

Cognitive outcomes of experiential learning in higher education: service-learning, and prior learning assessment and recognition

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In an attempt to rebuild public support, universities in the United States and elsewhere have begun to place more emphasis on various forms of community-university engagement (Gee, 2010; Kellogg Commission, 1999). As part of this general trend, universities have become more amenable to the use of various forms of experiential education, including service-learning, practica, co-op placements, and prior learning assessment and recognition. However, there is internal resistance at universities to newer forms of experiential learning such as service-learning (SL) and prior learning assessment and recognition (PLAR). Some of this resistance is related to an impression among many academics that the core teaching goal of universities – i.e., promoting students’ learning in the cognitive domain– is not well served by these forms of experiential learning. In Canada, some recent developments related to both PLAR/RPL and service-learning may help to address this resistance. One is the creation of a new Prior Learning International Research Centre. Another is a research project centred at the University of Alberta that is designed to measure, and improve, cognitive learning in service learning placements.

Keywords: cognitive outcomes, service-learning, recognition of prior learning

What is experiential learning?

Probably the best known summary work on experiential learning is Kolb (1984), which offers the following “working definition” of experiential learning: “[*Experiential*] (*l*)earning is the process whereby knowledge is created through the transformation of experience.” (1984, p. 38). Kolb adds this commentary:

This definition emphasizes several critical aspects of the learning process as viewed from the experiential perspective. First is the emphasis on the process of adaptation and learning as opposed to content or outcomes. Second is that knowledge is a transformational process, being continuously created and recreated, not an independent entity to be acquired or transmitted. Third, learning transforms experience in both its objective and subjective forms. Finally, to understand learning, we must understand the nature of knowledge and vice versa. (p. 38).

Kolb adds the caution that experiential learning “... often appears too thoroughly pragmatic for the academic mind, dangerously associated with the disturbing anti-intellectual and vocationalist trends in American society.” (p. 3).

What is community service-learning?

One form of experiential learning that is relatively new to Canadian higher education is community service-learning (CSL), known in the USA as simply service-learning. Service-learning has a plethora of definitions. Perhaps the one best known in Canada is that used by the Canadian Alliance for Community Service-Learning (CACSL), as posted on that organization's website http://www.communityservicelearning.ca/en/welcome_what_is.htm

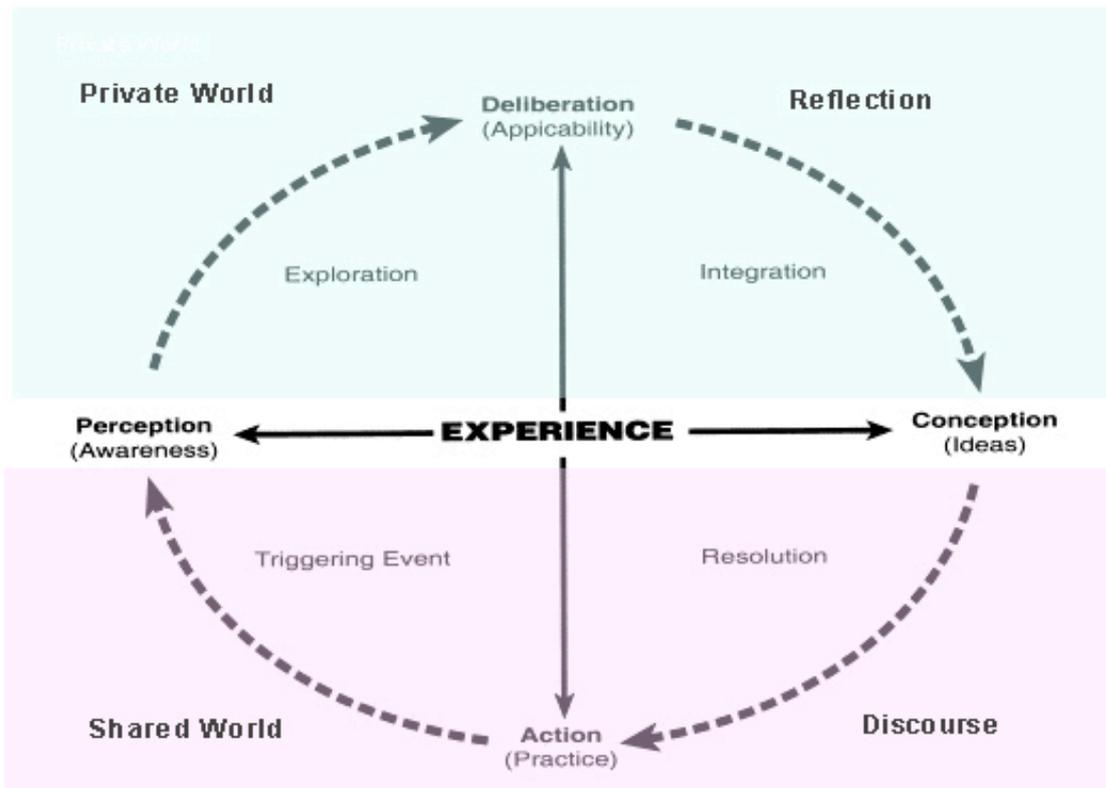
Community Service-Learning (CSL) is an educational approach that integrates service in the community with intentional learning activities. Within effective CSL efforts, members of both educational institutions and community organizations work together toward outcomes that are mutually beneficial.

The title of a major work in the field of service-learning poses a question that many in the higher education community ask – *Where's the learning in service-learning?* (Eyler & Giles, 1999). The authors report on their own wide-ranging research and that of others in an effort to answer this question. They conclude that a large majority of students who experience service-learning look back on it as a very positive experience and are convinced that they learn a great deal from their experience. However, while there is a considerable amount of research showing that service-learning fosters student development and learning in the affective domain, there is considerably less evidence for learning in the cognitive domain. The authors suggest that the marginal status of service-learning in institutions of higher education is at least partly attributable to that fact (p. xv).

More recently, Dan Butin, a well recognized authority on the subject of service-learning, has commented that “Service-learning cannot sustain itself in higher education—which is built on the very basis of rational and sustained critique and examination of inconvenient truths—if it cannot accommodate itself to the functioning of the academy.” (Butin, 2010, p. xvii)

One attempt to demonstrate that service-learning can accommodate itself to the functioning of the academy, including its focus on cognitive learning, is a research project at the University of Alberta that is examining how the *process* of critical thinking during service-learning placements can be measured and evaluated. This project has adapted for this purpose the Community of Inquiry framework originally developed to assess the process of inquiry in online discussion groups (Garrison, Anderson, & Archer, 2000).

Figure 1, below, illustrates the model of the process of critical thinking that was developed within the Community of Inquiry framework. This model describes the process of critical thinking as originating with a Triggering Event or problem (lower left hand quadrant), followed by an Exploration phase (generating ideas relevant to the problem), then an Integration phase (pulling together relevant information into a tentative solution), and finally a Resolution phase (real or vicarious testing of the solution).



Practical Inquiry: from Garrison, Anderson, Archer (2001):
 Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education

Figure 1: Model of the process of critical thinking (used with permission)

In the current research project, journal entries produced by students who have service-learning placements as part of a Sociology course are being coded (by paragraph) to see how they correspond to the model of the process of critical thinking described in Figure 1. Early results from this research suggest that these journals, when suitable guidelines are provided by the instructor, demonstrate a level of critical thinking comparable to that shown in term papers produced by students without CSL placements. This is encouraging, given that term papers are a tried and trusted method of assessing the extent to which students have met the cognitive goals of a course. This research is continuing, and is now being extended to the study of student writing during practica.

PLAR/RPL

Prior learning assessment and recognition (PLAR), also known as prior learning assessment (PLA) in Canada and the United States and recognition of prior learning (RPL) in other countries, emerged from diverse starting places. In the case of Canada, the United Kingdom, Australia, South Africa and New Zealand, after a period of practitioner activism, the initiative has been primarily government-driven, in an attempt to harness human learning for economic and social purposes. The Department of Human Resource Development Canada defines PLA as the process of identifying, assessing and recognizing skills, knowledge, or competencies that have been acquired through work experience, non-credentialed training, independent study, volunteer activities, and hobbies (HRDC, 1995). Given this definition, it is not surprising that the early adopters and champions of PLAR were technical and vocational colleges. However, PLAR has had a cool reception and fragmented presence among Canada's universities since the early 1990s.

PLAR as a social movement is pressing universities for institutional change to facilitate the achievement of credentials by non-traditional groups of learners. Since most Canadian universities already have in place special admission policies for non-traditional students, PLAR can be regarded as a teaching practice rather than an admission practice. The declining funding allocation for teaching since 1988 (Smith, 2010) is perhaps a manifestation of the exercise of pursuing higher rankings in global academic reputation, for which research excellence is the key indicator. Working under a reward system that favours research, many academics find it hard enough to maintain quality in teaching, let alone engage in new practices such as assessment of non-formal, experiential learning.

Whether the goal is to evaluate evidence of learning from a CSL experience or for PLAR, academics wish to see students using disciplinary, professional or work-related frameworks as appropriate to examine their learning. In Canada, Donald (1995) analyzed interview data from 40 professors in five disciplines and found that each discipline represented a different category of validation criteria and inquiry strategies according to the Biglan dimensions of 'hard-soft' and 'pure-applied.'

When adult learners initiate a PLAR process, they enter a complex world of university learning with a maze of expectations, many tacitly embedded in the perspectives and processes of the disciplinary areas in which recognition for their learning is sought. Helping students to understand the characteristics of various disciplines – their conceptions of knowledge, accepted modes of inquiry, and validation criteria – may be a necessary prelude to helping them to produce evidence of cognitive growth that is acceptable in the university context.

In recent years, partially due to the influence of some prominent reports (Boyer, 1990; Byrne, 2000; NSSE, 2003), many academics have been made aware of the imperative to provide high-quality learning experiences for their students – to create and support learning opportunities that place an emphasis on “rich” learning events and the construction of personal meaning by learners. More university departments are re-designing their programs to provide bridges between classroom-based learning and community-based or workplace-based learning. These departments are prime candidates for advocates of PLAR and SL to recruit as partners in developing assessment processes and curriculum structures that benefit both conventional age students and adult learners (Wong, forthcoming).

To maintain a fair but rigorous PLAR process, university teachers need to devote time to learning and practicing an assessment approach that requires them to appreciate different kinds of knowledge production as well as the complexities of learning and the varied circumstances under which it can take place. Many university programs currently use a journal and/or a learning portfolio as the vehicle(s) of choice to document learners' observations, reflections, reconstruction of meaning, and proposals for experimentation or solution. The portfolio also features prominently within the PLAR process as a means to establish grounds for recognizing prior experiential learning. Increasingly, university faculty members are engaged in the preparation of teaching portfolios to support their applications for promotion and tenure. These portfolio processes provide common ground between learners applying for PLAR and university faculty interested in enhancing their teaching.

Universities that accept portfolios for the purpose of PLAR usually specify the categories of evidence of cognitive learning that candidates are to present. An opportunity to demonstrate learning through both written and oral communication is provided through supplementing the presentation of a portfolio with an interview, usually conducted via teleconference.

Resisters to implementation of PLAR at universities often point to the lack of research studies that provide evidence of PLAR contributing to the cognitive development of their students. The recent inauguration of the Prior Learning International Research Centre, headquartered at Thompson Rivers University, Canada, should help to overcome this objection and eventually lead to the full acceptance of PLAR/RPL into the mainstream of university education.

References

- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. San Francisco: Jossey-Bass.
- Butin, D. W. (2010). *Service-learning in theory and practice: The future of community engagement in higher education*. New York: Palgrave Macmillan.
- Byrne, J. V. (2000). Engagement: A defining characteristic of the university of tomorrow. *Journal of Higher Education Outreach and Engagement*, 6(1), 13-21.
- Donald, J. G. (1995). Disciplinary differences in knowledge validation. In N. Hativa & M. Marincovich (Eds.), *Disciplinary differences in teaching and learning* (pp. 7-17). New Directions for Teaching and Learning, no. 64. San Francisco: Jossey-Bass.
- Eyler, J., & Giles, D.E., Jr. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.
- Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education* 2(2-3), 87-105.
- Gee, E.G. (2010) Opportunity and purpose: Outreach's changing mission. *Journal of Higher Education Outreach and Engagement*, Volume 14, Number 3, p. 5, (2010). Human Resource Development Canada (HRDC) (1995). *Prior Learning Development Newsletter*, 1(2), Ottawa, ON: HRDC.
- Kellogg Commission on the Future of State and Land-Grant Universities (1999). *Returning to our roots*. Washington, DC: National Association of State Universities and Land-Grant Colleges.
- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, N.J.: Prentice-Hall.
- National Survey of Student Engagement (2003). *Converting data into action: Expanding the boundaries of institutional improvement*. Bloomington: Center for Postsecondary Research, Indiana University.
- Smith, W. D. (2010). Where all that money is going. *McLean's*, January 18th issue, p. 38.
- Wong, A. T. (forthcoming). University faculty and prior learning assessment and recognition: Shifting resistance to inspired action. In J. Harris, M. Briere, and C. Wihak (eds.). *Researching recognition of prior learning*. Leicester, U.K.: NIACE.

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