

For Whom is the Classroom Bell Tolling?

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*No man is an island,
Entire of itself.
Each is a piece of the continent,
A part of the main.
If a clod be washed away by the sea,
Europe is the less.
As well as if a promontory were.
As well as if a manner of thine own
Or of thine friend's were.
Each man's death diminishes me,
For I am involved in mankind.
Therefore, send not to know
For whom the bell tolls,
It tolls for thee.*

John Donne

John Donne's poem speaks of death. In the poem, I see connections to the university classroom experience. We are fellow passengers on our journey through life. Omit the unintended death connotation. Focus on the ideas of influence and Locus of Control. We teach the impact of our behaviors and decisions on classmates and our automatic influence. We also as well as stress the importance of self-responsibility. A student paraphrase might be: "Ask not for whom the graduation and employment bells ring; they are ring for thee."

Locus of Control (LOC) is the extent to which students believe that they are able to control things (their education) in a manner that directly impacts them. When students enter our classrooms, they bring different academic experiences and expectations. In an ideal environment, each student would enter with the belief that he was in control of the quality of education received during the semester. Such is not my world. But it is the goal toward which I move.

Research suggests that employers are able to influence the locus of control of their employees. I believe that we have the ability to do the same in our classrooms. This presentation discusses techniques that in congregate are unique to my classes. I want to share strategies that I use in my classroom to build internal locus of control. Hopefully, the data will be supportive of my assumption of a modicum of success.

In an effort to validate the anecdotal proof that at least some students in my classes are gaining in self efficacy, I am conducting a blind-study in three sections of Organizational Behavior that I teach to upper level Management majors in the School of Business. All three sections are taught in the same classroom, for the same length of time and on the same days of the week. Personal inventories are traditionally a part of the curriculum so there is no special permission required to administer the surveys. Students identify their responses by using their mother's maiden name as their code name. Anonymity is thus insured. All sections of Organizational Behavior follow the same Department and School goals and use the same textbook. There are 25 students in each section.

Rotter's validated twenty-nine item Locus of Control scale is the instrument used as both a pre and a post test. Sections one and two took the Rotter's LOC pre-test. Section three did not. All three sections will take the test at the conclusion of the semester.

Section three did not take a pre-test in order to compare those scores against the scores of those who had both a pre-test and course content. Preliminary investigation of survey results combined with teaching content may modify perceptions. Thus, those students who took the pre-test might have a heightened awareness of LOC issues. In the first and third class sections LOC was minimally discussed as a term in the textbook. In the second section extra effort was taken to point out to the students their ability to take control of assignments, test grades, classroom activities.

- Bloom's Taxonomy addresses both cognitive and affective learning. His provision of models to facilitate the use of his theory enables faculty to strategize their move from good teaching to good learning thus achieving optimal student success. "Blooming" subject, cognitive matter is an easy task to understand. Reaching the top of the affective pinnacle a bit more difficult. **Affective learning** objectives are explicit and are incorporated concurrently with cognitive objectives. Understanding and developing students' Internal Locus of Control in the learning process is one of several avenues for enhancing and assessing student commitment to their learning.

We have an influence on how that life is lived. The extent to which we acknowledge our influence over life events is termed Locus of Control.

Can Internal Locus of Control be taught or otherwise influenced? In particular, is it possible to influence students to increase internal LOC in regards to academic performance?

The research for this paper, which started as a conversation over a glass of wine at last year's conference, is an attempt to answer that question. Minimal research exists which suggests that employers are able to influence the locus of control of their employees. (Brownell, 1981)(Spector, 1986) There appears to be nothing that addresses directly the ability of the college professors to influence the LOC of their students. The intent of this presentation is to share initial data, review questions and concerns and solicit participants guidance and input in terms of the question: Can Internal Locus of Control be taught or otherwise influenced?

Shakespeare's character Hamlet advised Laertes to be true to himself. Management Guru Chester Barnard is the proponent of the concept that each individual determines whether or not to accept someone else's authority, (Barnard, 1968). A more recent theorist, Peter Drucker, observed that to manage oneself required the managing of relationships. (Drucker, 2005) Goleman underscores the idea of self control as a core concept in his EQ writings. (Goleman, 1995)

A component of self-knowledge is Locus of Control. Locus of Control refers to the extent to which individuals believe that they have control over the events that affect them. Those who possess an internal LOC believe that events, rewards, and perceptions result primarily from their own behavior and actions. Those with a higher external LOC believe that powerful others, fate, incorrect information, and chance determine events and rewards. Examples of the difference between these two orientations of LOC is reflected

The core concerns of the paper are 1) Is the tendency for college students to have an internal or an external LOC? and 2) are faculty able to influence student LOC perspective, with a future question being 3) If so, how. The underlying assumption is that student internal LOC could increase during a semester of Organizational Behavior.

The topic is important because of the impact of LOC on student success within the classroom. Research reveals that people with a high internal self control have a higher degree of self knowledge and are less likely to approach their academic experience with "learned helplessness." (Seligman, 1975, Luthar, 1991) Furthermore, Understanding Locus of Control is important because there is a direct correlation between a student's LOC and his academic success. Research examining LOC and academic success has reported that Internals generally have greater academic achievement (Findley and Cooper, 1983) The research conducted by Root and Gall concluded that students with a higher LOC achieved more. (Root, Gall, 1981) A study by Boufard-Bouchard (1989) and Jourden and Bandura (1991) show that self-efficacy (a concept similar to internal LOC) correlates directly with academic performance and student goal setting. Other research shows that internal LOC is a critical factor in student honesty and ethical survival in academically challenging situations. (Brownell, 1981 Rogers and Smith (2001) Smith, A. and Hume, E. 2007) Students who approach learning with an internal locus of control experiences a greater degree of autonomy and emotional intelligence within the parameters of classroom learning. (Bellamy, A, Gore, D., Sturgis, J,)

Research also exists that shows that there is a highly significant difference in ethical decision making among students with different LOC. Students designated as internals supplied answers which were viewed as being more ethical than their external counterparts. (Smith et al, in Smith A and Hume, E. 2007)

Literature Review

In addition to the above cited studies which underline the importance of the topic, other background research exists. A point of beginning is the guidance provided by the publishers of Rotter's instrument on the instrument itself:

"Overall, an internal locus of control is more healthy, characterized by better overall psychological adjustment and greater success. An internal locus of control is positively correlated with self esteem. Those with a high internal locus of control have better

control of their behaviour and tend to exhibit more political behaviors than 'externals' and are more likely to attempt to influence other people. They not just tend to assume that their efforts will be successful, but generally achieve more than externals. Because 'internals' consider themselves responsible for their outcomes, they are more active in seeking information concerning their situation than do 'externals.' On average, internals are more physically healthy, as they will seek more information about health maintenance and engage in precautionary health measures, and will less likely become substance abusers. In other words, if you believe that you control your circumstances, you may feel less need to escape them and will more likely actually cope with them.

However, for all you externals, there are times when an external locus of control is more adaptive. These are situations in which limited personal control is actually available. For example, elderly people who are institutionalized and have little control over their lives will be more satisfied if they have an external locus of control (Felton and Kahana, 1974).

Can a person's locus of control be changed? Yes. Although locus of control is fairly stable, it may shift or alter as life circumstances change, such as after a divorce or when institutionalized. For example, when external college students were given a course that emphasized taking personal responsibility for success, their locus of control shifted towards being internal.” (Rotter, 1966)

The principle behind the LOC framework ties closely into Vroom's expectancy and Skinner's reinforcement theories. Simply stated, the locus of control construct refers to the degree to which an individual believes the occurrence of reinforcements is contingent on his or her own behavior. Carlise and Frank stress the variable of the situation. They state that: “ As a general principle, the locus of control variable may be thought of as affecting behavior as a function of expectancy and reinforcement within a specific situation” (Carlise-Frank, 1991).

Research Design:

In an effort to validate the anecdotal proof that at least some students are gaining in internal LOC or self efficacy, a blind-study was conducted during the Spring 2008 semester in three sections of Organizational Behavior. The data from this trial-run, is in no way conclusive. Rather, its value is descriptive.

The research is being continued during the Fall 2008 semester. The design is the same; hopefully the follow-through will be better. All three sections are taught in the same classroom, for the same length of time and on the same days of the week. The nature of the course is that students frequently fill out assessments so that responding to the Rotter scale seemed “SOP.” Because Personal inventories were traditionally a part of the curriculum there was no special permission required to administer the surveys. To maintain an anonymous data pool, students used the same code name on both the pre and the post test. The code name was their mother's maiden name.

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Instruments:

There are a variety of research designs that are used for measuring locus of control. For the purpose of this initial investigation the validated 29-item Rotter scale was used. Of the reliable scales, it is the most user-friendly. Scoring and interpretation are uncomplicated and are descriptive rather than predictive. There are no right or wrong answers. The self-scored instrument is designed to assess how much control an individual believes he has over the outcomes in his life. Low scores on the scale indicate that a person tends to have more of an internal LOC; while the higher scores suggest an LOC that is more external. The fact that the scores are often divided into internals and externals classifications is a predisposition. It seldom suggests that an individual is exclusively one of the other extreme between the two types. Rather, the idea is that everyone has both beliefs. The tests measure a difference in degree rather than a dichotomy between the two. The LOC instrument construct refers to the degree to which an individual believes that "the occurrence of reinforcements is contingent on his or her own behavior social learning theory." (Walston, 1982)

A copy of the instrument and scoring key are attached. All sections took a pre-test at the beginning of the semester. In the first and third class sections LOC was minimally discussed as a term in the textbook. In the second section extra effort was taken to point out to the students their ability to take control of assignments, test grades, classroom activities. In the second section, the professor drew attention to LOC as it related to subjects such as stress, sources of power, and leadership. Students were not told their scores for fear of creating a self-fulfilling prophecy.

The post-test was administered to all classes.

Personal opinion

All students at the conclusion of the semester filled out the university-wide SRII form evaluating their class experience. Using the option of adding additional questions, the instructor asked the students five specific questions which were expected to shed light on enacted LOC. The questions, to be answered on a Likert scale of 5 strong agreement and 1 strong disagreement were:

47. I read the textbook before coming to class at least 90% of the time.

49. My Locus of Control in this class is internal.

50. I believe I know more about myself as a result of taking this course.

51. I worked on my take-home final throughout the semester.

53. I felt more cohesiveness with my classmates than I do typically.

Identifiable strategies to encourage internal LOC:

Attendance Records

Class procedure required that students keep their own attendance on individual classroom tents. Their monitoring their own attendance and participation is in keeping with concepts of self-knowledge and personal responsibility.

Take Home Final Exam

In all three classes of the Spring 2008 term, the instructor gave students a copy of the take-home final exam on the first day of the class along with the course syllabus.¹ The offer was extended and often repeated that students could bring typed rough drafts of answers to the exam question answers to the professor's office for discussion and editing. In taking the final exam, students could select the number of questions that they would answer in terms of the quality of answers and the desired grade. Students were required to answer a minimum of one half of the questions. No formal record was kept of the students who took advantage of the professor's editorial assistance. However, the professor was aware, after the grades were posted, that among the students earning an "A" on the final exam, many had reviewed their work with her. Among the "C" or lower grade earners, no one had taken advantage of the available assistance.

Classroom Tests

Each of the three tests was preceded by a "cheat sheet" a colored piece of paper. On one side of the paper was a typed case about which students would answer questions during the test. The other side of the paper was blank. Students were free to write by hand any information that they perceived would be helpful to them in taking the closed book test. Thus, students could decide what time to invest in studying the case and the material covered and what data they perceived to be significant enough to record. Each test contained options. Students were given fifteen fill in the blank questions from which they were to select 10 to answer. They were also able to select from 5 discussion questions the 2 or 3 that they would answer. The total points for the discussion question was 30. If a student answered 2, then each had a weight of 15 points; three answers each had a weight of 10 points.

Subjects:

The subjects were all students in an upper-level section of Organizational Behavior in an urban mid-west university. The curriculum for all three sections includes

¹ The assignment was dropped in the Fall 2008 because of the unanticipated increase in class size. The total number of students made the assignment impractical for the professor. Other strategies are being developed to offer students the opportunity to receive help outside of class.

Acceptance View of Authority, Emotional Intelligence, Personal Strengths and Weaknesses and Locus of Control . The course is required of Management majors. Generally 5-10% of the students take the course as an elective.

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Results: (See chart on following page)

- Students in each section gained minimal increase in perceptions of their internal LOC.
- The most significant change occurred in the 11:00 class.
- The class with the strongest internal LOC (lowest numerical score) on the pre-test (9:00)also had the highest grade point average at the end of the semester.
- The class with the strongest external LOC (highest numerical score) on the pre-test (2:00 also had the lowest grade point average at the end of the semester.
- Even though their grade average was the highest of the 3 classes, the 9:00 students did not report reading the textbook before class or working on the take home final exam proactively.
- The only class that worked proactively on the take home final all semester was the 11:00 class.
- The highest self assessment of having internal LOC was reported by the 11:00 class; a distant second was the 9:00 class with a slightly lower score for the 2:00 class.
- The greatest perception of class cohesiveness was by far the 11:00 class

Class	Class	Avg. Final Grade	LOC* Test Pre	LOC* Test Post	LOC* Test Net	Q47* Text 90%	Q49* LOC Internal	Q51* Final all term	Q53* More Cohesion
Med	9am C1	90.5%	10.63	10.55	-.08	-41	59	-46	58
High	11am C2	83.8%	11.8	10.26	-1.54	-47	87	4	84
Low	2pm C3	86.3%	13.55	12.3	-1.25	-29	55	-41	55

*LOC measured in pts; more pts = more external
 *LOC >10; external LOC
 *LOC ≤10; internal LOC
 *Took total number of 4 & 5 ratings (agree) minus total number of 1 & 2 ratings (disagree) to come to get the above numbers. More negative figures indicates more disagreement with the statement

Conclusions:

- 1) Is the tendency for college students to have an internal or an external LOC?
- 2) Though the data is not overwhelming, it certainly suggests that faculty are able to influence student perceptions about their LOC. In the 11:00 class where the professor repeatedly drew attention to situations in which students had some control over their performance the students became more accepting of their own control. They espoused it in their response to the SR I question and enacted their belief in “grabbing the bull by the horns” and working on their take home final exam during the entire semester. The fact that their class average grade was not the highest is attributable, perhaps, to the fact that from the beginning of the semester their internal LOC was not as strong as that of the students in the other classes.
- 3) If so, how...which was raised as a “future question” has the beginning of an answer and perhaps the start of another paper. The class that gained the most in its understanding of its internal LOC was significantly the strongest in its positive response affirming the cohesiveness of the classroom experience.

Future Research:

During the Fall semester, all three classes are again taking pre and post tests using Rotter’s scale. Detailed notes will be kept by the professor of specific intervention strategies. There is a need for a control group’s body of data. Data will be gathered from another class using the scale one time. Therefore, there will be no awareness or discussion of the topic.

Control Group in which no choice is given

One might ask if those students who were in the second section which met at 11:00 were initially higher in their internal LOC than those in the other sections because the 11:00 is always the first to be filled to capacity.

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