

THE IMPLEMENTATION OF STUDENT CENTERED LEARNING (SCL) MODEL IN ACCOUNTING INFORMATION SYSTEM TO INCREASE STUDENT CORE COMPETENCY

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ABSTRACT

Student Centered Learning (SCL) is a learning that puts students at the center of the learning process, emphasis on the interests, needs and abilities of individuals. Promising model of learning that explores the characteristics of intrinsic motivation is to build quality human resources. Student Centered Learning problem solving is a learning concept which helps teachers to link between the subject being taught with real-world situations and encourage the students make connections between the knowledge possessed by the application in their daily lives. Seven major components contextual learning, are: (1) constructivism, (2) ask (questioning), (3) inquiry, (4) learning community, (5) modeling, (6) reflection, and (7) authentic assessment. Accounting Information Systems course requires and use logical reasoning as a tool to analyze problems that occur in the real world. Therefore the system of Learning Student Centered Learning is suitable for accounting information systems course. Accounting Information Systems course is supporting other academic subjects such as Auditing, Financial Accounting, Management Accounting, and others. The low competence of students in Accounting Information Systems Course will have an impact on other subjects that need to be a fundamental change, with the implementation of Student Centered Learning, it is expected that students are able to reflect on the theory obtained from the text book with the real world so there is no longer the gap is so a lot of theory with the actual situation in the future if the student must go into society, so have the advantage and competitiveness in the world of work.

KEYWORDS: Student Centered Learning, Accounting Information System, Core competency.

1. DEFINITION OF LEARNING

Learning should be based on four (4) pillars: Learning to know, Acting Learning (Learning to Do), Learning to Live Together (learning to Live Together) and Learning to Be Someone (Learning to Be). To achieve that goal, then every higher education should be able to produce students who are ready to society based on knowledge gained during his education at the University, College or High School.

According to John Dewey (in Tina Afiantin, page 1) stated learning is an individual discovery, providing opportunities and experiences in the process of finding information, solve problems and make decisions for their own lives. Through the process of student-centered learning lecturers changed the function of the teacher (teacher) learning partner (facilitator).

The concept of learning by Saljo, 1979 are as follows:

1. Learning is a quantitative increase in knowledge by seeking and finding information was or "know more"
2. Learning is an activity recall, store and reproduce information
3. Learning means acquiring facts, skills and methods that can be stored and used when
4. Learning means abtarksi meaning by finding the turf of a subject association and linkage relationship between the subject (or part thereof) with the real world
5. Learning is an activity of meaning and understanding reality in different ways
6. Learning is an activity the meaning of the real world as a whole by way of re-interpreting the knowledge they have gained.

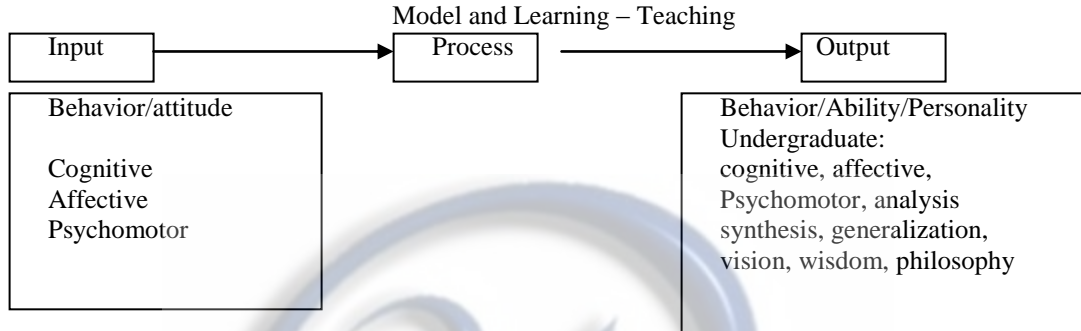
Terms of learning effectively:

1. Students are responsible for learning activities
2. Students are cooperative, collaborative, and supportive
3. Students account for the acquisition of learning

4. Classroom atmosphere student – centered
- The expected results of active learning are:
1. Students are able to develop critical thinking skills
 2. Students are able to develop a system of social support for learning
 3. Students are able to identify the most effective learning style
 4. Students have the skills as a life - long learner.

2. UNDERSTANDING METHODS / LEARNING MODEL

Figure 1 Model the Learning – Teaching

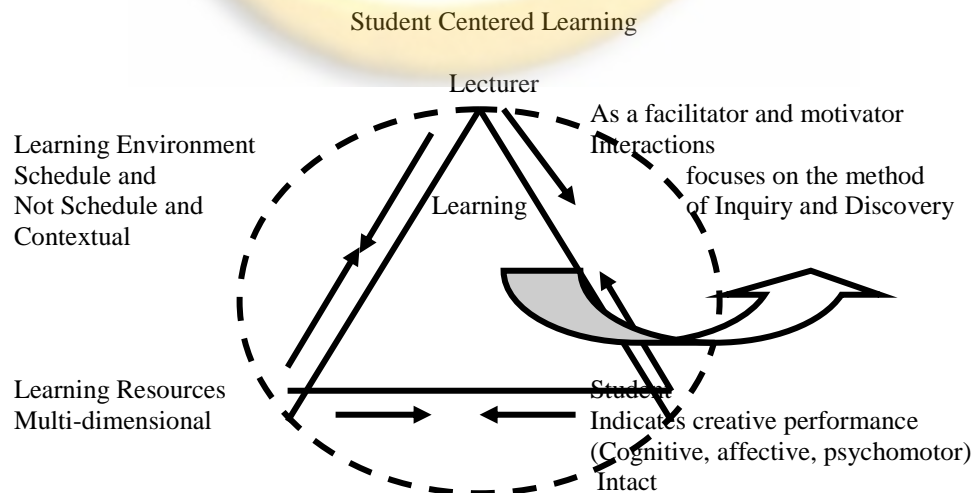


3. STUDENT CENTERED LEARNING MODEL

The process of learning is widely practiced today largely shaped face-to-face delivery (lecturing), unidirectional. Pattern learning process active faculty with effective passive students is low, and does not build active participation in the learning process. This occurs as a result of the formation process of participation in the form of (1) the drive to acquire the hope (effort), (2) the ability to follow the learning process, and (3) the opportunity to express learning materials obtained in the real world / society no or very limited.

Therefore, it is necessary to change the process and learning materials in higher education is no longer shaped Teacher - Centered Content - Oriented (TCCO), but was replaced with the principle Student - Centered Learning (SCL) in tune with the college. The description is as follows:

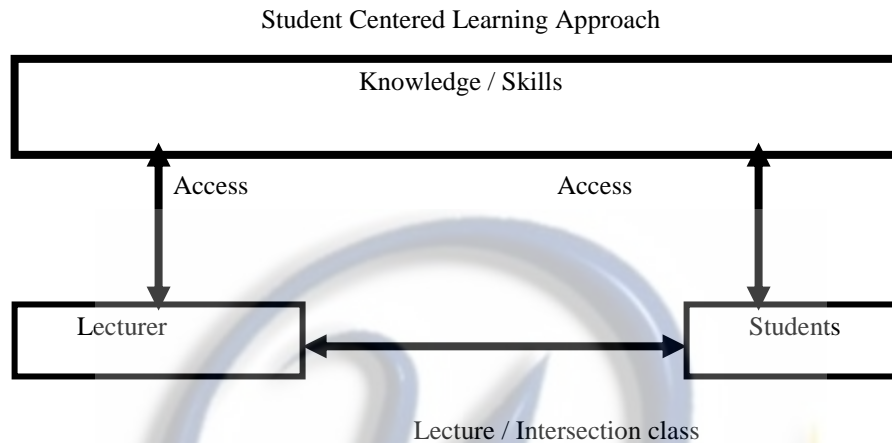
Figure 2 Student Centered Learning



Student - Centered Learning is a learning model that places the learner at the center of the learning process. Learners are expected to be active participants in their learning, independent, responsible and initiative to identify learning needs, find the source - the source of information to answer their needs, build and present knowledge based on the needs and sources - sources are found. Students are directed to learn how to learn skills such as problem solving, critical thinking and reflective, and skills to work in a team.

SCL approach is as follows:

Figure 3: Approach Student Centered Learning

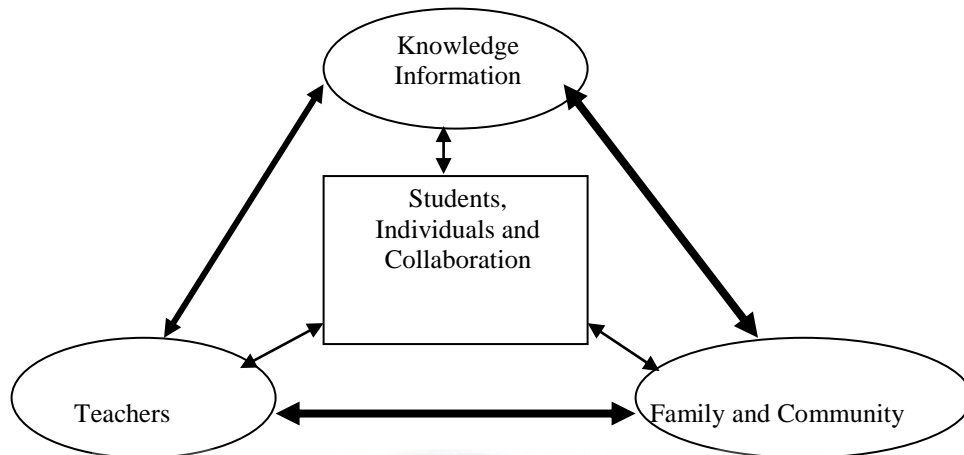


By way Student - Centered Learning is as follows:

1. Enabling the students in the learning process
2. Encourage the students to master the knowledge
3. Introduce the relationship between science and the real world (analytical, synthesis, articulation)
4. Encourage active learning and critical thinking
5. Introduce a variety of learning styles
6. Taking into account the learner's needs and background
7. Provide opportunities for entry into a variety of assessment strategies
8. The student is a major component in the classroom
9. Students are the focus, and the teachers switch functions as a facilitator for learners in small group discussions
10. Students as partners with teachers in education (Alley, 1996)

The types of learning in the Student - Centered Learning is: (1) individualistic learning (2) Co - operative learning (3) Collaborative learning (4) Competitive learning (5) Active learning (6) Self - directed learning (7) Autonomous learning (8) project based learning (9) Case based learning (10) Adult Learning (11) Problem-Based Learning (PBL)

Figure 4 Model SCL learning



Student - Centered Learning models include:

(1) Problem Solving (2) Team skills (3) Learning how to learn (4) Continuous improvement (5) Interdisciplinary knowledge (6) interacting and processing information (7) Technology is an integral part of learning.

In order Student - Centered Learning works well then there are some major things that need to be prepared include:

1. Changes in attitudes and role of educators
Educators no longer the central figure who knows everything, educators sued as motivators and facilitators dynamist.
2. Changes in Learning Methods
Method of learning refers to learning in nature and refers to the uniqueness of the individual is to be developed Collaborate learning, problem based learning, portfolio, project team, resource based learning.
3. Access to a variety of learning resources by utilizing the advancement of information technology especially computers.
4. Provision of infrastructure support.

4. ACCOUNTING INFORMATION SYSTEMS COURSES IN ACCOUNTING CURRICULUM STUDIES PROGRAM

Course in Information Systems (IS) consists of various levels such as starting from the introduction of Accounting Information Systems course organized in Accounting Information Systems (AIS) I; subsequent accounting cycles on computer-based business activities (computerized) as well as how to control and secure data that is soft copy in a business activity then compiled in the course of Accounting Information Systems II, further to clarify and describe the circumstances of the information system can run properly in a business activity, students are given in the form of Analysis and Design System (APS) integrated with a case companies is how to design an integrated information system in the form of the final result is OSC (Operating System Company) which is based on manual-based and information technology (computer).

5. PROBLEMS FACED BY STUDENTS FROM LEARNING OUTCOMES AND LEARNING METHOD CURRENT

Ministry of Finance based on the results of the PA (Public Accountant) and Certified Public Accountants (CPA) periods of 2003 and 2004, including reports that are often found as follows: (a) the weakness of the understanding of Certified Public Accountants Statement of Financial Accounting Standards (SFAS), (b)

weakness Public Accountants in reviewing the overall financial statement conformity with GAAP (Accounting Media Edition 49, 2005:26). That is because the accountants do not understand exactly Accounting Information Systems or System / Standard Operating Company in the audited entity.

There are indications of inadequate understanding of the student of the subject Accounting Information System. It can be seen from the Student Achievement semester of the academic year 2006-2007, shows the passing rate of only 75.85% only (Source: University of Widyatama of Electronic Data Services).

Failure due to the conventional learning process lecturer plays a major role in the process of producing a quality education, but the teachers are not the only source of knowledge.

Looking at the above, we propose a learning model shaped Student Centered Learning (SCL), which in SCL student active in the learning process so that what is expected from the national education goals can be achieved.

6. IMPLEMENTATION MODEL OF TEACHING STUDENT CENTERED LEARNING (SCL)

Student Centered Learning emphasis on the interests, needs and abilities of individuals, promising to learn a model that explores the intrinsic motivation to build a society that likes and is always learning. This learning model as well as to develop quality human resources the community needs such as creativity, leadership, self-confidence, self-reliance, self-discipline, critical thinking, the ability to communicate and work in teams, technical expertise, and global insight to be able to constantly adapt to change and development.

Learning Student Centered Learning (SCL) methods include:

- (A) sharing of information (information sharing) by: brainstorm (brainstorming), cooperative, collaborative, discussion groups (group discussion), panel discussions (panel discussion), symposia, and seminars;
- (B) learning from experience (experience based) manner; simulations, role playing (roleplay), games (games), and a group meeting;
- (C) learning through problem solving (problem solving based) way: case studies, tutorials, and workshops.

Learning SCL principle there are five important factors to be considered are: (a) met cognitive and cognitive factors that describe how students think and remember, and describe factors - factors involved in the formation of the meaning of information and experience, (b) affective factors that describe how beliefs, emotions, and motivations influence the way a person receives a learning situation, how many people are learning, and they do attempt to keep learning, (c) factors that describe the development of physical, intellectual, emotional, and social development is influenced by genetic factors unique and environmental factors, (d) personal and social factors that describe how others play a role in the learning process and the way - the way people work in groups. (e) factors unique to individual differences and the capacity of each - each influential in learning.

In broad outline implementation steps (SCL) in the class as follows:

- (1) Develop the idea that students will learn how to work more meaningful by itself, finding itself, and construct their own knowledge and new skills.
- (2) Implement the extent possible inquiry activities for all topics.
- (3) Develop an inquisitive nature to ask students
- (4) Create a community learning
- (5) Present the model as an example of learning
- (6) Do the reflections at the end of the meeting
- (7) Perform appraisers in various ways.

7. PROBLEM FORMULATION

Based on the statement above low graduation rate, based on the condition we try to identify the problem as follows:

1. Compile SCL appropriate learning methods so that students have an interest to learn more information was subject Accounting System
2. Realignment textbook, Lectures Events Unit (SAP) and Outline Teaching Guidelines (GBPP) as well as training materials in the laboratory of Accounting Information Systems.

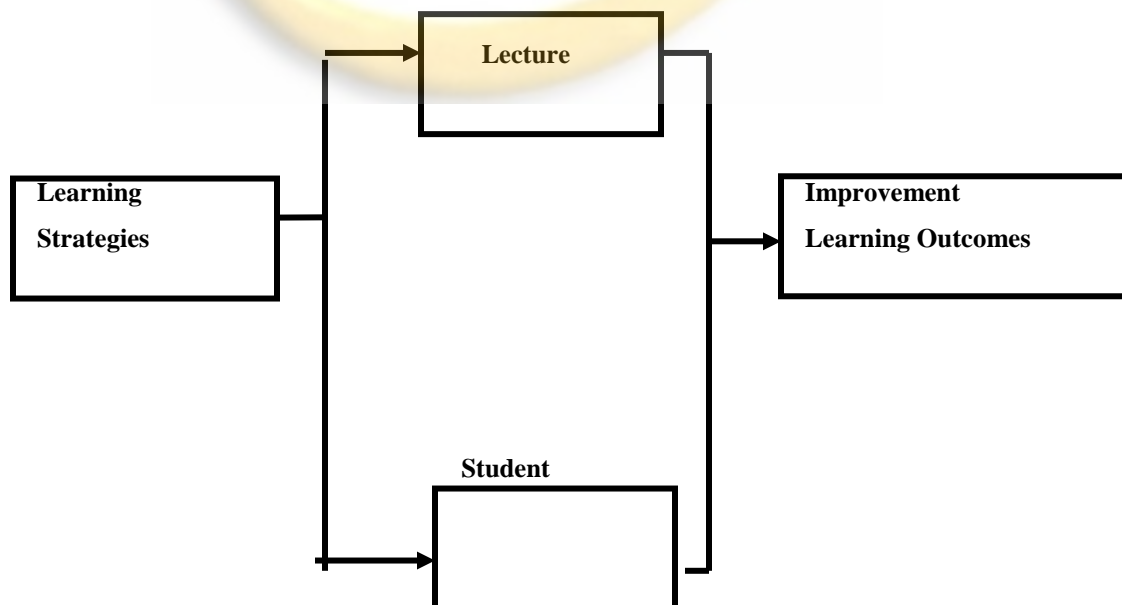
SCL six key elements are as follows:

- (1) Meaningful learning: understanding, relevance and personal rewards students that he was interested in the content of the new study. Learning is perceived as relevant to their lives;
- (2) the application of knowledge: the ability to see how what is learned is applied in another order and function in the present and future;
- (3) higher levels of thinking: students are trained to use critical thinking and creative in collecting the data, to understand an issue or solve a problem;
- (4) The curriculum was developed based on standards: teaching content associated with a diverse range and local standards, national standards, or industry associations;
- (5) Be responsive to culture: educators (teachers) have to understand and respect the values - values, beliefs - beliefs, and habits of students, fellow educators and the communities in which they educate, culture affect how educators teach. There are four perceptions that must be considered, namely: individual students, student groups, the order of the campus, and the larger society;
- (6) Authentic Assessment: use a variety of assessment strategies that validly reflect actual learning outcomes expected of students. The strategy includes an assessment of student activities, the use of portfolios, rubrics, checklists, and observation guide in addition to providing opportunities for students to participate actively participate in assessing student learning.

8. LEARNING STRATEGIES

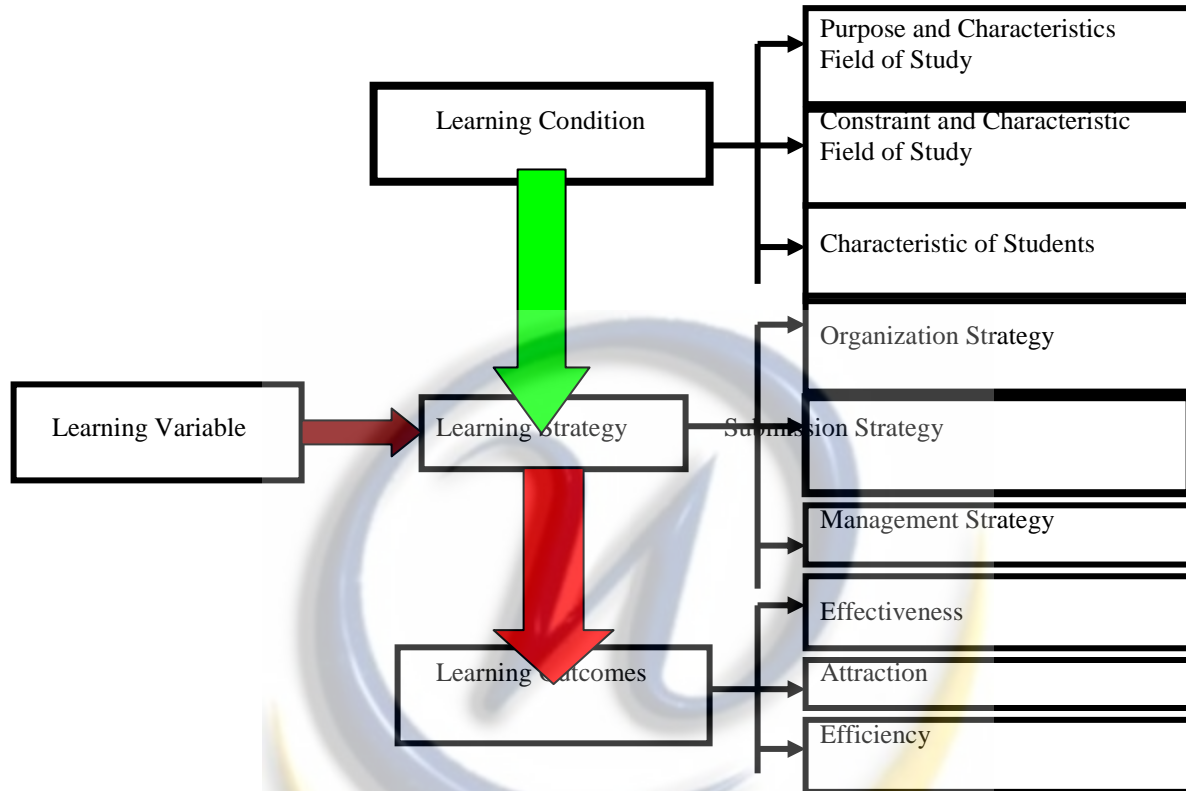
Meaningful learning strategies and how to use all the arts learning resources in an effort students. Learning strategies developed by the rules - certain rules so as to form a distinct knowledge area. The description is as follows:

Figure 5 Relationship Learning Strategy



In the first learning strategies to understand the variables - variables of learning. According Reigeluth and Merrill (in Degeng, 1989) variable learning can be classified into three, namely: (1) conditions (conditions) learning, (2) strategies (methods) learning, and (3) results (outcomes) learning. The description is as follows:

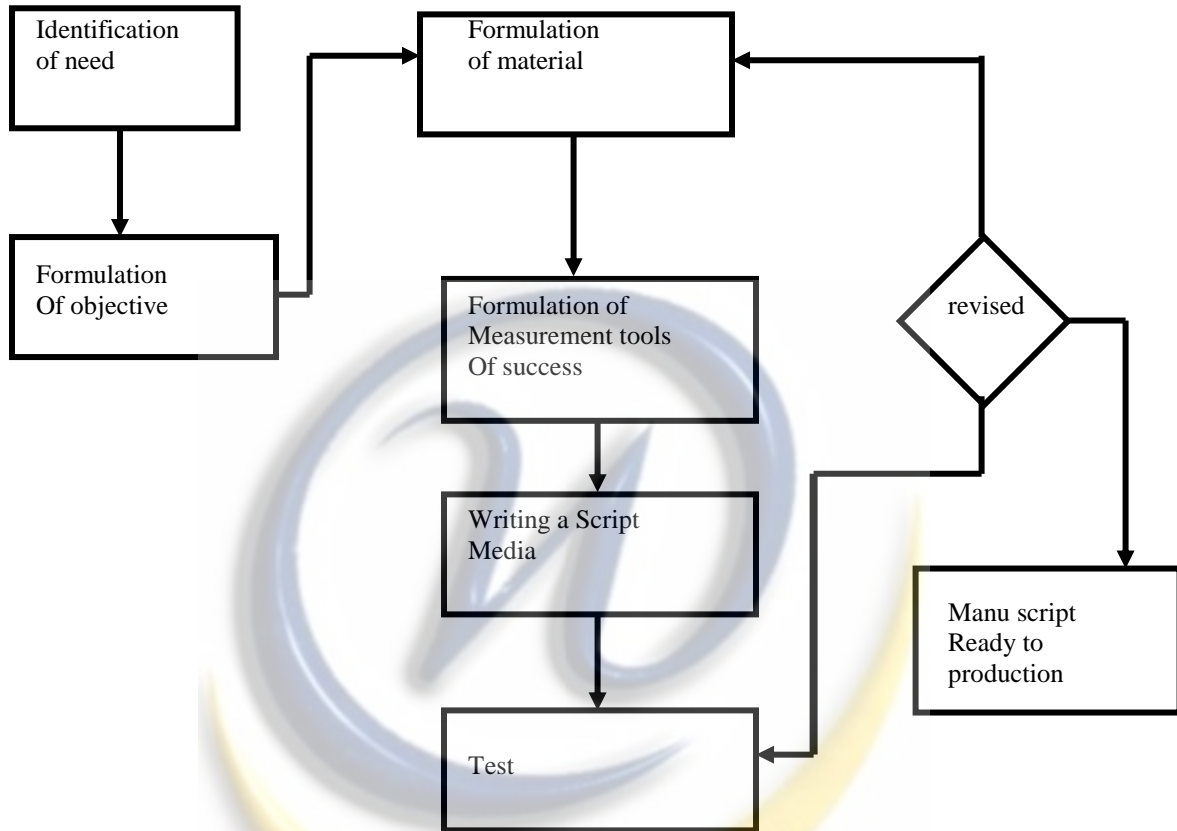
Figure 6 Variable Learning



9. APPLICATION OF LEARNING STRATEGIES

The results of the analysis of the condition of learning can be the basis for determining instructional strategies that will be used. Step - a necessary step can be explained as follows:

Figure 7. Model Development learning Media



10. CHANGE OF CONTENT DELIVERY

In tabular form as follows:

Table 1 Submission Material in SCL

Stage	Activity	Time (in percentage)
1	Objectives	5 %
2	Gearing up	10 %
3	Active excersise	10 %
4	Active Poll	30 %
5	Active Concept chek	10 %
6	Active application	35 %
	Total	100 %

11. DEFINITION OF COMPETENCE

Robert A. Roe (2001) suggests the definition of competence, namely:

Competence is defined as the ability to adequately perform a task, duty or role, competence integrates knowledge, skills, personal values and attitudes. Competence builds on knowledge and skills and is acquitted through work experience and learning by doing.

From the above definition of competence can be described as the ability to perform a task, role or task, the ability to integrate knowledge, skills, attitudes and values - personal values, and the ability to build knowledge and skills based on the experiences and lessons.

12. RESEARCH METHODS

1. Research Design

The study is called experimental research because there is something that is done then viewed or compare the results. The research was conducted using an experimental approach, with the form of Static group comparison design (Ruseffendi, 2005: 49). This design is used for obtaining treatment (x) only one group: there is no other group for comparison and sampling is done randomly. The schematic design of the study are as follows:



Description:

O: the final test, the Mid test or Final test

X: learning approach SCL

2. Population and Research Sample

The population is students taking the concentration courses in Accounting Information Systems by the number of students 276 people. Samples were randomly selected number of students 144 people called class treatment by using The SCL model. While a number of 132 students did not use the control class called Model SCL.

3. Research Instrument

The data in this study were obtained by using three kinds of research instruments, namely: (1) a description of the material form of the test materials test until the Mid Test course and final test to measure student learning outcomes (hard skills), (2) Likert attitude scale model to determine Student opinions of the SCL approach (soft skills), and (3) the observation sheet used to determine the opinion of students about learning approaches have been implemented with SCL.

4. Measurement of Student Ability

When finished discussing a lecture, students are asked to do the next problem set that contains a collection of business case or issue. The question contained in the problem set is setup to determine the ability to: (1) understanding, (2) critical and creative thinking, (3) solving the problem, and (4) linking between the three topics of the course.

13. STUDY OF STUDENT OUTCOMES ASSESSMENT CRITERIA

To find success learning using SCL approach, we first define the following indicators:

1. Assessment Reference Benchmark (APB)

Table 2. Student Outcomes Assessment Study

Final Score (Total of all components)	Letter of Credit	Quality	Predicate
≥ 80	A		Very Good
68-79	B		Good
55-67	C		Self
45-54	D		Less
<45	E		Failed
Sources: Asfiah Murni (2008) processed			

2. Indicators of Success

Indicators of successful implementation success approaches SCL and hard targets for the development of cognitive skills, as follows.

Table 3. Indicators of Success Hard Skill

No	Indikator	Baseline	Target Success
1.	Passing Grade Quality	Score A = 10 % Score B = 20 % Score C = 40 % Score D & E = 30 %	Minimum Score A = 25% Score B = 35 % Score C = 20 % Score D and E = 20 %
2.	The number of tasks	2	Minimum 6

Sources: Asfiah Murni (2008) processed

3. Performance Indicators

SCL model performance indicators in the teaching learning process can be measured by the presence or absence of a binding link between the learning process models to the development of basic competencies SCL students. Thus the performance indicators can be measured or seen from the development of cognitive, affective and psychomotor students.

14. IMPLEMENTATION SUCCESS MODEL SCL

The successful application of the SCL can be seen from the results of student learning. Learning outcomes can be hard skill and soft skills.

Table 5 Stages of Student Centered Learning

Stage I	<i>Relating</i>	At this stage, teachers connect concepts and theories will be taught by the phenomenon of accounting information systems, systems analysis and design, and management information systems.
Stage II	<i>Experiencing,</i>	At this stage students are invited to explore the phenomenon Relating delivered on stage in more depth. Their experience is explored.

Stage III	<i>Applying</i>	The third stage, the teacher explains the concepts and theories of the material to be presented the accounting information system, System Analysis & Design, and Management Information Systems.
Stage IV	<i>Cooperating</i>	At the fourth stage, the lecturer asked the students to discuss concepts and theories and their relationship to the phenomenon.
Stage V	<i>Transferring</i>	At the final stage, the lecturer will explain the material resulting from the discussions that have been implemented.

15. DIFFERENT TEST SUBJECT ACCOUNTING INFORMATION SYSTEMS

The hypothesis to be tested to see the difference between pre-test and post-test is

H0: There is no difference between responses pre test and post test for courses in Accounting Information Systems.

H1: There are differences between responses pre test and post test for courses in Accounting Information Systems

Based on calculations using SPSS 13, it was found that

Table 6 : Paired Samples Statistics Accounting Information System

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE_TEST	24.8966	144	2.30442	.42792
	POST_TEST	27.1034	144	1.85828	.34507

Source: Questioner

Based on the table above, it appears that the number of objects to study accounting information systems are 144 active students. The average pre-test responses of 24.22 while the average post-test was 25.66. This case illustrates that the average post-test responses is greater than the pre-test.

Table 7 : Paired Samples Correlations Accounting Information System

		N	Correlation	Sig.
Pair 1	PRE_TEST & POST_TEST	29	.703	.000

Source: Questioner October & November 2010

Based on the table above, it appears that the value of significance between the pre-test and post-test smaller than 0.05 thus shows that there is a correlation between the pre-test to post-test is robust 0703 or 70.3%.

Table 8: Paired Samples Test Accounting Information System

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	PRE_TEST - POST_TEST	-2.20690	1.65571	.30746	-2.83670	-1.57710	-7.178	28	.000

Source: Result Questioner October & November 2010

Based on the table above, using a paired sample test, it can be seen that the significance of 0000 and the number is smaller than 0.05 so it can be concluded that rejected H0, H1 is accepted. What this

means is there is a difference between the responses of pre test and post test for eye Accounting Information Systems. The difference in the average pre-test to post-test is 2207. This difference suggests the soft skills of Accounting Information Systems student eyes the better.

Table 9: Average Response Student Accounting Information Systems at Pre Test and Post Test

NO	VARIABLES COMMUNICATION AND DECISION MAKING	PRE TEST	MEANING	POST TEST	MEANING
1	Listener response when conveying ideas or ideas symbolically.	2.14	Understand the return asked for an explanation	1.79	Got it back without asking for an explanation
2	Responses audience when conveying ideas	2.21	Attention and vibrant	1.72	Attentive and eager
3	Attitude when someone else is talking	4.14	Giving attention when people are talking	4.52	Always pay attention when people are talking
4	Attitudes hear when other people talk to me	4.10	Giving attention to listening to the speaker until it gives a chance to answer	4.52	Listen attentively to the speaker until it gives opportunity to answer
5	Sentences that I use when asked to provide information to the public in writing	3.59	Be careful using the words good and easy to understand	4.14	Be careful using the words good and easy to understand
6	Problem solving when faced with complex problems	3.45	By using the simple instinct based on past experience	4.03	Less use of the concept of comprehensive thinking based on a deep understanding of the problem
7	Means of solving complex problems	2.69	Using the experience and intuition of what is right and wrong	1.93	Less decompose into parts that are simpler and solve it by using relevant knowledge
8	Action in analyzing the problem	2.59	Describe it and then compare it with other relevant issues	4.45	Outlining the problem into smaller parts, breaks it and compare it with other relevant issues

Sourcer: Ressult Questioner Data October & November 2010

16. CONCLUSION

Based on the table above, it appears that there is a difference in the direction of better after students attend lectures in Accounting Information Systems by using the Student Centered Learning.

17. SUGGESTION

So that learning can be accomplished more effectively and efficiently, you should:

1. Subjects Lecturer of Accounting Information Systems II as well as donor material should develop professionalism, should also consider the talents and abilities of each student in the learning process because the application must get help in solving cases.
2. The University provides facilities and infrastructure for teaching and learning activities along with the development of technology, especially computers with multi media such as the availability of adequate speakers and other devices such as playback video to show how applications in a company to the development of soft skills of students.
3. Students as learners always active learning is always ready at any face to face with a minimum reading textbooks in the classroom so that more discussion of the tutorial and more to live so that soft skills can be formed, so that students are able to perform acts rationally and can apply in the real world, if you do not follow the subject matter will cause it lagging the other.
4. This learning method should be applied to each class, so that students are familiar with the same method.

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