Applying Vark Principles To Impart Interpersonal Skills To The Students With Multimodal Learning Styles

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Abstract: Learning style differs from person to person; some learn best by watching videos and listening to audio or lecture; some learn by reading and others by doing some hands- on activities. It is not only good but also essential to know an individual's preferred learning style to improve his/her learning abilities. Therefore, it is important for teachers and trainers consider the students' learning style while framing the syllabus to achieve the optimum level of education. Many literature surveys are being carried out to know the experts' opinions on multimodal learning and the learner with multimodal learning styles. This paper aims at comparing the benefits of using lecturing method and VARK method to train the students with multimodal learning styles in interpersonal skills using J.K.Rowling's 'Harry Potter and the Prisoner of Azkaban.' In order to estimate the level of achievement, a test has been conducted and the results have been verified. The marks of both the methods of teaching reveal that there is a significant enhancement in the learner's perception and the acquisition of skills using VARK method. The students have reported very favourably on multimodal learning elements and have realised that using video, audio, reading and kinesthetic mode to teach soft skills has helped them understand and enhance their knowledge about interpersonal skills better and can be utilised for their practical life especially in their work place.

Keywords:VARK principles, interpersonal skills, literature, multimodal learners

1. LEARNING STYLES : AN INTRODUCTION

Learning style differs from person to person and it is not only good but also essential to know an individual's preferred learning style to improve his/her learning abilities. Students have diverse learning styles and so some students learn best by watching videos and listening to audio or lectures. Some learn by reading and others by doing some hands on activities. The concept of learning style has been studied in various ways. Campbell et al., (1996) define learning style as a certain specified pattern of behaviour based on which an individual approaches the learning experience. Dunn (1981) views it as a way in which an individual takes in new information and develops new skills. Kolb (1984) says that it is the process by which the individual retains new information or new skills. Therefore, it is important for the teachers and trainers to consider the students' learning styles while framing the syllabus in order to bring out the maximum learning outcome. This paper aims at comparing the benefits of using lecturing method and VARK learning style to train students with multimodal learning styles in the interpersonal skills which is one of the areas of soft skills using J. K. Rowling's select novels. In order to estimate the level of achievement, a test is conducted and the results are verified. The marks of both the methods of teaching reveal that there is a significant enhancement in the learner's perception and the acquisition of   skills in multimodal teaching using

VARK learning strategies. The students reported very favourably on multimodal learning elements and realised that using video, audio, reading and kinesthetic mode in teaching soft skills has helped them understand the interpersonal skills better and can be utilised for their practical life.

2. A BRIEF LITERATURE SURVEY
2.1. Multimodal Learning Style : Their role in the learning process

Neil Flemming, creator of the VARK system, proposes that there are four distinct learning styles namely Visual, Aural/Auditory, Read/Write and Kinesthetic which is called VARK learning style. Approximately 60 percent of the population is considered "multimodal," meaning they exhibit preferences for several learning methods. Multimodal learning environments allow instructional elements to be presented in more than one sensory mode (visual, aural, written). Fadel (2008, p. 12) opines that according to neuroscience research, significant increases can be accomplished in learning through the informed use of visual and verbal multimodal learning. Chen and Fu (2003) say that the materials that are presented in a variety of presentation modes may lead the learners to perceive that it is easier to learn and improve attention, thus leading to an improved learning performance, in particular for lower-achieving students. Cronin(2009) affirms that students may feel more

comfortable and perform better when they learn in an environment that caters to their predominant learning style. Hazari (2004) is of the view that presenting material in a variety of modes may also encourage students to develop a more versatile approach to their learning. According to Picciano(2009, p. 11), as recent findings in the field of cognitive science suggest, 'multiple intelligences and mental abilities do not exist as yes-no entities, within continua which e the mind blends into the manner in which it responds to and learns from the external environment and instructional stimuli. Conceptually, this suggests a framework for a multimodal instructional design that relies on a variety of pedagogical techniques, deliveries, and media'. Mayer (2003) contends that the students learn more deeply from a combination of words and pictures known as the multimedia effect than from words alone. Pashler et al. (2008, p. 109) report that different modes of instruction might be optimal for different people because different modes of presentation exploit the specific, perceptual and cognitive strengths of different individuals.

2.2. Multimodal Learners: An Overview

Multimodal learners are learners who have multiple preferences for learning.They can take in information by using more than one method. For example, a learner may have two strong preferences namely visual and aural(VA), read/write and kinesthetic (RK) or may have three strong preferences such as VAR or ARK. Multimodal learners use two, three or four modes to interact with others. They feel insecure with one mode of learning. According to Dunn et al.,(1981), the achievements of college students can be improved by providing instruction in a manner consistent with each student's learning style. Keefe (1987) opines that most of the early researches concerned have been with the relationship between memory and oral or visual teaching methods. The findings are conflicting, possibly due to differences in the populations, learning materials and tests. Messick (1976) says that the later researchers have recognised that different learners have different cognitive styles and habitual information-processing strategies that determine a learner's typical mode of perceiving, remembering, thinking, and problem solving. Gregoric (1985a, b) confirms that when students have a strong preference for the manner in which a new material is presented, it is difficult or even impossible for them to learn if educators fail to present the material in their preferred way.

3. IMPORTANCE OF INTERPERSONAL SKILLS TO THE ENGINEERING STUDENTS

Interpersonal skills are a prerequisite for engineering students as they are supposed to work in teams in the work place. A professional working in a team needs technical expertise along with the ability to work with the members of the team to accomplish the given task. It is important to balance the technical expertise on one hand and orient the team on the other to execute the project. It requires team spirit and interpersonal skills. Unfortunately, majority of the engineering students lack interpersonal skills as they are trained to work individually in schools, for instance, while preparing for entrance examinations to seek admission. Hence, they suffer both in their career and personal lives. According to Patricia A. Wheeler (2005), studies say that 90 percent of executive failures are attributable to lack of interpersonal competencies. Hayes (2000: p. 291) opines that a majority of engineers work in teams and hence interpersonal skills have become a pre-requisite. Engineering students have to develop interpersonal skills to accomplish the project at hand in the workplace and they need 'goal-directed behaviours' used in face-to-face interactions which are effective in bringing about a desired state of affairs. Therefore, interpersonal skills are the essential ingredients that every engineering graduate should possess as their work involves working in teams all through their career.

So, the need for training in interpersonal skills has become imperative in engineering colleges especially in India as students join the engineering courses from different family backgrounds. Since training has become an essential part, colleges adopt different training methods to coach the students. To make the students understand the value of acquiring interpersonal skills, explaining the theories of soft skills to engineering students through lecturing alone will not serve the purpose as they will not take it serious. Students may become unresponsive and teachers may find it difficult to explicate soft skills as it refers to behavioural skills. Hence, inculcating soft skills through reading a novel or a story, watching a movie, conducting GD and explaining through power point presentations to help them understand and analyse behaviors can help in enhancing the interpersonal skills better than the monotonous talk.

4. IMPARTING INTERPERSONAL SKILLS USING J. K. ROWLING'S NOVELS THROUGH VARK METHOD

The Harry Potter stories lend a promising hand in imparting interpersonal skills to students because they are adventurous, famous and being read and watched as a film by people all over the world. The hero, Harry, is admired by both the young and the old as he faces the challenges at home and also in his school right from his childhood and overcomes them brilliantly. J.K.Rowling, the author of the series, has said in her biography that she has written the novel not

only for children but also for the adults. Each character of the story demonstrates numerous soft skills like leadership, team work, assertiveness etc., and the students find it very interesting and useful if they read the stories, see the movies and understand the nature of the characters. Harry Potter novels best suit teaching interpersonal skills using multimodal teaching strategies as it can be shown as a video (V), taught by lecturing that is aural (A), through reading the story (R) and by conducting GD (K). Moreover, different interpersonal skills can be imparted by using various methods like power point presentations, video clippings, hands-on-activities and lecturing.

5. LEADERSHIP QUALITIES IN 'HARRY POTTER AND THE PRISONER OF AZKABAN'

The novel selected for this study is 'Harry Potter and the Prisoner of Azkaban' which speaks about Harry's third year of schooling at Hogwarts. The school atmosphere and the teachers help Harry learn many value based skills and most of the teachers like Professor Dumbledore, Professor McGonagall, Hagrid and Professor Lupin help Harry in one way or the other in his adventures. Albus Dumbledore, the Headmaster, stands as an example of a real leader with valor and courage. Dumbledore takes care of Harry Potter and teaches him the things he should know before facing Voldemort, the evil force. Also, he is the Founder of the "Order of the Phoenix", which is an organisation to fight Lord Voldemort. Professor McGonagall is a dynamic personality and stands as a role model for how a teacher should be. She is the Head of the Gryffindor house, Acting and Deputy Headmistress and Transfiguration teacher at Hogwarts. Rebeus Hagrid, Care of Magical Arts teacher, a personality with ebullience and enthusiasm interested in magical creature. Professor Lupin is another example of a leader who teaches Harry the black art and also guards Harry when the evil force appears before Harry and Harry makes an endeavor of the black art magic. The portrayal of the teachers as leaders is a source of inspiration for the teachers' community and it will also encourage the students to look upon them as guides and mentors.

Harry Potter is depicted as an exceptional student who is capable of leading the battle against Voldemort by knowing his identity as a wizard. Harry's leadership quality is affirmed by his willingness to die for his friends and caretakers. On the other hand, the negative leadership qualities are exhibited by Lord Voldemort and administrators of the ministry of magic by manipulation and control over others. Harry is mentally strong and intelligent, and depicted as a young man who turns suffering into motivation to create goodness and he gets moulded through his experience in school. Harry loses his

parents, godfather, Sirius Black and his teacher, Prof. Dumbledore, in his struggle. He also experiences troubles at the hands of the ministry. These sufferings strengthen Harry and depict him as a kind of leader that organisations need during the times of crisis. Harry's leadership qualities can be compared with the 'great man theory of leadership' which assumes that the capacity for leadership is inherent – that great leaders are born, not made (Thomas Carlyle 1940). Harry possesses the qualities of a true leader such as courage, determination, perseverance, resilience, etc. Harry chooses his friends well and pays attention to what is going on. He learns early on how to use people's talents for the greater good and how to accept help when it is needed and how to delegate tasks to those with the required skills to get things done. He is brave and goes to places that others are afraid of and does what is necessary, including taking chances in giving up his own life, for the greater good. He treats everyone fairly, whether it is a witch, wizard, goblin, elf, or any of the many magical creatures that are introduced in the series. He has a skill that helps him convince others to take chances in helping him get things done, even if he does not ask for help. He speaks through actions and helps his friends by teaching the techniques to fight against Voldemort. This training helps them a lot when Harry finally sacrifices his life to vanquish Voldemort.

6. METHODOLOGY

The following methodologies are adopted to offer training in leadership skills to students using 'Harry Potter and the Prisoner of Azkaban'. In order to understand the learning styles, first the students are asked to take up the VARK self assessment test and it is found that most of the students prefer more than one method of learning. It is understood that almost all the students belong to multimodal learning group.

- The students are exposed to two different teaching methodologies- lecturing and VARK method is conducted.
- The level of understanding is measured by conducting a test.
- The marks obtained by the two groups of students (A and B) are depicted in the bar diagram (Figure 1).

6.1 Method: 1 (lecturing method)

Two different classes (class A & class B) each consisting of 50 students are taken for the study. Students of class A are selected for the training through lecturing method and as a first step they are supplied with notes containing the description of the soft skill namely leadership quality. A part of the novel 'Harry Potter and the Prisoner of Azkaban' is distributed among the students. First, the researcher explains the following points in detail:

- Interpersonal skills required for the workplace in general.
- Impact of Interpersonal skills in the lives of the students especially in their career.
- The importance of acquiring leadership skills while students pursue their college education.
- The role of literature in inculcating soft skills
- The purpose of using J. K. Rowling's 'Harry Potter and the Prisoner of Azkaban' to impart leadership skills.
- Next, the scholar explains the leadership skills in the characters of the novel.
- Then the students are asked to read the novel. After that, a test containing both objective and subjective type questions is conducted to measure the students' level of understanding.

Here, the students are asked to record their responses against the questions prepared on the basis of interpersonal skills in the characters of the novel and the importance of acquiring the skill in the workplace.

Table-1 shows the marks obtained by the students and the number of students who have secured the marks.

Marks	No. of Students
0-10	0
10-20	0
20-30	0
30-40	10
40-50	12
50-60	6
60-70	9
70-80	11
80-90	2
90-100	0
Total	50

From the table, it can be seen that ten students have scored between 30 and 40., twelve students between 40 and 50. six students between 50 and 60, nine students between 60 and 70., eleven students between 70 and 80 and two students between 80 and 90.

6.2 Feed Back on the lecturing method:

Even though the students are able to understand the importance of interpersonal skills through lecturing method which is the usual method of teaching in most of the colleges, many students have not given a satisfactory response which is understood from the fact that none of the students have scored beyond 90.

6.3 Method: 2 (VARK method)

VARK learning style theory describes how four distinct types of learners process information.

Based upon the VAK (visual, auditory and kinesthetic) model of learning, VARK learning style theory was proposed in 1987 by Neil Fleming. Fleming's previous model of the visual learning component was divided into two parts, symbolic (represented as V) and text aspects (represented as R). According to the VARK learning style theory, every individual is inclined to a favoured learning style, instinctively favouring one of the four styles of VARK theory. Some students process information most effectively by using visual learning style, just as others rely more heavily on either auditory style, read/write learning style or kinesthetic style of learning. Most students express a marked preference for a particular learning style and they are usually unable to process information if it is presented in the format of a non-preferred style. It is also found that few learners are exclusively committed to a single learning style and that many individuals recognise the benefits associated with multiple learning style.

Students of class B are selected for the training through VARK method and before beginning with the VARK method of training, the students are asked to take up the VARK inventory test to identify the preferences. On analysing the scores, it is found out that all the four methods will be helpful as the students belong to multimodal learning nature. So, all the four methods namely visual, auditory, reading and kinesthetic have been adopted to train the students in soft skills through the novel.

For this method, four different modes of teaching are adopted namely lecturing with power point presentation (for auditory learners), novel reading (for readers with preference for reading) and movie watching (for visual learners) and group discussions (for kinesthetic style learners). Students are supplied with notes describing soft skills and part of the script of the novel 'Harry Potter and the Prisoner of Azkaban'. For adopting multimodal learning in the class, it takes fifty five minutes. Totally five hours have been spent to complete the lesson. The following points are discussed in each of the hours:

- First hour (Video): Movie of the novel is broadcast in the language lab and each student is allowed to view the film and asked to note down the leadership skills exhibited by the characters.
- Second hour (Auditory): Power point slides about leadership qualities are shown and explained. The story of the novel and the leadership skills exhibited by the characters of the novel are explained.
- Third hour (Reading): Students are asked to read the novel to understand the soft skills in the novel.
- Fourth hour (Kinesthetic): Group discussion is conducted to discuss the prevalence of

leadership skills in Harry Potter and the teachers of Hogwarts.

- Fifth hour (Evaluation): A test is conducted to evaluate the students' level of understanding. Questions are focused on the understanding of the significance of leadership skills and on the characters which exhibit leadership skills. The questions are selected in such a way that it will cater to the needs of all the four categories of VARK learning style approach.

Table-2 shows the marks which have been secured by the students and the number of students who have scored the marks.

Marks	No. of Students
0-10	0
10-20	0
20-30	0
30-40	0
40-50	0
50-60	0
60-70	9
70-80	13
80-90	12
90-100	17
Total	51

From the table, it is clear that nine students have scored between 60 and 70, thirteen students between 70 and 80, twelve students between 80 and 90 and seventeen students between 90 and 100. The overall performance in this test is better than the lecturing method. There is a more significant difference in the students' response in class B than in class A regarding the level of understanding of the concepts.

6.4 Feedback on VARK method.

The findings of this method are more promising and have led to greater student satisfaction. The feedback from the students is excellent. So VARK method is continued for other classes also.

Feedback from the Students

Student A: Yes, watching movies and reading novel have made us understand the concepts well.

Student B: This method of learning encourages me to learn more about leadership qualities.

Student C: This method of learning has helped me in planning my career development.

Student D: The video representation, reading and group discussions make us participate and learn with interest.

Student E: A wonderful part of teaching is giving examples of a practical situation. Through the novel, the teacher has explained the qualities of a leader and have made us understand the concept very well through PowerPoint presentations and GD.

6.5. The questionnaire used for the experiment to evaluate leadership skills

1. How do school teachers help Harry learn leadership qualities?
2. 'Professor Dumbledore is an example of a real leader'.Describe.
3. As a teacher Hagrid encourages the students.. Is he a real leader? Justify your answer.
4. Explain the role of Professor McGonagall in the novel.
5. Portray the qualities of Professor Lupin as a teacher and a leader.
6. Would you allow your team/group members to enjoy complete freedom in their work?
7. What would be your reaction as a representative of the group if the teams fail to reach the target?
8. Will you decide on what shall be done and how shall be done to complete an important task assigned to your group or will you allow your team members to do it?
9. Are you willing to take up challenges?
10. Have you settled conflicts that have occurred in your group? Explain your experience in sorting out one such problem.

6.6 Bar Chart depicting the results of lecturing and VARK method

The marks obtained from both the methods of teaching are analysed. The Following bar diagram depicts the results of the two methods of teaching namely 'Lecturing Method' and 'VARK Method'.
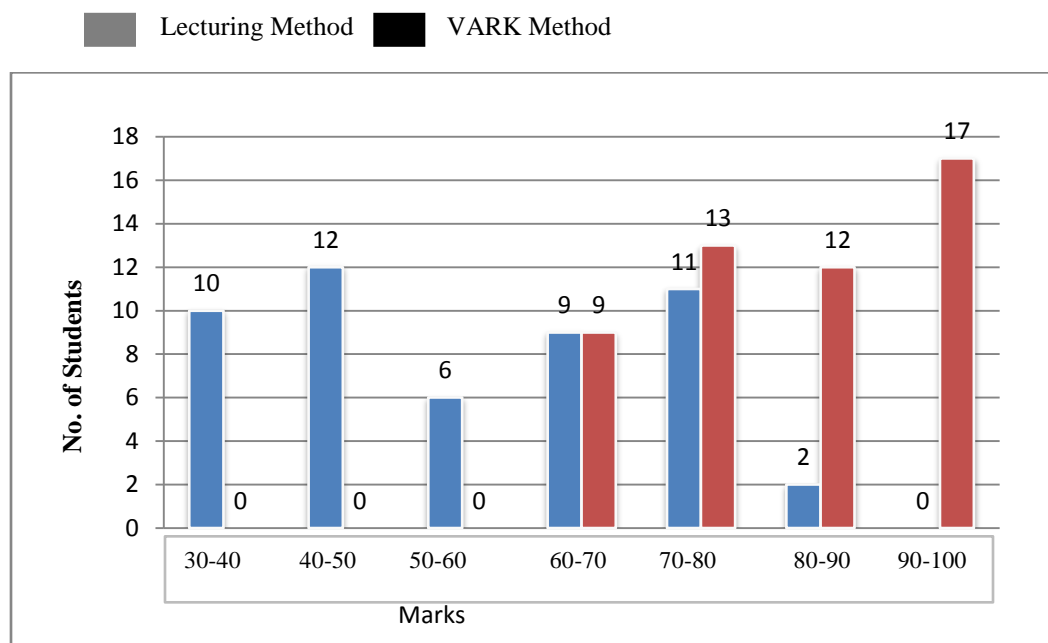
■ Lecturing Method   ■ VARK Method

Figure 1The bar chart explains the differences in the level of understanding through marks between lecturing method and VARK method. The violet bar represents the scores of the students from lecturing method(class A) and the black bar represents the scores of the students from VARK method(class B).

7. FINDINGS AND DISCUSSION

Of the fifty participants who have taken the VARK test, approximately two thirds (68%) are females and 32% is males. The majority of the participants have a predominant multimodal learning style (35%), with equal number of kinesthetic (21%) and read/write (22%) learners. Sixteen and six percentage of them are visual and aural learners respectively.

The kinesthetic learners, in particular, find the GD to be very helpful, while aural learners find the audio enhanced power point to be very helpful. It is also interesting to note that the visual and aural learners rate the textbook reading as the least helpful, while aural and read/write learners rate the GD the least helpful. This indicates that the visual and kinesthetic learners may be at some disadvantage when the learning resources are primarily text-based.

8. CONCLUSION

Thus it can be ascertained that the interpersonal skills which is the subject of this paper can be effectively taught using VARK learning strategies for the students with multimodal learning styles. It appears that a simple intervention such as administering the VARK learning style can enhance the students' skills as it caters to the learner's preference for learning. The VARK inventory method has helped the researcher understand the students' learning style and on the whole, this study has demonstrated that the students have responded

positively to this method of teaching.The feedback suggests that the majority of the students with multimodal learning style have found this method of teaching immensely useful and helpful and also it has created interest in acquiring interpersonal skills among the students.

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