doi: <u>https://doi.org/10.1111/j.1571-9979.2003.</u> <u>tb00279.x</u>

Kim, A 2000, Community building on the Web: Secret strategies for successful online communities, Peachpit Press, Berkeley, CA.

Knox, I 2005, 'Winning ways: Online regional communities that click', *Proceedings of the 2nd Future of Australia's Country Towns Conference*, La Trobe University, Bendigo, 11–13 July.

Littlepage, L, Gazley, B & Bennett, T 2012, 'Service learning from the supply side: Community capacity to engage students', *Nonprofit Management and Leadership*, vol. 22, no. 3, pp. 305–19. doi: <u>https://doi. org/10.1002/nml.20056</u>

Lyons, M 2001, *Third sector: The contribution of nonprofit and cooperative enterprises in Australia*, Allen & Unwin, St Leonards, NSW.

Lyons, M & Passey, A 2006, 'Need public policy ignore the third sector? Government policy in Australia and the United Kingdom', *Australian Journal of Public Administration*, vol. 65, no. 3, pp. 90–102. doi: <u>https://doi.org/10.1111/j.1467-8500.2006.00496a.x</u>

Mamun, S & Rahman, M 2015, 'An investigation on allocative efficiency and implications of new funding plans for the Australian universities', *Educational Research for Policy and Practice*, May 2015, doi: <u>https://doi.org/10.1007/s10671-015-9177-0</u>

Manzo, P & Pitkin, B 2007, 'Barriers to information technology usage in the nonprofit sector', in M Cortes & K Rafter (eds), *Nonprofits and technology: Emerging research for usable knowledge*, Lyceum, Chicago, IL, pp. 52–67.

Marriott, P 2007, 'Sustainable online community engagement', *The Australasian Journal of University Community Engagement*, vol. 2, no. 2, pp. 250–57.

Marriott, P, Patterson, E & Temple, J 2004, 'Community webs: Students building websites for the volunteer sector', *University Regional and Rural Engagement*, AUCEA refereed conference proceedings, Bathurst.

Marullo, S & Edwards, B 2000, 'From charity to social justice: The potential of university-community collaboration for social change', *The American Journal of Sociology*, vol. 43, no. 5, pp. 885–912. doi: <u>https://doi.org/10.1177/00027640021955540</u>

Mayer, M & Simsa, R 2014, 'Developments in the third sector: The last decade and a cautious view into the future', in M Freise & T Hallmann (eds), *Modernizing Democracy*, Springer, New York, pp. 203–15, online. doi: <u>https://doi.org/10.1007/978-1-4939-0485-3_17</u>

McGregor-Lowndes, M 2014, 'The not-for-profit sector in Australia: Fact sheet', Australian Centre for Philanthropy and Nonprofit Studies, QUT,

viewed 31 March 2017, <u>http://eprints.qut.edu.au/75397/4/75397(</u>updated). pdf

Murray, I 2014, 'Not-for-profit reform: Back to the future?' *Third Sector Review*, vol. 20, no. 1, pp. 109–39.

Nejmeh, B 2012, 'A framework for service-learning in computer and information sciences', in B Nejmeh (ed.), *Service-learning in computer and information sciences*, John Wiley & Sons, pp. 3–22, online, doi: <u>https://doi.org/10.1002/9781118319130</u>

Preece, J, 2000, 'Developing online communities: Community-centered development', in J Preece (ed.), *Online communities: Designing usability, supporting sociability*, John Wiley & Sons, Chichester, pp. 203–31.

Reason, P & Bradbury, H 2008, 'Introduction', in P Reason & H Bradbury (eds), *Sage handbook of action research: Participative inquiry and practice*, 2nd edn, Sage, London, pp. 1–10. doi: <u>https://doi.org/10.4135/9781848607934</u>

Rogers, K & Andrews, V 2016, 'Nonprofits' expectations in PR servicelearning partnerships', *Journalism and Mass Communication Educator*, vol. 7, no. 1, pp. 95–106. doi: <u>https://doi.org/10.1177/1077695815584226</u>

Smith, D 1997, 'Grassroots associations are important: Some theory and a review of impact literature', *Nonprofit and Voluntary Sector Quarterly*, vol. 26, no. 3, pp. 269–306. doi: <u>https://doi.org/10.1177/0899764097263002</u>

Smith, D 2000, *Grassroots associations*, Sage Publications, Thousand Oaks, CA.

Smith, D & Shen, C 2002, 'The roots of civil society: A model of voluntary association prevalence applied to data on larger contemporary nations', *International Journal of Comparative Sociology*, vol. 43, no. 2, pp. 93–133. doi: <u>https://doi.org/10.1177/002071520204300201</u>

Soska, T, Sullivan-Cosetti, M & Pasupuleti, S 2010, 'Service learning: Community engagement and partnership for integrated teaching, research, and service', *Journal of Community Practice*, vol. 18, nos. 2–3, pp. 139–47, doi: <u>https://doi.org/10.1080/10705422.2010.490176</u>

Stoecker, R, Loving, K, Reddy, M & Bollig, N 2010, 'Can community-based research guide service learning, *Journal of Community Practice*, vol. 18, nos. 2–3, pp. 280–96. doi: <u>https://doi.org/10.1080/10705422.2010.485878</u>

University of South Australia 2009, 'University of South Australia Teaching and Learning Academic Standards Framework', viewed 20 April, http://w3.unisa.edu.au/teachinglearning/strategy/default.asp.

University of South Australia 2017, 'University vision, mission and values', viewed 20 April 2017, <u>http://www.unisa.edu.au/About-UniSA/University-vision/</u>

Waters, R 2010, 'The use of social media by nonprofit organizations: An examination from the diffusion of innovations perspective', in T Dumova & R Fiordo (eds), Handbook of research on social interaction technologies and collaboration software, EBSCO Publishing NetLibrary, pp. 473–85. doi: https://doi.org/10.4018/978-1-60566-368-5.ch042

Wood, D & Dodd, A 2010a, 'Preparing students and communities for an unknown future with the support of Web 2.0 and CMS technologies', Ascilite 2010 Conference: Curriculum, Technology & Transformation for an Unknown Future, Sydney.

Wood, D, & Dodd, A 2010b, 'Sustaining community engagement through service learning in a unique public sector-university-community

partnership program', *Proceedings of 2010 AUCEA National Conference*, University of Tasmania, Launceston.

Xiao, L & Farooq, U 2013, 'Supporting end user development in community computing: Requirements, opportunities, and challenges', *Journal of Community Informatics*, vol. 9, no. 1, viewed 13 April 2017, http://ci-journal.net/index.php/ciej/article/view/693/974

Zorn, T, Grant, S & Henderson, A 2012, 'Strengthening resource mobilisation chains: Developing the social media competencies of community and voluntary organisations in New Zealand', *Voluntas*, vol. 24, pp. 666–87. doi: <u>https://doi.org/10.1007/s11266-012-9265-1</u>

Zorn, T & Richardson, M 2010, *Survey of community and voluntary organisations' use of information and communication technologies*, Waikato Management School, University of Waikato, Hamilton, New Zealand.