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Preface

The Australian Journal of University-Community Engagement is a refereed journal published twice a year by Engagement Australia (formerly AUCEA - the Australian Universities Community Engagement Alliance), a not for profit organisation dedicated to enhancing the engagement capabilities of staff and universities by developing expertise, fostering collaboration and building their communities across Australia.

The Engagement Australia E-Journal strives to be inclusive in scope, addressing topics and issues of significance to scholars and practitioners concerned with diverse aspects of university-community engagement.

The Journal aims to publish literature on both research and practice that employ a variety of methods and approaches, address theoretical and philosophical issues pertinent to university-community engagement and finally, provide case studies and reflections about university-community engagement.

The Journal aims to stimulate a critical approach to research and practice in the field and will, at times, devote issues to engaging with particular themes.

All manuscripts will be subject to double-blind peer review by three (3) professionals with expertise in the core area. The three (3) reviewers will include at least one (1) editorial board member.

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Editorial Comment

My co-editors and I are pleased to present you with this Autumn 2012 edition of The Australasian Journal of University-Community Engagement. Along with the recent successful Engagement Australia conference in Brisbane, it's great to see all of the inspiring and innovative scholarship being done locally in the community engagement field.

We are quite lucky to have received the manuscripts in this edition that can all be seen as contributions to how we continue to evolve our understanding of what we mean by engagement and range from the theoretical to the practical.

In "Striving for Definitional Clarity: What is Service Learning?", Donella Caspersz, Donia Olaru, and Leigh Smith explore the roots of a term that is central to our field – service learning – and provides some clarity (particularly through their use of descriptive graphics and figures) about how the differences in definitions of this term have implications for its application and evaluation.

Megan Le Clus builds on this notion of evaluation through her article, "Tracking and Measuring Engagement: A Review of the

Literature". As she establishes, because universities are increasingly devoting resources to engagement, they are also increasingly seeking ways to track and measure it and are finding that rather complex.

With "Can Service-Learning be Institutionalised? The Case Study of SIFE in Australia", Donella Caspersz, Maria Kavanagh, and Diana Whitton provide a practical application of both of those articles through case studies that describes three universities' application of service-learning through Students in Free Enterprise. In order to answer their research question as to whether service-learning can be institutionalized, they demonstrate the importance of definitions and evaluation methods.

The concluding articles in this edition share research that has been conducted on the application of service-learning toward improving the health and wellbeing of communities and contexts. In "Meaningful Engagement of Occupational Therapy Students: Service-learning Experiences in Regional Australia", Beth Mozolic-Staunton lets the students do the talking in describing how a community engaged learning

project has influenced their achievement of the intended learning outcomes. Similarly, Murray Drummond, Claire Drummond, and Sam Elliott use rich qualitative data in “Physical Activity and Nutrition in Low Socioeconomic Schools: A Collaborative Health Based Model Between Flinders University and South Adelaide Football Club” to relate the effects of an innovative partnership.

Many thanks to these authors for providing us with some exciting and thought provoking reading to get us through the winter (some of us are having a real winter!). Thanks too to the permanent editors of the

Journal for inviting me to guest edit this edition. In being from the only non-Australian university that is a member of Engagement Australia, I’m thrilled to pay back the welcoming support we’ve received from this great organisation.

Billy O’Steen

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Striving for Definitional Clarity: What is Service Learning?

Donella Caspersz, Doina Olaru, Leigh Smith

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Abstract

In this paper we provide definitional clarity about service learning, by undertaking a content analysis of a random selection of texts (2000-2011) selected from two search engines (JSTOR & Academic Premier), and applying the data mining tool, Leximancer. Our analysis confirms the main components of service-learning as being 'community' and then 'learning' and 'service', appearing in relatively equal representation; the second level components emerging from the analysis are 'sense', 'experiential', 'education', and 'engagement' – again balanced in their weighting. However, our analysis refines these by identifying key relationships between these, and signifiers that help further specify what service learning is. In addition, by drawing on the

analysis we are able to distinguish pathways or the process of service-learning. The new contribution of our analysis is in highlighting the need for urgent attention to be paid to conceptualizing the concept of 'reciprocity' or mutual benefit for stakeholders engaged in service-learning. We conclude by describing a future research agenda in this area.

Key words: *service learning, scholarship, civic engagement, Leximancer*

Introduction

“[Service-learning is a] pedagogical tool that has a variety of definitions...In the most general use of the term, service-learning is a branch of experiential education with active engagement as its foundation...I define service-learning courses as those that ‘emphasise academic rigor and the integration of real-world course projects where students produce tangible, professional products for use in the local community as they *work with* and *learn from* organisations to serve community needs” (Kenworthy-U’Ren, 2003: 52).

Many operational definitions for SL exist. These variations are derived from ideological differences that affect the purposes for which service-learning is used and ultimately the design of service-learning projects ... These differences have

implications for how service-learning is used and for how learning is evaluated. Four common rationales or perspectives on using service-learning - community service, moral, political, and instrumental. (Dicke, Dowden & Torres, 2004: 201)

Despite an extensive canon of literature, there is as yet no commonly acceptable definition of service learning, as service learning means different things to different researchers and streams of inquiry. However, with the increased interest in Australian universities in teaching students about 'civic responsibility', 'social responsibility' and 'citizenship' (GAP, 2008), the imperative to establish a uniform conceptualization of service-learning heightens, as this becomes the delivery vehicle for implementing these teaching and learning programs. In this paper we attempt to strive for definitional clarity about what is service learning, by undertaking a content analysis of conceptual and empirical articles published between 2000 and 2011, using the data-mining tool *Leximancer*.

The research question is *what is service-learning?* In interrogating this question we were interested in clarifying the

components of service-learning, and the significance of each component relative to other components, in other words what were the 'core' as distinct from 'peripheral' components of service-learning. We were also interested in understanding the relationship of these to existing conceptual frameworks. Therefore we selected a framework whose development coincided with the time span that the analysis focussed on (that is, 2000-2011) and clearly delineated variables that could be tested using *Leximancer*, that is the four 'R's as proposed by Godfrey, Illes and Berry (2005) - reality, reflection, reciprocity, and responsibility. Finally, in striving for definitional clarity we sought to understand the process of service - learning, in other words what are the pathways by which learning in service-learning occurs? In pursuing this, we were not interested in the minutiae of how service-learning is implemented, only in terms of the sequence of components and signifiers that comprise service-learning.

We have used *Leximancer* to identify the commonality of various service-learning definitions presented in the literature and the

relations between several streams. This analysis provides a basis for conceptualising service learning and promoting discussion about the meaning of service learning and for discovering its antecedents, goals, educational processes and the outcomes/value they offer. The analysis confirms that the core elements of service-learning are the 'learning experience' and the connection with the 'community', with 'reflection' and 'responsibility' being the strongest signifiers that characterise service-learning.

Methodology

Data Collection

As a result of the large volume of literature, we decided to explore the research question using two major databases: JSTOR and Academic Search Premier. While both are multidisciplinary, Academic Search Premier is more likely to be used by students whereas JSTOR is frequently used by academics, as the emphasis in JSTOR is on hosting significant scholarly work that is difficult to access, thus making it more

attractive to academics working in any field (Schonfield, 2011).

Academic Premier offers indexing and abstracts for more than 12,500 journals and a total of more than 13,200 publications including monographs, reports, conference proceedings, etc.,

(<http://www.ebscohost.com/academic/academic-search-complete>,

accessed 1st October 2011), while JSTOR has more than a thousand academic journals and over 1 million images, letters, and other primary sources (<http://www.jstor.org/>, accessed 1st October 2011).

The search parameters used were the same for both databases as per the following:

Search: ("service learning" OR "service-learning") AND higher AND education.

The following criteria were used in the search:

1. Peer Reviewed;
2. Publication Date: Post-2000;
3. Available to the University of Western Australia (UWA) as a full text document (within that database).

A significant number of publications on K-12 education emerged from the initial search. This was therefore refined to match our focus on higher education to delimit articles that were not relevant. We further refined the data to focus on the conceptualisation of service learning and exclude the ways in which service-learning was implemented or the outcomes of the programs.

The first 25 results, sorted by relevance, of each search were analysed. Two articles, which initially appeared in the lists were not analysed: the first, because it was a duplicate (reprint) of the preceding article (within the same database), and the second because it was written in a language other than English. In both cases, the next article on the list was analysed, ensuring that 25 articles in total were analysed. Table 1 summarises the total number of articles searched, selected and the journals in which these most frequently appeared (with the number of articles from the journals in brackets). Remarkably, the highest occurrence of service learning definitional papers did not appear in higher impact journals theorising pedagogy and education, but rather in

academic outlets presenting community engagement practices (for example, *Hispania*, *Nursing Education Perspectives*).

The selected articles contain a mixture of conceptual and empirical discussion, and span a range of disciplines, including art, business, computing, health, languages, humanities, and science. It is, however, important to note that the majority of the journals have a teaching or education focus, as reflected in the table below.

Table 1: Details of search and articles used in analysis

Database	No. of Articles Identified	No. of Journals	Most Common Journals and number of articles used in the analysis (in parenthesis)	Total No. of Articles Selected
JSTOR	914	16	<i>Hispania</i> (6) <i>Journal of Public Affairs Education</i> (3) <i>Journal of Education for Library and Information Science</i> (2) <i>Journal of Higher Education</i> (2)	25
ASP	2,469	17	<i>Nursing Education Perspectives</i> (4) <i>Journal of Experiential Education</i> (3) <i>Higher Education Research & Development</i> (2) <i>Teaching and Learning in Medicine</i> (2)	25

Reflecting the principle underpinning our data analysis tool, we too did not discriminate in terms of authors when selecting the articles to analyse, as the focus was to extract conceptualisations of service-learning rather than quote specific authors. Nonetheless, in our search, we noted an extensive overlap of reference to authors including Holland, Kenworthy U'ren and others considered significant in this field, especially in the Australian academic genre.

Appendix A provides a full list of the articles used in the analysis. The data passages extracted from these 50 articles for the analysis varied in size from 27 words to 1,843 with an average of 415 words per source.

Data Analysis

We used Leximancer in our data analysis to synthesise the multiple definitions provided by scholars for service-learning. Leximancer is a software package for analysis of textual data, developed by a small Australian company based in Brisbane. The software

automatically identifies key themes, concepts and ideas by mining large amounts of text. This analytical tool is both qualitative and quantitative and provides a means of measuring and displaying the conceptual structure of text, and a means of using this information to explore the relationships between these concepts.

There are seven steps involved in Leximancer (the reader is recommended the descriptions from Smith & Humphreys, 2006; Martin & Rice, 2007; Rooney et al., 2009), and they can be summarised as: extracting the most important concepts from text segments; establishing the co-occurrence of concepts within the text and deriving a semantic network; measuring similarity between concepts and clustering them in themes; presenting the information on a topical map. Leximancer uses mathematical algorithms to determine the most frequently used concepts within text and the relations between those concepts. The concepts that subsequently emerge are highly ranked lexical terms based on word frequency and co-occurrence use. They are

arranged on a topical map according to their similarity, thus forming concepts groups, referred to as themes.

Leximancer has been successfully used in a variety of domains for several purposes, including literature reviews, clustering/segmentation of population, and understanding attitudes and behaviours (Scott & Smith, 2005; Martin & Rice, 2007; Stockwell et al., 2009; Strong et al., 2009; Rooney et al., 2009; Cretchley et al., 2010). We applied Leximancer for its robustness, efficiency, and demonstrated validity. As Smith & Humphreys (2006) point out, Leximancer reduces subjectivity in manual coding, it eliminates the need for coder training and testing for inter-coder reliability, and it can be easily applied for mining large quantities of text (a tool by which to conduct a content analysis).

Understanding Leximancer Maps

Leximancer provides two types of maps: the perceptual map and the conceptual cloud. In the perceptual map, themes (circles) and their

concepts (dots inside the circles) are presented along with the most common connections that appear in the text (a grey network). The shade of the concepts provides an indication of the 'importance' of the concepts, the darker the label, the more frequently the concept appears. The conceptual cloud presents the same concept information as the perceptual map. The concepts are heat-mapped, red representing the most relevant concepts and cool colours (blue) the least relevant.

While some themes may appear disconnected, the reader should attribute equal importance to the location and connectedness of all themes: that is, while central themes have higher frequencies and are highly connected, and peripherally located themes have fewer connections and are less determinant in the network, the position and relevance of peripheral themes must not be discounted. The reason for their appearance is that the analysis has detected a frequency justifying their representation. In addition to using the term 'themes' to refer to the most frequently occurring concepts clustering together, we also use the term 'outliers' to refer to those concepts that sit outside the main

themes. Finally, the term ‘signifiers’ is used to refer to in-text notations within a theme or outlier, and the grey lines are used to substantiate the interpretation of pathways.

However, while Leximancer offers an analytical dimension for the investigation of relationships, the results are still subject to interpretation. In addition, several conditions for analysis may influence the maps: the number of sentences analysed per segment, seeding manually concepts or killing concepts are likely to alter the network structure (because in Leximancer the primary concepts are displayed in order of their frequency in the text). Keeping this in mind, we thus ran the analysis multiple times as a check for the stability of the maps.

Findings and Discussion

In the first analysis (see Figure 1) there is no ‘seeding’ of particular concepts: these only appear because of the high incidence in the texts. As can be noted *community* is the central theme of this map with interconnections with *learning* and *service* on both sides. That is, our interpretation is that the map suggests that *community* is the focal

point (red) and *service-learning* suggests student learning through working with the community.

Thus, we interpret this map to propose that the ‘core’ components of service-learning are *community*, *learning* and *service*: hence the bold ellipse that we have drawn around these components. However, the map also refines these components.

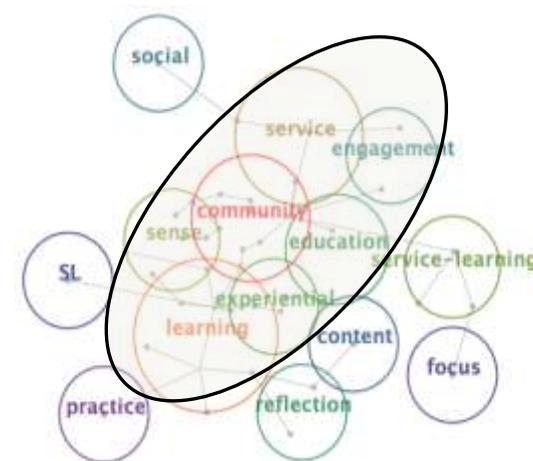


Figure 1: Initial map without manual seeding of the concepts

Based on the connectors (grey lines) and proximity of concepts, we would argue that service-learning means *education* and *engagement*, that is service-learning should ‘educate’, but also be based on

‘engagement’. Using the map, core components of community can be refined as per *education* in relationship to *experiential* and *sense*, meaning that the community is also engaged in education by either being a site for learning or providing education; but working *with* the community involves experiential engagement that makes ‘sense’ or is easily understood. Finally, *learning* has significant overlaps with (being) ‘experiential’ and again (needing to make) ‘sense’. In summary, this raw data analysis refines our initial conceptualisation of ‘core’ and ‘peripheral’ components to suggest that the principal themes of service-learning are *community* with *learning* and *service*, appearing in relatively equal representation; while second level components are *sense*, *experiential*, *education* and *engagement* – again balanced in their representation.

However, the ‘outliers’ in this map are also of importance as they only appear *because* of their frequency in the text. Particularly important is the positioning at the bottom right of the map of the institutional perspective. Here we interpret *content* to be suggesting

that service-learning is associated with either formal curriculum or is seen as a practice activity that also embraces *reflection*.

The pathway from *focus* to *service-learning* through to *education* and finally *community*, with the various associated concepts is one of our findings about the ‘process’ of service-learning: that is, the focus in service-learning is on *education* with the *community* that is both *experiential* and based on *engagement* and hence results (or has as its outcome) *service* that is targeted at *social* issues or needs. Drawing on the ‘outliers’ surrounding principal and second-level concepts we can identify another ‘pathway’ or ‘process’ of service-learning: that is, the *learning* in service-learning draws on *content*, *reflection* and *practice*, which makes this an *experiential* and *sense* making, thus coalescing into *service-learning*.

In summary, the map reassures us that service-learning can be taught, but it is an activity that requires reflection, practice and engagement in social issues/needs. We would argue that the findings subsequently distinguish service-learning from other various teaching

Multiplicity of the Service-Learning Terms

In the second analysis we began our process of ‘seeding’ the data in order to assess the commonality of our findings with the literature, and of course explore new findings that emerged. We first merged similar descriptors of service-learning on the basis of frequency, and sourced commonly used terms/ keywords appearing in the articles such as *community service*, *civic responsibility*, *social entrepreneurship*, *community-based education*, *citizenship*, *scholarship of engagement* in the set of concepts. Figure 3 shows the results from this analysis. As can be noted, some of the same components emerged from this analysis as were noted in the unseeded analysis: that is *community* and *service-learning* emerged as key components. However, the map also confirms the importance of *experience* (or experiential or engagement) with the community alongside *responsibility*, which drawing on our previous interpretation, aligns with *social* in denoting outcomes from service-learning as possibly relating to civic engagement and social responsibility.

However, the strength of *responsibility* and its proximal position with *service* and *content* is significant to note as this is the first time it appears in our analysis, yet reinforces the argument in the literature that service-learning is an activity that necessitates all stakeholders, that is, students, faculty and community to act ‘responsibly’ (Eyler, Dwight, Giles, Stenson & Gray, 2001). That is, service-learning should be a formal, curriculum-based activity which not only prepares students to act responsibly in their engagement; but also places an onus on faculty to assume this responsibility and of course the community to assume a similar responsibility (Holland, 1997). The number of signifiers clustering in the component *community* in Figure 3 both reinforces this argument, as well as alerts us to the fact that careful attention needs to be paid to how community engagement is structured in service-learning. Holland (1997) in particular emphasizes the role of community in service-learning and argues that it is at this level that differences in how institutions are involved in service-learning appear. Many institutions offer service-learning without a philosophy of

community engagement: the density of signifiers in the component *community* in Figure 3 and the proximity of community to all other components, emphasizes the need for considerable attention to be paid to this component in offering service-learning programs.

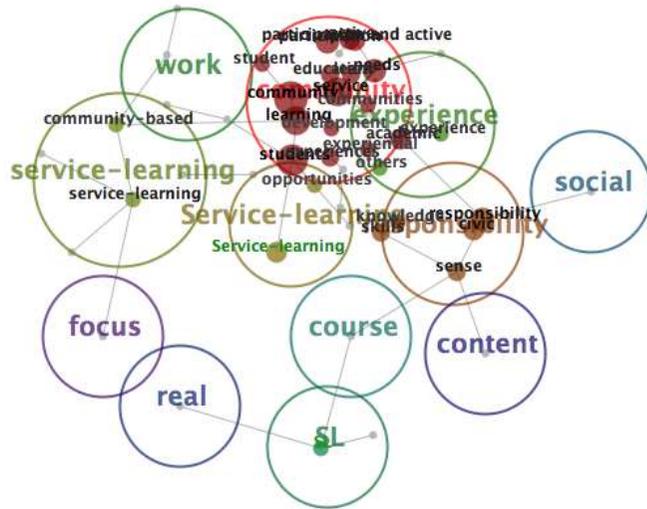


Figure 3: Perceptual map with manual seeding of the concepts

Matching the 4 'R's

In this analysis we tested a conceptual framework that coincided with the period of our analysis and had clearly delineated

variables for testing. Godfrey, Illes, & Berry (2005) identified four 'R's as elements of service-learning: reality, reflection, reciprocity, and responsibility. We forced the data by seeding these 4 'R's into the Leximancer list of concepts to test how well they are reflected in the 50 articles. *Reality* means that students apply academic content in real world settings, grappling with real world issues and engaging in real work. *Reflection* requires students to think deeply and write cogently about how the service experience has affected them and assists in Dewey's (1938) 'organic connection' between the experience and the individual. *Reciprocity* ensures that both service recipients and students gain from the exchange. *Responsibility* focuses on professionalism in that students should assume the obligations of citizenship and use their skills to better those communities where they live and work. Figure 4 presents the conceptual cloud that emerged from this analysis.

As can be noted, all 4 'R's appear in the cloud as per Figure 4, but at different stages and in relation to different components. Thus *reflective*, *reciprocity* and *real* are all proximally located to *service*

are not esoteric learning experiences, they should address the needs of the community. As suggested by the map, the highest relevant values are 'service-learning' (100%), 'community' (47%), and 'education' (45%). When considered as concepts, *reflection* is still the strongest (relevance of 28%), followed by *responsibility* (8%), *reciprocity* (2%), and *real-world* (1%). The map indicates that the relationship between university and community should be collaborative with reciprocal benefits. Service-learning is a vehicle for community empowerment and the experience addresses the needs of the community. This modus operandi delineates service-learning from volunteerism and other modes of service in which the transfer of knowledge is assumed to be one-way.

However, the gap between *reciprocity* and the other aspects of the map resonate with the previous analysis: that is as per our discussion in reference to Figure 2, the proximal location of *reciprocity* is suggestive of two related issues: the first is the lack of a philosophy of engagement with community that can harness the many untapped

opportunities that exist in working with community, while the second is the acceptance of a responsibility by all stakeholders that service-learning should be mutually beneficial. A challenge to exploring this is of course the difficulty of reaching this mutuality to the satisfaction of all stakeholders engaged in service learning, that is, community, institution, faculty and, of course, students. In contrast to the United States where service-learning now has a long and rich history (Kellogg, 2007), the embryonic nature of service-learning in the Australian university sector suggests that attaining this stage will require active debate and awareness raising amongst all the stakeholders about the aims as well as benefits of service-learning.



Figure 5: Perceptual map including the 4R concepts

In Summary...

The conceptual cloud in Figure 6 summarises many of the findings we have presented thus far: the proximal position of the indicators under the main concept of service-learning confirms that it is a *community-based activity* that requires *service*, a *sense-making project* and an *experiential program* necessitating *reflection* in particular. However, to accomplish *real-world practice* (the uppermost signifier in the cloud), the process of service-learning entails signifiers such as

work, teaching, knowledge and responsibility by all stakeholders in their engagement. We would argue that this depiction explicitly distinguishes service-learning from other similar activities such as volunteerism and community service, and hence contributes to clarifying its definitional meaning. Drawing all this together, we subsequently define service-learning as “a process of ‘reflective’ (of the experience) education in which students learn civic or social responsibility through a scholarship of community engagement that embodies the principle of reciprocity”.



Figure 6: Conceptual cloud including the 4R concepts

Implications & Conclusion

The use of Leximancer has enabled us to empirically substantiate aspects within the current body of literature that distinguishes service-learning, and refine these in order to understand ‘what’ service-learning is as well as distinguish signifiers that inform a conceptualisation of service-learning. In summary, the main components of service-learning are *community*, *learning* and *service* appearing in relatively equal representation, followed by a second tier components such as *sense*, *experiential*, *education* and *engagement*. The analysis of the 4 ‘R’s highlighted that of most significance are *responsibility* and *reflection*, while *real* appears as an outcome measure. However, *real* is evidenced in other ways such as *sense* and *experiential*. The findings also highlight ‘pathways’ in the process of service learning: we have discussed these in reference to Figures 2 and 4. Again, this resonates with current conceptualisations of service-learning in the literature, but refine these by identifying the denominators that inform these pathways, that is the process of service-learning. While the 4 ‘R’s

represents one model, it would be beneficial to interrogate the data with other concepts and/or themes from other frameworks.

Apart from contributing to definitional clarity about service-learning, we would argue that the additional value of this analysis has been: to refine the signifiers inherent within the components of service learning, to identify pathways or the process of service learning and finally, to highlight the under-developed conceptualisation of the concept of *reciprocity* in service –learning. We suggest that this is an area that requires attention. The urgency of this task lies in both our analysis and the common-sense understanding of service-learning: that is, without the ‘community’ there is no service-learning. Hence exploring a mutuality of benefit for all stakeholders in service-learning remains a critical task for completion.

Finally, we will draw on this research to inform the development of a matrix that can be used in auditing curriculum-based activities for their service-learning; as well as a further research program that seeks to better establish the ‘value proposition’ of service-

learning for all stakeholders. We expect that this exercise will result in a conceptualisation of reciprocity that may be a useful contribution to debate in this field.

References

- Ballantyne, J. & Phelps, K. (2002). What Can I Do? Applying Classroom Knowledge to Service Work, or Doing Practice Sociology, *Sociological Practice: A Journal of Clinical and Applied Sociology*, 4(1), .
- Cretchley, J., Gallois, C., Chenery, H., & Smith, A. (2010). Conversations Between Carers and People With Schizophrenia: A Qualitative Analysis Using Leximancer. *Qualitative Health Research*, 20(12), 1611-1628.
- Dewey, J. (1938). *Experience and Education*. New York: The Macmillan Company.
- Dewey, J. (2004). *Democracy and education*. Mineola, N.Y.: Dover Publications.
- Eyler, J., Dwight, E., Giles, Jr., Stenson, C., Gray, C. (2001). At a glance: what we know about the effects of service learning on college students, faculty, institutions and communities, 1993- 2000. Third Edition, <http://servicelearning.org/filemanager/download/aag.pdf>, accessed 20th March 2011.
- Godfrey, P.C., Illes, L.M. & Berry, G. (2005). Creating breadth in business education through service-learning. *Academy of Management Learning & Education*, 4(3), 309-323.
- Holland, B. (1997) Analyzing Institutional Commitment to Service: A model of key organizational factors. *Michigan Journal of Community Service Learning*. Fall, 30-41.
- Jacoby, B. (2003) *Building partnerships for service-learning*. San Francisco, CA: Jossey-Bass.
- Kendall, J.C. (1990). Combining Service and Learning: An Introduction. In Kendall, J.C. and Associates, *Combining Service and Learning: A Resource Book for Community and Public Service*, Vol. 1 (Raleigh, N.C.: National Society for Experiential Education, 18.
- Kenworthy-U'Ren, A. (2003). Service-Learning and Negotiation: Engaging Students in Real-World Projects That Make a Difference, *Negotiation Journal*, 19(1), 51-63.
- Knapp, T., Fisher, B., Levesque-Bristol, C. (2010). Service-Learning's Impact on College Students' Commitment to Future Civic Engagement, Self-Efficacy, and Social Empowerment, *Journal of Community Practice*, 1543-3706, 18(2): 233-251.
- Kolenko, T.A., Porter, G., Wheatley, W. & Colby, M. (1996). A Critique of Service Learning Projects in Management Education: Pedagogical Foundation, Barriers, and Guidelines, *Journal of Business Ethics* 15(1), 133-142.
- Langworthy, A. (2007). Education for the Public Good: Is Service Learning possible in the Australian Context, *AUCEA*, 2(1).
- Martin, N.J. & Rice, J.L. (2007). Profiling Enterprise Risks in Large Computer Companies Using the Leximancer Software Tool. *Risk Management* 9, 188-206.
- Metz, E., McLellan, J. A., & Youniss, J. (2003). Types of voluntary service and

- adolescents' civic development, *Journal of Adolescent Research*, 18, 188-203.
- Morton, K. & Troppe, M. (1996). From the Margin to the Mainstream: Campus Compact's Project on Integrating Service with Academic Study, *Journal of Business Ethics*, 15:21-32.
- Ngai, S.S. (2006). Service-Learning, Personal Development and Social Commitment: A Case Study of University Students in Hong Kong, *Adolescence*, 41(161), 165-177.
- Rooney, D., Paulsen, N., Callan, V.J., Brabant, M., & Gallois, C. (2009). A New Role for Place Identity in Managing Organizational Change. *Management Communication Quarterly*, 24(1), 44-73.
- Schmidt, J.A., Shumow, L & Kackar, H (2007). Adolescents' Participation in Service Activities and Its Impact on Academic, Behavioural and Civic Outcomes, *Journal of Youth Adolescence*, 36, 127-140.
- Scott, N. & Smith, A.E. (2005). Use of Automated Content Analysis Techniques for Event Image Assessment, *Tourism Recreation Research*, 30(2), 87-91.
- Smith, A.E. & Humphreys, M.S. (2006). Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping, *Behaviour Research Methods*, 38(2), 262-279.
- Stanton, T. (1990). Service Learning: Groping Toward A Definition. In Kendall, J.C. and Associates, *Combining Service and Learning*, Raleigh, N.C.: National Society for Internships and Experiential Education.
- Stockwell, P., Colomb, R.M., Smith, A.E., & Wiles, J. (2009). Use of an automatic content analysis tool: A technique for both local and global scope, *International Journal of Human-Computer Studies*, 67, 424-436.
- Strong, J., Mathews, T., Sussex, R., New, F., Hoey, S., & Mitchell, G. (2009). Pain language and gender differences when describing a past pain event, *Pain*, 145, 86-95.

Appendix A: Articles used in Leximancer Analysis

- Annette, J. (2005). Character, Civic Renewal and Service Learning for Democratic Citizenship in Higher Education, *British Journal of Educational Studies*, 53(3), 326-340.
- Ball, M.A. & Schilling, K. (2006). Service Learning, Technology and LIS Education, *Journal of Education for Library and Information Science*, 47(4), 277-290.
- Barcus, H.R. & Muehlenhaus, B. (2010). Bridging the Academic-Public Divide in GIS and Cartography: A Framework for Integrating Community Partnerships in the Classroom, *Journal of Geography in Higher Education*, 34(3), 363-378.
- Basi, S. (2011) Undergraduate Nursing Students' Perceptions of Service-Learning Through a School-Based Community Project, *Nursing Education Perspectives*, 32(3), 162-167.
- Bingle, R.G. & Hatcher, J.A. (2000) Institutionalization of Service Learning in Higher Education, *The Journal of Higher Education*, 71(3), 273-290.
- Bingle, R.G. & Hatcher, J.A. (2009). Innovative Practices in Service-Learning and Curricular Engagement, *New Directions for Higher Education*, 147, Fall 2009, 37-46.
- Buchanan, A.M., Baldwin, S.C. & Rudisill, M.E. (2002). Service Learning as Scholarship in Teacher Education, *Educational Researcher*, 31(8), 30-36.

- Carrington, S. & Selva, G. (2010). Critical Social Theory and Transformative Learning: Evidence in Pre-Service Teachers' Service-Learning Reflection Logs, *Higher Education Research and Development*, 29(1), 45-57.
- Curtin, K.A. & Garcia, J. (2011). Improving Work Performance for Adolescents with Emotional and Behavioural Disorders: A Comparison of Two Work-Based Learning Interventions, *Journal of Rehabilitation*, 77(1), 31-39.
- Cushman, E. (2002). Sustainable Service Learning, *College Composition and Communication*, 51(1), 40-65.
- Dahlberg, T., Barnes, T., Buch, K. & Bean, K. (2010). Applying Service Learning to Computer Science: Attracting and Engaging Under-Represented Students, *Computer Science Education*, 20(3), 169-180.
- Dicke, L., Dowden, S. & Torres, J. (2004). Successful Service Learning: A Matter of Ideology, *Journal of Public Affairs Education*, 10(3), 199-208.
- Dymond, S.K., Neeper, L.S. & Fones, D. (2010). Typing With Purpose: Linking the Word Processing Curriculum to Real World Applications through Service Learning, *Clearing House*, 83(2), 33-38.
- Ehrenberg, R.G. & Webber, D.A. (2010). Student Service Expenditures Matter, *Change*, 42(3), 36-39.
- Feenstra, J.S. (2011) Vocational Exploration through Service: The Effect of Service-Learning on Student Understanding of God's Calling, *Journal of Education & Christian Belief*, 15(1), 65-74.
- Furco, A. & Root, S. (2010). Research Demonstrates the Value of Service Learning, *Phi Delta Kappan*, 91(5), 16-20.
- Galvan, C. & Parker, M. (2011). Investigating the Reciprocal Nature of Service-Learning in Physical Education Teacher Education, *Journal of Experiential Education*, 34(1), 55-70.
- Green, S.S., Comer, L., Elliott, L. & Neubrandner, J. (2011). Exploring the Value of an International Service-Learning Experience in Honduras, *Nursing Education Perspectives*, 32(5), 302-307.
- Guertin, L.A., Cao, E.T., Craig, K.A., George, A.E., Goldson, S.T., Makatche, S.P., Radusevich, B.T., Sandor, C.W., Takos, A.T., Tuller, R., Williams, J.K. & Williams, M.A. (2004) Bringing Dinosaur Science to the Junior Girl Scouts Through a College Service-Learning Project, *Journal of Science Education and Teaching*, 13(4), 523-531.
- Hellebrandt, J. (2008). The Role of Service-Learning in the New Carnegie Classification for Community Engagement, *Hispania*, 91(1), 222-224.
- Hellebrandt, J. (2006). Spanish Service Learning Research from 1999-2003: Effects on Faculty, Department, Community and Discipline, *Hispania*, 89(4), 919-926.
- Hunter, S. & Brisbin, R.A. (2000). The Impact of Service Learning on Democratic and Civic Values, *PS: Political Science and Politics*, 33(3), 623-626.
- Jenkins, A. & Sheehy, P. (2009). Implementing Service Learning in Special Education Coursework: What We Learned, *Education*, 19(4), 668-682.
- Jouet-Pastre, C. & Braga, L.T. (2005). Community-Based Learning: A Window into the Portuguese-Speaking Communities of New England, *Hispania*, 88(4), 863-872.

- Kezar, A. and Rhoads, R.A. (2001). The Dynamic Tensions of Service Learning in Higher Education: A Philosophical Perspective, *The Journal of Higher Education*, 72(2), 148-171.
- Kielsmeier, J.C. (2010). Build a Bridge Between Service and Learning, *Phi Delta Kappan*, 91(5), 8-15.
- Krain, M. & Nurse, A.M. (2004). Human Rights through Service Learning, *Human Rights Quarterly*, 26(1), 189-207.
- Lambright, K.T. & Lu, Yi. (2009). What Impacts the Learning in Service Learning? An Examination of Project Structure and Student Characteristics, *Journal of Public Affairs Education*, 15(4), 425-444.
- Lemus, J.D., Bishop, K. and Walters, H. (2010). Quikscience: Effective Linkage of Competitive, Cooperative and Service Learning in Science Education, *American Secondary Education*, 38(3), 40-61.
- Levensque-Bristol, C., Knapp, T.D. & Fisher, B.J. (2010). The Effectiveness of Service-Learning: It's Not Always What You Think, *Journal of Experiential Education*, 33(3), 208-224.
- Lewis, T.L. (2004). Service Learning for Social Chance? Lessons from a Liberal Arts College, *Teaching Sociology*, 32(1), 94-108.
- Long, D.R. (2004). A Statewide Initiative in Service-Learning and Community-Based Instruction, *Hispania*, 87(1), 128-131.
- McKinnon, T.H. & Fealy, G. (2011). Core Principles for Developing Global Service-Learning Programs in Nursing, *Nursing Education Perspectives*, 32(2), 95-100.
- Molee, L.M., Henry, M.E., Sessa, V.I. & McKinney-Prupis, E.R. (2010). Assessing Learning in Service-Learning Courses Through Critical Reflection, *Journal of Experiential Education*, 33(3), 239-257.
- Nelson, A.L. & Scott, J.L. (2008). Applied Spanish in the University Curriculum: A Successful Model for Community-Based Service Learning, *Hispania*, 91(2), 446-460.
- Nelson, C., Antaya-Moore, D., Badley, K. & Coleman, W. (2010). The Sustaining Possibilities of Service-Learning Engagements, *Teachers & Teaching: Theory and Practice*, 16(3), 353-371.
- Packer, C.D., Carnell, R.C., Tomcho, P.M. & Scott, J.G. (2010). Development of a Four-Day Service-Learning Rotation for Third-Year Medical Students, *Teaching & Learning in Medicine*, 22(3), 224-228.
- Partker, E.A., Myers, N., Higgins, H.C., Oddsson, T., Prince, M. & Gould, T. (2009). More than Experiential Learning or Volunteering: A Case Study of Community Service Learning Within the Australian Context, *Higher Education Research & Development*, 28(6), 585-596.
- Plann, S.J. (2002). Latinos and Literacy: An Upper-Division Spanish Course with Service Learning, *Hispania*, 85(2), 330-338.
- Sedlak, C.A., Doheny, M.O., Panthofer, N. & Anaya, E. (2003). Critical Thinking in Students' Service-Learning Experiences, *College Teaching*, 51(3), 99-103.
- Seider, S.C., Rabinowicz, S.A. & Gillmor, S.C. (2011). The Impact of Philosophy and Theology Service-Learning Experiences upon the Public Service Motivation of Participating College Students, *Journal of Higher Education*, 82(5), 597-628.

- Seitsinger, A.M. (2005). Service-Learning and Standards-Based Instruction in Middle Schools, *The Journal of Educational Research*, 99(1), 19-30.
- Sheridan, M.E.B., Blue, A.V. & Basco, W.T. (2010). Promoting Students' Community Service During Medical School: The MUSC Gives Back Office, *Teaching & Learning in Medicine*, 22(3), 214-218.
- Sherman, A. & McDonald, L. (2009). Service Learning Experiences in University Science Degree Courses, *Innovative Higher Education*, 34(4), 235-244.
- Stallwood, .G. & Groh, C.J. (2011). Service-Learning in the Nursing Curriculum: Are We at the Level of Evidence-Based Practice, *Nursing Education Perspectives*, 32(5), 279-301.
- Taylor, P.G. (2002). Service Learning as Postmodern Art and Pedagogy, *Studies in Art Education*, 43(2), 124-140.
- Taylor, P.G. & Ballengee-Morris, C. (2004). Service-Learning: A Language of We, *Art Education*, 57(5), 6-12.
- Waldner, L.S. & Hunter, D. (2008). Client-Based Courses: Variations in Service Learning, *Journal of Public Affairs Education*, 14(2), 219-239.
- Wittmer, D.P. (2004). Business and Community: Integrating Service Learning in Graduate Business Education, *Journal of Business Ethics*, 51(4), 359-371.
- Yontz, E. & McCook, K. de la P. (2003). Service Learning and LIS Education, *Journal of Education for Library and Information Science*, 44(1), 58-68.

Tracking and Measuring Engagement: a review of the literature

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Abstract

A growing body of literature dedicated to critical discussions on university-community engagement suggests that universities are now, more than ever, committed to becoming more engaged with their community partners. This type of engagement is defined by its focus on reciprocal, mutually-beneficial knowledge-driven relationships. In the literature, we read about the successes and failures of university-community engagement projects and practices, and the complexities of tracking and measuring such activities. The purpose of this Literature Review is to highlight some of the challenges and identify some of the

approaches currently being used by universities to track and measure their university-community engagement.

Key Words: University-community engagement; TaME (Tracking and Measuring Engagement).

Introduction

University-community engagement has emerged as a significant component of learning and teaching and research that is defined by its focus on reciprocal, mutually-beneficial knowledge-driven relationships between higher education institutions and their community partners. The hallmark of engagement in higher education, according to Holland and Ramaley, is “...the development of partnerships that ensure a mutually beneficial exchange of knowledge between the university and the community” (2008, p. 33). Further, the Carnegie Foundation proposes that engagement describes the collaboration between institutions of higher education and their larger communities for the

mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity (2006).

The Australian University-Community Engagement Alliance (AUCEA, now called Engagement Australia), in their 2008-2010 Position Paper, emphasised that university-community engagement is a “core responsibility of higher education” (p. 2). As such, knowledge driven, mutually beneficial (university and community) partnerships are encouraged and celebrated in universities across the globe. For this reason, universities are becoming more engaged. A growing number of senior positions dedicated to engagement have been created, university-community engagement programs have been developed, and academic interest in engaged learning and teaching, and engaged research, has increased. In addition, a growing body of literature dedicated to critical discussions on university-community engagement suggests that universities are now, more than ever, committed to becoming more engaged.

What the literature is saying

In the university-community engagement literature, we read about the successes and failures of university-community engagement projects and methods of best practice. Many articles emphasise the need for useful and effective tools to describe and assess engagement however, very few focus on rigorous and reliable methods of tracking and measuring university-community engagement. Many warn that this is problematic, especially given that “universities making a commitment to community engagement must be able to track and provide a consolidated picture of projects and partnerships in order to document activity, inform the measurement of impact and outcomes, and contribute to program improvement” (Holland, Scott and Grebennikov, 2010, p. 262).

For this reason, measurement approaches that include economic dimensions and impacts on community merit further attention and development if the benefits and worthiness of engagement are to be reported (Hart, Northmore and Gerhardt, 2009). In their review of the

literature, Hart and Northmore (2011) identified three problems with measuring university-community engagement: a lack of focus on outcomes, a lack of standardised tools, and the wide variety of approaches being adopted by various institutions. They stressed the need for transparency regarding the procedures and methodology that measure both impact and change, suggesting the establishment of a 'community of practice' on audit and evaluation so that every stakeholder can participate in the evaluation process.

There also appears to be some confusion and uncertainty in the literature relating to terminology and the specific meaning of terms related to university-community engagement. For example, terms like tracking, measurement, assessment and evaluation are often used interchangeably. This creates confusion when describing models of university-community engagement as those that focus on evaluation are grouped together with those that track and measure such activities. However, it must also be noted that these terms are also used intentionally and their meaning is more explicit. For the purpose of this

review, all of the different ways of describing, evaluating, assessing, tracking and measuring university-community engagement are outlined in order to present an overview of all the approaches.

Undertaking the review

Taking all of the above mentioned points into consideration, in undertaking the literature search, a wide range of databases (including Informit, ProQuest, and ISI Web of Knowledge) were searched between August and September 2010 using the terms 'tracking university-community engagement'; 'measuring university-community engagement'; 'measuring work integrated learning'; 'tracking work integrated learning'; 'measuring service learning'; 'tracking service learning'; and 'evaluating university-community engagement. The Internet was also searched, through the Google and Google Scholar search engines, to identify the board range of tools, reports and articles not captured by the database search. From that broad search, a total of 83 papers were returned.

The papers covered a diverse range of topics, themes and representations of tracking and measuring university-community engagement. Some papers drew attention to the measurement and tracking of university-community engagement but merely recited case studies of what universities were doing in the area of engagement, with very little, if any, focus on the actual measurement and tracking of the activities in higher education institutions. This review draws knowledge and information from 29 of the papers returned.

Why is there so little research on university-community engagement?

Perhaps the paucity of evidence and research is due to the fact that university-community engagement has not been the subject of critical examination. Holland (2009), in her paper titled *Will it Last? Evidence of Institutionalization at Carnegie Classified Community Engagement Institutions* (2009), advised that institutionalisation is often the indicator of success for any new, innovative idea that is

introduced to higher education, such as university-community engagement. Holland (2009) explained how university-community engagement has often been questioned as a “...faddish idea what will disappear with the retirement of the generation of activist-minded baby boomer faculty” (p. 86). Such questioning suggests that it is the level of institutionalisation, and/or direction of leadership, that dictates the level of engagement and how successful it is. Thus the question posed by academic staff is – will it last?

In addition to such views by academics, measuring university-community engagement is a task made more difficult because “the level of institutionalization is difficult to measure in part because the nature of community engagement itself challenges some of the traditional values and indicators of academic prestige and performance” (Holland, 2009, p. 86). Holland (2009) illustrated this sentiment by quoting a member of academia who said, “If it doesn’t lead to a refereed publication in a top journal in my field, then I’m not interested” (p. 86). This quote suggests that the ‘publish or perish’ position has the

potential to dictate an individual academics level of participation and involvement in university-community engagement. A position that, once again, is often dictated by an institution's commitment to engagement and its related activities.

The problem, as suggested by Holland (2009), is that university-community engagement cannot be measured in the traditional ways of ranking or counting publications and patents. Holland (2009, p. 86) noted that:

Finding accurate ways to measure the impacts and outcomes of dynamic relationships that have intellectual benefits to the academy and practical benefits to the community quickly becomes complex and more than a little confusing. If the essence of the work is collaborative, then attribution, costs, and benefits become much more difficult to define and measure. Yet measurement is essential.

The purpose of this literature review is to highlight the challenges of tracking and measuring university-community engagement and identify current approaches.

Defining university-community engagement

In their paper on tracking and assessing community engagement, Holland, Scott and Grebennikov (2010) proposed that the various definitions of university-community engagement that currently frequent the literature share two key points. The first point is that engagement is a purposeful collaboration of universities with the non-university world. The second point emphasises that the collaboration that occurs as a result of the engagement yields mutual benefits.

These two points suggest that many institutions have used the Carnegie Foundation definition and adapted it to suit their own situation and needs. The problem however, is that beyond these two key points, various definitions of university-community engagement feature in the literature. Further, specific references to tracking and measurement are few – and even those that feature the word 'measure' or 'measurement' in the title – neglect to actually discuss ways of measuring university-community engagement. This may be, as Holland et al. identified, that the confusion over definitions of engagement has

“...made efforts to measure engagement clumsy at best and, at worst, confusing” (2010, p. 262).

For the purpose of this literature review, the AUCEA definition of university-community engagement will be used:

University-community engagement is a specific method for academic research and teaching that necessarily involves external communities (business, industry, schools, governments, non-governmental organisations, associations, indigenous and ethnic communities, and the general public) in collaborative activities that address community needs and opportunities while also enriching the teaching, learning and research objectives of the university (AUCEA, 2008).

In this context, through engaged research and teaching, university-community engagement can contribute toward the strengthening of communities and universities alike. The relationship, to be successful, **has** to be mutually beneficial – the co-production of knowledge **has** to benefit all parties involved.

The definitions offered by the Carnegie Foundation for the Advancement of Teaching (2006) and AUCEA (2008) provide a useful

platform for a wider discussion on how that engagement should be tracked and measured. This is important as Universities are now focusing on the tracking and measurement of university-community engagement. But this process is not without its challenges.

Challenges and complexities

A review of the existing literature confirmed a general impression that scholarly work on the tracking and measurement of university-community engagement in higher education is limited. Holland (2001) reported that few studies have been conducted that validate the institutional effects of university-community engagement. Adams, Badenhorst and Berman (2005) later acknowledged the growing nature and prominence of university-community engagement but suggested that little work had been done on how it was measured.

In their paper titled *In Search of Evidence: Measuring Community Engagement: A pilot study* Goedegebuure and van der Lee (2006) examined the possibility of developing a set of indicators for university-

community engagement based on a review of the international literature. Despite finding a range of ways to measure commercialisation, technology transfers and spin-offs, Goedegebuure and van der Lee (2006) found few, if any, ways of measuring engagement. What methods they did find were inconsistent (p. 3). From their research, it was concluded that “at present there is insufficient information reported to even superficially understand the level of community engagement being undertaken by a university” (2006, p. 29).

Stella and Baird (2008) also reported a lack of information related to the measurement of university-community engagement activities. They suggested that this dearth of information may be due to the fact that universities often fail to report their engagement activities in any cohesive unified manner – or method of recording, measuring and keeping track of outcomes. For this reason, Stella and Baird (2008), in their thematic analysis of the Australian Universities Quality Agency (AUQA) Cycle One Audit, reported that “Audit panels have suggested

that such an approach might require a university-wide register or database of activities and community interactions” (p. 25). Of interest, Stella (2007) reported a similar response in the 2007 AUQA thematic analysis of engagement and noted that tracking and measuring university-community engagement required further attention.

Around the same time Rudd (2007) suggested that “while a variety of approaches have been proposed to measure progress and assure quality in terms of outputs, processes and outcomes in university-community engagement, these require testing” (p. 73). Further, “the triad of embedding community engagement into the governance arrangements of a university, measuring community engagement and assessing risk is not well documented” (Rudd, 2007, p. 73).

In addition, much of the literature on university-community engagement is what Hart and Northmore (2011) refer to as ‘grey’ literature, including conference proceedings and audit tools available on the web. For this reason, much of the information on engagement,

including its tools of measurement, may not be as obvious then a finding reported in a refereed journal for example. It must be noted however, that this 'grey' body of literature does contribute greatly to our understanding of university-community engagement, albeit on the light side in terms of tracking and measuring such activities.

There is a great deal of literature on university-community engagement that contributes to the tracking and measurement discourse using different terminologies. These include auditing and evaluating (Hart and Northmore, 2011), monitoring (Hart, Northmore and Gerhardt, 2009 & Ritsila, Nieminen, Sotarauta and Lahtonen, 2008), and quality management (Scott and Jackson, 2005). These, and many other papers, are all included in this review as the need for quality tracking and measurement is likely to be embedded in all of their approaches.

In 2001, Holland, in her paper on exploring the challenge of documenting and measuring civic engagement (p.3) posed this question: Can we imagine a way to describe and/or measure civic

engagement activities on a national level and what would be our goals for such a system? In that same paper, Holland (2001) encouraged us to consider the motivation behind such a question, as the reason we seek to create measures influences the type of measures we develop. In doing so, Holland (2001) wrote about academic legitimacy, image and reputation, accountability, different civic missions, quality and matching measures to purpose and audience. Holland (2001) later referred to these as challenges, which may be partly responsible for, the insistence of early assessment and measurement models to focus on process and relationships, rather than outcomes.

Another challenge that contributes to the complexities of measuring university-community engagement is in fact, its definition. University-community engagement involves many activities, people and places. The diversity of approaches used by universities to describe and categorise university-community engagement contributes to those complexities. Next, the review considers the evolution of tracking and measuring university-community engagement.

Where have we come from?

One of the first frameworks for measuring university-community engagement was the Holland Matrix, described as a diagnostic tool “to describe and interpret the dimensions, approaches, and levels of institutional commitment to community service and service-learning and, thereby to facilitate institutional planning, decision-making and evaluation” (Holland, 1997, p. 33). In the matrix, seven organisational factors (mission; promotion, tenure and hiring; organisational structure; student involvement; faculty involvement; community involvement; and campus publications) are rated using four levels of commitment to engagement (low relevance, medium relevance, high relevance and full integration).

In her description of the Matrix, Holland warned that:

There is no intention in the matrix to judge ‘correctness’ or ‘goodness’ regarding an institution’s choice of level of commitment. Rather, the intent is solely to provide a framework that may be useful to an institution in comparing where it ideally seeks to be positioned on the matrix and its

assessment of its current location, all in the service of coherent institutional planning and decision making (p. 36).

The Kellogg Commission on the Future of State and Land-Grant Universities, in their report titled ‘The Engaged University’, provided useful resources for developing and measuring university-community engagement. One of those resources was the Holland Matrix.

The Kellogg Commission’s report (1999) reinforces the factors developed by Holland (1997). Its seven-part test includes the characteristics that are said to define an engaged campus: responsiveness to the community; respect for partners; academic neutrality; accessibility; integration of engagement into mission; coordination; and resource adequacy.

The organisational factors advanced by Holland (1997) are addressed by the Kellogg Commission, with community involvement, mission, infrastructure/coordination and resources receiving emphasis in both works. Moreover, the Kellogg Commission recommended key strategies for developing, fostering, and nurturing the engaged

institution that also cross over with the factors in the Holland Matrix. The Kellogg Commission policy recommendations relate to mission revision, policy, evaluation of the rewards processes, the role of university leadership, and faculty support and involvement (1999).

The Kellogg Commission's work captures the same dimensions or factors relevant to engagement in the Holland Matrix, with the exception of student involvement. Thus, mission; leadership; the faculty promotion; tenure and reward system; policy; budget allocation; organizational structure; faculty involvement and community involvement appear to be consistent factors across two pieces of literature on institutional/organisational factors. The model incorporates these factors, addressing tenure, promotion, and hiring processes within a broader Institutional Policies factor.

A year after Holland (1997) introduced her matrix, Furco, Muller and Ammon (1998) developed the *Self-Assessment Rubric for the Institutionalization of Service-Learning in Higher Education*. This rubric was designed to “assist members of the higher education community in

gauging the progress of their campus’s service-learning institutionalisation efforts” (Furco, 2002).

The rubric establishes a set of criteria that can help measure the status of a campus’s level of institutionalization at a particular point in time. The results can help an institution develop an action plan (to advance service learning), identify what is going well and what needs attention. Furco (2002) suggested that the rubric is also useful for facilitating faculty discussion about service learning and its direction, and for that reason, can be used in many ways.

The rubric, as described by Furco (2002), is structured by five dimensions characterised by several components. Each component has a three stage continuum of development. The rubric described in this review is a revision to the original version that was published in 1998 (Furco, 2002). The five dimensions are:

1. Philosophy and mission of service learning
2. Faculty support for involvement in service learning
3. Student support for involvement in service learning
4. Community participation and partnerships

5. Institutional support for service learning

Furco (2002) described how each component has three stages of development:

1. Stage One – is the Critical Mass Building stage where institutions are beginning to recognise service learning and building effort;
2. Stage Two – the Quality Building stage where focus is put on the quality of service learning;
3. Stage Three – this final stage is the Sustained Institutionalization stage where service learning is an integral part of the ‘fabric’ of the institution.

Both approaches, according to Holland (2009, p. 88), accomplish three things:

1. They estimate the optimum or desired level of engagement activity
2. They direct attention to aspects of the organisation that are essential for engagement
3. And they identify areas of weakness

The next approach, Gelmon’s Capacity for Community Engagement, builds on Furco’s five dimensions, adding a sixth

dimension – community engaged scholarship. This self-assessment tool, designed to be conducted in groups, is constructed around six dimensions:

1. Definition and vision of community engagement
2. Faculty support for and involvement in community engagement
3. Student support for an involvement in community engagement
4. Community support for and involvement in community engagement
5. Institutional leadership and support for community engagement
6. Community-engaged scholarship

The tool assists organisations to track their progress and develop a longitudinal profile of their developing capacity for engagement over time (Gelmon, Seifer, Kauper-Brown and Mikkelsen, 2005). The Gelmon Assessment approach is a measurement strategy used to evaluate university-community partnerships, the impact of service learning on professionals, faculty commitment and capacity, and the impact of the engagement on community partners (Jacobson, Butterill, and Goering, 2004). A Matrix Framework is used for student

assessment; assessment by academic staff; and institutional assessment (Gelmon, Holland, Driscoll, Spring and Kerrigan, 2001).

The assessment of engagement initiatives, according to Norvell and Gelmon (nd, p. 267) is useful in three ways:

1. It should reflect what has been learned (by all stakeholders)
2. It should serve as a guide for program improvement; and
3. Can be used to build and sustain community-based partnerships

In a discussion on the methods and strategies for assessing community university partnerships, Gelmon, Foucek and Waterbury (2005) encourage partners to ask the following questions:

- What do you hope to learn through the assessment of your partnership?
- Who wants/needs the results of the assessment? Do different audiences have different needs?
- What resources are available to support the assessment? (people, time, money)
- Who will conduct the assessment? Who will analyse the results?
- What will be the impact on the partnership?

The development of these tools has all influenced the development of the Carnegie elective Community Engagement Classification in one way or another. The Carnegie Foundation is an elective classification for describing institutional framework diversity in the United States. It defines community engagement as "the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity".

According to Hart, Northmore and Gerhardt (2009) the Carnegie Classification is useful for finding out whether a university has community engagement in its identity, culture and commitments and is relevant for providing guidance, identifying commitment, setting out a clear framework and comparing other approaches. However, the classification is not as useful for assessing activities from the community perspective, understanding the micro-dynamics of engagement or assessing how well universities manage the

implementation of their development strategies (Hart, Northmore and Gerhardt, 2009). Hart, Northmore and Gerhardt (2009) warn that the Classification, at this stage, only applies to US universities.

Where are we going?

University-community engagement is growing. Evidence of this growth is highlighted by the number of Australian University's establishing Engagement centres (for example Southern Cross University's Office of Community Engagement; the Community and Engagement Hub at Central Queensland University; and Edith Cowan University's newly established Engagement office) and their associated functional plans. With that growth has been an increase in research attention given to the policies and practices in various institutions. As previously suggested in this review, much of that attention has been directed toward defining, embedding and benchmarking engagement activities. Increasing interest is now being directed at how university-community engagement is measured and the types of tools that are

used to evaluate those activities (e.g. Goedegebuure & Van der Lee, 2006; Hart, Northmore and Gerhardt, 2009 and Holland, Scott and Grebennikov, 2010). However, a review of the literature suggests some complexity and confusion on the tracking and measurement of university-community engagement in higher education.

Rowe and Frewer (2000) and Granner and Sharpe (2004) were among the first to acknowledge the lack of standardised measurement instruments for the evaluation of university-community engagement. Scott and Jackson (2005) acknowledged that although many universities have included engagement objectives in their strategic planning, the realisation of those objectives has been ad hoc. In response, they have called for a more comprehensive and evidence based framework ensuring quality management for university-community engagement activities.

In their paper, Scott and Jackson (2005) identified a range of measures used by universities including:

- Results from community satisfaction surveys
- Related grants won

- Publication and citation rates
- Community usage of university facilities
- Community participation rates in university cultural activities
- Number of staff and students on community placements
- Number of alumni involved in university activities

The problem however, as reported by Scott and Jackson (2005), is the lack of quantifiable performance or tracking measures. For this reason, they suggested that universities need to establish key performance measures and then decide on the most appropriate ways of measuring and tracking that performance. This suggestion is supported by Goedegebuure and van der Lee (2006) who said that “little has been achieved in the development of robust measures reflecting the benefits that flow from such partnerships to both universities and community with which they engage” (p. 4). Goedegebuure and van der Lee (2006), in their pilot study, investigated the practicality of using current published information to report against a set of indicators to determine the type and extent of university-community engagement activity in Victorian universities.

In their briefing paper on auditing, benchmarking and evaluating public engagement, Hart, Northmore and Gerhardt (2009) clarified terminology. Firstly, an audit is a quality improvement process where performance is measured against a set of pre-determined standards or indicators of overall performance. It measures what is being done. During an audit, a university may be asked to select the types of community activities they participate in. These may include conferences, public lectures, seminars, musical productions and the like. Change can occur as a result of an audit in order to improve standards. Secondly, benchmarking is an ongoing, comparative process used to evaluate different aspects of their practice with others in their sector. It is a way of identifying problems and areas of excellence and for establishing best practice. Lastly, an evaluation assesses the value of what is being done in the institution. Hart, Northmore and Gerhardt (2009) suggested that it is the diversity of engagement related activities that contributes to the complexities of measuring university-community engagement.

Hart and Northmore (2011) wrote in support of attempts to measure engagement including one-off surveys, which according to Holland (2009) can produce inconsistent results due to simple designs and unclear terminology. Because of this, Holland et al. (2010) advocated for a more efficient and effective system of reporting and monitoring.

What the literature fails to provide is adequate detail on [how](#) to track and measure indicators of university-community engagement. As emphasised by Hart and Northmore (2011), the purpose of a tool to audit and evaluate university-community engagement should be to measure impact and change, and not just activity. The literature does however, provide valuable and useful information on the history of tracking and measuring engagement and the leaders in the field.

Conclusion

In addition to the many definitions of university-community engagement provided in the literature, there are a wide and varied number of activities and approaches to evaluating and measuring the types of engagement occurring between universities and communities. The diversity of approaches, as suggested by Hanover Research (2011), is because the field is still in a formative stage of development and an indication that no single approach is better than another.

This review of the literature has highlighted the various methods, tools, approaches and models used to track, measure, benchmark, and evaluate the countless ways that universities and communities engage with one another. For this reason, as suggested by Holland, Scott and Grebennikov (2010), the aims and benefits of such collaborations are complex – contributing to the challenge of assessment and measurement. As a result, “numerous attempts to define indicators for university-public engagement suggest that there is no single approach to audit, benchmarking and evaluation that can be

applied to any given university and its community partners” (Hart, Northmore and Gerhardt, 2009, p. 15).

From this review, it is clear that different tools for measuring university-community engagement are needed in different situations and universities – which may indicate a ‘what fits best’ approach. But as suggested by Hart and Northmore, “...there is no simple solution to the development of audit and evaluation tools for measuring community engagement (2010, p. 4).

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References

- Adams, R., Badenhorst, A., & Berman, G. (2005). The Value of Performance Indicators in Supporting a Community Engagement Agenda at RMIT. *Proceedings of the 2005 Australian Universities Quality Forum: Engaging Communities*, AUQA Occasional Publications, 5, pp. 28-32.
- Australian Universities Community Engagement Alliance. (2008). *Universities and Community Engagement: Position Paper 2008-2010*. Australian Universities Community Engagement Alliance.
- Australian Universities Community Engagement Alliance www.aucea.org.au Retrieved on Friday 9th of September 2011.
- Carnegie Foundation for the Advancement of Teaching. (2006). *Community engagement classification*. Palo Alto: Carnegie Foundation for the Advancement of Teaching.
- Furco, A. (2002). *Self-Assessment Rubric for the Institutionalization of Service-Learning in Higher Education (revised 2002)*. University of California, Berkeley.
- Furco, A., Muller, P. & Ammon, M.S. (1998). *Institutionalizing Service-Learning in Higher Education: Findings from a Study of the Western Region Campus Compact Consortium*. University of California, Berkeley.
- Garlick, S. & Langworthy, A. (2008). Benchmarking University Community Engagement: Developing a National Approach in Australia. *Higher Education Management and Policy*, 20(2).
- Gelmon, S.B., Foucek, A. & Waterbury, A. (2005). *Program Evaluation: Principles and Practices*. 2nd edition. Portland: Northwest Health Foundation <http://nwhf.org/resources/>

- Gelmon, S. B., Holland, B. A., Driscoll, A., Spring, A., & Kerrigan, S. (2001). *Assessing the impact of service-learning and civic engagement: Principles and methods*. Providence, RI: Campus Compact.
- Gelmon, S.B., Seifer, S.D., Kauper-Brown, J. & Mikkelsen, M. (2005). *Building Capacity for Community Engagement: Institutional Self-Assessment*. Community Campus Partnerships for Health, Seattle, WA.
- Goedegebuure, L. and Van der Lee, J. (2006). *In search of evidence: measuring community engagement, a pilot study*. Downloaded on September 12 2011 from <http://apo.org.au/research/search-evidence-measuring-community-engagement-pilot-study>
- Granner, M.L. & Sharpe, P.A. (2004). Evaluating community coalition and functioning: a summary of measurement tools. *Health Education Research*, 19(5), pp. 514-535.
- Hanover Research (2011). *Best Practices in Measuring University-Community Engagement*. Prepared for Edith Cowan University. Washington DC.
- Hart, A. & Northmore, S. (2011). Auditing and Evaluating University-Community Engagement: Lessons from a UK Case Study. *Higher Education Quarterly*, 65(1), pp. 34-58.
- Hart, A., Northmore, S. & Gerhardt, C. (2007). *Briefing Paper: Auditing, Benchmarking and Evaluating Public Engagement*. Prepared for the National Co-ordinating Centre for Public Engagement, UK.
- Holland, B. (2009). Will it last? Evidence of Institutionalization at Carnegie Classified Community Engagement Institutions. *New Directions for Higher Education*, 146, pp. 85-98.
- Holland, B. (2001). *Exploring the challenges of documenting and measuring civic engagement endeavours of colleges and universities: purposes, issues, ideas*. Paper presented to Campus Compact, Advanced Institute on Classifications for Civic Engagement, March 21.
- Holland, B. (1997). Analyzing Institutional Commitment to Service: A Model of Key Organizational Factors. *Michigan Journal of Community Service Learning*, Fall, pp. 30-41.
- Holland, B. & Ramaley, J. (2008). Creating a Supportive Environment for Community-University Engagement: Conceptual Frameworks, in *Engaging Communities: Proceedings of the 31st HERDSA Annual Conference*, Rotorua, 1-4 July 2008, pp. 11-25.
- Holland, B., Scott, G. & Grebennikov, L. (2010). *Rationale and Model for an Online System for Tracking and Assessing Community Engagement*. Proceedings of the 2010 AUCEA National Conference: Communities Participation and Partnership, July 2010.
- Jacobson, N., Butterill, D. and Goering, P. (2004), Organizational Factors that Influence University-Based Researchers' Engagement in Knowledge Transfer Activities'. *Science Communication*, 25(3), pp. 246-259.
- Kellogg Commission on the Future of State and Land-Grant Universities. (1999). *Returning to our roots: The Engaged institution*. National Association of State Universities and Land-Grant Colleges, Washington, DC.
- Norvell, K.H. & Gelmon, S.B. (nd). Assessing Civic Engagement. Retrieved from <http://teachpsych.org/resources/e-books/pse2011/vol1/53.%20Civic%20Engagement.pdf> on Friday 9th of September, 2011.

- Ritsila, J., Neiminen, M., Sotarauta, M. & Lahtonen, J. (2008). Societal and Economic Engagement of Universities in Finland: An Evaluation Model. *Higher Education Management and Policy*, 20(2).
- Rowe, G. & Frewer, L.J. (2000). Public Participation Methods: A Framework for Evaluation. *Science, Technology & Human Values*, 25(1), pp. 3-29.
- Rudd, C. (2005). Community engagement: A partnership approach to measurement, evaluation and benchmarking processes. *The Australasian Journal of University Community Engagement*, 2(2), 72-86.
- Scott, G. & Jackson, J. (2005). *A Proposed Framework for Effective Quality Management of Community Engagement*. Proceedings of the 2005 Australian Universities Quality Forum: Engaging Communities, July 2005.
- Stella, A. (2007). *Community Engagement in Australian Higher Education: a Brief Report on the Thematic Analysis of AUQA Audit Reports*. Paper presented at the AUCEA Conference held at Charles Darwin University, Alice Springs.
- Stella, A. & Baird, J. (2008). *Community Engagement and Inclusion in Australian Higher Education: A Thematic Analysis of AUQA's Cycle 1 Audits*. Australian Universities Quality Agency, Occasional Publications Series Number 15.

Can Service-Learning Be Institutionalised?

The case study of SIFE in Australia

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Abstract

There has been an increased interest amongst Australian universities in offering service-learning activities. Yet there remains a question as to whether service-learning can be institutionalised. The focus of this paper is to assess the opportunity that the SIFE programme (Students in Free Enterprise) offers universities in achieving institutionalisation of service-learning activities such as SIFE. Very little has been written about SIFE in Australia. This paper therefore firstly describes the SIFE programme and secondly, discusses the opportunity

it presents for universities to advance their offering of service-learning. However, by drawing on three case studies, we argue that for Universities to maximise this opportunity, SIFE – like service-learning generally – must be embedded in the strategic priorities of the University.

Keywords: SIFE, service-learning, university

Introduction

Developing the legitimacy of service-learning in Australian universities until now has, at best, remained ambiguous and, at worst, been ignored. Service-learning is an experiential student-centred model of learning (Ballantyne & Phelps, 2002, p 45). Holland defines service-learning as “...all in the hyphen. It is the enrichment of specific learning goals through structured community service opportunities that respond to community-identified needs and opportunities” (as quoted by Kenworthy-U’ren et al., 2006). More recently, service-learning has been

described as “a process of ‘reflective’ (of the experience) education in which students learn civic or social responsibility through a scholarship of community engagement that embodies the principle of reciprocity” (Caspersz, Olaru & Smith 2012).

The ambivalent status of service-learning has led some such as Langworthy (2007) to query whether service-learning is possible in Australian universities. As Holland (1997) and Kenworthy U’reen (2008) note, institutionalising service-learning remains problematic, as universities have traditionally viewed it as an excellent ‘ancillary’ activity that makes them ‘feel good’, without being ‘good enough’ to institutionally embed within their structures.

However, in 2008 the Australian Federal Government awarded SIFE (Students in Free Enterprise) Australia a three-year grant under the Diversity and Structural Adjustment Fund (DASA) in collaboration with a host, the University of South Australia, to increase the SIFE ‘presence’ in Australian universities. SIFE is about students creating sustainable positive social change in their community. SIFE operates at

both the national (SIFE Australia <http://www.sifeaustralia.org.au/>) and international (SIFE International www.sife.org) level. In Australia, SIFE commenced operation in 2000 and had 23 out of a possible 37 universities participating in the programme at time of writing. SIFE broadly meets the criteria of service-learning because students learn civic or social responsibility through a scholarship of community engagement through their engagement with SIFE (Caspersz & Olaru, 2012). In other words, universities can use SIFE to ‘teach’ students about citizenship (Billig *et al.*, 2005).

However, will this be enough? Will funding of programmes such as SIFE ‘institutionalise’ service-learning in Australian universities? The term institutionalise as used in this paper reflects a commonly held definition: that is, to establish service-learning as a convention or norm in universities. The aim of this paper is to offer a perspective on this question by considering the case study of SIFE. Little has been written about SIFE. We therefore begin the paper by describing the SIFE programme before reviewing the ‘ledger’ for and against the case for

service-learning in universities. We then draw on case studies of SIFE at three Australian universities to explore pathways to institutionalisation. We conclude by providing some preliminary observations about pathways that universities may take to institutionalise service-learning.

This paper represents the initial stage of a wider research programme about service-learning. Thus, it is in the nature of a reflective piece that draws on participant observation and secondary material to inform the argument. Nonetheless, in light of the analysis, we argue that unless SIFE – and by implication, service-learning – is aligned with the strategic objectives of universities, both SIFE and service-learning will remain marginal in Australian universities. We argue this is not only because of the resource implications associated with implementing service-learning programmes, but also because service-learning emboldens a particular philosophy of ‘care’ that is peripheral in some Australian universities as a result of increasing economic pressures and the increasing privatization of Australian university education since the 1980s onwards.

Describing SIFE

SIFE is a student driven team-based activity that has a university staff member who acts as an advisor and mentor to the SIFE team. The SIFE mission is to “bring together the top leaders of today and tomorrow to *create a better, more sustainable world....*”.

(<http://www.sife.org/Pages/default.aspx>) In universities across the world, SIFE activities are conducted in accordance with the following criterion:

“Considering the relevant economic, social and environmental factors, which SIFE team most effectively empowered people in need by applying business and economic concepts and an entrepreneurial approach to improve their quality of life and standard of living.” (<http://www.sife.org/Pages/default.aspx>).

SIFE teams present their suite of programmes at a national conference each year. At this they must demonstrate how their intervention changed the standard of living and quality of life of their targeted recipients (individuals and/or groups). This is the overriding

criterion that determines a national winner who then represents SIFE Australia at a world event.

Thus, both the SIFE mission and modus operandi offer universities a service-learning student activity that is meaningful to community life. For instance, 23 SIFE teams throughout Australia were involved in an international initiative sponsored by Campbell titled “Campbell’s Let’s Can Hunger” initiative in which they collected non-perishable goods and donated them to relevant organisations such as Foodbank.

The three universities that are described in this paper were part of this initiative. Table 1 provides further details of sample SIFE programmes at universities.

Project (University)	Description
Soft Landing (University of Western Sydney)	Promotes the recycling of discarded mattresses within the Sydney Basin and surrounding areas in partnership with Mission Australia.
Imprint (University of Melbourne)	Imprint creates positive public spaces in the community to encourage social interaction, boost economic activity and discourage anti-social behaviour.
BEAMS (University of Southern Queensland)	University students act as peer mentors for young people in school.
UHURU (University of Western Australia)	Women in Kenya’s Korogocho slums attended a two-week intensive course where they learned business and leadership skills.
Education Enterprise (Flinders University)	Captain Enterprise assists children understand good financial habits by providing an online interaction educational facility.

Table 1: Sample SIFE Programmes at SIFE Australia Universities

Source: University of Western Sydney SIFE Annual Report, 2010-11
http://sifeaustralia.org.au/media/files/Files/2011_Annual_Reports/UWS_2011.pdf
 University of Melbourne SIFE Annual Report, 2010-2011,
http://sifeaustralia.org.au/media/files/Files/2011_Annual_Reports/MELBOURNE_2011.pdf
 University of Southern Queensland Annual Report, 2010-2011,
http://sifeaustralia.org.au/media/files/Files/2011_Annual_Reports/USQ_2011.pdf
 University of Western Australia SIFE Annual Report, 2010/11
http://sifeaustralia.org.au/media/files/Files/2011_Annual_Reports/UWA_2011.pdf
 Flinders University Annual Report, 2010-2011,
http://sifeaustralia.org.au/media/files/Files/2011_Annual_Reports/FLINDERS_2011.pdf

Reviewing the ‘Ledger’

In posing the question ‘is service-learning possible in Australian universities?’, Langworthy (2007) highlights one side of the ledger in this debate when stating that contrary to their historical origins, “it can be argued that vocational and financial drivers (in Australian universities) are (now) far more influential than any sense of nation-building or community responsibility” (2007, p 122). Crick and Joldersma (2006) describe this trend in universities as an increase in the discourse of accountability as education increasingly focuses on measurable outcomes or rather ensuring that knowledge and skills developed in Universities meets the needs of the market. Not surprisingly, university staff reflect this emphasis with research noting that a critical barrier to implementing service-learning is university staff attitudes. As a result of pressure to be research active, university staff may refuse to participate in service-learning (Kolenko, 1996). Linked to this is the effect of service-learning on university staff workload programmes (Kolenko et al., 1996). In the age of

accountability-driven education, university staff seek to divest activities to cope with their increasing workload stemming from accountability requirements linked to their teaching and research engagement. Finally, our own observations confirm that university staff resistance to service-learning also stems from failure to identify the ‘specific learning goals’ of service-learning programmes in that lack of clarity about these makes it difficult for university staff to fit service-learning into an agenda that links accountability to learning outcomes and assessment.

Langworthy (2007) highlights an additional challenge arising from the recipient group of service-learning, that is, students. Langworthy suggests that research shows a decreasing detachment by students from university life as they struggle to combine work and study so as to be able to ‘afford’ ‘their educational qualification. As Kolenko (1996) noted in the case of service-learning in the US, financial pressures minimise the attractiveness of service-learning to University ‘customers’, as neither students nor parents are likely to affirm service-

learning given its invisible relationship to career and advancement in post-University life.

While there are significant challenges, we would argue that there is nonetheless a 'case' for service-learning in our institutions (that is, another side to the 'ledger'). At the level of the individual student, service-learning has been found to improve academic performance (Eyler & Giles, 1999), practical understanding of academic theories (Eyler *et al.*, 2001), social, cognitive and interpersonal skills (Klute & Billig, 2002), and a positive attitude in students towards their educational institution (Furco, 2002). Importantly, service-learning develops students' civic responsibility (Ballantyne & Phelps, 2002; Ngai, 2006) as by definition, service-learning entails working with the community (Caspersz *et al.*, 2012) in response to community-identified needs and opportunities (Kenworthy-U'ren *et al.*, 2006). Employers also rate extra curricular activities such as those delivered by service learning projects very highly on student curriculum vitae. Finally, service-learning can assist universities demonstrate that they are

responding to 'troubled times' (Marullo & Edwards, 2000a) (for instance social crises triggered by the global financial crisis); by fostering graduate attributes such as a 'sense of civic responsibility', 'social responsibility' and 'citizenship' (GAP, 2008).

However, research further suggests that Generation Y (or our University students) are considered idealistic, anti-corporate and perceived as being the socially conscious generation (Wolburg *et al.*, 2001). Similarly Caspersz and Winterton (2008) found that the desire to 'help the community' underscored student motivation to participate in the SIFE service-learning programme. Finally, in terms of university staff, participant observation confirms that there is much goodwill amongst university staff to participate in programmes such as SIFE.

In summary, while there are many negatives against service-learning, at the same time service-learning offers universities an opportunity to be perceived not only as institutions that graduate competent students; but also as institutions that graduate caring and

concerned citizens with the ability to change their society (Marullo & Edwards, 2000b; Boyer, 1990).

Collection of information

In developing this paper, we have relied on the technique of participant observation (Kawulich 2005) combined with analysis of secondary data. Schensul, Schensul & LeCompte (1999) define participant observation as "the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting" (p.91). Participant observation is also associated with 'peopled ethnography' (Fine 2003) referring to an understanding of the setting that is used to explore theoretical implications through the use of vignettes, that are compiled through extensive observations, notes, interactions and interviews.

We suggest that a combination of participant observation with the concept of peopled ethnography reflects the methodology used in developing our paper. We have been engaged with SIFE for some time,

firstly as university staff advisors to SIFE teams, and more recently as SIFE regional co-ordinators covering SIFE teams in South Australia, Western Australia, New South Wales and Queensland. In this role we offer training for SIFE staff and students about SIFE and provide advice to teams about the development of their SIFE portfolios and management of their projects and activities.

We found participant observation to be the most useful method for collecting our information, given we were interested in studying a naturalistic environment (Lincoln & Guba 1985), and were not seeking to test any propositions or hypotheses. Nonetheless, we engaged in conversations with key stakeholders of SIFE at our three case study sites namely students and faculty staff. We further drew on secondary data such as annual reports from SIFE teams at the three respective sites to complement our information.

We did not apply any techniques to the analysis of our observations, as we were engaged mostly in a sense-making exercise.

Similarly, we drew on secondary material for descriptive purposes only, given this phase of the research.

Case Studies

The SIFE Experience at Institution 1

At Institution 1, students can engage in SIFE through the subject, *Learning through Community Services*. This is offered as an open elective valued at 20 credit points (this is double the usual allocation of credit points) to all undergraduate students within the university.

The focus of the unit can be described as one in which students apply discipline based knowledge as they carry out projects of substantial benefit to community agencies. These include:

- Developing an understanding of the nature and roles of public sector agencies and of non-profit community organizations;
- Exploring issues that typically confront public sector and non-profit community agencies;
- Examining strategies that agencies employ to address problems, including the role of voluntary service and advocacy;

- Contributing to research and service provision in collaboration with public sector and non-profit community agencies; and,
- Developing effective communication, advocacy and analytical and intervention and interpersonal skills.

In the unit, students are guided through an academic process that helps them to critically evaluate the selection of an appropriate community group and project, set up and commence project and finally evaluate the project outcomes and achievements.

Again to support the academic standing of the unit, students engage in a three-day intensive workshop in which they receive content that gives them a background to service learning, types of service learning and the theories related to service learning; the theory of Social Justice and working in the community; evaluating community needs need; maintaining professional standards when working with communities; and critically evaluating their service learning.

Each semester a cohort of students enrol in SIFE and 85 students have undertaken this unit since its commencement in 2006

(this is over 7 semesters). The unit was a core unit in the Bachelor of Early Childhood; however, this is no longer the case. Nonetheless, student enrolments in the unit have been maintained with student reviews suggesting that the impact of the previous projects that have been undertaken contribute to encouraging new students to enrol in the unit, even where it is not compulsory. However, as a further attempt to institutionalise SIFE Institution 1, the University now made the decision that as of 2010 scholarship students will have to participate in SIFE, either through enrolling in the unit or electing to be an ordinary team member.

These events along with observations and feedback from staff and students suggest that service-learning through SIFE is attaining some measure of 'institutionalisation' at this institution. University affirmation (through support for the Unit and now participation by scholarship students) has ensured deployment of resources (both staff and student) to sustain service-learning and SIFE. Undoubtedly, the fact

that SIFE is embedded in a teaching and learning programme has contributed to the unfolding of this scenario.

The SIFE Experience at Institution 2

SIFE at Institution 2 first began with students from the Arts and Social and Behavioural Science Faculties in 2001. As time evolved the greater proportion of students involved in SIFE from 2003 to 2007 were drawn from the business disciplines of business, economics and law. This was also the discipline from which the academic university staff advisor was appointed. Funding for the SIFE program was limited to funds that the team could generate and in kind support such as printing, use of office space, and marketing assistance provided by the relevant University staff.

At Institution 2 the SIFE experience has always been viewed as an extra-curricula or service activity for both the students and university staff advisors involved. Thus in contrast to Institution 1, students do not receive formal credit for the project work they undertake despite the fact that many of the projects may extend for one

year or more. Rather SIFE is perceived as a means of enriching their studies by providing a chance for students to engage in real life projects for various bodies and individuals in the community. Student involvement is completely voluntary with certification of achievement and participation awarded in accordance with the level of service delivered.

However members of the SIFE team often take part in 'mainstream' university activities providing assistance at events such as orientation and campus conferences, opening of new facilities, and operation of a campus book- shop. In discussion with key university stakeholders at Institution 2 it is clear that SIFE is viewed as a very effective means of 'enriching the student experience'. With a greater emphasis now being placed on community service or engagement as a graduation requirement and employers are requiring credible 'real life' experience of university graduates, the SIFE programme provides a viable means of satisfying these requirements

Nonetheless, despite the deployment of resources to sustain and expand SIFE, its continued presence at Institution 2 has been limited with significant effects. For instance, this institution did not attend the SIFE Nationals in 2011, but is hoping to return in 2012, and there has been difficulty in retaining a university staff advisor.

The SIFE Experience at Institution 3

Institution 3 positions itself as a research-intensive University. Teaching and learning is thus viewed as supporting this broad strategic goal with the emphasis in this area being on improving the 'quality of the student experience'. Whilst not specified, it is suggested that SIFE helps the university meet this objective through offering a structured activity that can assist students attain real-life experience.

Thus and in contrast to the Institution 1 experience, this institution does not offer SIFE for 'credit'. As SIFE is considered part of enhancing the overall student experience of being at the university, it is offered as a completely voluntary activity that is not formally integrated

into any teaching and learning approach. However, in reviewing the evolution of SIFE at this institution, there are indicators that SIFE is well on the pathway towards institutionalisation here.

At this institution, the SIFE programme is formally a Guild Club but is heavily supported by the Business School, who provide academic mentors and resources to SIFE for their activities. The SIFE chapter have a webpage attached to the Business School main page. Very importantly, SIFE has been invited to be part of 'mainstream' university activities. For instance, at the recent opening of the Business School, the SIFE team were invited to publicise their activities and use the event to launch one of their new programmes. In addition, as a Guild Club, the SIFE team draws its membership from across the University. Currently there are students from the Arts (Communication and Cultural Studies, Law), Engineering, Science and Commerce faculties involved in SIFE activities.

In discussions with key university stakeholders about the SIFE experience at this institution, it is clear that they view SIFE as assisting

the university to 'enhance the quality of the student experience'. Evidence supporting this also stems from noting that the institution promotes SIFE to new students at commencing student orientations. Again – and like the experience of Institution 1 – the opportunity that SIFE offers to operationalise a key strategic objective of the university enhances the possibility that SIFE will remain sustainable within this environment. This is supported by the fact that the university is pursuing a university-wide policy on service-learning. As part of this, the university now has in place a process to 'credit' units as service-learning units. As a result students will receive notification on their transcripts that they have completed a recognised service-learning unit. While not embedded in a specific unit, students engaged in SIFE will receive a comparable notation on their certificate. Finally, the momentum created by these events has contributed to the awarding of a teaching fellowship at this institution (in 2011) to examine service-learning in the Business School.

Discussion & Implications

According to Morton and Troppe (1996, p 27), universities generally adopt one of three service-learning strategies:

- Integrating service into existing academic structure/classes
- Organising service learning as a discipline or area of study (for example, minors or majors in community service)
- Affiliating service learning with a leadership, citizenship or other centre that is topical and interdisciplinary in nature.

Morton and Troppe (1996) and others (see Fritz, 2002) note that the first approach generally dominates service-learning at Universities. While this may be the explicit route to follow, our case studies highlight that a variety of approaches may be used to effect the institutionalisation of service learning within Universities: in other words, 'institutionalisation' does not necessarily imply incorporating the activity into a formal learning programme as in the case of a separate unit of study. Instead, if considered from the perspective of establishing the activity as a norm within the culture of an organisation,

the pathway to institutionalisation may take many forms. Our case studies illustrate this.

Undoubtedly, SIFE at Institution 1 has followed the first route. By embedding SIFE in a unit programme, support to enact a policy that engages most – if not all – students in SIFE was created. We therefore conclude that SIFE at this institution has become the norm rather than the exception – or is at least well on the way to doing so. It is possible that through the provision of funding under the DASA programme SIFE will be further embedded in that university's culture.

The case of Institution 2 reinforces the importance of creating this 'norm' if institutionalisation is to be achieved. In this environment the provision of funds under the DASA programme is unlikely to contribute to further institutionalisation as achieving this requires a cultural shift. While it could be argued that this may be due to a lack of embedding in a unit as in the case of Institution 1; the case of Institution 3 illustrates that a service-learning activity such as SIFE may remain co-curricula, yet service-learning may attain a level of institutionalisation.

At this institution, service-learning appears to have strengthened in terms of becoming institutionalised in that environment. The fact that SIFE remains a co-curricula activity appears to not have impeded progress along this pathway. In fact, and in contrast to Institution 1, there has been a broadening of recognition of service-learning beyond SIFE into other areas of the university.

A commonality that emerges from the case studies is that realising institutionalisation requires a university staff member to act as a champion 'of the cause'. In suggesting this, we are mindful of similar findings by Fritz (2002, p76) who in reviewing case studies of service-learning at various Universities concluded that a key driver is a 'university staff member...(who) needs to be passionate about service learning, organized, willing to acknowledge the risks ("security, stability, and our own construction of personal identities") and flexible (as "no two service-learning experiences will ever be the same").

The case studies about SIFE both emphasize and extend this observation. To operate at Universities the organisation of SIFE (that is,

the national and international bodies) mandate that there be a university staff member whose role is to provide mentoring and strategic advice on project development and completion. However, both Institutions 1 and 3 have retained long-serving university staff as mentors for their SIFE teams; this has not been the case at Institution 2. Hence, ensuring succession of university staff in delivering service-learning is a further lesson that is reinforced by the case studies in terms of progress on the pathway to institutionalisation.

In summary, the case studies illustrate that institutionalisation of a service-learning activity such as SIFE can develop through alternative pathways. However, a key is the support of the broader university culture. This suggests that until there is a clear alignment of service-learning or the service-learning activity with the university's own priorities, institutionalisation of this activity will remain ambiguous.

Limitations and Future Research

It is acknowledged that the case study material included in this paper is limited to three institutions. Thus, we hope that future research in this area will include a larger case study sample and include a more comprehensive study of the views of university staff advisors and students.

Apart from our small sample, a further limitation in our study is that of researcher bias. Inevitably this will affect the data, given the methodology adopted in this study (Kawulich 2005). Undoubtedly, further research needs to undertake different methodologies that may diminish this effect.

Conclusion

This paper has presented a number of preliminary considerations that will guide our future work in this area. There are a number of trends in the wider non-university context that may be encouraging universities to consider service-learning more seriously.

The development of a social inclusion agenda by the Federal, and implementations post the Review of Higher Education (2009) of funding to attract socially disadvantaged youth into university, suggests that the lens through which universities view and hence engage with their broader community, may be widening.

SIFE and service-learning in general present an opportunity for universities to respond to these trends. Yet, we are mindful of the challenge that these programmes face, given the dominance of the accountability discourse within universities and, by implication, amongst our student and university staff populations. Changing this discourse requires highlighting the opportunities for both Universities as organisations and individual students and university staff who engage in service-learning programmes such as SIFE from both a professional and personal perspective.

References

- Ballantyne, J., & Phelps, K. (2002) What Can I Do? Applying Classroom Knowledge to Service Work, or Doing Practice Sociology. *Sociological Practice: A Journal of Clinical and Applied Sociology*, Vol 4, No 1.
- Boyer, E. 1996. The Scholarship of Engagement. *Journal of Public Service and Outreach*, 1(1): 11-20.
- Brookfield, S (2005) Learning Democratic Reason: The Adult Education Project of Jurgen Habermas, *Teachers College Round*, 107, 6, 1127-1168.
- Caspersz, D. and Winterton, J, (2008) Responding to Student Poverty: Teaching Social Entrepreneurship Through Finance for Life at the University of Western Australia. *Proceedings from the AUCEA National Conference themed "Engaging for A Sustainable Future"*, 9-11 July 2008, Sunshine and Fraser Coasts, Queensland.
<http://www.auceaconference.net.au/>.
- Caspersz, D., Olaru, D., & Smith, L. 2012. Striving for definitional clarity: What is service learning?, *AUCEA e-journal*, forthcoming.
- Caspersz, D & Olaru, D. 2012. Developing 'emancipatory' interest: learning to create social change. *HERD*, forthcoming.
- Crick, R. D. and Joldersma, C. W. (2007) Habermas, lifelong learning and citizenship education, *Studies in Philosophical Education*, 26, 77-95.
- Eyler, J., Giles, D.E. Jr. 1999. *Where's the Learning in Service-Learning?*. San Francisco: Jossey-Bass.
- Eyler, J., Giles, D.E. Jr., Stenson, C.M., & Gray, C.J. 2001. *At A Glance: What We Know about The Effects of Service-Learning on College Students, Faculty, Institutions and Communities, 1993-2000*. Third Edition.
- Fine, G. A 2003. Towards a peopled ethnography. *Ethnography* 4(1), 41-60.
- Fritz, J M (2002) A Little Bit of Sugar: Integrated Service-Learning Courses. *A Journal of Clinical and Applied Sociology*, 4(1).
- Furco, A. 2002. Is service-learning really better than community service? A study of highschool service. In A. Furco & S.H. Billig (Eds.), *Advances in service-learning research: Vol.1. Service-learning: The essence of the pedagogy* (23-50). Greenwich, CT: Information Age Publishing.
- GAP, 2008.
<http://www.itl.usyd.edu.au/projects/nationalgap/resources/gamap/map.cfm?ga=7> accessed 15th September, 2010.
- Gillard, J (2009) Australian Financial Review – Higher Education Conference – 9 March 2009. Ministers Media Centre – Employment , Education and Workplace Relations Portfolio.
- Guo, Z. and Sheffield, J. (2006) Habermasian Inquiring System: Towards a General Framework for Knowledge Management Research, *Proceedings of the 39th Hawaii International Conference on System Sciences*, 2006.
- Habermas, J. (1968) *Knowledge and Human Interests*, Boston, MA, Beacon Press.
- Habermas, J. (1984) *Theory of Communicative Action: Reason and the rationalisation of society* (Vol 1), Boston MA, Beacon Press.

- Holland, B (1997) Analyzing Institutional Commitment to Service: A model of key organizational factors. *Michigan Journal of Community Service Learning*. Fall, p30-41.
- Kawulich, B. 2005. Participant observation as a data collection method. FORUM. Qualitative Social Research. Vol6. No. 2. Art 43. <http://www.qualitative-research.net/index.php/fqs/article/view/466/996>
- Kenworthy-U'ren, A. (2008) A Decade of Service-Learning: A Review of the Field Ten Years After JOBE's Seminal Special Issue, *Journal of Business Ethics*, 81, 811-822.
- Kenworthy-U'Ren, A., Taylor, M. L. and Petri, A. (2006) Components of Successful Service-Learning Programs: Notes from Barbara Holland, Director of the U.S. National Service-Learning Clearinghouse, *International Journal of Case Method Research and Application* 18(2), 120-129.
- Klute, M.M., Billig, S.H. 2002. *The impact of service-learning on MEAP: A large-scale study of Michigan Learn and Serve grantees*. RMC Research Corporation: Denver, CO.
- Kolenko, T. A., Porter, G., Wheatley, W. and Colby, M. (1996) A Critique of Service Learning Projects in Management Education: Pedagogical Foundation, Barriers, and Guidelines, *Journal of Business Ethics* 15(1), 133-142.
- Langworthy, A (2007) Education for the Public Good: Is Service Learning possible in the Australian Context, *AUCEA*, 2(1).
- Marullo, S., Edwards, B. 2000a. Service-learning pedagogy as universities' response to troubled times. *American Behavioural Scientist* 43: 746-755.
- Marullo, S., Edwards, B. 2000b. From charity to justice: the potential of university-community collaboration for social change. *American Behavioural Scientist* 43: 895-912.
- Morton, Keith, and Marie Troppe. 1996. From the Margin to the Mainstream: Campus Compact's Project on Integrating Service with Academic Study. *Journal of Business Ethics*, 15:21-32.
- Schensul, Stephen L.; Schensul, Jean J. & LeCompte, Margaret D. (1999). *Essential ethnographic methods: observations, interviews, and questionnaires* (Book 2 in Ethnographer's Toolkit). Walnut Creek, CA: AltaMira Press.
- Ngai, S.S. (2006) Service-Learning, Personal Development and Social Commitment: A Case Study of University Students in Hong Kong. *Adolescence*, 41 (161), 165-177.
- Wolburg, J.M. and Pokrywczynski, J. (2001) A psychographic analysis of Generation Y college students. *Journal of Advertising Research*, 41(5), Sep/Oct, 33-52.

Meaningful Engagement of Occupational Therapy Students: Community Engaged Learning Experiences in Regional Australia

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Abstract

Community engaged learning is an established pedagogical approach in higher education. A new occupational therapy program is being developed in regional Australia under the university's mission to provide quality and inspiring learning experiences to students based on scholarly teaching practices. This study aims to determine if participation in an occupational therapy community engaged learning assignment promotes the achievement of student learning objectives and enhances engagement with community organizations in regional NSW, Australia. Qualitative analysis of student reflections and community feedback indicates that both intended and unintended

learning outcomes were achieved and positive relationships have been established between the university and community organisations.

Key Words: Community engaged learning; service-learning; allied health; occupational therapy; Australia; University

Introduction

Service learning as an approach to teaching and learning has been described as combining relevant community service with the application of academic content and classroom activities in a way that is beneficial to both the student and the community (Bowen, 2010). While service learning is considered to be an effective pedagogy in many countries around the world, there are limited studies which demonstrate the impact of community engaged learning for both students and community agencies in the context of allied health in regional Australia (Parker, et al., 2009). The vice chancellor of a regional Australian university states that "Southern Cross University is growing:

more students, more world-leading research and deepening connections with our communities” and has committed to “providing inspirational learning experiences for our students through high quality teaching engaged with scholarship” (Lee, 2011, p. 3). Across Australia, an expansion of community and workplace based learning in higher education is occurring as it is a key mechanism for workforce capacity building (Kay, et al., 2011). In the Australian context, Smith et al. (2009), defines service learning as “work integrated learning which is initiated by community organisations, and which provides explicit social benefit to the organisation” (p. 8). Other researchers have defined service-learning as the integration of experiential learning or active learning with typical classroom activities in a way that is structured to address both community needs and promote student development by instilling a sense of civic responsibility and a greater awareness of issues surrounding community service provision (Andrews, 2007; Jacoby et al., 1996). The project under investigation in this paper may best be described by the term ‘community engaged learning’. Critical

components of community engaged learning include both the students’ reflection of their involvement and impact in a particular service and its relation to their developing understanding of occupational therapy practice while equally emphasizing mutually beneficial outcomes for all participants. “While practicum, internship and work integrated learning have delivered excellent professional and experiential learning outcomes for students at SCU for a number of years, there remains a gap in the provision of structured learning opportunities that will not only equip our students to be effective, socially responsible global citizens, but also increase the capacity of the university to enrich its communities” (Roach & Fisher, 2011, p. 2).

Context and Rationale for the project

The third year of the ongoing process of developing and delivering SCU’s new Bachelor of Occupational Therapy (OT) program is being finalized. The purpose of this project is to explore whether participation in an occupational therapy community engaged learning

assignment promotes the achievement of student learning objectives and enhances engagement of the university and its students with community organizations in regional NSW, Australia?

Results of this evaluation will be used to inform continuing curriculum development processes within the occupational therapy program. Additionally, a community health clinic staffed by students and a suite of allied health programs are currently being developed with planned commencement in 2013 at the new Gold Coast campus of SCU. Outcomes of this pilot project and subsequent initiatives will provide evidence and foundations for the continuing establishment of strategic partnerships in the region. Scholarly evaluation of our teaching practices in higher education can enable us to evaluate outcomes of community engaged learning projects and can provide valuable insights and practical guidelines for facilitating meaningful engagement of students in the community (Bingle & Hatcher, 1995).

A unit entitled “Play, Education and Leisure in Occupational Therapy”, was developed for third year OT students and delivered for

the first time in session 2, 2011. A community engaged learning component for the unit was designed and evaluated to ensure that this approach is consistent with best practice recommendations in the literature and that the teaching and learning activities and assessment are appropriately student- centred for students nearing the end of their degree program in preparation. The community engaged learning assessment task pertaining to this unit has been designed to be substantially valid and authentic or applicable to the real-world knowledge that is required for practice (Morgan, Dunn, O'Reilly, & Parry, 2004).

Service learning has been established as an effective and popular pedagogy being used in occupational therapy and other allied health higher education programs at many overseas institutions (Atler & Gavin, 2010; Hansen, et al., 2007; Moskowitz, Glasco, Johnson, & Wang, 2006; Vroman, Simmons, & Knight, 2010). Community engaged learning, as applied in this project, exemplifies occupational therapy's core philosophy of engagement, social participation and learning by

doing (Hansen, et al., 2007). Effective community engaged learning practice has been described as providing academic credit for learning, rather than for service; adhering to rigorous academic standards; establishing specific learning outcomes; and assigning projects that are relevant to actual community needs (Mintz & Hesser, 1996, as cited in Bowen, 2010). Understanding outcomes of newly developed community engaged learning projects as a pedagogical approach and as a method of establishing community engagement will help to inform the development of future curricula and further enhance the university's regional engagement agenda.

There is evidence to support community engaged learning as a valuable teaching and learning tool in the Australian University context. In 2009, the Australian Learning and Teaching Council (ALTC) put forward a comprehensive report on maximizing the contribution of work integrated learning (WIL) to the student experience. Research from the ALTC report identifies the value of providing a wide spectrum of workplace experiences to enhance student learning. Despite

evidence of benefits, there are resourcing issues that place significant constraints on the capacity of institutions to deliver quality WIL programs required to enhance skill development which will maximise graduates contribution socially and economically to the nation (Kay, 2011). The ALTC report recommends that opportunities be created to embed career development learning and structured work-integrated learning models into curriculum by using community engaged learning and other extra-curricular activities for student learning (Smith, et al., 2009). The evidence-based guidelines from this report were applied during the development of the community engaged learning project.

Rational for Community Engaged Learning vs. Work Integrated Learning

Traditional work- integrated learning is embedded in the current curriculum at the program level through clinical placement. Occupational Therapy students are required to complete 1000 hours of clinical placement in order to obtain their degree. These placements are

embedded throughout the course and frequently take place in traditional clinical settings such as acute care in public hospital systems, rehabilitation centres, and home and community care agencies. OT is a dynamic and growing profession with many newly emerging areas of practice. One challenge with the requirement for 1000 hours of fieldwork is that the student has to be supervised directly by an OT. This does not enable students gain much practical experience in non-traditional settings. To make education relevant, purposeful and meaningful within the community, opportunities for students to be engaged with people in a natural environment, without a clinical process are an appropriate teaching strategy for occupational therapy students (Hartmann, 2011). In the unit “Play, Education and Leisure” there is a focus on applying these important occupations in a creative community setting. There are many potential client groups who could benefit from the skill set that OTs have to offer where they are not traditionally employed. Some examples include adaptive recreation opportunities for people with disabilities, services for adolescents and

young people who are at risk for any number of reasons, educational and recreational support for children with social or learning challenges outside of school, or early intervention and developmental activities for young children. Services such as these are important for many members of the community but are seldom accessed by many people who could benefit from them. As government funding for healthcare becomes more limited, our graduates will not all be able to obtain jobs in the public health sector. Access to OT services in the public sector is strictly limited to those with the severest of needs and even then long waiting lists exist. Another challenge is the small number of OTs that work with children and young people in this region of the country. Queensland schools only employ a handful of therapists and there are only a few working in private practices. Many organizations and client groups who could benefit from the services of an OT have likely never had the pleasure of meeting one! There are many opportunities for the newly graduating therapists to be creative and develop programs in such emerging areas of practice. While there is substantial evidence to

support community engaged learning as an integral part of a variety of allied health curricula, this study proposes that there is a need to evaluate the direct outcomes of community engaged learning on the achievement of student learning objectives and to evaluate the ongoing process of developing engaged partnerships with community organizations specific to the region in which the suite of new allied health programs is situated.

Methodology

Assessment of Community Engaged Learning

Studies in the area of community engaged learning suggest that learning in the field is influenced by personal, interpersonal, institutional, social and historical factors and that learning itself can vary between formal and incidental. Thus measurement of outcomes in community engaged learning can be quite complex (Richardson, Kaider, Henschke, & Jackling, 2009). Richardson and colleagues (2009), discuss that assessment practices in community engaged learning are different

to those typically used to measure application of academic knowledge and may not be appropriate for community engaged learning. They recommend that the best method of assessment is to consider the activity to be measured, the context of the activity and the stakeholders involved. Since this project is highly self-directed by students and their experiences vary widely, the measurement of outcomes in this unit are be focused on the student's ability to reflect on their individual learning experience, the activities they engaged in, and the context and stakeholders they encountered. It is acknowledged that each student may have very different experiences from one another depending on prior knowledge, previous experiences and the level of engagement and effort in the process (Kramer, et al., 2007). Thus as students reflect to assess their own experience, they are engaged in a more learner-centred experience.

This approach promotes alignment with SCU's graduate attributes as well and is also recommended in the ATLC guidelines on work-integrated learning. Richardson et al. (2009) suggests that

students should be assessed on their ability to justify and validate their claims for learning which enables them to develop critical thinking and develop work readiness skills. “This process extends the value of critical thinking by enabling students to recognise their future learning needs and develop their capabilities for lifelong learning” (Brodie & Irving, 2007). The assessment strategy of critical reflection also provides opportunities for students to assess themselves in both formative and summative ways through various assessment tasks associated with the community engaged learning assignment.

Participants

This investigation was carried out in the occupational therapy program in the School of Health and Human Sciences at Southern Cross University in Tweed Heads, NSW, Australia. Participants (n=13) were 3rd year occupational therapy students enrolled in a unit called “Education, Play and Leisure Occupations.” Students participated in community engaged learning projects as a key teaching and learning

activity. There were four primary learning objectives that the community engaged learning project was designed to enable students to achieve:

- To identify and analyse occupations of importance to individuals’ occupational roles in their school, cultural, social and familial contexts with particular reference to school, play and self maintenance occupations.
- Analyse the range of, and interaction between, factors that affect performance in play, leisure and/or school contexts.
- Critically evaluate approaches to intervention using major paediatric frames of reference used in occupational therapy.
- Select and apply assessment and intervention strategies appropriate to identify needs and promote occupational performance in school and play contexts, and with consideration of the child, the family and other professionals

Data collection

As this is the first time this new unit is being delivered, evaluation and review of outcomes and feedback from students will be important in making adjustments for following years. There is no standard evaluation methodology for assessing students' outcomes in community engaged learning projects (Sauter-Davis, 2011). Although it has been determined that evaluation should provide a structured, systematic method for feedback, contain clearly articulated goals, a means for students to communicate their experiences, a measurement strategy for reflection, and opportunity for students to improve through feedback (Troppe, 1995 as cited in Sauter-Davis, 2011). These guidelines for effective evaluation were followed in this unit. During the final week of the semester, time was allotted for students to share their experiences during their community engaged learning project and to provide feedback regarding the successes and challenges of this student-directed project. Feedback has also been solicited from the community agencies that were involved in the form of a formal thank-you letter and short survey. Additionally, data was collated from the required unit

performance reports. Steinke & Buresh (2002) as cited in Kramer and colleagues (2007), found that service learning outcomes primarily use students' self-report measures with the results indicating a deeper understanding of course material and problem solving of social issues.

Another established way of assessing the outcomes of community engaged learning is through structured reflection (Bowen, 2010). Reflection combined with feedback as provided throughout the semester can stimulate the student's ability to critically analyse their learning process (Ash & Clayton, 2004). Ash and Clayton cite the work of Eyler, Giles and Schmiede (1996) to describe critical reflection as "... a transformative link between the action of serving and the ideas and understanding of learning" (p.14). These authors conclude that the use of critical reflection is an excellent pedagogy to determine student learning outcomes. As a final project in the unit, students were required to prepare a reflective essay on their experience with the organization. They were asked to describe their role as a volunteer and the mission of the organisation. Consideration of the physical, cognitive, psychosocial

and environmental factors that impact the client group and organisation they worked with was included. Students were also asked to describe some ways that education, leisure, and/or play occupations are assessed, maintained, or restored by the activities of the organisation. They were asked to think about the OT frames of reference we have discussed in class, and consider if the principles of any of these apply to the type of work they experienced. Students commented on their ideas of ways to enhance the promotion of occupational performance in the clients of the group they have worked with from an OT perspective. Insights gained from their experience that will help them as a healthcare professional were described. Finally, they were required to consult the literature base to see if there is evidence to support the work being done by the organisation. Through the process of this guided academic analysis, students were able to articulate their learning experiences with a deeper understanding of complex issues and develop their ability to view themselves as agents of change (Ash & Clayton, 2004).

Data Analysis

To gain insight into whether or not students achieved intended or unintended learning outcomes a phenomenographic analysis was employed (Akerlind, 2005). Phenomenographic analysis is a methodological approach to research in education where the variation in human meaning, understanding, conceptions, awareness or ways of experiencing a particular phenomenon is studied (Akerlind, 2005). In this study, the way in which students experience and understand their participation in service-learning projects is being evaluated phenomenographically through analysis of reflective essays. Essays were coded thematically using open coding techniques which entails assigning names to themes and combining related items into categories (Marshall & Rossman, 1999). This qualitative approach to data analysis was also applied to feedback collected from participating community organisations to determine the nature of their experience of their interactions with occupational therapy students.

Results:

Essays and student feedback surveys (n=13) were qualitatively analysed. Four main themes emerged, which aligned with intended learning outcomes and also with the lecture and tutorial content that was delivered in class throughout the semester. Class content topics included frames of reference, assessment and intervention in paediatric OT, child and family centred practice, collaborative practice, and inclusive education. Some examples from student reflections are provided to highlight each of the themes.

Theme 1: Child/Family Centred Practice

One prominent theme that emerged was an emphasis on family or child centred practice. This topic was directly covered through structured teaching and learning activities throughout the unit and is a common thread in all of the intended learning objectives. All of the students (n=13) discussed their ability to analyse and apply the

concepts of family/child centred practice in a variety of community contexts. Pseudonyms have been used for all names.

By experiencing the family perspective of intervention I was able to see firsthand the problems and continuous issues that are constantly presenting themselves and the ways in which James and his family solved these problems. This has allowed me to better understand the role of occupational therapy within the community and paediatrics as I can better understand how vital community involvement and early intervention is to achieving good outcomes.

The main insights I gained from this experience was how full on all the demands of each child are. How mothers and families support them day in and day out is a credit to them. It really opened my eyes to how much they would have to do in a day and then they would come to therapy and we potentially give them an extra ten things to do per week. This has made me more mindful of these factors and the adage that they are the expert.

We get taught that every child is unique and individual but I didn't realise how different they could be. There were four children with the same diagnosis but they were absolutely nothing alike...This made me realise that I had made

assumptions about the disease's characteristics which got firmly slapped from my brain.

My experience opened my eyes to the fact that sometimes – you might have a lesson or treatment session all planned out theoretically but once you are in the setting, the mood and the atmosphere around you can make you have to simply dismiss all your hard work on the lesson/treatment session and improvise a whole new one for it to be functional, beneficial and realistic to the client population.

Theme 2: Environmental and systemic supports/challenges

A second theme to emerge is the students' ability to analyse and understand a range of environmental and systemic supports and challenges that affect performance in the context in which they completed their community engaged learning project. This theme is also directly aligned with an intended learning outcome: 'analyse the range of, and interaction between, factors that affect performance in play, leisure and/or school contexts'. Several students (n=10) describe their analysis of factors impacting occupational performance in the context of their projects:

I noticed that the 13-year-old client was limited socially as it was difficult for her to go to the movies or shopping with her friends as she needed moderate assistance toileting and had difficulties with access. This resulted in her spending most of her time at home and only socialising at school.

As soon as I entered the unit I felt instantly welcome and safe and this is how I suspect the kids would also feel. The teachers that were leading the classrooms were also very supportive of every student. They knew each student by name, what their strengths were, where they needed help, and which child to keep them away from to avoid an all out war. They were also genuinely warm and made obvious efforts to try and engage all students in everything they did. I think the teachers within the unit have made real conscious efforts to go above and beyond for these students and I think it benefits the rest of the school as well.

When you enter the school one of the first things you see is a fenced play area, with equipment and toys for the "special children". So we have to consider on one hand the school has to consider the safety of these students and the students outside of the unit (hence the fence). On the other hand though there is that aim of inclusion that the school is trying to do which has a big fat barrier between the "special unit" and the rest of the

school. The aim of this area is to provide a safe and supported area for the children in the unit but I have to question whether they are undoing all of their work for inclusion by keeping this segregation.

Financial strain and funding was another common issue, with parents of newly diagnosed children not knowing that they were eligible for substantial funding until coming to the coffee and chat morning. Quite a lot of protocol and paperwork surrounds most aspects of diagnosis and funding, placing strain on families who are already dealing with the pressures of dealing with a child with a disability as well as the usual work and family commitments. Also raised during the morning was the strain that a child's diagnosis can have on family and social relationships (e.g. a child with ASD being told to leave their sporting team because of their behaviour).

Orana house enabled me to experience a physical environment appropriate for a diverse range of clients with varying needs. The facility encompassed a 'home like' feeling to provide a safe environment for children while they are away from their families...

Theme 3: Enhanced Clinical Reasoning

A third theme that has clearly emerged in the reflections is one of students' developing clinical reasoning skills. The students' demonstrated achievement of one of the unit learning objectives by critically evaluating approaches to intervention using major paediatric frames of reference used in occupational therapy. They were all able to describe frames of reference appropriately in relation to their community engaged learning context and supported their clinical reasoning process with evidence from the literature. Several students also discussed the selection and application of assessment and intervention strategies appropriate to identify needs and promote occupational performance in school and play contexts, thus demonstrating achievement of the 4th learning objective.

The environment is primarily supported by a social participation frame of reference where children are encouraged to interact with their peers and develop relationships. My role in this setting was to monitor social behaviours and to intervene as required to encourage respectful play.

The Sensory Integration (SI) Frame of Reference was not deliberately utilised in this classroom with Kyle or any of the other students, although it was clear it was inadvertently being used as the effects were obvious with James as he became able to focus and settled and when it was not used he was noisy, unsettled and disruptive.

I feel significantly more confident in my ability to share ideas and clinical reasoning for interventions in a school setting.

Theme 4: Collaborative Practice

The fourth theme to be identified is one of collaborative practice. Students (n=9) explained their strategies for applying a team approach and described their experiences of considering the child, family, and other professionals during their projects.

I met with Lee and asked his permission if it was alright that I come to some of his classes and he seemed agreeable with the idea.

In order to enhance the promotion of occupational performance when providing respite care for children I believe it would be beneficial... to sit down and talk with parents, the occupational

therapist, social worker and physiotherapist so that they are all familiar with the goals the family wishes to achieve.

When James chose to ride his bike he usually experienced fatigue in his legs and trunk... 'Traffic lights' is a game played by James and myself that requires us to move when the traffic light (visible across the road) changed to green and stop when it changed back to red. James enjoys this game because he feels he is imitating his parents driving the car.

The students completed their community engaged learning projects at seven different community organisations including primary schools, special schools, respite services, disability support services, and a support group for people with autism. Three out of 13 students entered into ongoing employment with the agency during the community engaged learning project. Two continued in ongoing volunteer roles after the project ended, and four students set up a two ongoing projects to be continued during another OT unit next semester.

Feedback from the community agencies was obtained from short follow-up surveys and several unsolicited e-mails and comments were received.

The students have worked well with our clients. I think their understanding of "occupation" helps in terms of their role as a disability support worker, as they tend to think more in terms of clients independence, rather than how fast they can get something done...

Thank you very much for the staff of OT students which are currently studying at your uni who now work for us. Therapists have commented on the level of maturity, boundaries & knowledge that these students have brought to our families and clients.

One noteworthy outcome was the suggestion by one of the supervisors that there are future roles for OTs in the area.

....we have limited positions available through Education QLD but certainly private OT through Better start initiative or Medicare is highly needed.

Since the implementation of this pilot project in 2011, the community engaged learning program is continuing to develop mutually beneficial relationships with local organisations and is currently actively collaborating with a growing list of approximately 25

community organisations that have expressed interest in participating in this community engaged learning program during 2012.

Discussion

Gitlow & Flecky (2011) discuss that service-learning can facilitate occupational therapy students' abilities to be flexible, collaborative and to develop a better understanding of the ambiguities of working in communities. The outcomes of this project support these findings in this regional Australian university context.

Reflections of the students indicated that their learning has met and extended beyond the intended learning objectives of the unit. Students now have a much more authentic understanding of the complexity of families, particularly of those with special needs. They have an improved appreciation for the hard work and passion that teachers, aides, and other education and health professionals contribute to the lives of children and families on an ongoing basis. The students also have had a chance to gain some insight into the various systems

and networks of service provision, funding, and inter-professional collaboration in their community. These findings support extensive research in the area of best practice in therapeutic services for children and families in the field of paediatric OT. An accomplished author in the field, Jane Case-Smith, states that “ best practice in early intervention services extends beyond professional and technical expertise and requires that therapists develop caring attitudes and philosophies about families and children” (Case-Smith, et al., 2007, p. 74).

Many of these lessons would have been impossible for students to learn in the classroom. This community engaged learning experience has helped these students listen to the needs of the organisation and clients, rather than “doing” intervention on a paper or video case.

The unintended outcomes of students are evident in that several are continuing on in paid employment, volunteer, and continued student project capacity which strongly indicates that occupational therapy students are able to meet a variety of needs in the community. Additionally, the capacity of the university to make a meaningful

contribution to organisations throughout the community is evident by the significantly increased expressions of interest from received from local community service agencies to collaborate with the OT program at SCU. Through this scholarly reflection of the outcomes of the first implementation of the project, it is hoped that following cohorts of allied health students will be prevented from becoming underutilised resources and will be able to actively achieve a variety of learning objectives while serving their community and developing opportunities for occupational therapy professionals in emerging areas of practice.

Results of this study should be considered with caution due to the small sample size and the use of a single method design. Future evaluation of this growing program may incorporate collection and analysis of quantitative data (Creswell, 2005) and examine the outcomes of specific community engaged learning projects in order to drive the establishment of effective, mutually beneficial partnerships between occupational therapy students and community organisations.

Conclusion

To make education relevant, purposeful and meaningful within the community, community engaged learning provides a natural context for students to apply and develop occupational therapy concepts in a way that is meaningful for both the student and community organisations. This has been determined to be an effective pedagogical approach that enables students to link concepts taught in traditional academic format with their experiences interacting with fellow community members while engaging in education, leisure and play occupations. Community engaged learning has enabled this new university program to develop its regional engagement profile with the community by active “doing”, allowing students to be involved in the process of determining community need, establishing connections with new partners, and building a platform for future growth in collaborative partnerships between allied health students and community organisations in this region of Australia.

References

- Akerlind, G. S. (2005). Variation and commonality in phenomenographic research methods. *Higher Education Research & Development, 24*(4), 321-334.
- Andrews, C. P. (2007). Service Learning: Applications and Research in Business. *Journal of Education for Business, 83*(1), 19-26.
- Ash, S. L., & Clayton, P. H. (2004). The Articulated Learning: An Approach to Guided Reflection and Assessment. *Innovative Higher Education, 29*(2), 137-154.
- Atler, K., & Gavin, W. J. (2010). Service-learning-based instruction enhances students' perceptions of their abilities to engage in evidence-based practice. *Occupational Therapy in Health Care, 24*(1), 23-38.
- Bowen, G. (2010). Service Learning in the Scholarship of Teaching and Learning: Effective Practices. *International Journal for the Scholarship of Teaching & Learning, 4*(2), 1-15.
- Bringle, R. G., & Hatcher, J. A. (1995). A service-learning curriculum for faculty. *Michigan Journal of Community Service Learning*(2), 112-122.
- Brodie, P., & Irving, K. (2007). Assessment in work-based learning: investigating a pedagogical approach to enhance student learning. *Assessment & Evaluation in Higher Education, 32*(1), 11-19.
- Case-Smith, J., Sainato, D., McQuaid, J., Deubler, D., Gottesman, M., & Taber, M. (2007). IMPACTS Project: Preparing Therapists to Provide

- Best Practice Early Intervention Services. *Physical & Occupational Therapy in Pediatrics*, 27(3), 73-90.
- Creswell, J. (2005). *Educational research planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Gitlow, L., & Flecky, K. (2011). Conclusions and Reflections on Service-Learning in Occupational Therapy Education. In K. Flecky & L. Gitlow (Eds.), *Service Learning in Occupational Therapy Education*. Sudbury, MA: Jones and Bartlett Publishers.
- Hansen, A. M. W., Munoz, J., Crist, P. A., Gupta, J., Ideishi, R. I., Primeau, L. A., et al. (2007). Service learning: meaningful, community-centered professional skill development for occupational therapy students. *Occupational Therapy in Health Care*, 21(1-2), 25-49.
- Hartmann, K. (2011). Community Engagement: A Process for Curriculum Integration. In K. Flecky & L. Gitlow (Eds.), *Service-Learning in Occupational Therapy*. Sudbury, MA: Jones and Bartlett Publishers.
- Jacoby, B., & et al. (1996). *Service-Learning in Higher Education: Concepts and Practices. The Jossey-Bass Higher and Adult Education Series*.
- Kay, J., Jorgensen, D., Tayebjee, F., Campbell, M., Kingsmill, F., Peach, D., et al. (2011). *Australian Collaborative Education Network- Response to Higher Education Base Funding Review: Australian Collaborative Education Network*.
- Kramer, P., Ideishi, R. I., Kearney, P. J., Cohen, M. E., Ames, J. O., Shea, G. B., et al. (2007). Achieving curricular themes through learner-centered teaching. *Occupational Therapy in Health Care*, 21(1-2), 185-198.
- Lee, P. (2011). *Strategic Plan 2011-2015*. Lismore, NSW: Southern Cross University.
- Marshall, C., & Rossman, G. (1999). *Designing Qualitative Research* (3ed ed.). London: Sage Publication.
- Morgan, C., Dunn, L., O'Reilly, M., & Parry, S. (2004). Chapter 4: Valid assessment *The student assesment handbook* (pp. 29-33). London: Routledge.
- Moskowitz, D., Glasco, J., Johnson, B., & Wang, G. (2006). Students in the community: An interprofessional student-run free clinic. *Journal of Interprofessional Care*, 20(3), 254-259.
- Parker, E. A., Myers, N., Higgins, H. C., Oddsson, T., Price, M., & Gould, T. (2009). More than Experiential Learning or Volunteering: A Case Study of Community Service Learning within the Australian Context. *Higher Education Research and Development*, 28(6), 585-596.
- Richardson, J., Kaider, F., Henschke, K., & Jackling, B. (2009, 6-9 July). *A framework for assessing work integrated learning*. Paper presented at

- the The Student Experience, Proceedings of the 32nd HERDSA Annual Conference, Darwin.
- Roach, B., & Fisher, K. (2011). Community-based learning at SCU: a concept paper. Office of Community Engagement, Southern Cross University.
- Sauter-Davis, D. (2011). Occupation of Learning through Service Engagement: An Occupational Therapy Assistant Program Perspective. In K. Flecky & L. Gitlow (Eds.), *Service-Learning in Occupational Therapy Education*. Sudbury: Jones and Bartlett Publishers.
- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009). *Career Development Learning: maximizing the contribution of work-integrated learning to the student learning experience [Australian Learning and Teaching Council] Final Project Report June 2009*. Wollongong: University of Wollongong, Careers Central, Academic Services Division.
- Steinke, P., & Buresh, S. (2002). Cognitive outcomes of service-learning: Reviewing the past and glimpsing the future. *Michigan Journal of Community Service Learning, 8*(2), 5-14.
- Vroman, K., Simmons, C. D., & Knight, J. (2010). Service learning can make occupation-based practice a reality: a single case study. *Occupational Therapy in Health Care, 24*(3), 249-265.

Physical activity and nutrition in low socioeconomic schools: A collaborative health based model between Flinders University and South Adelaide Football Club

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Abstract

This paper provides an overview of a community based initiative between Flinders University and the South Adelaide Football Club in the southern regions of metropolitan Adelaide. The program, funded through a Commonwealth Knowledge Exchange Grant was

designed to implement a nine-week physical activity and nutrition program in schools in low socioeconomic communities. The importance of focusing on physical activity and nutrition in low SES communities is important to develop health literacy with a view to impacting long term health based decision making. Utilising Flinders University health and physical education students together with the South Adelaide Football Club players was designed to enhance the overall perception and legitimacy of the program in the eyes of the participants. The paper reports on the qualitative evaluation and highlights several positive unintended outcomes, which can be influential in other community collaborative programs in low SES areas.

Key words: Physical Activity, Nutrition, Low Socioeconomic, Collaboration, Knowledge Exchange Grant

Introduction

This paper is based on a collaborative project conducted between Flinders University and the South Adelaide Football Club (SAFC) in Adelaide, South Australia. The SAFC are also nicknamed 'the Panthers' and therefore the program was termed the, 'Flinders-Panthers Be Your Best' program (F-PBYB). The project was funded through a Commonwealth Knowledge Exchange Grant (KEG) whereby the first two authors were successful in attaining a KEG to run the project and then evaluate the outcomes. The SAFC is based in southern Adelaide and has had a recent history of engagement with Flinders University on a number of collaborative initiatives including commercial ventures, conducting research, as well as Health and Physical Education student placement practicum.

The F-PBYB project was based on improving physical activity and dietary behaviours in low socio-economic status (SES) schools in the Southern regions of Adelaide. Improving physical activity and dietary behaviours is important given epidemiological evidence from

the past two decades indicating physical activity and poor nutrition as a major modifiable risk factor in the reduction of mortality and morbidity associated with many chronic, non-communicable and potentially preventable diseases (Bauman et al., 2000; Stephenson et al., 2000; WHO 2004). This is particularly evident in areas with low socioeconomic standing. In Australia it is estimated that sedentary behaviour coupled with poor dietary behaviours is responsible for approximately 8,000 deaths per year (Mathers et al., 1999). Consequently this impacts on the direct costs of health care, which is estimated to be in excess of \$400million and rising. This presents a significant burden of disease as well as a substantial economic burden to the Australian population (Stephenson et al., 2000).

Physical inactivity is an independent risk factor for a range of diseases and consequences (WHO, 2004). Physical inactivity has been linked to mortality and morbidity through increased risk and incidence of coronary heart disease, hypertension, type II diabetes mellitus, and some cancers (Bauman et al, 2000). Regular physical activity has also

been shown to improve stress management, reduce depression and anxiety, strengthen self-esteem, enhance mood and boost mental alertness. Additionally, it provides social benefits through increased social interaction and integration (Holt & Sehn, et al., 2011). Although there is less evidence to suggest that children are at the same risk as adults in terms of developing coronary heart disease and hypertension (Troost, 2005), children and adolescents who participate in regular physical activity and practice healthy dietary behaviours show improved school performance, a greater sense of personal responsibility and group cooperation (Bauman et al., 2002; Troost, 2005). They also display less drug and alcohol consumption in addition to general health benefits (Bauman et al., 2002; Troost, 2005).

In Australia, as globally, there is universal interest in increasing levels of participation in physical activity at a population level (Egger et al., 1999; WHO, 2004). Socio-economic circumstances and disadvantage shape and constrain available options to participate in physical activity (Short, 2004; Lammle et al., 2012) as well as provide barriers to

participation (Chinn et al., 1999; ABS, 2007). Of all of the identified areas of health risk associated with physical inactivity, individuals within low socio-economic and disadvantaged groups are more likely to be affected (Egger et al., 1999; Jury et al., 2007). Developing interventions and strategies that target groups at greater risk is vital. According to Burton (2007), identifying environments and determinants that have a positive or inhibiting impact on physical activity outcomes is important. The same can be said for outcomes associated with dietary behaviour (Sharma, 2007).

Evidence indicates that groups from low SES environments experience greater ill health (Glover et al., 1999). They are also more likely to engage in behaviours, or have a risk profile, consistent with poorer health status (Glover et al., 1999). Individuals living in low SES areas also present the worst outcomes in terms of overweight and obesity (Mclaren, 2007). This has been inextricably linked to poor physical activity and dietary behaviours at all age levels, including

children (Bauman et al., 1996; Armstrong et al., 2000; Gidlow et al., 2006; Salmon et al., 2005).

While there are a multitude of health issues that potentially present themselves within low SES schools and communities this project was designed to positively influence children's physical activity and dietary behaviours. It is argued that positively influencing physical activity and dietary behaviours among such a group of children could have lifelong benefits. Enabling individuals to make informed health decisions through the development of health literacy (Peerson & Saunders, 2009) is an achievable aim throughout the school years. This will likely have a positive impact on health outcomes later in life.

The F-PBYB project was designed to be a collaborative initiative in which the main local community sport agency was involved. The SAFC sits in a significant emerging suburb within the City of Onkaparinga and is recognised as a low SES community. Australian football in the southern region, and sport more broadly, plays a unique role in galvanising the community while increasing social inclusion,

particularly in areas of low SES (Gidley et al., 2010). The SAFC, also nicknamed 'The Panthers', provides such a galvanising focal point for many people in the area.

There were two primary schools involved in this collaborative project and its subsequent evaluation. The schools were specifically invited to be involved based on their central locality within the community as well as their immediate proximity to the SAFC. Each of the schools' Principals was enthusiastic at the prospect of being involved. The majority of the children in both schools were aware of the Panthers and their key, higher profile, footballers. Many children identified with these footballers in a very positive light. Synergistically, the locality of the school to the football club offered an important opportunity to explore the significance of utilising the Panthers players as vehicles for change among the groups of school children. While there is little evidence to suggest that using recognisable elite athletes provides benefits in terms of long-term behaviour change, this project used celebrated athletes within the school environment over a

sustained period of time (Weschler et al., 2000). The project was delivered in conjunction with Flinders University undergraduate Health and Physical Educators who assisted in implementing the program thereby enabling positive role modelling behaviour (Weschler et al., 2000).

The Program

The project was one that evolved from a program originally devised by the South Adelaide Football Club known as 'Panthers Be Your Best'. The original program was designed to engage primary school age children in health, nutrition and physical activity initiatives principally based around Australian football. The SAFC is conscious of the role it can play in its community and therefore is committed to such initiatives within the southern region. However, as previously alluded to, the original program was generally implemented in a school over one or two visits. The basis of the current project was to engage with several schools on a weekly basis for nine-week term and access every

child for at least 40-50 minutes each week alternating between physical activity one week and nutrition the next. There was a constant project officer from Flinders University together with a range of 3rd and 4th year undergraduate Physical Education students to assist each session. Additionally there were a number of senior Panthers footballers in attendance to provide football skills development and engage with the students on issues associated with fitness and training.

Given that the current project was a more detailed version of the original 'Panthers Be Your Best' program each session needed to be specifically designed for the needs and purposes of the children and the fundamental underpinning tenets of the project. Every session was designed to provide each child with a new and rewarding 'health oriented' experience that had the potential to be transferable beyond the classroom. The children were exposed to new ball-based activities and inclusive movement centred games. They were also exposed to new types of fruits and vegetables as well as alternative methods of food presentation for the more traditional and accessible foods. For example

as part of the project the team purchased an apple curler for every classroom as well as several for the school canteens. The fun associated with eating 'curly apples' was a highly effective approach in engaging the children with a more traditional healthy food choice.

The approach of alternating weeks of physical activity and nutrition delivery was designed to ensure that the students recognised the importance of each within the context of a healthy life. It was imperative that one domain was not championed above another. Rather, physical activity and nutrition were discussed in synergy and regularly identified in terms of how they should be mutually inclusive. Significantly, early in the implementation stage of the project, the team fortuitously made contact with a not for profit organisation that has its core business centred on reducing hunger through the delivery of free and cost effective food to individuals and communities that require food. This organisation was able to provide the program with very low cost, and free, fruits and vegetables, which assisted the budget enormously. It also offered the children at the two schools the

opportunity to try new foods that they had previously never eaten. The children displayed a level of excitement and enthusiasm around attempting a range of new fruits and vegetables each week.

The project team spent one day a week at each school and included every child in the school. Noteworthy, this was above and beyond the students' existing physical education and sport lessons already scheduled. In the final week of the program a physical activity and food expo was designed and implemented, which received favourable comments from the students. The not for profit food agency provided most of the food for the event, with many Panthers footballers and Flinders University Health and Physical Education students in attendance. As a way in which the program team could thank the children for being involved in the program, and as a form of memento, many free items were provided to the children from South Adelaide Football Club and Flinders University (for example footballs, pens and rulers).

The Research

Despite the minimal budget for this nine-week project it was imperative that a robust evaluation was conducted to ascertain the effectiveness of its process and short-term impact. Long-term outcomes from this initiative will not be evident for some time and arguably the program would need to be conducted on a continual yearly basis to see significant change over a sustained period. Therefore the research questions within the context of the evaluation were to:

- (i) Ascertain whether the processes that were implemented were appropriate
- (ii) What type of impact did the program have on participants?

Institutional ethics was granted for the qualitative evaluation in which students, teachers and the two Principals were invited to participate in focus groups and individual interviews. Given that the children were the primary recipients of the program it was essential to understand how they perceived the program across all areas including;

delivery, timing, foods provided, expectations, and outcomes. With the Principals and teachers as key stakeholders, it was imperative to develop a sense of how the program was perceived from their perspective. For example, reflections from the stakeholders would indicate the need for such a program in low SES schools as well as attitudes towards the program.

Focus groups and targeted individual interviews were utilised as a means of capturing meaningful data. The focus groups with the children were particularly significant given the need for the program to be relevant for the target group. For most of these children, this was the first time they had been interviewed in such a manner and therefore feelings of uncertainty and intimidation may have been prevalent. Individual interviews can further heighten these feelings. However, within the focus group settings the children had the capacity to share their experiences with one another in a less formal and somewhat 'easy going' environment (Drummond et al., 2009). Fontana and Frey, (2000) claim that the focus group interview is a technique for gathering rich

descriptive qualitative data in a systematic manner and is not a discussion, but rather *an interview* whereby everyone has the capacity to hear one another's views and opinions, thereby establishing the most important issues for that group. This focus group environment tended to break down the interviewer/participant barrier and led to an open and frank discussion regarding many issues pertaining to the program conducted at the school. It must be recognised that focus groups with children in early childhood did not last as long as those with the middle and upper primary school children. However, their voices were no less significant (Drummond et al., 2009). The individual interviews with the teachers and the Principals were designed to attain deeper contextual information about the processes and overall perceptions of the program. All of the interviews were audio recorded and transcribed verbatim. The data were then thematically analysed using inductive thematic analysis (Patton, 2002)

Findings

This section highlights themes that emerged from the focus groups and individual interviews. The data from the children who participated directly in the project is quite different from the data attained from the teachers who were able to watch and reflect upon the children's engagement and the project's initiatives. Additionally there were differences in the types of responses between the children and adults simply based on age, which in turn reflected their levels of maturity and ability to articulate responses. Three major themes emerged from the evaluation data and are outlined below:

- (i) The importance of sustained initiatives in low SES communities;
- (ii) The significance of role models;
- (iii) The importance of aspirational models

The Importance of Sustained Initiatives in Low SES Communities

Individuals within low SES communities can display a unique set of circumstances including disengagement, marginalisation and stigmatisation (O'Dea, 2005). Where young people are concerned it is schools in such low SES communities that can often bear the brunt of anger and frustration fuelled by feelings associated with being disenfranchised and disempowered through a perceived lack of opportunities. Schools in low SES areas can also be the focal point of continually changing government programs and initiatives that can be cynically perceived as 'quick fix' approaches or, in some cases, vote gaining exercises.

The Flinders-Panthers Be Your Best (F-PBYB) program was not designed to be a quick fix approach. It was based on sound evidence stating that sustainable health promotion approaches and initiatives provide longer-term attitude and behaviour change benefits for its participants (Wechsler et al., 2000). The following comment from a Principal is indicative of such a claim:

Probably the immediate reaction is it's all been positive. It's been a very positive involvement from everyone's perspective. Teachers have loved it, kids have loved it, and we've even had comments from parents. So that enthusiasm is there from the kids and it rubs off. Teachers have been really happy because of the program and the way it's delivered and the number of student's that have been supportive. The kids have enjoyed that more youthful involvement and of course it's reinforcing the messages that the kids have been getting. So that's a quick nutshell of how I've seen it from afar.

An important aspect of the F-PBYB was to work with the schools in a strategic manner and build on the initiatives that they had implemented over the past several years around healthy physical activity and nutrition. The program was not designed to be a 'stand alone' project that had little relationship with the schools' curriculum and strategic initiatives. Therefore, in the lead up to the implementation of the program, the project team worked closely with the Principals and the schools' Health and Physical Education coordinators to ensure that the messages provided within the F-PBYB program were the same as those established by the schools. While the

messages were the same it was the footballers and university students that provided a successful alternative method of conveying those messages. One Principal claimed:

Look, I think it's definitely promoted healthy eating and healthy lifestyles for most kids. It's worked out quite well because last year we started the 'Crunch and Sip Program' as well, where the kids bring healthy food to school and eat that at the same time. Each class eats their fruit at the same time every day, and drink their water. So I think this just kind of consolidates the message that we're all trying to get across for healthy living and healthy lifestyles. And I think the program has been really good because it's been an ongoing program in a sense that it's not just something that's been done once and then just left and forgotten about. It's something that's happened every week. It's been predictable which is important for these kids. They know on a Wednesday that you guys have been coming, which is something they've been looking forward to. And it's just been promoting, yeah, getting that message across as well as the 'Crunch and Sip' and whatever the teachers talk about in the class and the health lessons they do, like the garden with the fruit and veg we've got now. Just all those things together, I think, help get the message across. And hopefully it has left a bit of a lasting legacy and message with the kids.

The F-PBYB program provided the schools with a sense of vindication around their own healthy message campaign, which have been developed and adopted over a number of years. The difference is that the F-PBYB program provided the students with an intense, yet sustained block of time in which these messages were imparted. Additionally, delivery and reinforcement of healthy messages by 'other' people who were not teachers, and who were perceived as 'cool', was seen as another positive aspect of the program. This was stated by one of the teachers who claimed:

I think things like that (the F-PBYB program), is great for our guys because it means that you're reinforcing what we're saying in health about healthy eating and about the 'Crunch and Sip'. It's like the stuff that we've said is real. So we've tried to have a healthy eating focus for the last few years and when people come in and combine that with a sporting activity, because a lot of our kids as you know are not really involved with sport outside of school, then it just kind of reinforces what we keep saying. So with somebody else saying it and other young people saying it, because they'd see the guys from the uni as young people, rather than us oldies. They kind of get the idea that it's not just a parent or an older teacher thing. Young

kids are saying it's good to think about what you're eating, and it's good to go out and do activities. So it just reinforces on different levels the stuff that we're trying to teach them.

The Significance of Role Models

A fundamental tenet of the program was the utilisation of SAFC footballers as key individuals within the delivery of the physical activity component. This was a strategic initiative based on footballers being visible and recognisable local community icons in this low SES region where football is regarded highly. It was also strategic for the SAFC given their role in attracting and recruiting local participants to their club and feeder clubs within their zone. However, for the F-PBYB project it was hoped that these players would engender enthusiasm among the children as well as provide a legitimisation of the underpinning philosophies of the program. Indeed, this was certainly the case and both the teachers and the students commented on the 'Panthers' footballers being good role models:

I thought it was very successful. I thought it engaged the students really, really well. I thought it was good to have

someone coming in from outside who had expertise in a particular area of sport. I think most primary school teachers may have played their own particular sport during their own younger days. And I did. I used to do athletics and baseball. I was never a football player so it was really good to have someone who actually had that depth of skill base to come in to show my kids how to do stuff that I actually would not be able to show them, because I wasn't aware of some of the processes that they use. You know, for holding the ball and kicking and all those sort of things. So I thought that was really good. I thought it was really positive having the younger players from the Panthers to come out because I felt that really engaged the kids and made the kids feel that it was something that was more significant and more worthwhile. I mean the kids took it a little bit more seriously. It wasn't just a whole bunch of academics, older people coming out telling the kids what they were going to do. It was actually some people who they could relate to I think, on more of an equal sort of level because they weren't much older than the kids. And they also didn't have the attitude that a lot of teachers, that we need to have, where a lot of it is about teaching and disciplining the children.

Specifically, a teacher highlighted the importance of using role models within such initiatives to not only change behaviour and

attitudes around health but also to inspire children in general, and enhance a desire to be at school. All of the teachers were able to identify at least one student within their cohort where the footballers had played a role in influencing certain behaviours. In the following comment, the teacher highlights the way in which the footballers' presence assisted in keeping a boy at school where he would have otherwise gone home:

There's been one kid in particular, a year five boy. And obviously I won't mention his name, but he's been a severe behaviour problem for a number of years. And he was on a restricted time at school. He usually went home around 12.30 in the afternoon, so after that time so he was missing out. Once he heard the buzz around it (the F-PBYB program), he likes footy and he plays football for a local footy team in the juniors. And he actually asked if he could do it and it was a real incentive for him to stay at school, just to be a part of that program. So that's one example that springs to mind. I mean it was that incentive he needed. It gave him that extra reason to stay at school. Yeah, I suppose something that's relevant and important to him. He loves his footy.

Most of the children across all of the age groups identified the football players as people that are worthy of being role models and people with whom they could look up to given their role in the community and their achievements in life. Comments such as "I loved the Panthers. They were great", and "the Panthers players were awesome. I liked Nick, Luke and Nathan". The students constantly alluded to the fact that it was nice having 'other' people come in to deliver the program who were 'different' to their teachers which in turn allowed them to feel a little more comfortable, most likely due to the feelings of power that teachers possess, being eradicated with the footballers and university students running the sessions. The following comment highlights this notion when a student claimed:

You're really nice (the university research assistant). We meet people nicer than teachers. Like teachers are nice but we meet people nicer than, like, teachers that we can relate to and go and talk to them if we need to talk to.

Making programs such as the F-PBYB relevant to the children is imperative in order to make it resonate with them and provide meaningfulness to their lives. Additionally it is important that the people who deliver the program are also meaningful to the students and not only provide inspiration but also aspiration as well.

The Importance of Aspirational Models

A significant part of this program is about long term attitude and behaviour change around health and physical activity. While the program is based around physical activity and healthy eating there are many other aspects to emerge that go beyond the fundamental tenets of the program. Given the program was based around working with children in low SES communities it was encouraging to uncover the emergent theme that reflected the children's aspirational values. Similar to the role models produced by the Panthers footballers, the Flinders University students created a desire for aspiration among a number of the older children. Importantly the program offered the opportunity for

an ongoing weekly dialogue with students for an entire nine-week term. Therefore some of the school students developed a rapport with the Flinders University students and were able to gain a sense of understanding around the life of university student and the underpinning reasons why they chose tertiary education. They were also able to learn that a number of these university students had similar backgrounds to themselves, which made them appear even more ideologically accessible. This was articulated well by a teacher when he claimed:

It was good when some of the uni students said that they came from an area like this. Because it's kind of like sometimes these kids don't see that they actually have a positive future, whether it's family circumstances or they're just not feeling good about themselves. For these Flinders students to actually share those positive stories about this and what they've done, and this is what they want to do or something like that, is really good for those kids as well.

Another staff member reiterated a similar comment when it was claimed:

Yeah, because actually I was just going to say the very same thing, especially the year 7s. They see that people around them that are just like them, although they're going to uni and they started off somewhere. And when they (the Flinders students) gave their experiences and their stories it showed them that they were just like them. Some of them never even thought about "what would I be doing when I grow up", you know. And so they realised that "oh it's not difficult. I can move up". Some of them want to give up after year 7 over here; they didn't want to continue with year 8 some of them, but now....

These are significant comments around an area of the program for which the program had not originally, or purposely, planned. It is an area that is extremely encouraging given the low SES demographic in which the program was being implemented and the potential educational aspirations associated with the students completing secondary and tertiary education. Importantly, there is a body evidence to indicate that health outcomes are improved with higher levels of educational attainment (ABS, 2006). Hence, there is a greater likelihood

of engaging in healthy physical activity and dietary behaviours later life, including a host of other positive health outcomes.

It was not only the teachers and Principals who recognised the significance of having the university students engage with the school children. It was the children themselves who also highlighted their enthusiasm in working with the university students. A year 7 student stated that she liked "Cathy because she has the same name as her best friend and she was nice and she was smart". This, and other similar comments, are very encouraging emanating from primary school students because they highlight the children's respect for university students. However, it is the capacity for the university students to engage with the school children at a level that is meaningful, which is the key.

It was not only older children but also the younger children who grew fond of the Flinders students. The following comments emerge from a discussion with year 1 and year 2 students who appeared to

have developed a strong relationship with several of the female university students:

A: Yeah it was fun, and say to Katie that I miss her.

Q: You miss Katie – oh, cool. What about you guys, anything else to add?

A: Yeah, when you see Katie, can you say can you come back, me and Katie?

A: Me too, saying.

Q: To Katie, as well?

A: Me too!

A: And Sarah.

Discussion and Conclusion

As previously stated the basis of this initiative was to engage children in low SES schools in southern metropolitan Adelaide in a health based physical activity and nutrition program. It was a project specifically designed to be collaborative in nature between two highly visible and prominent organisations within the southern community, that of Flinders University and the South Adelaide Football Club. Given the data surrounding poor health associated with overweight and

obesity among people in low SES areas this program was designed to provide primary school children with practical knowledge and skills to assist in making health based choices around physical activity and dietary behaviours. Establishing the skills for a healthy start to life was a fundamental tenet of the program. Therefore, in terms of answering research question (i) which was to; ascertain whether the processes that were implemented were appropriate, it is clear from the evaluation data from both the adults (Principals and teachers) and the children that the program was a success in terms of the way in which it was organised, implemented and received. Therefore process and impact evaluation data would suggest that there were many positive aspects of the program that were specifically targeted to achieve. These include things such as high numbers of student engagement in physical activities, positive feedback associated with content, and knowledge construction around fundamental food and nutrition literacies. Noteworthy however, was the impact that both the footballers and the

university students had on the overall perception of the program and its delivery and implementation.

Clearly, engaging the SAFC footballers in the program was integral to this whole process. These football players were utilised in such a manner that was designed to promote both the content of the program and their community agency, which was the South Adelaide Football Club. However, given that the program was delivered over a nine-week period their presence was not merely a superficial gesture to promote the SAFC. The football players became an important part of the sustained process. The school students looked forward to seeing these players on a regular basis where they were perceived to be role models and people to inspire them. Similarly the Flinders University students, who were predominantly 3rd and 4th year Health and Physical Education specialists, were utilised in such a manner to apply their knowledge of sporting skills and health and nutrition information. Importantly the feedback around these areas was extremely positive and assists in answering the research question based on: (ii) What type of impact did

the program have on participants? Noteworthy it was the aspirational manner in which they engaged with the students, simply by their presence and their status as local university students, which resonated with many of the children. Indeed, with several of the university students having lived, or currently living, in the same community as the children this further impacted the positive perception of the university students and made tertiary education seem accessible, something which had not been previously considered by many of the older students. This is an important unintended consequence of the program and needs to be considered when developing any school-based program for low SES communities. As previously identified, by improving education in general the greater capacity there is to complete secondary school and tertiary studies and therefore a greater chance for positive health outcomes. Making university seem accessible by utilising university students to deliver these programs is an important element of community-based initiatives both in schools as well as in programs delivered to adolescents in the community.

References

- Australian Bureau of Statistics 2006, *Physical Activity in Australia: A Snapshot. 2004-05*, Cat. No. 4835.0.55.001, ABS, Canberra
- Australian Bureau of Statistics 2007, *Participation in Sports and Physical Recreation*, Cat. No. 4102.0, Australian Social Trends, ABS, Canberra.
- Armstrong, T., Bauman, A. & Davies, J. (2000). *Physical activity patterns of Australian adults. Results of the 1999 National Physical Activity Survey*. Australian Institute of Health and Welfare, Australia.
- Bauman A., Bellow B., Booth M., Hahn, A., Stoker, L., & Thomas, M. (1996). *NSW Health Promotion Survey 1994: Towards best practice for the promotion of physical activity in the areas of New South Wales*. NSW Health Department, Centre for Disease Prevention and Health.
- Bauman, A., Owen, N., & Leslie, E. (2000). Physical activity and health outcomes: epidemiological evidence, national guidelines and public health initiatives. *Australian Journal of Nutrition and Dietetics* 57 (4) 229-232.
- Bauman, A., Bellew, B., Vita, P., Brown, W., & Owen, N. (2002). *Getting Australia Active: towards better practice for the promotion of physical activity*. National Public Health Partnership. Melbourne, Australia.
- Burton, N., Oldenburg, B., Sallis, J., & Turrell, G. (2007). Measuring psychological, social, and environmental influences on leisure-time physical activity among adults. *Australian and New Zealand Journal of Health Promotion*, 31(1), 36-43.
- Chinn, D. J., White, M., Harland, J., Drinkwater, C., & Raybould, S. (1999). Barriers to physical activity and socio-economic position; Implications for health promotion. *Journal of Epidemiology and Community Health*, 53(3), 191-193.
- Drummond, M.J.N., Drummond, C.E., & Birbeck, D., 2009. Listening to children's voices in qualitative health research. *Journal of Student Wellbeing*, 3(1), 1-13.
- Egger, G., Donovan, R., Swinburn, B., Giles-Corti, B. & Bull, F. (1999). *Physical Activity Guidelines for Australians Scientific Background Report*. Commonwealth Department of Health and Aged Care, Australia.
- Fontana, A & Frey, J (2000). *The interview: from structured questions to negotiated text*, in *Handbook of qualitative research* (2nd ed). NK Denzin & YS Lincoln eds., Sage, California. 645-672.
- Gidley, J., Hampson, G., Wheeler, L., & Bereded-Samuel, E. (2010). Social inclusion-Context, theory and practice. *Australasian Journal of University-Community Engagement* 5(1) 6-36.
- Gidlow, C., Johnston, L.H., Crone, D., Ellis, N. & James, D. (2006). A systematic review of the relationship between socio-economic position and physical activity'. *Health Education Journal* 65(4), 338-367.
- Glover, J., Harris, K., & Tennant, S. (1999). *A Social Health Atlas of Australia*. Public Health Information Development Unit: Adelaide, South Australia.
- Holt, N. L., Sehn, Z.L., Spence, J.C., Newton, A.S., & Ball, D.C. (2012). Physical education and sport programs at an inner city school: exploring possibilities for positive youth development. *Physical Education & Sport Pedagogy*, 17(1) 97-113.
- Jury, H., Cottrell, J., Gill, T., & Taylor, A. (2006) *Report on Children's Activities January 2004-December 2006*. South Australian Monitoring and

- Surveillance System (SAMSS), Population Research and Outcome Studies Unit, Department of Health, Government of South Australia.
- Lammle, L., Worth, A., & Bos, K. (2012). Socio-demographic correlates of physical activity and physical fitness in German children and adolescents. *European Journal of Public Health*, 1-6.
- Mathers, C., Vos, T., & Stevenson, C. (1999). *Burden of disease and injury in Australia*. AIHW Catalogue PHE 17, Canberra: Australian Institute of Health and Welfare 1, pp71-76.
- McLaren, L. (2007). Socioeconomic status and obesity. *Epidemiological Review*, 29(1), 29-48.
- O'Dea, J. (2005). Prevention of child obesity: 'First, do no harm'. *Health Education Research*, 20(2). 259-265.
- Patton, M. (2002). *Qualitative research and evaluation methods* 3rd ed. Sage Publications; Thousand Oaks, Calif.
- Peerson, A., & Saunders, M. (2009). Health literacy revisited: what do we mean and why does it matter? *Health Promotion International*, 24(3), 285-296.
- Salmon, J., Timperio, A., Cleland, V., & Venn, A. (2005). 'Trend's in children's physical activity and weight status in high and low socio-economic status areas of Melbourne, Victoria, 1985-2001'. *Australian and New Zealand Journal of Public Health* 29(4), 337-342.
- Sharma, M. (2007). International school-based interventions for preventing obesity in children. *Obesity Reviews* 8(2), 155-167.
- Stephenson, J., Bauman, A., Armstrong, T., Smith, B., & Bellow, B. (2000). *The Costs of Illness Attributable to Physical Inactivity in Australia: A Preliminary Study*. A report prepared for The Commonwealth Department of Health and Aged Care and the Australian Sports Commission, Commonwealth of Australia.
- Short, S. (2004). Fat is a fairness issue. *Griffith Review*, 4.
- Trost, S. G. (2005). *Discussion paper for the development of recommendations for children's and youths' participation in health promoting physical activity*. Department of Health and Ageing, Commonwealth Australia.
- Wechsler, H., Devereaux, R., Davis, M & Collins, J. (2000). Using the school environment to promote physical activity and healthy eating. *Preventive Medicine*, 31(2), 121-137.
- World Health Organization. (2004). *World Health Organization Global Strategy on Diet, Physical Activity and Health*, World Health Organization, Geneva.