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## **Learning Styles and Teaching Strategies: Creating a Balance**

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### **Abstract**

Students learn in various ways, and one approach to teaching might not work for every student or even for most students (Hawk, Thomas, Shah, Amit, 2007). This paper investigates the learning styles of a small number of learners in a limited setting at the higher education level. The VARK inventory was administered to 18 M.S. students of the Department of English at the International Islamic University, Islamabad, Pakistan to determine their learning styles. Fellow teachers were then made aware of the results of the inventory.

Students were also trained through a workshop for the development of a holistic learning approach which integrates the four major learning styles to make them more reflective, absorptive and self aware. A teacher training session was organized for the development of innovative approaches to teaching by integrating different teaching styles into classroom instruction, curriculum development and procedures for evaluation, while taking cognizance of the preferred thinking patterns of the students.

The study led to the findings that at the postgraduate level, (a) exposure to the possibilities of a holistic learning style helps students in their academic intake, and (b) development of a parallel holistic teaching approach helps in the creation of an effective academic environment.

**Keywords:** Learning styles, Higher Education students, Teaching strategies, VARK inventory.

## **Introduction**

How can a student learn best? What is the role of learning styles in a teaching-learning situation? These are questions that teachers should take into account to address classroom issues related to a given academic programme. Learning is a dynamic, lifelong process. Individuals involved in the process of learning often develop attitudes and behaviors which determine preferences and expectations in the way they learn. These preferred ways are called learning styles.

Individuals acquire and pass knowledge in their own particular way (Fleming 2001, Fuller, Norby, Pearce, & Strand, 2000). They have their preferences which have been the basis of much research. According to Budny, a learning style is a set of personal characteristics that differentiate it from other learning styles (2000). Research demonstrates that students have learning preferences that have strong impact on their knowledge retention (Borchert, Jensen, Yates 1999). If the method of information delivery is in accordance to their particular learning style they learn better (Danish, Awan, 2008, Suskie, Robotham, 2009).

Taylor (2004) argues that traditional approaches to learning and teaching will not have the capacity to meet the increasing demands of higher education in future. This is mainly because of significant and ongoing societal and technological developments that have resulted in major changes in the field of higher education (Jochems, Merrienboer & Koper, 2004). These changes require instructions that meet the demand of international standards and fulfill the needs of global students. Such transformation is vital in the delivery of course materials worldwide (Kellner, 2004).

Schmeck 1988 defines learning style as follows:

Learning style can be distinguished from learning strategy. Learning style relates more to the way the learner has, over time and because of experience, adapted to a particular learning context...Style resides within the person and relates to genetics and prior experience.

This definition reveals that learning styles are a result of complex interactions through a number of experiences. People bear different styles of receiving information, depending on their surroundings, as well as on the methods of instruction. Students' learning styles should be taken into consideration while teaching.

According to Dunn and Dunn (1992; 1993; 1999), learning style is the style through which each learner starts concentrating on, processing, absorbing, and retaining new and difficult information. The interaction of these elements appears differently in every individual. Therefore, it is necessary to determine what is most likely to trigger each student's concentration, how to sustain it, and how to address his or her natural processing style while teaching to produce retention of the taught contents.

According to Miller (2001) and Wolfe (1985), we can improve student's performance by adapting teaching approaches according to the different learning style preferences of our students. Tanner and Allan (2004) say that an understanding of learning style preferences can aid teaching approaches. A number of quality improvement methodologies have been developed and practiced by educators. This article provides a brief review of the relationship between the modified forms of learning and teaching styles in order to improve the academic achievement of the students.

### **Fleming's VARK Model**

Fleming's VARK model has been adapted for this study to identify students' preferred learning styles.

VARK is an acronym for Visual, Aural, Read/Write, and Kinesthetic sensory modalities that are utilized for learning information. This model is based on a simple 13-question test inquiring how the student prefers to receive and process information.

The model proposed by Fleming describes learning styles into four categories; it is the most widely used learning model. Test VARK is based upon 4 different modes of getting information from the environment: Visual (Iconic), Auditory (Echoic), Read/write and Kinesthetic. The latest VARK descriptors now test for a fifth mode, Multi-modality, but the previous one has been used for the present study. Visually orientated students prefer to receive information via optics in charts, graphs, flow charts, and symbols. Aurally orientated students prefer to receive information through the auditory organs. Read/write orientated students prefer getting information displayed as words, and Kinesthetic orientated students depend upon "learning by doing", learning by simulated real-world experience and practice (Borchert, Jensen, Yates 1999).

### **Method**

To investigate the learning style preferences, the VARK learning style model developed by Fleming (version 7), a survey instrument comprised of thirteen multiple-choice questions with three to four answer selections corresponding to the four sensory modalities, was administered to MS (English) second semester students of International Islamic University, Islamabad, for the

subject of Linguistics, to investigate their preferred learning styles. All eighteen of them formed the sample of the study.

The instrument was administered to them during their midterm examination in order to experiment with modified learning and teaching styles based on a holistic approach soon after their mid term examination so that the difference of the learning experiences of the learners can support the findings of the research.

The purpose of the survey was explained before the distribution of the VARK questionnaire. Filled questionnaires were collected, evaluated and the students were provided feedback about their preferred learning styles. The teacher concerned was also informed about the findings. Students were trained through a 3-day workshop for the development of a holistic learning style to make them more receptive to different kinds of teaching styles. A 3-day teacher training session was organized for the development of an innovative approach to teaching by integrating different teaching styles and multiple learning styles into classroom instruction.

The details of the workshops and their execution are as follows:

1. Workshop for the development of a Holistic Learning Style

Titles of Presentations:

- Learning style preferences as the basis for academic development
- Learning style as a guide to the development of effective learning strategies
- Strong and weak learning styles
- Personal development plans for effective learning
- Activity and presentation session

2. Workshop for the development of a Holistic Teaching Style

Titles of Presentations:

- Introduction to learning styles
- Introduction to Instructional designs
- Presentation of Instructional materials
- Connecting Instructional design and learning styles
- Designing a Holistic Teaching Style

After these workshops of one day each, a teaching of 24 hours divided in 8 sessions of 3 hours each served the purpose of treatment for the group. The model developed for holistic teaching was based upon a taxonomy that consisted on the matching of the learning styles with the

component and teaching strategies. Bloom's taxonomy was selected as the base of organization and sequencing of the contents and activities.

The emphasis of the present model relies on the designing, programming and presentation of the teaching content. Teaching strategies for this study were based on the results of the learning style inventory.

The present study revealed a student range of 7 auditory, 4 visual, 4 reading/writing and 3 kinaesthetic preferred learning styles, so the presentation schemes for the contents of teaching were designed by the integration of the four modes of presentation by setting a ratio of 2:1:1:1 approximately, so that all types of cognitive behaviours of the learners could be accommodated and the objectives of the teaching accomplished. Multimedia, whiteboard and handouts were used as teaching aids.

### **Why and How to Connect Learning Styles with Classroom Instructions**

The question is: whether the knowledge of learning style helps determining a practical teaching approach? Yes, there exists a strong relationship between the learning style and the method employed for teaching.

The notion of acceptance of new knowledge is always presentation dependent. If it matches the preferred style of learning then the reception of knowledge becomes faster. It is quite possible to match teaching strategies with the learning styles and this, too, is desirable. Sometimes it becomes necessary to present new knowledge according to the preferred learning styles of the learners but at other times it certainly becomes challenging for the teacher to follow the design: for example conceptual knowledge is better presented through explanation than through other modes of presentation.

Knowing learning styles does not mean that a teacher should always follow related teaching strategies. The knowledge of learning styles should be used as a guide rather than a fixed prescription for teaching strategies.

Learners should also be encouraged to develop flexibility in their learning styles. Acceptability to a degree that makes one comfortable to the reception of knowledge from any mode of presentation is recommended. This would enable learners to deal with a wider range of teaching-learning situations effectively and at ease and will enable the learner to absorb a larger quantum of knowledge. Becoming flexible can only be facilitated by the teachers, so it is more useful to provide the learners with the opportunities that can make them effective learners with diverse teaching styles rather than pampering them according to their preferred learning styles and narrowing down their scope of absorption.

### **Learning Style Instruments**

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Learning style instruments may be used as a diagnostic aid to investigate the strengths and weaknesses of the learners and as a guide for planning appropriate teaching strategies. Essentially the information drawn from the identification of the preferred learning styles of the learners provides teachers with the knowledge which will be useful for planning and teaching, keeping in view the available resources.

The concept is not to teach each student separately, but to strive for a balanced approach towards teaching. For example, at the higher education level, some teachers rely on lecture method, some make use of group and pair work, some focus on applications of the theories and others suggest comprehension through memory.

### **Situation in Developing World**

It would be impractical to take care of individual learning styles especially in the developing world situation, where there is a paucity of space, scarcity of teaching aids and above all, inaccessibility to modern techniques of teaching and learning.

A very good idea is to prepare a lesson plan, keeping in view the learning styles of the learners with their existing ratio in the class and then integrate the strategies using a balanced form of representation of the required modes of presentation. Along with this, the second thing needed is to identify the preferred learning styles of the learners and let the information pass to the learners and try to enhance their cognitive and self-awareness moving on to the development of autonomous learning.

Knowledge of the learning style will help the student become more aware of their strengths and weaknesses which will further take them to a higher mode of taking input and processing information devoid of dependence upon a specific learning style and restricting human ability to receive knowledge through one sensory organ rather than bringing into practice all five and proving to be the superior creature on earth.

### **An Outline of Instructional Plan**

The Madeline Hunter's (1989) lesson plan model was adapted with minor changes to plan lessons for the present study. After declaring the teaching objectives in the classroom the teacher puts the students into a receptive frame of mind to create an atmosphere where the students' advance organizers can come into practice by the use of examples, analogies and activities via audio, video and integrated forms of teaching aids.

Presentation of the contents included Input, Modeling, and Checking for Understanding. Input was used to provide the information for the students to transfer the knowledge or skill through lecture, film, tape, video, pictures or realia.

The lesson was modeled through examples. The critical aspects were explained through classification, comparison, contrast and explanation. The learners were then taken to the application level through problem-solving activities based on constructivist educational view.

For the determination of students' understanding and comprehension, question answer session was conducted and the doubted parts of the presented knowledge were re-taught. Then the teacher entered the practice stage by working through an activity under direct supervision. The teacher moved around the classroom to determine the level of reception and to provide individual remediation as per need to eliminate ambiguities, confusions and frustrations. Once pupils had mastered the content or skill, reinforcement was made possible through practice which again was done through repetition of activities based on different forms of presentation in order to create a comfort zone for the recipients of different learning styles.

### Example of Method Application

Introduction to Linguistics course for the Masters programme was used to test the utility of the method. Only one segment of the course is selected here as an example.

In the first phase of the method, VARK's inventory questionnaire was given to 18 students. 7 students came out to be auditory, 4 visual, 4 reading/writing and 3 kinaesthetic as to have their preferred learning styles. In the second phase of the model, workshops for students and teacher were arranged separately in order to expose them to the desired strategies which were supposed to enhance the compatibility component of the teaching-learning styles with a better outcome of objectives of learning. In the third phase the skills learnt at workshops were brought into play.

Students after having acquired holistic learning style were exposed to a holistic teaching style with an integrated approach for the presentation of teaching contents. The content in itself was practical; the material was linked to the real world through examples from realia and activities based on the application of the learnt knowledge. The following table describes the methodised strategy:

**Table 1**

**Topic: An Introduction to IPA Phonetic System**

Stages of the Lesson Plan	Teaching Strategies and Teaching Aids
<b>Objective:</b> To introduce IPA phonetic symbols to work with languages to make	White board writing, Verbal statement of the objective in order to make the learners

generalizations and analyze the provided linguistic content.	aware of the expectations out of the whole teaching exercise.
Input: Your information today will be derived from your own observations while you experiment with your native languages, National and International ones.	Brainstorming activity, Observations regarding the native languages, the experiences of the teacher herself.
<b>Modeling:</b> listen carefully what is said in the recorded text and try to relate it with the sounds of your native languages.	Chart of Phonetic symbols, Recorded sounds, handouts
<b>Checking for understanding:</b> Look at your handouts and determine which sounds are there in the given lexical items.	Questioning and quizzes
<b>Guided or monitored practice:</b> I'll be moving among your lab groups. Signal me if you have questions or need assistance...	Speech recordings and activities based upon solved examples for the sake of drill and practice.
<b>Independent practice:</b> Identify a question that you have about your native language. Then conduct an experiment that would answer the question".	Assignment based on the class discussion and practical learning based on data collection, organization and presentation.

This example deals with a specific subject; it can be replicated for other subjects provided the procedure is applied. This way, if implemented, personalization of the learning process may be achieved.

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## Conclusion

The purpose of this paper was to identify students' learning styles and suggest teachers to take into account those preferred learning styles while developing instructional methodology in teaching language programmes.

It is concluded from the study that to help students to do well in language programmes, teacher must understand their learning styles, so that the teacher can plan appropriate teaching strategies to accommodate individual strengths and needs. It is very important for teacher to share information with students about their learning styles and the preferred teaching strategies to accommodate those styles.

The researchers are sharply aware that inferences derived from a sample of 18 subjects may be questioned. However, they feel that the sampling is fairly representative of the average intake of students in universities at this level in Pakistan, and that the ratios indicated in it would be confirmed within reasonable limits in similar experiments done with other batches of students. Some kind of guarded generalization should be possible. Even if differences emerged from other experiments, the basic assumption, that students have different learning preferences, would remain valid. Also, factors such as age, gender numbers and educational background would probably affect findings in other experiments, but these factors have not been considered here. Ratios may be used as guidelines, so that the teacher can weight her teaching style to accommodate the varied learning expectations of a given group of students.

From the researcher's point of view, the ratios derived from this limited experiment are less important than the confirmation of the primary premise *that different learning preferences exist within groups of students, small or large*. The teacher's approach should be characterized by the expectation of heterogeneity, not of homogeneity.

In conclusion, language courses would do well to suggest models that accommodate different types of learners. It is desirable to provide a number of learning options that take into account diverse learning styles. Combining a mixture of approaches and methods allows students to react to instructional styles that best fit their individual learning styles. Effective teaching arises when she successfully reaches out to students whose preferred ways of learning are otherwise mismatched with the general style of teaching.

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## References

Borchert R., Jensen D., and Yates D. (1999), "**Hands-on and Visualization Modules for Enhancement of Learning in Mechanics: Development and Assessment in the Context of Myers Briggs Types and VARK Learning Styles,**" ASEE Annual Conference, Charlotte, NC,

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E.V. [http://www.usafa.af.mil/dfem/research\\_info/ed\\_research/paper\\_final3.pdf](http://www.usafa.af.mil/dfem/research_info/ed_research/paper_final3.pdf), 1999 (29-03-2009).

Danish K.F, Awan,A.S, (2008 )“A Study of Students’ Learning Styles in a Medical Institution in Pakistan” **Rawal Med J**;33:239-241.

Dunn R and Dunn K (1999). **The Complete Guide to the Learning Styles** . Inservice System Boston, MA: Allyn and Bacon.

Dunn, R., & Dunn, K. (1992). **Teaching elementary students through their individual learning styles: Practical approaches for grades 3-6**. Boston, MA: Allyn & Bacon.

Dunn, R., & Dunn, K. (1993). **Teaching secondary students through their individual learning styles: Practical approaches for grades 7-12**. Boston, MA: Allyn & Bacon.

Fleming N. **VARK, a Guide to Learning Styles** (online). <http://www.vark-learn.com/english/page.asp?p=questionnaire> [12.03. 2009].

Fleming N.(2001) **Teaching and Learning Styles: VARK Strategies**, pp. 128, Neil Fleming, E.V. <http://www.vark-learn.com/bookssoftware.htm>, (09-03-2009).

Fuller, D., Norby, R. F., Pearce, K. & Strand, S. (2000). Internet teaching by style: profiling the on-line professor. **Educational Technology and Society**, 3 (2)

Hawk, Thomas F.; Shah, Amit J. (2007) Decision Sciences. **The Journal of Innovative Education**, 5,( 1) : 1-19.

Hunter, M (1989) Madeline Hunter in the English Classroom *The English Journal* © 1989 National Council of Teachers of English.

Kellner, D. (2004). Technological transformation, multiple literacies, and the re-visioning of education. **E-Learning**, 1(1): 9-37.

Larkin-Hein T, Budny. D., (2000) “**Why Bother Learning about Learning Styles and Psychological Types?**,” , ASEE Annual Conference, St Louis, MO, American Society for Engineering Education, E.V. <http://www.asee.org/conferences/search/20707.pdf>. (25-03-2009)

Miller P. (2001) **Learning styles: the multimedia of the mind**. (451: 140) Educ Resources Inform Center.

Ochems, W., van Merriënboer, J., & Koper, R. (Eds.). (2004). **integrated e-learning: Implications for pedagogy, technology and organization**. London: Routledge Falmer.

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Robotham D. (2009) **The application of learning style theory in higher education teaching.**  
At: [www.glos.ac.uk/gdn/discuss/kolb2.htm](http://www.glos.ac.uk/gdn/discuss/kolb2.htm). Accessed: (02-04 2009).

Schmeck, R. (1988) **Learning Strategies and Learning Style**, New York,  
Plenum Press.

Suskie L. (2009) **What are learning styles? can we identify them? what is their place in an  
assessment program? First year assessment listserv.**

At:[www.brevard.edu/fyc/listserv/remarks/suskie2.htm](http://www.brevard.edu/fyc/listserv/remarks/suskie2.htm). (22-03-2009)

Taylor, J. C. (2004). **Will universities become extinct in the networked world?** Paper  
presented at the ICDE World Conference on Open & Distance Learning, Hong Kong.

Wolfe J. (1985) The teaching effectiveness of games in collegiate business courses. **Simulations  
Games** 16: 251–258.

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