

Researchers' reflections on what is missing from work-integrated learning research

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This paper deals with the lack of attention to negative findings that has been found in cooperative education research and with issues that have been ignored by work integrated learning researchers. A review of the literature, an informal survey, and instances from the writer's experience provided many examples of negative results and under-reported findings. An example of how negative or unexpected results might be incorporated into research and practice is presented. It is argued that a failure to consider the work or job component of WIL programs may be responsible for this neglect of issues and negative results. (*Asia-Pacific Journal of Cooperative Education, Special Issue, 2015, 16(2), 101-107*)

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The potential benefits of work-integrated learning (WIL) seem so obvious that university administrators, politicians, and the parents of students often feel no need to question and evaluate its effects. Such optimism, however, may lead to a bias that hides negative findings, or fails to reveal effects that are important. Most people who work with students in WIL programs or cooperative education (co-op) programs will have observed such effects – depressed students unable to find a job, faculty members with negative attitudes towards these programs, or industry attempts to influence academic decision making. This paper is based upon an address to WIL researchers (Rowe, 2014), designed to encourage more attention to these negative results or neglected issues and to consider how they might alter both research and practice in WIL.

From the publication of Wilson and Lyon's (1961) classic book to the more contemporary work of Dressler and Keeling (2011), Braunstein, Takei, Wang, and Loken. (2011), and Crump and Johnsson (2011) the benefits of cooperative education have been well-documented. While it is not the intention of this paper to review all this literature, it is worth noting that a careful rereading even of Wilson and Lyon's book reveals some negative issues. These include initial differences between co-op and non-co-op students in social class, living arrangements, and other such differences that could well have affected some of the results. Another finding from that earlier study was a failure to find as many or as large differences between co-op and non-co-op graduates as might be expected in their views towards the preparation for their first job provided by their college co-op work terms.

Significantly, Bartkus and Stull (2004) commented on the lack of theory in WIL research, and Bartkus (2007) subsequently noted limitations in the quality of many studies. Sovilla and Varty (2011), in reviewing the history of co-op and WIL in the United States, stated that many programs lacked the involvement of academic faculty, an issue that has not, to my knowledge, been the subject of any research. Finally, Bartkus and Higgs (2011) provided an excellent set of reflections and recommendations for research on co-op education, encompassing the need for more theory, for examination of models of experience-based knowledge, for greater engagement by practitioners, and for the use of a variety of research paradigms, drawing on both quantitative and qualitative methods.

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Not all WIL research appears in readily available publications. Thus, for example, a major examination of WIL was conducted in Britain in the 1980s and a synthesis of the studies is available in Davies (1990). My own interest in the topic goes back many years, as a rereading of various reports and papers reveals (Rowe, 1988; 1990; 2000). More recently, two organizations have conducted major studies of co-op and other forms of work experience in my home province of Ontario. See, for example, the Higher Education Quality Council of Ontario (Sattler, 2011; DeClou, Sattler, & Peters, 2013) and Higher Education Strategy Associates (Kramer & Usher, 2011). These studies provide an unbiased view of the attitudes of students, faculty, and employers who participate in WIL programs, including comparisons with students who do not participate.

As the published literature may not always report results critical of or not supporting cooperative education, a survey of long-time researchers was utilized, asking for instances of negative results and neglected topics. Investigators known to the writer as well as researchers suggested by the Executive Chair of the WACE International Research Group were contacted. Email messages were sent to 29 researchers.

The questions posed to the participants were as follows:

- Given your extensive experience in co-op or WIL I am asking you, and some of our other experienced colleagues, what research findings you think have been ignored, either by other researchers or by practitioners? If you happen to know where these results were published or reported, I'd be grateful if you included that information, but it isn't necessary.
- Secondly, I'm wondering whether there is an issue that you think has been neglected or is worthy of more attention by researchers?

Replies were received from 19 of the individuals who were sent emails, a response rate of 66%. The responses ranged from a few sentences to several pages in length, and were often emotionally loaded. These responses, together with others drawn from the literature, and my own experience were categorized according to whether they applied to the students, the institution, or employers (Table 1), and some leftovers labeled miscellaneous. Not all issues could be considered negative or neglected so are not included here. Issues submitted by a number of participants or from several sources were combined.

An examination of the negative or neglected issues related to students suggests that there are two types of issues: one related to the work term and one connected to characteristics of the students themselves. Thus, it is reported that students select co-op programs in order to get jobs, particularly permanent positions after graduation. Yet many find their jobs boring, and the post graduation employment differences between WIL and non-WIL students are smaller and of shorter duration than expected. Furthermore those post graduation effects appear to be restricted to those who accept permanent positions with a previous WIL employer. Researchers have also failed to examine the effects of various aspects of work (amount, study versus work abroad, paid versus unpaid, etc.) that are necessary to produce the effects. Secondly, there has been little research on the characteristics of students prior to the co-op work term (personality, attitudes, ability, etc.) and how these characteristics interact with experience.

TABLE 1: Negative or neglected findings related to each stakeholder

Student Issues

- Many students report that their jobs are boring, or that they do not have enough to do.
- Research indicates that any employment differences between WIL and non-WIL graduates disappear after a few years.
- Those who accept post-graduation jobs with a previous WIL employer receive the most employment benefits.
- The relative benefits of paid versus unpaid employment are unknown.
- There are a number of differences (personality, interests, GPA, etc.) between WIL and non-WIL students before any work placement that makes subsequent effects questionable.
- The amount, length, and type of work necessary to produce effects are unknown.
- The causes and consequences of quitting WIL programs have not been studied.
- Students who enroll in WIL programs may be motivated more by monetary concerns; those who elect some non-WIL programs may have more altruistic motivations.
- Fewer WIL students enter graduate programs than non-WIL students.
- Alternating work and study terms may produce a disconnect from campus life.
- The differences between study abroad and work abroad on cross-cultural competencies is unknown.

Institutional Issues: Faculty and Staff

- Faculty are not engaged or even committed to WIL.
- Evidence for the effects of participation in WIL on future academic performance is inconclusive or weak.
- Students may receive as much from teaching or research assistantships as they do from WIL.
- Coordinators have difficulty balancing work and academic workloads.

Institutional Issues: Administration

- There is a decline in enrolment in WIL programs.
- WIL is too much driven by industry.
- International students are harder to place, and require more resources.
- WIL practices may not transfer to other cultures.
- Institutional control of work integration may not be necessary to enhance learning. Site visits, work reports, and even coordinators may not be needed.

Employer Issues

- A substantial number of employers hire once and never return.
- Employers often cancel jobs.
- Employers report that their main reason for participating in WIL is recruitment, attracting future employees.
- Other employers are only looking to meet short-resourcing needs.
- Some employers want work term lengths that are not suited to the academic year or semester.
- Employers report that considerable staff time is required to hire, train, and supervise WIL students.
- Not all companies participating in WIL have jobs that relate to a program's goals.
- The ideal conditions on the job that will enhance student success are not well defined.

Miscellaneous Issues

- The relevancy and value of a work term is very different from the perspectives of faculty, students, coordinators, and employers.
 - WIL is so broadly defined that it includes far too many kinds of experiences (work terms, internships, volunteer activities, part-time work, etc.).
 - The theoretical constructs used in most research are too limiting.
 - When most students have some work experience it may be difficult to find effects caused by WIL.
 - More research should be replicated.
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When considering the findings related to the institution, faculty and staff seem to be concerned about the academic value of WIL, which in turn, leads to a reduced commitment to WIL. The fact that there is mixed evidence to support a significant amount of learning from work terms as compared to non-WIL work experience has led to extensive efforts to show improved "soft skills" and to the development of professionalization courses. Administration concerns tend to be resource related, resulting in the questioning of whether institutional control of work integration is necessary and worth the expense.

Concerns that have been raised regarding employers are largely related to motivation: the fact that self-interest is what determines participation in co-op programs. Given that employers consistently report that they participate in WIL in order to attract and recruit potential full time employees, this motivation would account for why employers hire one term but never return, or post jobs and then cancel them. This is a very serious issue and means that our institutions are only functioning as employment agencies for these employers, which undermines the idea of the work term as a learning opportunity.

Finally, some very broad and general negative issues are presented. One of these issues is that the studies include many different kinds of work experience, different kinds of students, employers, and programs, as well as being conducted at different times. Most of the studies are conducted on small samples of students in a single program. There is a strong possibility that many of our findings are situation specific and that meta-analysis may show these findings to be the result of small sample sizes. If so, eventually we may be able to determine which variables are correlated to future benefits of WIL and which are not.

It is appropriate at this point to ask how researchers and practitioners should handle these negative findings. Let me take one example, the finding that while WIL graduates are typically more likely to be employed than non-WIL graduates, there is also research showing that non-WIL graduates catch up to them anywhere from two to five years later (Brown, 1976). My own research also suggests that those who accept jobs with a previous co-op employer receive most of the postgraduate benefits (Rowe, 2000). A possible interpretation of these results might well be that what is "learned" during the work term is highly specific to that job and that organization. A review of the literature in business and psychology would in fact reveal that the greatest benefits of training or experience occur in situations most similar to the ones where the experience was acquired or the training occurred (Baldwin & Ford, 1988). It is not surprising, therefore, that WIL is likely to provide the greatest effects for those continuing with a previous WIL employer, but research designed to test this prediction is required.

Secondly, this finding suggests that WIL is going to have its greatest effect in those disciplines where there is a close relationship between the job, the academic program, and the long-term career. These close relationships are most likely to be found in disciplines leading to a professional designation or where the work experience occurs in the terminal academic program for the discipline, such as the bachelor's degree in engineering, the MBA, or the PhD in clinical psychology. Moreover, these results raise the question as to whether there are any benefits to those students who are in programs only broadly related to future careers, such as bachelor's programs in arts, social science, or physical or biological science. These are all researchable questions but they require more analysis of postgraduate careers than has been done so far.

For the practitioner these findings suggest the need to look at work term jobs as future careers, thus putting a premium on the quality of work term jobs at a time when most institutions are thankful just to find enough jobs. And perhaps practitioners should be more transparent and make students aware of these findings, and the importance of making good choices, not just to apply for a job that is close to home or has a high salary. Perhaps students in less relevant programs should be informed that they are not likely going to get permanent jobs from their work terms, but they may get something else, even if it is not known what the something else is. Such students may decide to drop out of WIL and look for summer jobs, or other types of work experience.

From the perspective of an industrial psychologist (which I am), WIL can be examined as a special type of work rather than a particular form of education. Considering WIL as work means that one examines work variables such as required skills and abilities, job satisfaction, job motivation, and job performance, or work related processes such as the selection interview, assessment, or organizational socialization. While work behavior is usually regarded as behavior related to the production of goods and services by individuals in employment relationships, increasingly we understand that work behavior may refer to unpaid work, and thus may apply to activities undertaken in internships, in voluntary activities, by stay-at-home parents, or even retirement.

It is almost impossible to overstate the importance of work to individuals: work has been described "as the primary activity of lives" (Hulin, 2014, p. 15). Not only does work provide, usually, an income, but it is also a source of one's identity, provides structure to lives, purpose in life, feelings of self-worth and self-esteem, and interaction with others. Work is not the same as going to school: work is about performing a task; school is about learning skills. Let me recount a very personal experience on that topic: in the summer of 2013 my then 11-year old granddaughter volunteered to work in the museum near my cottage. She assisted children in the crafts area, monitored climbing on the rock wall, performed the chores of a girl in the 1800s, handled pythons and geckos for the reptile show, and helped clean up the displays at the end of her shift. In other words she performed an important and valued job for the museum. In so doing, she learned skills that would help her perform the same job, or maybe one a little more demanding, the next summer, and she did, indeed, get more responsibility and longer shifts the following summer. Moreover, those skills would probably transfer to work at another museum. But it is doubtful that they would transfer to a job as a counselor in a summer camp or to one at a fast food restaurant. She also acquired experience relating to other workers, being supervised by someone other than a teacher or parent, dealing with customers (parents and children), time management, and a host of other "soft skills", but whether they will transfer to other jobs is a good question.

My point here is that it may be a mistake thinking and referring to the work term as a learning experience. Most students see the work term as a job, with all that that means in terms of tasks, performance, etc. Certainly most of the co-op students I have known and studied have the same feelings and attitudes towards their work term jobs (such as commitment, pride in their performance, motivation, satisfaction) as adult workers have, and regard those jobs as primarily work even if temporary or short term, not education, and even though they may have learned a great deal on the job.

What might all this mean for research? First of all, and this reflects my own bias, I think we should pay more attention to some of the traditional issues in industrial/organizational psychology – topics such as selection, motivation, job performance, job characteristics, and

training. These topics will provide a rich resource for many ideas to examine in WIL settings. Secondly, given that for many students their employer after graduation is likely to be a previous co-op employer, the quality of work term jobs available is of critical importance. Few studies have provided any analysis of those work term jobs. Finally, recalling the importance of job loss to adult workers we should pay more attention to the consequences for students who fail to get a job, or who are not invited back for a second work term, or who are not offered a permanent position upon graduation.

Two of the survey respondents lamented the fact that research results are regularly ignored, especially by decision makers. Indeed, one of them said "all research findings have been ignored by researchers, practitioners and pretty much everyone else". And it has been noted that educators rarely evaluate the success or failure of their own programs. As much of WIL research is conducted to justify the existence of such programs, asking to give serious attention to negative results or neglected issues may be a hopeless cause. I remain optimistic, however, that such research will provide a firmer foundation for the scholarly advance of cooperative education and our knowledge of work-integrated learning.

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