



A STUDY ON VARIATIONS IN STYLES OF LEARNING OF MANAGEMENT STUDENTS – A CASE STUDY OF AURORA’S PG COLLEGE, MOOSARAMBAGH

Research and Development Cell - APGCM

T. V. Janaki, Associate Professor- Department of Management in Aurora’s PG College.

G.N. Satish Kumar, Associate Professor- Department of Management in Aurora’s PG College.

Dr. T. Uma Devi, Professor- Department of Management in Aurora’s PG College.

Abstract

Many a time teachers feel that a well prepared lecture or work shop fails to attract students in expected numbers. It is more common experience for Management Educators than teachers of any other fields. While the contribution of value by Management Education is more than any other post-graduation program by strengthening one’s abilities, improving life style, accentuating reading and writing skills, and ultimately preparing one’s mind to manage various turbulent business situations, it is also a fact that it is a multidisciplinary program that attracts students from various streams. It is, therefore, essential for management teachers to identify the variations in the learning mechanisms of students for creating effective class rooms.

The present study attempts to understand the various learning styles of students with a motive to assess whether there is any mismatch in instructor’s teaching style and student’s learning style. It is a case study aimed to understand the learning style of APGC students who come from various socio economic as well as academic backgrounds. Felder Silverman Model is employed to find out the variations in the learning styles. There are variations in one’s ability to accumulate as well as assimilate information. The reason for this variation is one’s learning style determines one’s ability to accumulate and assimilate information. The learning style is the method that best allows a person to gather and use knowledge in a specific manner.

Need for a Study on Learning Style

When mismatches exist between learning styles of most students in a class and the teaching style of the professor, the students may become bored and inattentive in class, do poorly on tests, and get discouraged about the courses, the curriculum, and themselves. In some cases it results in changing to other curricula or drop out of college. Professors have to bear with low level result of students, unresponsive or hostile classes, poor attendance and dropouts. Then, one easily understands that something is not working.

If the different learning styles of students are identified, suitable changes can be made in the pedagogy. Groups of the students can be created based on the similar learning style. It generates numerous advantages that can be described in the following way.

Academic Advantages

- Maximizing the learning potential
- Succeed on all educational levels
- Understand how to best study and score better on exams and tests
- Overcome limitations in the classroom
- Reduces frustration and stress levels
- Expand the employability

Personal Advantages

- Improve your self-confidence and self-esteem
- Learn how to best use your brain



- Gain insight into your own strengths as well as weaknesses
- Learn how to enjoy learning more
- Develop a motivation for learning
- How to maximize your natural abilities and skills

Professional Advantages

- Stay up to date on professional topics
- Gain an edge over the competition
- Manage teams in a more effective manner
- Learn how to deliver more effective presentations

The Need for the Present Study

The study pertains to management education. It is well known for the fact that there is a remarkable expansion of postgraduate colleges all over the nation. The number of growing youth on one hand, government policy for the promotion of higher education as a part of Vision 2020 program on the other hand and the changing dynamics of the world towards globalization where higher education needs are manifold on the other hand, many new colleges are entering the higher education industry every year and existing colleges are going for expansions. Contrary to earlier situation today a post graduate student is not very serious student. The growth of postgraduate colleges gives a rise to dilution of quality of students in academic front. The image of postgraduate students of earlier days is quite different from business management students of today particularly in the study area that is state of Andhra Pradesh.

Keeping all these factors in consideration, in order to generate interest in the mind of students towards the subjects, it is largely required to see that the teaching style matches the learning styles of the student. As MBA is an interdisciplinary course people join from various streams. Their socioeconomic profiles vary to a large extent. The medium of instruction they had till graduating might also be different. In addition to these factors, the location which they belong to shows a great variation. After, studying till graduation in a village or town many students desire to pursue their post graduation in a big city aiming at good exposure to various dimensions of society, good employment opportunities and for good growth. All these factors are expected to have an influence on their learning styles of the students. In order to stylize pedagogy according to the students, the various learning styles have to be understood, and the influence of various socioeconomic and academic factors on the learning style of the students should be analyzed. Researchers have contributed categorizations various learning styles based on their researches.

Learning Style Models

There are various definitions of learning styles. According to Keefe (1979), learning styles are cognitive, effective and psychological behaviors. They are the indicators of how learners perceive and interact with learning environment. Cury (1983) employed 'concentric rings' model which depicts personality elements at its epicenter, information processing at middle ring and instructional preferences at outer ring. The study stated that the most ingrained patterns are to be found at core. While Kolb (1976, 1984) designed the model of experiential learning which postulates a four stage cyclic structure.

Concrete experience → reflective observation → abstract conceptualization → active experimentation
Honey and Mumford (1982) developed learning style questionnaire to identify people in four ways namely, activist, reflector, theorist and pragmatist.

The Canfield Learning Style Inventory (1992) establishes four learning dimensions. They are conditions for learning, area of interest, mode of interest and performance expectations.

Felder and Silverman's Learning Style model (1988) was originally developed for engineering students.



Felder and Silverman (year) advocate that students learn in different ways: by hearing and seeing; by reflecting and acting; reasoning either logically or intuitively; by memorizing and visualizing and drawing analogies; and, either steadily or in small bits and large pieces. They also advocate that teaching styles vary, such as an educator's preference for lecturing or demonstrating, or for focusing on principles or applications.

The Four Dimensions of Learning are the following

I dimension: Active and Reflective

Active (Kolb, 1976) learners learn by working actively with the learning material. They keep applying the material and trying things out. They tend to be more interested in communication with others and prefer to learn by working in groups where they can discuss about the learning material. In contrast, reflective learners prefer to think about and reflect on the material. Regarding communication, they prefer to work alone or maybe in a small group together with one good friend.

II Dimension: Sensing Versus Intuitive Learning

Learners (Kolb, 1976) who prefer a sensing learning style like to learn facts and concrete learning material. They like to solve problems with standard approaches and also tend to be more patient with details. Furthermore, sensing learners are considered as more realistic and sensible; they tend to be more practical than intuitive learners and like to relate the learned material to the real world. In contrast, intuitive learners prefer to learn abstract learning material, such as theories and their underlying meanings. They like to discover possibilities and relationships and tend to be more innovative and creative than sensing learners.

III Dimension: Visual-Verbal Dimension

It differentiates learners who remember best what they have seen, e.g. pictures, diagrams and flow-charts, and learners who get more out of textual representations, regardless of the fact whether they are written or spoken.

IV dimension: Sequential – Global

According to this dimension the learners are characterized according to their understanding. Sequential learners learn in small incremental steps and therefore have a linear learning progress. They tend to follow logical stepwise paths in finding solutions. In contrast, global learners use a holistic thinking process and learn in large leaps. They tend to absorb learning material almost randomly without seeing connections but after they have learned enough material they suddenly get the whole picture. Then they are able to solve complex problems, find connections between different areas, and put things together in novel ways but they have difficulties in explaining how they did it. Because the whole picture is important for global learners, they tend to be more interested in overviews and a broad knowledge whereas sequential learners are more interested in details.

Application of Knowledge of Learning Styles in Management Education

Management program consists of various courses that have multiple orientations like mathematics, statistics, economics, accounts, finance psychology etc. The teaching methodologies also range from traditional methods to live studies of cases. The awareness about composition of learning styles among students with different profiles enables the teaching community to relocate the sections to the students and allocating appropriate faculty member for them.

In addition to that teachers can adopt various styles of teaching techniques and achieve an optimum match between teaching and learning styles. It would improve the interest of the students in the class, in turn leading to effective class room teaching. The knowledge enhancement of students thereby takes place would definitely increase the employability of the students.

Table: 1, A Multistyle Teaching Approach to Aid the Facilitation of Learning

Learning style Teaching technique adopted to match individual learning styles	
Active	group projects; brainstorming; learn-by-doing and problem-solving exercises
Reflective	reflective statements; 'functional pauses' for reflection and evaluation
Sensing	case studies; examples and explicit links to the real world of business
Intuitive	theories and models; space for abstraction and conceptualization
Visual	trigger videos and visual organizers such as charts, maps, etc.
Verbal	traditional lecture; oral presentation
Sequential	integrated progression of topics; Making the subject into small topics
Global	a two-step approach combining specific-to-general and general-to-specific

(Adopted from article authored by Glauco De Vita on Learning Styles, 2001)

Case Study

The present study is a case study conducted in Aurora's PG College, Moosarambagh functioning under Aurora Group of Institutions. Aurora group of institutions are prestigious institutions for engineering and management educations. With an existence in the field for more than two decades, Aurora Group of Industries have always shown a committed approach in creating good learning environment for students, providing them with high quality education and ultimately carving them for the industry requirements.

However, the recent environmental changes created a need for revising the pedagogical approach for the institute towards students. Due to the increased inflow of the students and expansion of sections for the programme of business management, there are certain unprecedented tendencies observed. There is a decline observed in seriousness of students towards curriculum. There is an increased demand for 'made easy' kind of teaching methodology. Based on these observations a study was planned at two stages as explained here.

1. To know the variations in learning styles of the people with respect to their education background marks secured in degree and intermediate, place they hail from, economic status and medium of education.
2. Making suitable changes in pedagogy and observing the impact.

The present paper deals with part of the study in stage I. People are grouped based on their intermediate percentages and their learning styles are observed. Therefore, the objectives of the paper can be summarized as

1. To observe the validity of Felder Silverman model with respect to management students.
2. To understand the preference of the students with respect to various methods of teaching and rank them accordingly.
3. To understand the variation in learning styles on merit basis.

Sampling

The MBA I year students of APGC, Moosarambagh constitute the population for the study. The study is based on convenience sampling. First year students are only selected because it would pave the way to continue the study to II level that is making suitable changes in pedagogy to match the learning styles and assess the improvement.

Data collection

Study is based on primary data. A questionnaire was constructed in structured way and responses were collected from students. Five point scale was used to measure the responses namely Strongly Agree, Moderately Agree, Neutral, Moderately disagree and Strongly Disagree.

Pattern of Analysis

The use of statistical tools is imperative for analyzing and interpreting the data more scientifically. Present study uses the tools including calculation of mean, standard deviation and standard error from mean. The mean calculation is based on Likert Scale 1 to 5. If the mean value is 1, it defines the presence of that item in minimum, and if mean value is 5, it defines the presence of that item in maximum. For further precision in interpretation

mean percentages are calculated by using a formula $(\text{mean score} - 1) * 25$. If mean is 1 mean percentage would be 0, if it is 2 mean percentage would be 25 and if it is 5 mean percentage would be 100.

Since, there is a possibility that responses might overlap, as the nature of subjects differs the statements employed to measure are taken in sets and the mean scores are ranked accordingly.

Results and Discussion

It is seen from Table: 1 that the mean percentage of preference of learning through labeled pictures is higher than preference of learning through printed text. In the I set of questions, therefore, it is seen that students mostly prefer charts or graphs and understand well through them.

Set II questions state that they see diagrams first and then they go to the theory.

The statements pertaining to the Sensing and Intuitive dimension clearly reveal that majority students try to remember the facts through understanding the relationship of various events. They prefer to learn through real life cases to reading text book content.

The statements in the questionnaire pertaining to Sequential Global reveal that students of management education have more interest towards innovation than following well established facts.

It is also seen that they prefer to follow subject in a sequential manner. The statement related to global dimension occupies II place.

The last dimension is Active – Reflective dimension. It is seen that majority of people like to have interactive teaching. The statement ‘I want to sit in the class and take notes’ occupies second place. Similarly, group work is liked by majority people who signify active learning. Working alone which is a reflective dimension is less liked.

Table: II, Dimensions of Learning Styles among Management Students

Sl. No	Statement	Dimension	Mean	Std Deviation	S.E from Mean	Mean percentage	Rank in the set
1	Learning theory through labeled pictures is preferred	Visual Vs Verbal	3.96	0.87	0.089	74	I
2	Learning from printed text is preferred		3.81	1.009	0.103	70.25	II
3	I see charts and diagrams and then go to the theory		3.94	0.831	0.085	73.5	I
4	I read theory first and then go to charts		3.83	1.066	0.109	70.75	II
5	I like to learn facts & years 'as it is' from the material	Sensing and Intuitive	3.27	1.115	0.114	56.75	II
6	I am good in understanding the relationship of the events and remember years and facts		3.98	0.794	0.081	74.5	I
7	I prefer learning through real life cases		4.19	0.874	0.089	79.75	I
8	I prefer to follow content of book		3.19	1.008	0.101	54.75	II

9	I like to solve problems from well-established methods	Sequential and Global	3.4	1.128	0.115	60	II
10	I like innovation and don't like repetition		3.82	0.94	0.096	70.5	I
11	I follow any theory through sequential and logical steps		3.66	1.247	0.127	66.5	I
12	Randomly point flashes in my mind and I understand		3.52	1.056	0.108	63	II
13	I want thinking time during lectures		3.36	0.906	0.102	59	III
14	I prefer interactive teaching methodology	Active Vs Reflective	3.64	1.362	0.139	66	I
15	I don't mind to sit in the class and take notes		3.27	1.318	0.134	56.75	II
16	I prefer group work		3.46	1.247	0.127	61.5	I
17	I prefer to work alone		3.29	1.305	0.133	57.25	II

The third objective of the study is to see whether learning styles differ based on merit of the students. Intermediate percentage is chosen as the basis for the study. People secured more than 70% are classified as merit students and those secured less than or equal to 70% are classified as normal students. Cross tabulations and chi-square tests are conducted to study the statistical significance of the variations.

It is seen that only few statements turn out to be statistically significant at 95% confidence level. Table III depicts those statements which show a valid variation based on chi square.

Table: III, The Learning Style Differential Based on Merit of the Students

Sl. No	Statement	Agree		Chi square	Significance
		= 70% n=49	>70%,n=47		
1	I see charts and diagrams and then go to the theory	36	40	9.584	0.048
2	I like innovation and don't like repetition	31	43	30.136	0
3	I like to learn facts & years 'as it is' from material	17	37	19.577	0.001
4	I prefer interactive teaching methodology	30	34	9.423	0.045
5	I don't mind to sit in the class and take notes	20	29	15.181	0.004
6	I prefer group work	33	23	12.642	0.013
7	I prefer to work alone	20	28	15.376	0.004
8	I follow any theory through sequential and logical steps	28	41	14.962	0.005
10	Randomly point flashes in my mind and I understand	34	28	15.705	0.003

The above table reveals that merit students exhibit a dominant style of visual learning style compared to normal students. The observation is statistically significant at 95% confidence level ($p=0.048$). Innovation is largely

preferred by merit students. However, it is also seen that they don't mind to sit in the class and take notes whereas normal students significantly differ with that opinion.

It is evident from the table that merit students learn facts as it is from the material. Normal students require some kind of relationships or events to remember them. Interactive teaching methodology is widely preferred by merit students and it is statistically significant.

Coming to active and reflective dimension merit students prefer to work alone. The difference of opinion is statistically significant. Similarly, normal students prefer group work. Merit students follow any theory through sequential and logical steps which is also statistically significant ($p=0.005$) and point flashes in the minds of normal people randomly ($p=0.003$) which is also statistically significant. However, few statements do not show any difference that is statistically significant. Mainly, students' interest in case studies which commands highest mean percentage (as per Table II) does not show statistically significant variation. Similarly, both the groups equally exhibit the preference towards printed text, and to see the diagrams and charts first and go to the content etc. It is revealed that visual dimension is predominant than verbal dimension.

Suggestions

The analysis has few important implications for allocation. It can be suggested that students can be divided on the basis of merit and changes in teaching techniques can be implemented. Innovative techniques should be introduced for classes of merit students. The number of case studies should be increased in session plans. More visual aids should be used in classes as they are more interesting for students.

The sections of normal students should be planned more carefully as they dislike simply sitting in the class and taking notes. The lectures for them should be with full of interesting events, examples and cases.

Conclusion

Management Education is the choice of large number of students. It offers more than any post-graduation course. However, the recent trends bring out the fact that students show less interest in the classes which has a negative impact on their employability. It is, therefore, necessary to study the learning styles of students and make suitable changes in teaching techniques.

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