Preface from the Editors

The SEAAIR 2005 Indonesian Conference represents the fifth international conference of the Southeast Asian Association for Institutional Research. Given the significant environmental changes facing higher both at the institutional and national/international levels, we believe that the conference theme “Higher Education Reform: Facing Local and Global Changes” is very appropriate platform for academics, researchers and university managers to consider at this Bali conference.

This year it has been determined that only refereed full papers shall be presented at the Conference. Regrettably this has meant that those papers rejected by the referees could neither be presented at the conference nor included within this refereed proceedings. However, we believe that maintenance and enhancement of the quality of the papers is an important objective for SEAAIR to pursue.

The papers are based on experiential and conceptual research undertaken in the universities and higher education institutions drawn from the region as well as the United Kingdom, Australia and Mexico. We believe that this is a valuable collection of papers covering the full gamut of institutional research including quality issues, institutional reviews, teaching and learning developments, strategic management and other related matters.

We hope that this collection of papers will assist you to benefit from the range of perspectives provided at the local, regional and international levels. It is also believed that the papers will provide knowledge and insights that will assist the readers to plan and adapt to changes facing them from higher education reforms and to place their institution/ organisation in the best position to gain from the competitive environment.

Finally we would like to express our gratitude to all who have contributed to the development of the 2005 SEAAIR Conference and these Proceedings.

Warm regards

Dr. Raj sharma & Dr. Petrina Faustine, MM., MSc.
Joint Editors
SEAAIR 2005 Indonesia Conference Refereed Proceedings
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ABSTRACT
In the era of globalization, graduates of higher education have to be able to meet global job requirements. This means that they are expected to be relevant to the users of their services, to their country and even to the world. So, they need to have fitness for purpose or quality, relevant discipline areas, enterprising, professional and commitment. It is a must for the graduates to own such entrepreneurship competency to anticipate the change in society so that they can be expected not only to be the job seeker but also the job creator.

The aim of this research is to identify: i) entrepreneurship competency factors required to produce such graduates; ii) learning style of the student individually to form entrepreneurship competency. Learning style of the student individually, it has 4 steps among others: Experimental Learning, Reflective Observation, Abstract Conceptualization, and Active Experimentation. Entrepreneurship competency models are investigated and that measures include: Achievement, Thinking & Problem Solving, Personal Maturity, Influence, Directing & Controlling, and Orientation to Others.

We contend that these factors will require the higher education institutions to appropriately improve their curricula and their learning processes and through these enhance their own entrepreneurial capacity and ability.

The samples for this study were taken from Widyatama University

Key word: Development of entrepreneur competency

BACKGROUND
Higher Education graduates are expected to be qualified, professional and to have entrepreneurship attitude and commitment. This entrepreneurship attitude which is realized in the form of competence is needed to anticipate changes in the society so the graduates will not only function as job-seekers but also as job-creators. To meet the 21st century challenges, strategies and learning models need to be developed in such a way in order to create a pleasant atmosphere for both the students and teachers. It should also create students' independency which, in this paper, is called entrepreneurship competency.

The success of individual learning is expected to improve students' working qualities which in the end will create their competence accumulation. Spencer and Spencer (1993) used the term 'competency' to delineate basic characteristic of individual worker; this characteristics were parts of their inner personalities which would influence his/her behavior when he/she has to encounter a situation or carried out a job. Obviously, these characteristics would have a great effect on the quality of job he/she did. Interaction between human, management, and technology will become a work load for a certain individual, therefore the individual is supposed to improve his capabilities and capacities as a person by learning.

The Aim of this Research is to Identify:

i) Entrepreneurship competency factors required to produce such graduates
ii) learning style of the student individually to form entrepreneurship competency
iii) To analyze the process of individual learning in the forming of entrepreneurship competency.

LITERATURE REVIEW
Experimental learning theory (Kolb, 1976) suggested that a learning model of a learning process should be consistent with the structure of human perception, and the level of human growth and development. He
stated four process of learning: Concrete Experience (CE), Reflective observation (RO), Abstract Conceptualization (AC), and finally Active Experimentation (AE). (See the diagram)

Kolb (1976) also suggested Experimentation learning model. Specifically, there are two main dimensions to measure the process of learning namely:
- Concrete experience and abstract conceptualization
- Active experimentation and Reflective Observation.

COMPETENCY
Spencer and Spencer (1993) were used to identify the competencies that best distinguished superior from average entrepreneurs:
- Achievement is a concern for working well or for competing against a standard of excellence
- Thinking and Problem solving including: Systematic planning, Problem Solving
- Personal Maturity
- Directing and Controlling
- Orientation to others: Credibility, Integrity and Sincerity.
- Influence and
- Additional Competencies including: Building Capital, Concern for image of Product and Service

RESEARCH MODEL

1.1 Identification of Research Variables
Individual learning process according to Kolb (1976), from Cokorda Istri Dewi (2000) is then modified into: 1) Concrete Experience (CE), 2) Reflective Observation (RO), 3) Abstract Conceptualization (AC), and 4) Active Experimentation (AE). From an actor to an observer, from direct involvement to a general analyst. Below are detailed explanation of each individual style of learning:

1. **Concrete Experience learning – style.** The individual will be open to any new information, feel and involve himself. Their self directly in real-world activities in order to get new experiences. The process of learning can be identified as follows:

<table>
<thead>
<tr>
<th></th>
<th>Acceptance (CE-1)</th>
<th>The process of accepting new information by feeling/sensitizing to identify new problems</th>
</tr>
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<tbody>
<tr>
<td>2. Sensitive (CE-2)</td>
<td>The process of getting new information by sensitizing current information around them</td>
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<tr>
<td>3. Accepting (CE-3)</td>
<td>The process of organizing new information by predicting future probabilities as an agreement to what he/she feels to solve problems</td>
<td></td>
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<tr>
<td>4. Intuitive (CE-4)</td>
<td>The process of organizing new information by using intuition to solve problems</td>
<td></td>
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<tr>
<td>5. Direct Involvement (CE-5)</td>
<td>The process of managing new information by internalizing it into new intuitive experience</td>
<td></td>
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<tr>
<td>6. Experience (CE-6)</td>
<td>The process of managing new information by reflecting and giving meaning to new information to enrich his/her intuition</td>
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</table>

2. **Reflection and Observation learning – style.** This is the process of individual learning by observing new information from different angles and reflect the nature of the experience without a bias toward his/her own present knowledge.

<table>
<thead>
<tr>
<th></th>
<th>Acceptance (RO-1)</th>
<th>The process of getting information by drawing an impression as a received fact to understand new problems</th>
</tr>
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<tbody>
<tr>
<td>2. Paying attention (RO-2)</td>
<td>The process of getting information by communicating and cooperating to get important information for him/her so that he/she can understand new problems</td>
<td></td>
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<tr>
<td>3. Watching (RO-3)</td>
<td>The process of organizing information by visualizing facts to find the best alternative solution</td>
<td></td>
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<tr>
<td>4. Reflective (RO-4)</td>
<td>The process of organizing information by using observation results to decide for the best solution</td>
<td></td>
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<tr>
<td>5. Observation (RO-5)</td>
<td>The process of organizing information by giving meaning toward observation results in order to get new experience</td>
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</table>
Reflecting (RO-6) The process of organizing information by interpreting new information in order to be confident of the new knowledge.

### Abstract-conceptualization learning-style

The learner makes himself/herself get used to evaluative and analytical thinking in designing concepts. This way of thinking is an integration of observation into a logical theory.

<table>
<thead>
<tr>
<th>Reflecting (RO-6)</th>
<th>The process of organizing information by interpreting new information in order to be confident of the new knowledge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical (AC-1)</td>
<td>The process of understanding new information by breaking down new information. Analyze new information by using his/her present knowledge to identify new problems.</td>
</tr>
<tr>
<td>Conceptual thinking (AC-2)</td>
<td>The process of understanding new information by perceiving problems in structured conceptualization in order to see how the components relate to one another.</td>
</tr>
<tr>
<td>Evaluative thinking (AC-3)</td>
<td>The process of organizing information by evaluating the results of new problems by using his/her present knowledge.</td>
</tr>
<tr>
<td>Logical thinking (AC-4)</td>
<td>The process of organizing information by checking the truth of the information logically so that he can get the most appropriate solution.</td>
</tr>
<tr>
<td>Conceptualization thinking (AC-5)</td>
<td>The process of organizing information by internalizing the new acquired information into new knowledge.</td>
</tr>
<tr>
<td>Rationalization (AC-6)</td>
<td>The process of getting new information by sensing the logical conceptualization so that he/she acts and thinks rationally.</td>
</tr>
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### Active Experimentation (AE) learning - style

The process of learning by trying out new theory or concept systematically based on his/her own knowledge to make a decision or to prove the truth of a theory.

<table>
<thead>
<tr>
<th>Active Experimentation (AE)</th>
<th>The process of getting new information by trying out new theory or concept systematically based on his/her own knowledge to make a decision or to prove the truth of a theory.</th>
</tr>
</thead>
<tbody>
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<td>Practical (AE-1)</td>
<td>The process of getting new information by doing real action to understand new problems.</td>
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<tr>
<td>Implementing (AE-2)</td>
<td>The process of getting new information by intensively implementing alternative try-out to a new problem.</td>
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<tr>
<td>Active Working (AE-3)</td>
<td>The process of getting new information by completing the job he/she does.</td>
</tr>
<tr>
<td>Pragmatic (AE-4)</td>
<td>The process of getting new information by using pragmatic point of view to solve problem.</td>
</tr>
<tr>
<td>Experimentation (AE-5)</td>
<td>The process of getting new information by internalizing selected experiment results to build new knowledge.</td>
</tr>
<tr>
<td>Responsibility (AE-6)</td>
<td>The process of getting new information by sensitizing awareness to something right and wrong based on his/her knowledge.</td>
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1.2 Variable Identification for Entrepreneurship Competency (Spencer and Spencer, 1993)

There are six types of individual characteristics who can be considered competent as entrepreneur:

1. **Achievement (ACH)** is a concern for working well or for competing against a standard of excellence. Achievement Orientation include: Initiative (ACH1), Sees and Acts on Opportunities (ACH2), Efficiency Orientation (ACH3) and Information Seeking (ACH3)
   - **Initiative (ACH1)**
     1) Does things before being asked or forced to by events
     2) Acts to extend the business into new areas, products or services or job
   - **Sees and Acts on Opportunities (ACH2)**
     1) Sees and acts on new business or job opportunities
     2) Seizes unusual opportunities to obtain financing, land, work space, or assistance
   - **Efficiency Orientation (ACH3)**
     1) Looks for or finds ways to do things faster or at less cost
   - **Information Seeking (ACH4)**
     1) Does personal research on how to provide a product or service
     2) Consult experts for business or technical advice
     3) Personally undertakes market research, analysis, or investigation

2. **Thinking and Problem Solving (THP), including Systematic Planning (THP1), Problem Solving (THP2)**
   - **Systematic Planning (THP1)**
     1) Plans by breaking a large task down into subtasks
     2) Develops plans that anticipate obstacles
     3) Evaluates alternatives
     4) Takes a logical and systematic approach to activities
   - **Problem Solving (THP2)**
     1) Switches to an alternative strategy to reach a goal
     2) Generates new ideas or innovative solutions
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3. **Personal Maturity (PER)**, include **Personal Maturity include: Self Confidence (PER1), Expertise (PER2)**
   a. Self-Confidence (PER1)
      1) Expresses confidence in his or her own ability to complete a task or meet a challenge
      2) Sticks with his or her own judgment in the face of opposition or early lack of success
      3) Does something that he or she says is risky
   b. Expertise (PER2)
      1) Had experience in the same area of business
      2) Possesses strong technical expertise in area of business
      3) Had skill in finance before starting business
      4) Had skill in marketing/selling before starting business

4. **Directing and Controlling (DIR)**, include **Monitoring (DIR1)**
   a. Monitoring (DIR1)
      1) Develops or uses procedures to ensure that work is completed or that work meets standards of quality

5. **Orientation to Others (ORI)**: **Credibility, Integrity, and Sincerity (ORI1)**, **Concern for Employee Welfare (ORI2)**, **Recognizing the Importance of Business Relationships (ORI3)**, **Provide Training for Employees (ORI4)**
   a. Credibility, Integrity, and Sincerity (ORI1)
      1) Acts to ensure honesty or fairness in dealing with others
      2) Tells customer he or she cannot do something (e.g. complete a task) even if it means a loss of business
   b. Concern for Employee Welfare (ORI2)
      1) Takes positive actions in response to employees personal concerns
   c. Recognizing the Importance of Business Relationships (ORI3)
      1) Places long-term good will over short-term gain in business relationship
   d. Provide Training for Employees (ORI4)
      1) Take action to teach or coach to others

6. **Influence (INF)**, include **Persuasion (INF1)**
   a. Persuasion (INF1)
      1) Convinces someone to buy a product or service
      2) Convinces someone to provide financing
      3) Asserts own competence, reliability or other personal or company qualities

**CONCLUSION**

From statistical test, by using SPSS Reliability Test (α Cronbach), Correlation (r) and From that results above, it was indicated that below:

1. **Achievement competency (ACH)** which was manifested in the willingness and the initiative taking: Students had initiative, see and act on opportunities, seek for information, and Persistence, were influenced by the following students learning-styles as below:
   - Concrete Experience (CE) by accepting, seeing possible occurrence as an agreement to what was felt in accepting new information, accepting new information, construct knowledge in active involvement and seeing, He/she internalized new experience into new intuition for him/herself
   - Constructing Concept by using logical explanation and acted and thought rationally to meet appropriate solution for making decision.
   - AC-6: Learning through constructing concepts by rationalizing so that he understood things logically and finally, could think and act logically.
   - AE-2: Learning through experiment so that he could implement various trial and errors alternatives and experiments in order to create new knowledge.
   - AE-5: Learning through experiments by internalizing experiment results in order to create new knowledge.

2. **Thinking and problem Solving Competency**: this type of learning is manifested in the following variables:
   a) Arrange a systematic plan which is easy to carry out and b) Solve problems by simplifying the problem. Both competencies were influenced by learning-styles:
   - CE-3: Concrete Experience by accepting, seeing possibilities as an agreement to what was felt in accepting new information.
   - RO-4: Reflective-Observation: using the results of observation to make good decision, RO-5: learning through observation and watching, give meaning, toward the results of new information or
knowledge, RO-6: Learning through reflective observation to interpret new information in order to be confident toward the knowledge acquired.

- AE-3: Learning through experiment by actively working on completing the job to select the best alternative.

3. Personal Maturity Competency: This competence was manifested in 1) self-confidence and 2) expertise. Both variable 1 and 2 were influenced by the following learning styles:

- CE-5: Learning through concrete experience in accepting the information, or knowledge, through seeing and active involvement in internalizing new experience into new experience for him/her.
- RO-5: Learning through observation and watching and giving meaning to new information or knowledge.
- AC-2: Learning by getting himself/herself used to construct concepts in order to see problem in structured way and able to see an interrelationship among the problem' components.
- AE-3: Learning through active working experiment to select the best alternative in completing a job.

4. Influence Competency

This competence was manifested by persuasive approach variable; was influenced by the following learning styles:

- CE-3: Learning through concrete experience by accepting new information. Seeing the occurrence as an agreement to what was felt in receiving new information.
- CE-5: Learning through concrete experience by getting new information He sees and involves actively internalizing new experience into new intuition for him/her.
- RO-1: Learning through concrete experience by forming an impression to the received facts in order to understand new knowledge.
- RO-5: Learning through observation by seeing, giving meaning to new knowledge or information.
- RO-6: Learning by reflecting; interpreting new knowledge in order to gain the feeling of confidence of the new knowledge.
- AE-2: learning by intensive experiment, a try-out of systematic and structured problem solving to understand new problem.
- AE-5: Learning by internalizing the results of concrete experiment in order to construct new knowledge.

5. Directing and Controlling Competency: was manifested in the monitoring variable, maintaining the job quality, and was influenced by the following learning styles:

- CE-2: Learning through sensitive concrete experience by feeling of what occurred around him/her. This was done in an effort to understand the problem or the new knowledge.
- CE-3: Learning through concrete experience by accepting new information, seeing the possible occurrence as an agreement to what he felt in the process of accepting new information.
- RO-1: Learning through concrete experience by active involvement, seeing, internalizing the new knowledge into his/her own new intuitive experience.
- AE-4: Learning through pragmatic experiment; he used pragmatic point of views to solve problems.

6. Orientation to Others Competence manifested in the following variables: 1) Integrity, 2) Orientation to welfare, 3) Business relationship and customers were influenced by the following learning styles:

- AE-3: Learning through active working experiment and completing the job to find the best alternative solution.

7. The influence with Negative Beta Score means that significant reversed influence. Meaning that the process of learning in Faculty of Economy & Management had negative significant influence on the entrepreneurship competency because it was not oriented toward the following variables:

- CE-3: Learning through concrete experience by accepting new knowledge, seeing possibilities as an agreement to what he/she felt in accepting the new knowledge.
- AC-4: Learning by constructing logical concepts and acting and thinking rationally to find the most appropriate solution.
- RO-1: Learning through concrete experience in accepting new information or new knowledge, constructing knowledge by actively involved in internalizing new experience into new intuitive experience for himself/herself.
- RO-5: Learning through visual observation, giving meaning to the new knowledge, or new information.
• AE-2: Learning through intensive experiment and trial and error using systematic problem solving.
• AE-4: Learning through pragmatic experiment. To make decision by using practical point of view to solve problem.

The above variables were needed to form entrepreneurship competency. These variables were not fully accommodated in the process of learning in The Faculty of Economy & Management of Widyatama University. Students were passively received the theoretical explanation, the facts, or the new information from the Learning Process. Students were not actively felt and involved in the process of learning. In other words, students were not involved in the trial and error using concrete examples, making decision related to the received knowledge, information and the facts. Obviously, S1 graduates of Department of Economic and Business & Management of Widyatama University.

8. Learning styles that would form and influence the entrepreneurship competence were: 1) Concrete Experience learning style was the style where students were supposed to openly accept new information, feel and actively involve himself/herself directly into concrete activities in order to get new information and knowledge. 2) Reflection observation learning style was the style where students were supposed to observe from different of opinion and later on reflected the observation. 3) Concept constructing learning style was the style where students were supposed to have analytical and evaluative thinking in constructing the concepts after an observation into logical information/knowledge. 4) Experimental learning style was the style where students were supposed to do trial and error to implement a theory or new concepts, prove and make decision on the truth of the experiment.

9. The results of the research suggested that the identified learning styles above would accelerate entrepreneurship competency therefore they should be implemented into the process of learning. The process of learning should facilitate students with the process of accepting new information, absorbing and involving himself/herself to get new knowledge, drawing an impression, visualizing the new information to find alternative solution, thinking and constructing concepts by understanding the problems structurally then internalizing the concepts into new logical conception, acting rationally and trying out an experiment actively and intensively, responsible of the experiment by increasing awareness of the truth of the knowledge, facts, and information he received during process of learning in the lectures. Students should also be geared to have initiative to improve him/her toward the achievement of standard of excellent, to find new information and see and find opportunities. They should also be geared to be persistence and solve problems systematically, direct the work, and have orientation to others which is manifested in his/her integrity, self confidence, expertise in entrepreneurship and develop business relationship and pay attention to others welfare.

10. The Negative Beta Score showed the amount of influence to the process of learning. it showed reversed influence toward the learning styles which mean that the process of, learning the lacking in exercises, actual problem, concrete practice, concrete case, actively involved in the process of learning the case-studies, problem solving and responsibility of case study.

RECOMMENDATION:
As a result of implementing the Entrepreneurships competency above, learning Process in Widyatama University should be:
• Lecturing should be in the form of demonstration, simulation, actually case, practicing active involvement, practicing sense of responsibility in problem solving, ability to build concepts, analyzing problems in order to understand the actual of the problems.
• Teaching Learning process should be started by the process of accepting the essence of the knowledge, the knowledge should concern with practical application up to the level of active involvement of the knowledge, the theory, and the facts studied under the umbrella of university curriculum. The experience of learning to solve concrete cases is needed to accelerate active involvement and concrete experience of the facts studied, to see job opportunities, to see real condition in order to feel and to form self awareness.

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