ICT USAGE IN RELATION TO LEARNING STYLES OF ADOLESCENT STUDENTS

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Abstract

Information and Communication Technology (ICT) refers to the integration of computing technology and communication. It can be defined as 'Anything, which allows us to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipment'. ICT increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. Classroom teaching can be considered effective only of it learning about student engagement and involvement in the learning process. To ensure this a teacher ought to understand the different learning and thinking styles of the students. ICT has contributed in shifting the focus on learning than teaching.

Keywords: *ICT , Learning Styles and Adolescent*

The emergence of information and communication technology (ICT) has ushered in a new era. It has influenced by every sector of the society, that is, trade, industry, science, technology including education. ICT includes devices for encoding, storing, organization, processing, retrieving, transferring and presenting information with the help of telecommunication, television and computers. The emergence of ICT is not only affecting teaching style but also influencing the learning style. Whereby a student becomes the explorer of information and independent knowledge. The ICT has immerged power to enhance personalized learning. Tap Scott (1998) claimed that for the first time in history, children are more comfortable, knowledgeable, and literate than their parents about an innovation central to society's functioning. These children and youngsters, members of the —Net-Generation, will use digital media to develop and impose the digital culture on the rest of society. According to UNESCO (2002) Information and Communication Technology (ICT) may be regarded as the combination of 'Informatics technology' with other related technology, specifically communication technology.

Information and Communications Technology (ICT) is a tool to expand human skills and make living better. Information and Communications Technology (ICT) has been identified as areas that can enable us have a great deal of leverage in the delivery of quality education and thereby improving the lives of our people.

- **Face-to-face Interaction**- Online learning activities, lectures, videos, multimedia and telecommunication tools support the various learning processes

- **Helpful to students with special needs**- ICT provides wider access to learning and participation, particularly for learners with special educational needs and disabilities, and those unable to attend school due to illness or disaffection with traditional learning methods.

- **Latest information**- Students remain in touch with in touch with latest Information regarding their study using ICT techniques and the benefits of it in their educational activities.

LEARNING STYLES: The term 'learning styles' says that every student learns differently. Technically, an individual's learning style refers to the preferential way in which the student absorbs processes,

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comprehends and retains information. Kolb and Kolb (2005) has defined the concept of the learning style describes individual differences in learning based on the learner's preference for employing different phases of the learning cycle.

ICT has contributed in shifting the focus on learning than teaching. ICT helps students to explore knowledge to learn the content through self-study. The use of new technologies is often linked to the development of learning styles. Hargreaves (2004) highlights the importance of nine gateways to personalizing learning—curriculum, workforce, organization, student voice, mentoring, advice and guidance, new technologies (ICT), assessment for learning and learning to learn, with each potentially —enhancing student motivation and commitment to learning. Speak Up (2009) stated that —Students see the use of relevancy-based digital tools, content and resources as a key to driving learning productivity, not just about engaging students in learning‖. In studies that rely largely on self-reporting, most students feel that using ICTs makes them more effective learners.

In this study we try to establish the link between the different Learning Styles of Adolescents and their Usage of ICT. ICT provide all the tools to find activities which work with different Learning Styles of students in a class. So, investigator will try to study the Learning Styles of Students and how ICT can meet their pedagogical needs differently.

OBJECTIVES OF THE STUDY

• To study the usage of ICT among adolescent students with Auditory and Visual Learning Styles.

• To study the usage of ICT among adolescent students with Auditory and Kinesthetic Learning Styles.

• To study the usage of ICT among adolescent students with Visual and Kinesthetic Learning Styles.

METHOD

In order to conduct the present investigation, the independent classificatory variables was Visual, Auditory and Kinesthetic learners styles and the dependent variable was ICT usage.

SAMPLE

The sample comprised of eight C.B.S.E Schools randomly selected which were around 400 from Jalandhar city.

PROCEDURE

The secondary school students had been selected and grouped by using the tool prepared by the investigator. They had been grouped into Auditory Style Learners, Visual Style Learners and Kinesthetic Style Learners. After that ICT Usage tool prepared by the investigator had been administered on these groups. Data had been analyzed with the help of Statistical Techniques.

RESULT AND DISCUSSION

TABLE 1. - Means, SD'S, t-ratio of ICT Usage Of Auditory And Visual Learning Style

AUDITORY LEARNING STYLE	VISUAL LEARNING STYLE
$N_1 = 156$ $M_1 = 88.1$ $\sigma_1 = 24.4$	$N_2 = 116$ $M_2 = 95$ $\sigma_2 = 25.85$
$SE_{D1} = 3.1$ $t_1 = 2.23$ $df = 270$	

*Significant at 0.05 level of confidence.

The t-ratio in table 1 reveals that value of ICT usage is not significant at 0.01 level and significant at 0.05 level of confidence therefore hypothesis namely (H_1) is accepted at 0.01 level and rejected at 0.05 level in case of usage of ICT among students of auditory and visual learning styles.

TABLE 2- Means, SD'S, t-ratio of ICT Usage Of Auditory And Kinesthetic Learning Style

AUDITORY LEARNING STYLE	KINESTHETIC LEARNING STYLE
N1 = 156 M1 = 88.1 $\sigma_1 = 24.4$	N3 = 128 M3 = 91.5 $\sigma_3 = 25.5$
SED2 = 3 t2 = 1.13 df = 282	

The t-ratio in table 2 reveals that value of ICT usage is not significant at 0.01 level and 0.05 level of confidence therefore hypothesis namely (H_1) is accepted in case of usage of ICT among auditory and kinesthetic learning style.

TABLE 3- Means, SD'S, t-ratio of ICT Usage Of Visual And Kinesthetic Learning Style

VISUAL LEARNING STYLE	KINESTHETIC LEARNING STYLE
$N_2 = 116$ $M_2 = 95$ $\sigma_2 = 25.85$	$N_3 = 128$ $M_3 = 91.5$ $\sigma_3 = 25.5$
$SE_{D3} = 3.3$ $t_3 = 1.1$ df = 242	

The t-ratio in table 3 reveals that value of ICT usage is not significant at 0.01 level and 0.05 level of confidence.

CONCLUSIONS:

The analysis of data was done and the conclusions are as follows:

• It was found that there is significant difference in ICT usage among Adolescent students with Visual and Auditory Learning Style which means that adolescent students with Visual Learning Style use more ICT as compared to adolescent students with Auditory Learning Style.

• It was found that there is no significant difference in ICT usage among Adolescent students with Auditory and Kinesthetic.

• It was found that there is no significant difference in ICT usage among Adolescent students with Visual and Kinesthetic Learning Style.

IMPLICATIONS:

The findings of the study suggest that:

 Learning Styles can help in creating a better Online Learning Environment, Educational Software, Learning CD's and Web Based Instructions.

 Video games can help visual students by allowing for pictures and other visual aides to be used on the screen.

 The auditory students can then review their lessons again later in their homes teachers can allow their students to use I-Mate PDA phones, iPods, laptops, electronic boards, electronic pens, and electronic dictionaries.

 Teachers can give Kinesthetic learners the opportunity to write on, highlight, and interact with the IWB (Interactive Whiteboard)

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