

Achieving faculty buy-in: motivation performance in learning outcome assessment

Suttee Sujitparapitaya
San José State University

ABSTRACT

Despite the great value of student learning outcome assessment (SLOA), faculty have not fully embraced the assessment movement, and many remain locked in debates on its merits. To gain faculty buy-in and explain why many faculty were motivated to engage in outcome assessment, the modified CANE (Commitment And Necessary Effort) model was used to examine key indices of motivated behavior. Both task assessment and personal values were found to be the primary motivational components of faculty commitment. When the commitment difficulties occur, these indices must accurately be identified and modified during the front end analysis to create and reinforce faculty values.

Keywords: Learning Outcome Assessment, Program Assessment, Faculty Buy-in, Student Learning Assessment, Work Goal Commitment, Motivation Performance

INTRODUCTION

Today's colleges and universities face public criticisms and concerns about educational effectiveness. Many people are willing to pay more for higher quality and better service, but it is not clear that higher tuition process translate into higher quality. At the same time, assessment of student learning is mandated by accrediting bodies. Many faculty and administrators feel coerced and so resist or even undermine assessment activities on campuses. It has been a concern how we can alleviate our faculty's feelings of resentment and anger about the imposition of a mandate and promote feeling of value, ownership, and enjoyment in student learning activities at the program or department level (Lopez, 1998, Morse and Santiago, 2000). Banta (2002) also indicated that faculty and staff have not fully embraced the assessment movement, and many remain locked in debates on the merits of assessment and reluctant to accept the added responsibilities associated with implementing effective assessment.

Despite the significant opportunities and increasing requirements, academic leaders know so little about the adoption of faculty participation (buy-in) in learning outcomes assessment. To achieve the appropriate participation, Clark (1998a) suggested that the emphasis must be in both knowledge and motivation functions. Like the automobile engine or transmission, knowledge functions that provide techniques and strategies for achieving goals can be obtained from training or hiring new employees. Motivation functions, on the other hand, are recognized as a fuel that provides the energy or mental effort required to achieve goals. Thus, inadequate motivation can be compared with racing car without gasoline in the tank. Stolovitch and Keeps (1992) have suggested that many training programs had focused mainly on knowledge problems and were inappropriately designed or applied to motivation.

This study describes an approach based on the past motivation research on cognitive performance to examine the motivation of faculty who currently or previously participated in student learning outcome assessment in their academic program at a large four-year public institution. To gain faculty buy-in and explain why faculty were motivated to engage in learning outcome assessment, this study measured key indices of motivated behavior using a modified version of the widely recognized CANE (Commitment And Necessary Effort) model, developed by Richard Clark (1998a, 1998b). The research findings are based on survey responses of faculty who currently or previously participated in student learning outcome assessment in their program at a large four-year public institution. Five influencing variables (ability, permission, utility value, interest value, importance value) were used to guide the implementation of student learning outcome assessment. Choice (faculty buy-in) was chosen as a predictor of motivation.

LITERATURE REVIEW, RESEARCH MODEL, AND HYPOTHESES

In the recent years, growing competition, mounting demands for accountability, and the increasing value on measurable skills in the workplace has created powerful incentives for institutions to implement outcomes assessment in order to improve academic and institutional effectiveness. The key to successful assessment efforts is to help faculty understand the importance of assessment as well as to motivate and support them to achieve its successful implementations.

Student Learning Outcome Assessment (SLOA).

In its broadest sense, the learning outcomes assessment is the systematic and ongoing process of defining goals, collecting, and reflecting on evidence, taking action to improve academic quality, and documenting improvements to meet accountability requirements (Bresciani, Zelna and Anderson, 2004; Facione and Facione, 1996). It is most effective as a collaborative effort among faculty, staff, students, alumni, and other stakeholders. Assessment allows institutions to realize significant benefits in improved understanding of their educational effectiveness; better informed decisions about curriculum, policy, and resource allocation; and the ability to meet accountability demands (Erwin, 1991).

Student learning takes place in many venues. It could occur in individual courses, academic programs, general education core curricular, co-curricular programs and student life, and cohort-based programs. In this study, student learning assessment at the academic program level is the emphasis that can occur in variety of ways, including embedded course assignments, capstone experiences, field experiences, portfolios, and published tests (Allen, 2004).

Work Goal Commitment.

Gaining buy-in from faculty is as critical for a program's success and sustainability as it is for encouraging student retention and program completion (Ewell, 2005). In today's changing and complex work environment, faculty members are facing variety of tasks and inability to commit themselves equally to all tasks. The work goal or goal commitment used in this study is defined when people actively pursue a performance goal over time in the face of distractions. Thus, the measure of goal commitment is the choice or buy-in that faculty members have actually chosen. Unlike the intention, the choice occurs with action or response and not mere thought or words. The continuation of choice in the face of obstacles normally leads to successful implementation (Deci and Ryan, 2000; Kuhl, 1986).

The work commitment problems were considered when people resist assigning adequate priority to important tasks. In many occasions, they may argue that the task is less important and attempt to hand off the task to someone else or blame someone for their own failure to perform the task. Clark (1998a) suggested three primary factors influencing goal commitment: task assessment, emotion, and personal value. In the same study, Clark indicated that emotion or mood could play less significant roles if the task was performed in the environment or organizations where change is constant. Due to the nature of SLOA practices that is typically stable and less rapid changes, emotion or mood will not be considered in this study. Thus, the goal commitment is based on the modified model using two factors:

1. Task Assessment.

Two main concerns regarding task assessment are: whether people have the required skills and knowledge to achieve the goal (Ability: Can I do it?); and whether there are barriers to their performance in the work environment (Permission: Will I be permitted to do it?). Thus, ability beliefs have an impact on skills; contextual beliefs have an impact on responding to the environment. Thus, people tend to analyze any assigned task to determine whether or not they are capable to successfully complete the task and permitted to accomplish it (Ford, 1992). The goal commitment will increase when people believe in their ability and/or the institutional

willingness that allow them to use their skills and knowledge (Bandura, 1997; Clark, 1998a). Thus, commitment in SLOA implementation can be supported by increasing capability and changing perceptions on the barriers.

2. Personal Value.

The strength of goal commitment increases when people believe that achievement of goal will make them more successful or positively value (Shapiro et al, 1996; Locke and Latham, 1990; Wigfield and Eccles, 1998). In contrast, many people tend to give higher priority to tasks that they sincerely believe will lead them to fail or be perceived as incompetent. Eccles and Wigfield (1995) further described three types of effectiveness values. Utility value represents the case where a person does not value the task at hand, but values the consequence of successfully completing the task. Interest value occurs when people are curious or like the pursuit of a particular goal. The opportunity to pursue their curiosity or interest is enough to increase their commitment. Importance value occurs from the recognition that commitment to a specific task represents a person's strengths and personal goals. Thus, personal values on an assigned task may influence the strength or intensity of the behavior (Pintrich and Schrauben, 1992). Clark (1998a) suggested that personal values do not directly impact on performance or effort; rather value influences the commitment at a task. Thus, goal pursuit is more likely when these three type of personal value are positive. Wigfield and Eccles (1995, 1998) had suggested that performance on a task such as course grades is most highly related to self-efficacy, whereas task choices such as decision to enroll in a given courses is more highly related to the perceived task value.

The following Figure and table describes the dynamics at work in the modified CANE Model. It is followed by an explanation of both influencing and outcome variables and questions in which the faculty members might express the effect of the variable of their behavior.

SURVEY DESIGN, DATA COLLECTION, POPULATION AND SAMPLING METHOD

The survey instrument used in this study was modeled after the CANE Model (Clark, 1998a) that was developed to examine various aspects of why faculty were motivated to perform a specific outcome assessment project. None of the earlier studies focused solely on student learning outcome assessment in post secondary education. The questionnaire used a mix of multiple choice, true/false, and open-ended questions on both the perception and values toward SLOA, as well as demographics. After the completion of the initial draft questionnaire, five institutional researchers were asked to examine and assist in modifying the questionnaire content. Subsequently, two faculty coordinators, in charge of the implementation of learning outcome assessment were invited to examine the questionnaire to ensure clarity and relevance of items. Feedback from the institutional researchers and faculty coordinators helped shape the final version of the questionnaire.

Subjects of this study were 118 faculty coordinators from seven colleges who currently or previously participated in student learning outcome assessment in their program. An online invitation with a enclosed unique web address to the questionnaire was sent. An incentive was provided in the form of gift certificates from the University Bookstore. One email invitation and two reminders were sent to subjects. The data collection process was conducted over a period of

3 weeks. As a result, a total of 92 responses were received showing an overall response rate of 78%. Three unusable and 2 incomplete responses were eliminated.

Table 2 summarizes the sample characteristics. The descriptive statistics indicate that 83% of the respondents were tenured faculty and nearly half of all participants had at least 5 years of experience in implementing learning outcome assessment. For extent of SLOA actual implementation, 63% of academic programs assessed student learning outcomes at both undergraduate and graduate levels (18% for undergraduate program only; 14% for graduate program alone).

ANALYSIS OF CONSTRUCT RELIABILITY AND VALIDITY

The survey instrument used in this study includes many questions about multiple topics. Typically, how respondents answer these different questions tend to form patterns and correlated to one another (Bartholomew, 1987; Kim and Mueller, 1978). The construct or internal consistency reliability in this study was assessed by Cronbach's coefficient alpha. Reliability is used to indicate the extent to which the different survey items or measures are consistent with one another and the extent to which each item is free from measure error (Cortina, 1993). In other words, when two or more items are viewed as measuring the same variable or related systematically to one another in a linear manner, they are believed to be measures of the same construct. Table 3 presents a summary of Cronbach's alpha used for relevant items in this study. According to Nunnally (1978), Cronbach's alpha values greater than 0.70 are considered acceptable to produce reliable measures.

Principal axis factor analysis with varimax rotation was used to assess the underlying structure for 29 items in this study. Table 3 shows four factors were determined, based on the fact that the items were designed to index four constructs: permission, utility value, interest value, and importance value. The eigenvalues refer to the variance accounted for or explained. All four factors cumulatively explained 72.1% of the variance and eigenvalues were greater than 1.378, which is a common criterion for a factor to be useful.

To assess construct validity and Discriminant validity, the principle components analysis with varimax was used to examine items that should not be related are in fact not related. Tabachnik and Fidell (2001) suggested that the Kaiser-Meyer-Olkin (KMO) Test should be greater than 0.6 to ensure sampling adequacy. Table 4 indicates that items used in this study satisfied the KMO Test at 0.869 confirming sampling adequacy. The Barlett's Test Chi Square value of 1909.064 was significant; therefore, the correlation matrix to be analyzed was non-random and was suitable for factor analyses.

DISCUSSION AND IMPLICATIONS OF STUDY RESULTS

Many research indicated that commitment plays a critical role in training motivation (Facteau, Dobbins, Russell, Ladd, and Kudisch, 1995; Noe, 1986; Tannenbaum, Mathieu, Salas, and Cannon-Bowers, 1991). Because goal commitment is likely to influence motivation in the workplace, the modified CANE model provided the primary framework for the analysis. The information received from the SLOA survey intended to explain the reasons why the faculty currently or previously participated in student learning outcome assessment in their program. Two primary factors have been found to enhance (or diminish) goal commitment, including task assessment and personal values.

1. Task Assessment

This factor examines whether or not faculty can successfully complete the assessment projects. Two main questions – “Can faculty implement SLOA?” and “Will faculty be permitted to implement SLOA?” Bandura (1997) and Ford (1992) suggested that goal commitment will increase when individuals believe that they have the ability to accomplish the goal and they will be permitted to accomplish it.

1.1. Ability (Can faculty implement SLOA?).

In this survey, participants were asked to indicate their “current” ability relative to their “ideal” ability”. The ideal ability is the level that the person would like to have in order to successfully implement SLOA project. The results suggest that participants have more confidence in their ability to develop program mission and goals as well as measureable or ascertainable assessment criteria. They perceive that they need improvement in ability to select and use appropriate assessment tools as well as ability to close the loop.

1.2. Permission (Are faculty prevented to implement SLOA?).

Participants were asked about the level of permission and support to implement outcome assessment. The support and encouragement from dean and/or department chair as well as university administration are among the higher items. However, only half of participants agreed and strongly agreed that outcome assessment training provided by the institution was sufficient.

2. Personal Values

The second factor that influences the strength of goal commitment is personal value to an assigned task. It refers to the personal evaluation of the how useful, how interesting, and how important the task is (What do I think of this task?). When we asked participants “what is your attitude toward student learning outcome assessment (SLOA) in postsecondary education?” Nearly 60% of all participants expressed a positive attitude. The majority of Associate Professors (69%) and Assistant Professors (75%) were strong supporters of learning outcome assessment. Further explanation about faculty’s perceptions of the SLOA could be given in terms of utility, interest, and importance.

Research suggested that the more we believe that achievement of a goal will make us more successful, the higher our level of commitment to the goal (Shapiro et al, 1996; Locke and Latham, 1990). To gain faculty buy-in to the program assessment work, the emphasis should be on the campus culture and engaging faculty members in ways that will reflect and recognize what they value. Based on our survey of faculty who currently or previously participated in outcome assessment, the most common top values is their passion in teaching as well as student achievement and success. Values about their academic discipline, time for all their work, and collegiality is also a top priority.

We had learned a great deal about setting clear goals (and objectives) and a considerable amount about necessary skills and knowledge in outcome assessment arena because of our expertise in training and development. Many institutions establish systematic and successful

approaches to designing and aligning institutional policies and procedures that support learning outcome initiatives. However, it is not the only solution required to solve issues related to faculty buy-in. Solving faculty participation and realizing opportunities of assessing learning outcomes often requires an increase and focusing of motivation and personal values.

2.1. Utility Value (Does SLOA have utility?).

Many people quickly chose to do what they believe the benefits will come when they finish and to avoid the negative consequences. In other words, they do not value the task at hand, but values the consequence of successfully completing the task will be positive. In this survey, participants agreed that earning a release time and receiving credit toward tenure and promotion are two highest utility values as the means to encourage them to complete the learning assessment projects. The utility value can be enhanced by describing the realistic and meaningful benefits of completing a less desired task or goal and the risks of avoiding it. Professional prestige and career exploration are among the lowest values in this factor.

2.2. Interest Value (Are faculty curious about SLOA?).

People tend to choose to do what interests them the most. The top three highest interest values, including a) opportunities to enhance alignment of program curriculum with learning outcomes, b) to inform changes in program design, and c) increase in specificity of students' mastery of discrete content, cognitive processes and/or skills are an intrinsic interest. The opportunity to pursue this curiosity or interest is strong enough to increase their commitment to SLOA. To promote this value, the connections between performance goals and people's natural interests must be developed whenever possible. The bottom two items that did not attract participant's interest include the opportunities to influence social change and for scholarly pursuit.

2.3. Importance Value (Is SLOA important enough?).

The third factor, importance or attainment value, represents the significance to a person of doing well on a task because success confirms their own beliefs about their skill level. People seem more likely to do tasks that they believe challenge one of their special "skills".

Participants perceive that a) opportunity to develop appropriate learning objectives, b) collaboration with other faculty in developing new techniques for assessing learning, and c) SLOA is required by department present strong challenges to their special ability. Because the importance value comes from the recognition that commitment to a specific task represents a person's strengths and personal goal, the connections between performance goals and individual's special abilities must occur to obtain faculty buy-in. Institution should explicitly recognize faculty that they are "good at assessing student learning outcomes" and it is an "opportunity to show their skills in this area."

Choices or Buy-in

In this study, all participants currently or previously chose to participate in student learning outcome assessment in their program. Although they accomplished the SLOA goal

attainment, a decline in active choice or buy-in effort should signal a need to repair value and/or agency and/or efficacy. Participants were asked to identify learning outcomes that they chose in assessing student learning in their program. Figure 4 shows critical thinking (e.g., examine and understand the fundamental qualities of problems, collect and analyze critical data, draw appropriate interpretations and conclusions, examine broad-based problem-solving options and effectively communicate and implement appropriate solutions) and diversity (e.g., reflect an individual's understanding and appreciation of differences, including the recognition of values held by different people, cultures, ethnicities, politics, religion, gender, age, sexual orientation and a host of others) are the two most popular learning outcomes used at the program level.

The survey also asked participants to identify the benefits of learning outcome assessment. Table 4 shows three primary benefits, including a) clarifying learning objectives (clear expectations about what's important) for student and faculty, b) informing faculty and/or student on how well learning objectives are being met, and c) informing changes (what's working and what's not working) in a program's design. The least important benefit about implementing outcome assessment is to obtain evidence and accountability to justify resources needed to maintain or improve programs.

CONCLUSIONS AND RECOMMENDATIONS

In the recent years, the trend toward greater accountability infringes on an institution's autonomy and faculty members' academic freedom and adds to their workload. While some faculty members could be reluctant about or downright opposed to the valuable goal of assessing student learning outcome, it has been embraced by many, especially when university administrators have been aware of what motivates faculty and what faculty barriers to creation need to be mitigated. Although many researchers conducted and published various studies to diagnose and solve motivation problems at work, there had been limited higher education research to explain why faculty were motivated to engage in and make a commitment to student learning outcome assessment.

This study describes the model that explains the motivational components of faculty commitment (buy-in) in outcome assessment initiatives. Key indices of motivated behavior are task assessment (ability, permission) and personal values (utility value, interest value, and importance value). When the commitment difficulties occur, these indices must accurately be identified and modified during the front end analysis. Locke and Lathem (1990) also suggested that people do not have to participate in project's goal settings in order to give strong commitment. They found that value for the goals is enhanced if people perceive the goals to be developed and assigned by trusted authority with an inspiring vision that reflects a convincing rationale.

After more than a century of research and argument, motivation researchers and practitioners begin to agree that motivation is the result of our beliefs about what makes us successful and effective. In higher education, committing to quality means setting clear goals for student achievement, regularly measuring performance against those goals, reporting evidence of success, and continuously working to improve results. Therefore, changes in the following areas can greatly increase faculty member's motivation and performance:

1. Help Faculty Members Develop Self-confidence in their SLOA Skills and Knowledge

The main motivational goal is to overcome task assessment problems that institutions must convince faculty that they can do the work. When people lack confidence to succeed at a specific goal, they will not choose to tackle that goal (Bandura, 1997). To help faculty develop self-confident in their assessment skills, the training sessions, best practices, and other supporting materials need to be offered and easily accessed. It is also important that institutions must regularly assess faculty's concerns and what will help them build confidence.

2. Remove Unnecessary Policies, Procedures and Existing Barriers

Spitzer (1995) suggested that variety of arbitrary and unnecessary rules and cumbersome policies was one of the major de-motivators at work. Even the most competent and personally motivated faculty tend to quit trying in the face of what they perceive to be arbitrary barriers. It is important to involve key faculty in the elimination of unnecessary, arbitrary institutional policy and procedural barriers to reduce resistance.

3. Support the Development of Strong Interest Value

In terms of personal value problems and opportunities, institutions must convince faculty that completing the outcome assessment projects will help them become and/or perceived as more effective. It is important to connect between the performance goals and individual interests that present an opportunity to do something that they are interested.

4. Promote the Environment that Support Personal Importance Value

To stimulate the importance value, the recognition must be known. The connections between performance goal and individual's special abilities must be established by recognizing that they are "good at this type of assignment" and that is an "opportunity to show the skills and knowledge."

5. Encourage the Establishment of Utility Value

Many tasks we commit to accomplish not only because we love it or can excel at it, but also because we value the consequence of successfully completing the task. To promote this value, institutions must describe the realistic benefits of completing the outcome assessment project and uncertainty of avoiding it.

6. Develop Incentive Programs that Support the Personal Value

To overcome the motivation gaps, institution must carefully select incentives only when appropriate. The complicating element in implementing the cognitive model comes from the need to apply it to individual differences, unconventional beliefs and values in today's higher education settings. Each faculty and group uniquely defines effectiveness at work. Some culture may value and great respect, other cultures value monetary incentives, yet others value

achievement. Institutions must recognize that selecting incentives only for challenging goals, involving targeted recipients in the selection of incentives, and ensure equity and fairness.

In conclusion, university leaders cannot afford to ignore concerns voiced by faculty in this period of momentous academic transition. The learning outcome assessment should be recognized as a part of the institution's culture and context that both creates and reinforces faculty values. It is important to recognize that the essential of motivation seems to be our beliefs and expectations about what makes us successful and effective. Various motivational strategies all serve the same powerful purpose. Institutions of higher education should master a positive adjustment in the way faculty value themselves, their goals as well as the people and activities that help them achieve their goals.

References

- Allen, Mary J. (2004). *Assessing academic programs in higher education*. Bolton, MA: Anker Publishing Company.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W.H. Freeman.
- Banta, T.W. (2002). *Building a scholarship of assessment*. San Francisco: Jossey-Bass.
- Bartholomew, D.J. (1987). *Latent variable models and factor analysis*. New York: Oxford University Press.
- Bresciani, M. J., Zelna, C. J., & Anderson, J. A. (2004). *Assessing student learning and development: A handbook for practitioners*. Washington, DC: NASPA.
- Clark, R. E. (1998a). The CANE model of motivation to learn and to work: A two-stage process of goal commitment and effort. In J. Lowyck (Ed.), *Trend in corporate training* (pp. 1-25). Leuven Belgium: University of Leuven Press.
- Clark, R. E. (1998b). Motivation performance: Part 1—Diagnosing and solving motivation problems. *Performance Improvement*, 37(8), 39-47.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78, 98–104.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Eccles, J. S., & Wigfield, A. (1995). In the mind of the actor: The structure of adolescents' achievement task values and expectancy-related beliefs. *Personality and Social Psychology Bulletin*, 21(3), 215-225.
- Erwin, T. D. (1991). Assessing student learning and development: A guide to the principles, goals, and methods of determining college outcomes. San Francisco, CA: Jossey-Bass Inc.
- Ewell, P.J. (2005, April). *Assessing Assessment: Successes, Failures, and the Future*. Paper presented at the North Carolina State University Assessment Symposium, Raleigh, NC. Presentation retrieved from <http://www.nchems.org/pubs/docs/NCSUAssessmentConf.pdf>.
- Facione, N. C., & Facione, P. A. (1996). *Student outcomes assessment: Opportunities and strategies*. Retrieved from California Academic Press website: <http://www.calpress.com/outcome.html>.
- Facteau, J. D., Dobbins, G. H., Russell, J.E.A., Ladd, R. T., & Kudisch, J. D. (1995). The influence of general perceptions of the training environment on pre-training motivation and perceived training transfer. *Journal of Management*, 21, 1–25.

- Ford, M. E. (1992). *Motivating humans: Goals, emotions, and personal agency beliefs*. London: Sage.
- Kim, J.O. & Mueller, C.W. (1978). *An introduction to factor analysis: What it is and how to do it*. Beverly Hills, CA: Sage.
- Kuhl, J. (1986). Motivation and Information Processing: A New Look at Decision Making, Dynamic Change, and Action Control. In R. M. Sorrentino & E. T. Higgins (Eds.), *The Handbook of Motivation and Cognition: Foundations of Social Behavior* (pp. 404-434). New York: Guilford Press.
- Locke, E. A., and Latham, G. P. (1990). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, N.J.: Prentice-Hall.
- Lopez, C.L. Assessment of Student Learning. *Liberal Education*, 1998, 84, 36-43.
- Morse, J.A., and Santiago, G. (2000). Accreditation and Faculty Working Together. *Academe*, 86, 20-34.
- Noe, R. A. (1986). Trainee attributes and attitudes: Neglected influences on training effectiveness. *Academy of Management Review*, 11, 736–749.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw–Hill.
- Pintrich, P., & Schunk, D. (2001). *Motivation in education: Theory, research and applications* (2nd ed). Englewood Cliffs, NJ: Merrill.
- Reeve, J. (2005). *Understanding Motivation and Emotion* (4th ed.). Hoboken, N.J.: Wiley.
- Pintrich, P.R., & Schrauben, B. (1992). Students' motivational beliefs and their cognitive engagement in classroom academic tasks. In D.H. Schunk & J.Meece (Eds.), *Student Perceptions in the Classroom* (pp. 149-179). Hillsdale, NJ: Lawrence Erlbaum.
- Shapiro Jr., D. H., Schwartz, C. E., & Austin, J. A. (1996). Controlling Ourselves, Controlling Our World: Psychologies Role in Understanding Position and Negative Consequences of Seeking and Gaining Control. *American Psychologist*, 51 (12), 1213-1230.
- Spitzer, D. (1995) *SuperMotivation*. New York, NY: AMACOM Books.
- Stolovitch, H. D. and Keeps, E. J. (1992) *The handbook of human performance technology*, San Francisco: Jossey Bass Publishers.
- Tabachnick, B. G. & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn and Bacon.
- Tannenbaum, S. I., Mathieu, J. E., Salas, E., & Cannon-Bowers, J. A. (1991). Meeting trainees' expectations: The influence of training fulfillment on the development of commitment, self efficacy, and motivation. *Journal of Applied Psychology*, 76, 759–769.
- Wigfield, A., & Eccles, J. S. (1998). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology*, 25, 68-81.



Figure 1. The Modified CANE Model of Factors influencing Goal Commitment

Table 1

Influencing and Outcome Variables used in the Modified CANE Model

Variables	Description	Questions
Influencing Variables		
Ability	The belief that one can organize and execute courses of action to obtain desired goals.	Can I do this?
Permission	The belief that you will be supported in doing a task or allowed to perform the task in accordance with your goals.	Will I be permitted to do this and be supported?
Utility Value	Willingness to perform A to secure B. Task utility is often the most powerful motivator. If the answer to the question at the right is “nothing,” people are unlikely to commit to the task.	What’s in it for me?
Interest Value	People can commit themselves to tasks even when the only thing they get out of it is pleasure from doing the task.	Do I like this?
Importance Value	People tend to commit to tasks when they identify with the task.	Is this task “me”?
Outcome Variable		
Choice or Buy-in	Accepting the choice or buy-in. This is the actual goal that people have selected; it differs from intention in that it involves some sort of action or response and not mere thought or words.	Do I agree with this?

Table 2

Profile of Survey Participants (n=87)

Characteristics	Percent of Total
a. Tenure status of participants	
Tenured	83%
Probationary	14%
Temporary	3%
b. Years of SLOA participation in the program	
More than 10 years	13%
5 to 10 years	36%
2 to 4 years	18%
Less than 2 years	14%
Not Specified	20%
c. Level of academic programs selected to implement SLOA	
Undergraduate Program Only	18%
Graduate Program Only	14%
Both Undergraduate and Graduate Programs	63%
Not Specified	5%

Table 3

Summary of Cronbach's Alpha Coefficients and Principle Axis Factor Analysis

Factors	Cronbach's Alpha	Factor Loading	Eigen-values	ES
Permission				
Support and encouragement from university administration	0.822	0.761	15.672	52.24 2
Support and encouragement from dean and/or chair		0.627		
Learning outcome assessment through training provided by the institution		0.613		
Support and encouragement from other faculty		0.610		
Utility Value				
Monetary support for participation	0.798	0.875	2.843	9.476
Career exploration		0.806		
Release time		0.790		
Recognition and awards		0.763		
Increase in salary		0.746		
Professional prestige and status		0.708		
Grants for materials and expenses		0.687		
Job security		0.622		
Credit toward tenure and promotion		0.605		
Interest Value				
Opportunity to inform both faculty and/or student on how well learning objectives are being met	0.730	0.796	1.744	5.813
Opportunity to enhance alignment of program curriculum with learning outcomes		0.780		
Opportunity to inform changes in program design		0.772		
Opportunity to improve my teaching		0.761		
Opportunity for scholarly pursuit		0.738		
Increase specificity of students' mastery of discrete content, cognitive processes and/or skills		0.731		
Intellectual challenge		0.659		
Opportunity to use learning outcome assessment		0.652		

as a teaching tool				
Personal (self) motivation to use learning outcome assessment	0.637			
Opportunity to influence social change	0.602			
Importance value				
Required by department	0.741	0.830	1.378	4.592
Expectation by university that faculty should participate	0.820			
Opportunity to develop appropriate learning objectives	0.797			
Visibility for jobs at other institutions/organizations	0.727			
Collaboration with other faculty in developing new techniques for assessing learning	0.705			
Course assignment	0.650			

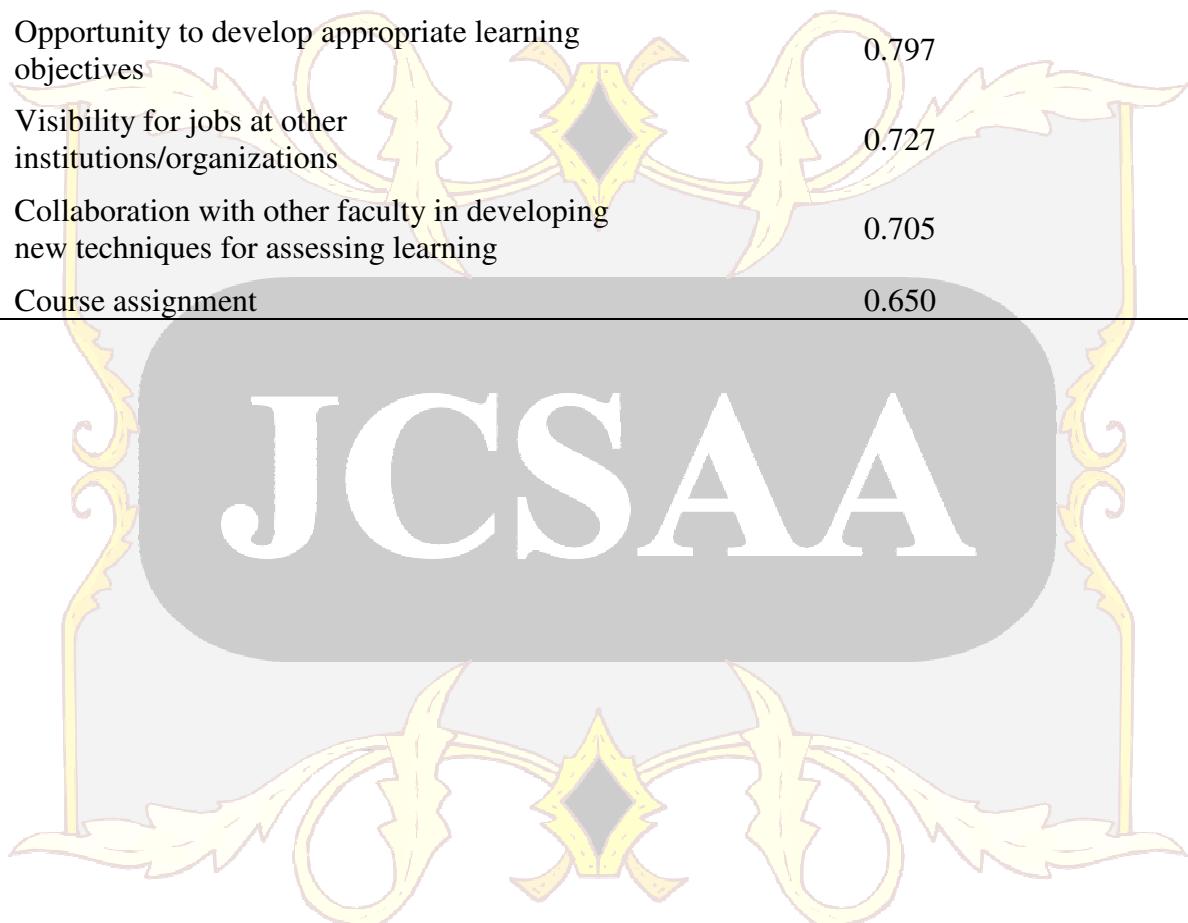


Table 4

KMO and Bartlett's Test Results

Test	Motivating Factors
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.869
	Approx. Chi-Square
Bartlett's Test of Sphericity	df
	Sig.

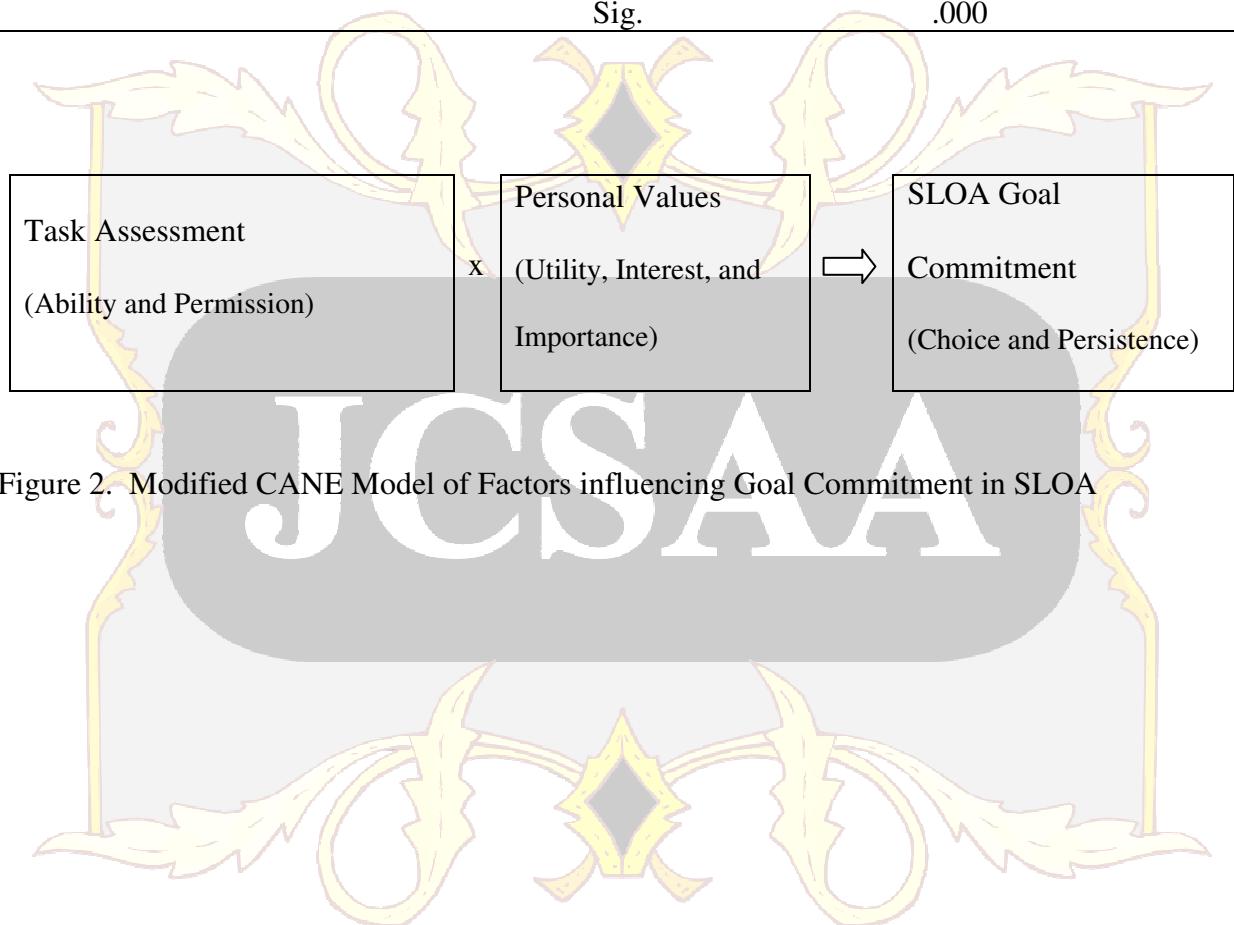


Figure 2. Modified CANE Model of Factors influencing Goal Commitment in SLOA

Table 5

Rating of Participant's "Current Ability" Relative to the "Ideal Ability"

Item	<i>M (SD)</i>	Very much and Somewhat like my ideal ability
Develop program mission and goals	2.592 (1.228)	61.2%
Develop measurable or ascertainable assessment criteria (definition of outcomes)	2.594 (0.707)	59.4%
Select and use appropriate assessment tools	2.409 (0.793)	40.9%
Implement assessment process (data collection)	2.447 (0.908)	55.3%
Use information to identify and make changes (closing the loop)	2.471 (0.569)	52.9%

Note. Percent of Very much and Somewhat like My Ideal Ability

Table 6

Support and Encouragement to Implement SLOA

Item	<i>M (SD)</i>	% Strongly Agree and Agree
Support and encouragement from dean and/or chair	2.975 (0.836)	73.6%
Support and encouragement from university administration	2.925 (0.938)	69.0%
Support and encouragement from other faculty	2.653 (1.007)	55.2%
Learning outcome assessment through training provided by the institution	2.608 (1.031)	51.7%

Table 7

Participant's Attitudes toward SLOA by Job Title

Job Title	<u>Positive</u>		<u>Neutral</u>		<u>Negative</u>		<u>Total</u> #	<u>Neutral & Negative</u> #	<u>Neutral & Negative</u> %
	#	%	#	%	#	%			
Total Participants	52	60%	23	26%	10	11%	85	33	38%
Professor	27	53%	17	33%	7	14%	51	24	47%
Associate Professor	11	69%	3	19%	2	13%	16	5	31%
Assistant Professor	9	75%	3	25%	0	0%	12	3	25%
Administrators	5	83%	0	0%	1	17%	6	1	17%

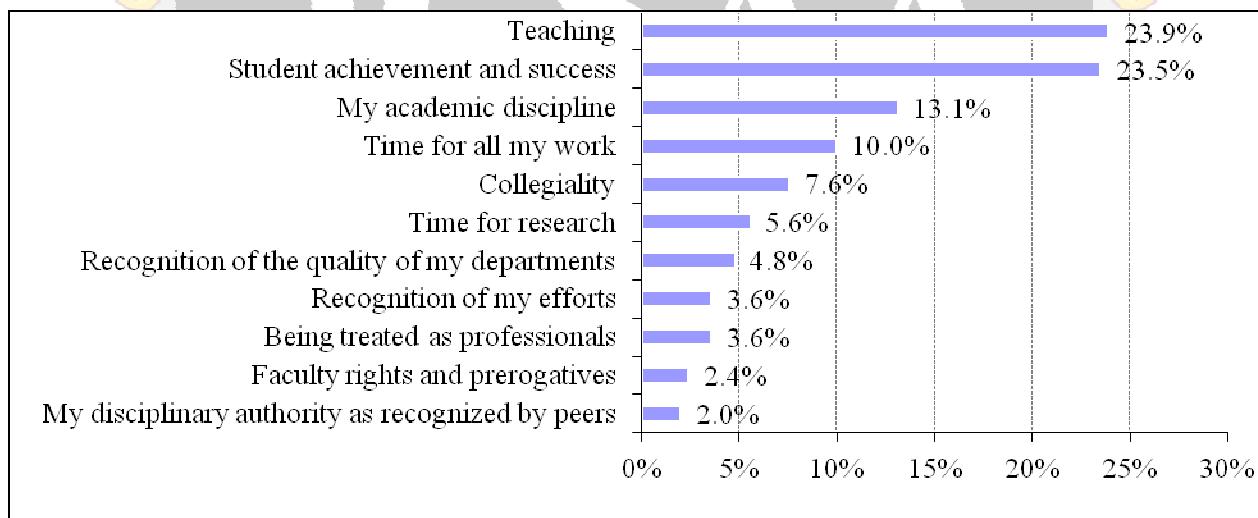


Figure 3. Value Recognized by Participants

Table 8

Responding Items Underlying Utility Value

Utility Value	<i>M (SD)</i>	% Agree & Strongly Agree
Release time	2.948 (1.146)	58.6%
Credit toward tenure and promotion	2.684 (1.086)	55.2%
Monetary support for participation (e.g., stipend)	2.757 (1.180)	50.6%
Grants for materials and expenses	2.562 (1.041)	44.8%
Increase in salary	2.603 (1.255)	43.7%
Recognition and awards	2.278 (1.024)	36.8%
Job security	2.221 (0.975)	31.0%
Professional prestige and status	2.122 (0.921)	27.6%
Career exploration	2.056 (0.893)	23.0%

Table 9

Responding Items Underlying Interest Value

Interest Value	<i>M (SD)</i>	% Agree & Strongly Agree
Opportunity to enhance alignment of program curriculum with learning outcomes	3.337 (0.801)	87.4%
Opportunity to inform changes in program design	3.300 (0.818)	82.8%
Increase specificity of students' mastery of discrete content, cognitive processes and/or skills	3.136 (0.818)	77.0%
Opportunity to inform both faculty and/or student on how well learning objectives are being met	3.175 (0.868)	75.9%
Opportunity to improve my teaching	3.175 (0.925)	75.9%
Opportunity to use learning outcome assessment as a teaching tool	3.066 (0.929)	64.4%
Intellectual challenge	2.618 (0.966)	51.7%
Personal (self) motivation to use learning outcome assessment	2.688 (0.936)	50.6%
Opportunity to influence social change	2.453 (1.031)	46.0%
Opportunity for scholarly pursuit	2.467 (0.963)	36.8%

Table 10

Responding Items Underlying Importance Value

Importance Value	M (SD)	% Agree & Strongly Agree
Opportunity to develop appropriate learning objectives	3.272 (0.791)	82.8%
Collaboration with other faculty in developing new techniques for assessing learning	3.150 (0.887)	75.9%
Required by department	2.951 (0.888)	75.9%
Expectation by university that faculty should participate	2.805 (0.795)	64.4%
Course assignment	2.284 (1.012)	29.9%
Visibility for jobs at other institutions/organizations	2.111 (0.943)	25.3%

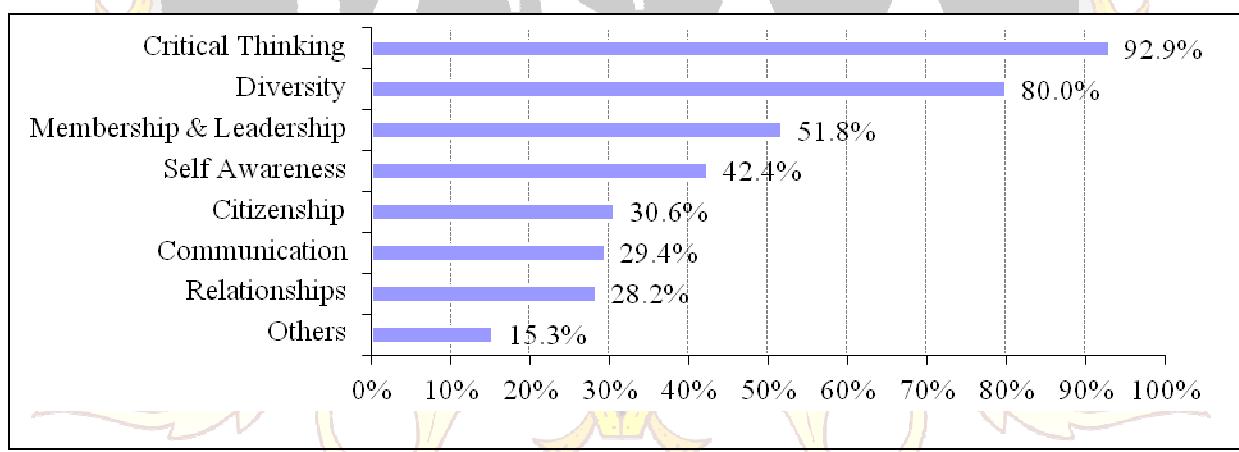


Figure 4. Type of Learning Outcomes (chosen in assessing student learning). Others include subject content knowledge, specific competencies of the profession, adequate writing skills, basic quantitative analysis skills, and group work, fundamental knowledge within a field, and applications of theories and concepts.

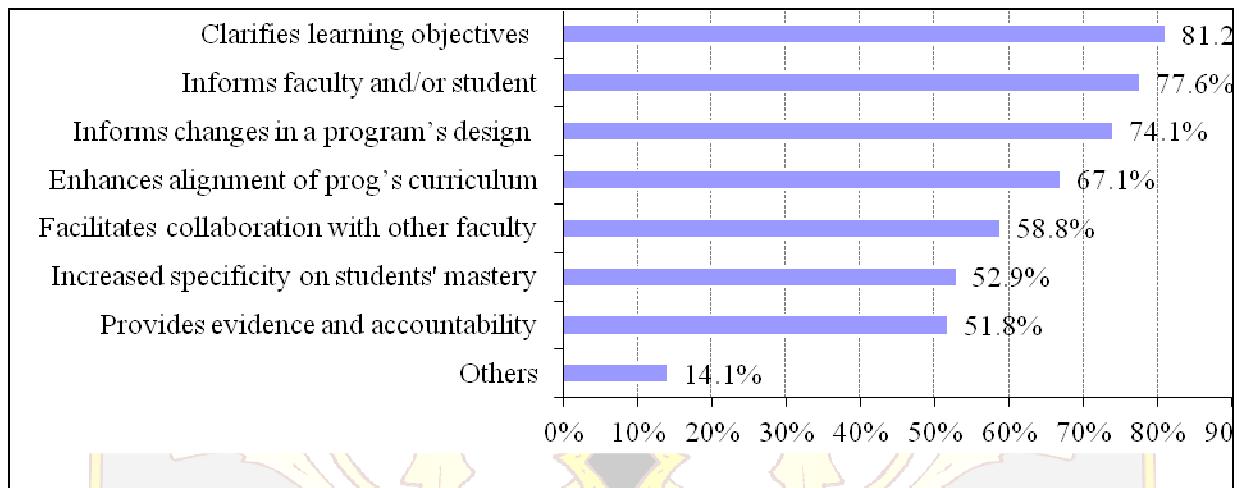


Figure 5. Perception about Benefits of Outcome Assessment. Others include provide evidence to the external accreditation agencies, facilitate collaboration among faculty, determine the justification of resources, and demonstrate commitment to improve student learning.

