# Action Learning In Action: How Business Students Strengthen Their Knowledge Bases Through Work-Based Experiential Methods

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## INTRODUCTION

The use of service learning as a means of training future business leaders is advantageous when used as part of learning process and an introduction to problem solving. This study will review how student knowledge can be enhanced when the learning process is linked with real world experiences such as internships, apprenticeships, cooperative education programs, and when a student is assigned a mentor. This infusion helps students make a connection between classroom instruction and real business problem solving (Woods 1997). For this position paper the term "Action Learning" will be used as a surrogate for the various forms of learning available outside the classroom.

According to Raelin (2000), work-based learning is much more than the traditional experiential learning component in a student's learning process. He contends that experiential learning (such as the case approach that consists of adding a layer of simulated experience onto conceptual knowledge) falls short when it comes to enhancement to the real world business link. On the other hand, a work-based learning experience can be "layered" with real-world business practice onto the conceptual theory taught in the classroom. When in practice the learner builds confidence as he or she consciously reflects on challenges of their practice, they can engage in problem solving, data gathering, action, evaluation, and share that knowledge with others they are practicing with, because their understanding is best achieved through action. Therefore, the connection between the instructor's transfer of a concept along with theory and students' true comprehension is best achieved through practice.

Raelin (2000) differentiates the concepts of explicit vs. tacit knowledge, in that explicit knowledge is transmitted in a formal systematic language such as a lecture, while tacit knowledge is deeply rooted in action and involvement such as doing. The results of explicit knowledge is the learner's conceptual understanding of a concept, whereas tacit knowledge represents the learner's skill in doing something, and the latter can be either mental or physical (or both). Conventional learning methodologies tend to be theory- based classroom experiences relying on explicit knowledge. To give a concrete example, a student may learn the theory of how to play a guitar through explicit knowledge without experiencing the tacit knowledge of holding the instrument, depressing the strings against the frets, and strumming the strings. Without a hands-on experience, the learner can be left with the impression that problems are nestled into neat little packages as with questions at the end of a case study or using a SWOT analysis as the only experience. What also needs to be considered is that students learn through work at an individual level and that actual experiences provide knowledge from challenges, making mistakes, problem solving, and taking action based on a decision made by the learner.

Lightfoot (2005) highlights Chickering and Gamson's (1987) "Seven Principles" of learning. These seven principles were developed to clarify activities which should be incorporated when teaching undergraduates:

1. Develop reciprocity and cooperation among students so they can    work together to encourage peer learning and practice group skills, in preparation for real world experiences.
2. Encourage contacts between students and faculty (one of the most important characteristics of a successful class). Students need to overcome intimidation of those in authority.

3.      Use active learning techniques by actively engaging students in the content of the course, and create an environment where learners actively discover knowledge. This can be accomplished through internships, cooperative education, and mentorship to gain tacit knowledge.
4.      Give prompt and timely feedback frequently, which will provide positive reinforcement.
5.      Encourage good time management, a skill required for jobs.
6.      Communicate high expectations so students learn what is expected of them.
7.      Respect diverse talents and ways various students learn.

Students need to choose a career and according to Corey (2006), college students do not think seriously about why they choose a given vocation. For many, parental pressure is their reason for being in college, while others have idealized views of what it would be like to be an attorney, doctor, accountant, or engineer. They have not thought about what is expected of them and what they can expect from work. Another area that is sometimes overlooked is the factors that need to be examined in selecting a career.

As one can observe from the seven principles of learning and Corey's (2006) approach the learning process can most likely be enhanced through an actual work experience. The action learning pedagogy is designed to provide students with a real world of work perspective. Students can become active participants in the learning/problem solving process. When students are in an active learning environment, problems that arise become real rather than theoretical.  Via real workplace experiences, students learn the necessity of focused action to achieve results, become aware of realities, and are confronted with decision making under risk, and at times even experience real failure. The action learning approach places students in a position of reality as employees in the business world. This puts them in a position to make decisions and to learn from the experience. An action learning experience elicits tacit knowledge thinking and behavior, rather than student behavior. This active learning enhancement should provide students the opportunity to acquire tacit knowledge, real management practices, and their own capacities for decisive action (Journal of Management Education).

## CONCEPTUALIZATION VS. EXPERIMENTATION

Conceptualization theory has contributed a great deal to management practice. Students learn to perceive standard problems and conceptualization gives them a means to tackle different problems, because theory can help to illuminate and describe an action. However, conceptualization cannot stand alone; it needs to be coupled with action. Conceptualization is sometimes criticized as not being sufficiently real world, which indicates it is not being translated into practice within the real work environment. Students need to try out or experiment with their conceptual knowledge so that it becomes contextual experimentation as explicated by Dewey (1916), who warned educators that mere "doing" or activity was not enough to produce learning. Dewey believed that doing needs to become trying, as indicated above whereby students need to make decisions in a meaningful environment and take risks, because they need to know what it is like to experiment in the real world. At the same time, students need the opportunity to try out their conceptual knowledge and then that knowledge can become contextual or grounded from action. For instructors to rely on conceptualization alone could limit student problem solving, because real world problems are not sufficiently coherent to be organized into theory.  Learning often occurs through experiences. Therefore, students need to undergo a particular action experience and then reflect on that experience as they learn from it (Raelin, 2000, 2).

An important advantage to action learning is its direct impact on students' perspectives on what their future role may be in the world of work and how they relate to a job and an organization.  If students are placed in an organization to work on real business issues with practicing professionals, they can gain useful tacit knowledge that can help them mold their own futures.  Learning often entails much more than reading books and memorizing information to pass an exam, because learning could be described as entering into an environment to sense what it is like (Oakeshott 1989, Benton et al. 1995).  As a result of enhancing learning through action, students become directly physically and mentally involved in the learning process.  A good sign of accomplishment is when the student grows to enjoy the process and the opportunity of collaborating and problem solving with practicing professionals.  The enhancement of action learning affords students the opportunity to develop the required ability to verbalize and articulate clearly.  When students are engaged in an action learning environment, they learn that

making vague statements and communicating with imprecision inhibits productivity. As a result, they aspire to develop self-efficacy which is one's capabilities to organize and execute the sources of action required to manage prospective situations, in their own business discourse and dialogue (Bandura,1994). They also learn that there can be more than one solution to a given problem. Most importantly, students can learn to take chances and risk failure, and therefore to take responsibility and ownership for their decisions and the subsequent outcomes (Dillon 1995).

Is this to say that action learning is the only way? Not at all. This study points out that business education needs to be brought beyond applied science. Ideally a balance of teaching methods should be employed to enhance learning, and here is why: most academics in the business management field tend to dedicate their research to instrumental or applied problems. The applied sciences approaches are usually experiments that are under carefully controlled conditions of the method, and most academics in business schools tend to dedicate their science to instrumental or applied problems. Therefore they tend not to waver in their commitment to sound empirical methods (Bernstein, 1976, Hanfling, 1981, Rosenau, 1992).

Raelin's (20003) view is that scientists contend that they can gain insight into an objective knowledge or reality that exists outside of human thought. As they search for areas of objective knowledge left undiscovered, scientists further explicitly detach themselves from other issues such as real world variables and conditions within the business environment, but test out preordained patterns of conceptual relationships and then draw conclusions that might generalize to other similar situations. One can observe that Raelin's results of knowledge subjected to this method of inquiry are as follows:

1.      It becomes truer or more valid as the same theory testing is employed for the same issue.
2.      It is the results of mathematical language and expressed as a series of logical relationships.
3.      All of this invites reformulation for further experimentation.

Applied science can contribute to practice by providing theories of action that are systematically tested, but practitioners need to view and experience the gaps between formal research and the actual conditions in the business environment.

**Figure 1.1 Action Learning Model**



1-Case studies, Internships, Coop's, Mentorships, Apprenticeships,
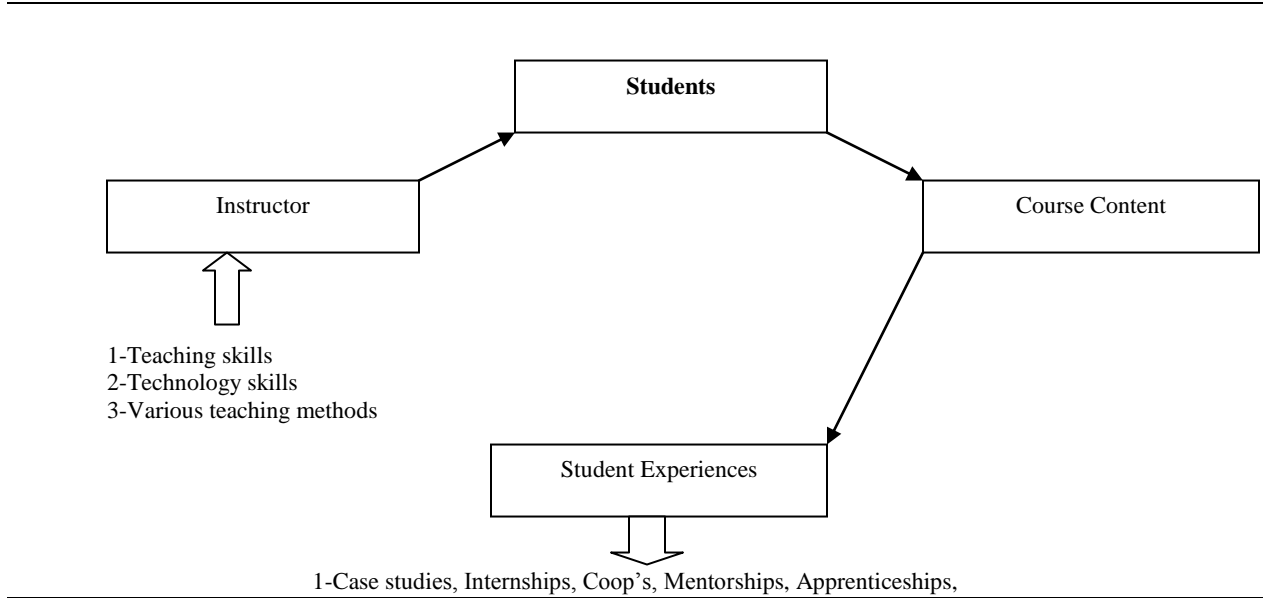
When viewing Figure 1.1 (the Action Learning Model), it should become clear that if the teacher combines his /her teaching and technology skills with various teaching methods. It is possible to include action learning into course content, keeping in mind that case studies alone are not adequate. According to McKeachie (2002), college professors not only teach students concepts but also modes of thought. Therefore, instructional means may vary from discussion, use of technology, and case studies. When action learning is added to the learning process, educators enhance the abstract concepts by providing an opportunity for the student to experience the concepts. This can be accomplished through action learning whereby abstract concepts discussed in the classroom can become meaningful because actual experiences can link learning, thinking, and doing.

## LITERATURE REVIEW

In one segment of the health care profession alone, the amount and complexity of knowledge and information that nurses are expected to learn has continued to increase. As a result of this increased demand for complex knowledge, interest has grown for integrated curriculum approaches that include appropriate content on the use of a variety of information formats and instruction using resource-based and process methods such as problem based learning, inquiry learning, and action learning. Learning is enhanced through the collaboration between students and practitioners (Barnard, Nash, O'Brien, 2006).

According to Lewis (2004), who conducted a study on work based experiences, students who took part in work based learning were more apt to plan on academic studies beyond the bachelor's degree. Two thirds of the students reported that they learned better through hands-on experiences and real world application, opposed to learning solely through classroom work and text books. In addition, the students who participated in two or more work based learning activities earned a college grade point average of 3.0 or higher, compared with 58% of the whole cohort.

Research conducted by Molseed, Alsup, and Voyles (2003) revealed that learning job specific skills could be considered necessary; however, other skills are required for job success. The additional skills that need to be developed are effective work related skills that demonstrate a positive attitude, personal responsibility, decision making skills, problem solving, collaboration, commitment, and an understanding of possible career choices, all of which are developed during the student's work experience.

Trach and Harney (1998), defined "Co-op's" as a unique plan of educational enrichment designed to enhance the students' self-realization by integrating classroom study with planned and supervised learning outside the classroom. They further explained that work experiences enrich the learning process through the student's application of concepts and skills taught in the classroom to the work environment, which then reinforces classroom learning. As a result of work experiences students gain skills related to three types of learning objectives:

1.    Academic objectives that connect theory to practice.
2.    Career learning objectives that include determining realistic career choice analysis.
3.    Personal growth such as confidence, self-understanding, communication skills, personal and ethical values, social interpersonal skills, and a sense of professionalism.

Cunningham and Sagas (2004) report that positive work experiences that include task variety, feedback, and the chance for meaningful interactions with others were predictors of work experiences outcomes such as self-efficacy (which is a person's feeling of confidence to complete a job successfully), and a self-concept of viewing themselves as competent. A work experience can result in the development a strong feeling of employee commitment and low job turnover.

Some respected educators of our time – Knapp, Dewey, Lancelot, and Stimson – expressed four components of work experience learning (Knobloch, 2001):

1. Students engage in solving problems that are relevant in their lives.
2. Students communicate their thoughts connecting knowledge in action.
3. Students discover through investigation.
4. Educators teach for long-term effects so their students can apply knowledge many years later in various contexts.

Howard and Mosca (1997) linked "Grounded Learning" to real world experiences. They defined grounded learning as a process of learning inductively from interactive involvement with the concept being studied. It is conceptually similar to the process of developing grounded theory. A theory is considered grounded when it:

1. Fits with reality.
2. Makes sense to both the one engaged in the experience and the observer.
3. Provides intuitive generalization across similar circumstances.
4. Proposes some control over the concept that was taught.

The grounded learning approach includes four elements:

1. It creates a real-world experience.
2. It optimizes learning transfer by establishing similar stimulus and response elements in both the learning and transfer settings.
3. It integrates theoretically general and empirically specific knowledge.
4. It incorporates both positive interdependence and individual accountability.

Finally, Silberman (2006) defined the elements for developing active learning objectives. He stated that the topics are not essential. What is important, however, is to determine what you want the learners to value, understand, and how to put to use the information and knowledge being transferred. Once the objectives are determined the measurable goals which Silberman refers to are the ABC's of learning, as follows:

1. A- *Affective learning* which includes fostering attitudes, feelings, and preferences.
2. B- *Behavioral learning* that includes the development of competence in an actual environment.
3. C- *Cognitive learning* is when the learner acquires information and concepts from course work and relates them to real work settings.

## RESEARCH GOALS

The four overarching goals of this study were to:

1. Determine if business students who took part in an active learning program are able to relate to business concepts taught in the classroom environment.
2. Assess whether business students learn more by participating in an active learning program versus lecture alone.
3. Learn how business students who take part in an active learning program develop more confidence in their knowledge of business concepts in the work environment.
4. Determine if an active learning program helps business students relate to the required management skills in the real world.

## METHODOLOGY AND ANALYSIS

A one page survey comprised of 11 questions was distributed to undergraduate and graduate business students. For analytical purposes, a Likert scale was used to determine results and comparative examination.

Of the sample of 193 students, 13 individuals identified themselves as graduate students. As this number was too small for appropriate analysis, these individuals were excluded, resulting in a sample of 170 undergraduates. The mean age of these remaining undergraduate students was 21.99. Males constituted 48.2% (n = 82) and females 41.8% (n = 71). Seventeen individuals (10%) did not indicate their gender. Of these students, 37.1% (63) individuals self identified as taking part in an active learning program while attending college. Students were further asked if they had participated in the following active earning experiences: co-op, internship, apprenticeship, if they had someone whom they considered to be a mentor, or if they had worked full- or part-time while attending college. Results are in Table 1:

### Table 1: Type of Active Learning Experience

| Type of active learning experience | Those replying "yes" | |
|---|---|---|
| | **number** | **percentage** |
| Co-op | 11 | 6.5 |
| internship | 44 | 29.5 |
| apprenticeship | 9 | 5.3 |
| had a mentor | 61 | 35.9 |
| worked full-time | 28 | 16.5 |
| worked part-time | 118 | 69.4 |

Percentages do not add up to 100 as many students reported more than one type of active learning experience.

Respondents who reported that they had engaged in any of the aforementioned active learning experiences were asked to identify the extent to which their experience had aided them in their business education. The scale used was a Likert scale, with 5 = Strongly Agree and 1 = Strongly Disagree. Higher responses therefore indicated greater agreement. Results are in the following tables:

### Table 2: Co-op experience (n = 11)

| Statement | Mean response | Standard Deviation |
|---|---|---|
| Strengthened knowledge of classroom experience | 4.09 | 0.701 |
| Gave more confidence in work settings | 4.45 | 0.688 |
| Gave more "real world" business skills | 4.45 | 0.522 |
| Helped relate classroom concepts with better understanding | 4.09 | 0.539 |

### Table 3: Internship Experience (n = 44)

| Statement | Mean response | Standard Deviation |
|---|---|---|
| Strengthened knowledge of classroom experience | 4.09 | 0.830 |
| Gave more confidence in work settings | 4.57 | 0.695 |
| Gave more "real world" business skills | 4.64 | 0.613 |
| Helped relate classroom concepts with better understanding | 4.18 | 0.896 |

**Table 4: Apprenticeship Experience (n = 9)**

| Statement | Mean response | Standard Deviation |
|---|---|---|
| Strengthened knowledge of classroom experience | 3.78 | 1.093 |
| Gave more confidence in work settings | 4.56 | 0.726 |
| Gave more "real world" business skills | 4.56 | 0.726 |
| Helped relate classroom concepts with better understanding | 3.89 | 1.167 |

**Table 5: Mentorship Experience (n = 61)**

| Statement | Mean response | Standard Deviation |
|---|---|---|
| Strengthened knowledge of classroom experience | 4.26 | 0.728 |
| Gave more confidence in work settings | 4.41 | 0.642 |
| Gave more "real world" business skills | 4.34 | 0.680 |
| Helped relate classroom concepts with better understanding | 4.25 | 0.704 |

**Table 6: Full-time Work Experience (n = 28)**

| Statement | Mean response | Standard Deviation |
|---|---|---|
| Strengthened knowledge of classroom experience | 4.14 | 0.848 |
| Gave more confidence in work settings | 4.46 | 0.744 |
| Gave more "real world" business skills | 4.54 | 0.693 |
| Helped relate classroom concepts with better understanding | 4.43 | 0.790 |

**Table 7: Part-time Work Experience (n = 118)**

| Statement | Mean response | Standard Deviation |
|---|---|---|
| Strengthened knowledge of classroom experience | 3.62 | 0.886 |
| Gave more confidence in work settings | 4.12 | 0.661 |
| Gave more "real world" business skills | 4.09 | 0.734 |
| Helped relate classroom concepts with better understanding | 3.71 | 0.913 |

Pearson's chi square test of gender versus the various active learning experiences yielded significant results only for mentorship ($p = 0.050$) and apprenticeship ($p = 0.026$).

Although this study examined a small population within only one business school, it appears clear that this population sample values the concrete experience that the various forms of action learning provide – especially in tandem with classroom experiences. One factor that may have added to the overall positive responses is that these students are learning in a university setting located near two very large metropolitan areas and within a state that offers a great deal of work (business) opportunities. Therefore, these authors believe that these data should be reexamined in future research studies to determine whether responses to the same items will vary by geographic location. If the data are found to be different, colleges and universities could examine ways in which they can "partner" with local and regional work organizations to promote action learning venues. In addition, it is important to note that while this study did not include an examination of gender and its impact on view of coop's, mentorships, internships, and the like, future researchers may want to examine how important these experience are to young female professionals, in particular, to determine their overall efficacy within the broader work learning experience.

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