

GLOBAL JOURNAL

OF HUMAN SOCIAL SCIENCE: G

Linguistics & Education

Hidden Markov Model

God and Creation

Modeling and Discovering

Highlights

Challenges of Globalization

Discovering Thoughts, Inventing Future

VOLUME 13

ISSUE 4

VERSION 1.0



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE : G
LINGUISTICS & EDUCATION



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE : G
LINGUISTICS & EDUCATION

VOLUME 13 ISSUE 4 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of Human Social Sciences. 2013.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Human Social Sciences." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Human Social Sciences"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Human Social Sciences" unless otherwise noted on specific articles.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

The opinions and statements made in this book are those of the authors concerned. Ultraculture has not verified and neither confirms nor denies any of the foregoing and no warranty or fitness is implied.

Engage with the contents herein at your own risk.

The use of this journal, and the terms and conditions for our providing information, is governed by our Disclaimer, Terms and Conditions and Privacy Policy given on our website <http://globaljournals.us/terms-and-condition/menu-id-1463/>

By referring / using / reading / any type of association / referencing this journal, this signifies and you acknowledge that you have read them and that you accept and will be bound by the terms thereof.

All information, journals, this journal, activities undertaken, materials, services and our website, terms and conditions, privacy policy, and this journal is subject to change anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; **Reg. Number: 0423089**)

Sponsors: *Open Association of Research Society*
Open Scientific Standards

Publisher's Headquarters office

Global Journals Inc., Headquarters Corporate Office,
Cambridge Office Center, II Canal Park, Floor No.
5th, **Cambridge (Massachusetts)**, Pin: MA 02141
United States

USA Toll Free: +001-888-839-7392

USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Open Association of Research Society, Marsh Road,
Rainham, Essex, London RM13 8EU
United Kingdom.

Packaging & Continental Dispatching

Global Journals, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please
email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org

Investor Inquiries: investers@globaljournals.org

Technical Support: technology@globaljournals.org

Media & Releases: media@globaljournals.org

Pricing (Including by Air Parcel Charges):

For Authors:

22 USD (B/W) & 50 USD (Color)

Yearly Subscription (Personal & Institutional):

200 USD (B/W) & 250 USD (Color)

EDITORIAL BOARD MEMBERS (HON.)

John A. Hamilton, "Drew" Jr.,
Ph.D., Professor, Management
Computer Science and Software
Engineering
Director, Information Assurance
Laboratory
Auburn University

Dr. Henry Hexmoor
IEEE senior member since 2004
Ph.D. Computer Science, University at
Buffalo
Department of Computer Science
Southern Illinois University at Carbondale

Dr. Osman Balci, Professor
Department of Computer Science
Virginia Tech, Virginia University
Ph.D. and M.S. Syracuse University,
Syracuse, New York
M.S. and B.S. Bogazici University,
Istanbul, Turkey

Yogita Bajpai
M.Sc. (Computer Science), FICCT
U.S.A. Email:
yogita@computerresearch.org

Dr. T. David A. Forbes
Associate Professor and Range
Nutritionist
Ph.D. Edinburgh University - Animal
Nutrition
M.S. Aberdeen University - Animal
Nutrition
B.A. University of Dublin- Zoology

Dr. Wenying Feng
Professor, Department of Computing &
Information Systems
Department of Mathematics
Trent University, Peterborough,
ON Canada K9J 7B8

Dr. Thomas Wischgoll
Computer Science and Engineering,
Wright State University, Dayton, Ohio
B.S., M.S., Ph.D.
(University of Kaiserslautern)

Dr. Abdurrahman Arslanyilmaz
Computer Science & Information Systems
Department
Youngstown State University
Ph.D., Texas A&M University
University of Missouri, Columbia
Gazi University, Turkey

Dr. Xiaohong He
Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS,
PhD., (University of Texas-Dallas)

Burcin Becerik-Gerber
University of Southern California
Ph.D. in Civil Engineering
DDes from Harvard University
M.S. from University of California, Berkeley
& Istanbul University

Dr. Bart Lambrecht

Director of Research in Accounting and Finance
Professor of Finance
Lancaster University Management School
BA (Antwerp); MPhil, MA, PhD
(Cambridge)

Dr. Carlos García Pont

Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management),
Massachusetts Institute of Technology (MIT)
Master in Business Administration, IESE,
University of Navarra
Degree in Industrial Engineering,
Universitat Politècnica de Catalunya

Dr. Fotini Labropulu

Mathematics - Luther College
University of Regina
Ph.D., M.Sc. in Mathematics
B.A. (Honors) in Mathematics
University of Windsor

Dr. Lynn Lim

Reader in Business and Marketing
Roehampton University, London
BCom, PGDip, MBA (Distinction), PhD,
FHEA

Dr. Mihaly Mezei

ASSOCIATE PROFESSOR
Department of Structural and Chemical
Biology, Mount Sinai School of Medical
Center
Ph.D., Etsv Lornd University
Postdoctoral Training,
New York University

Dr. Söhnke M. Bartram

Department of Accounting and Finance
Lancaster University Management School
Ph.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)

Dr. Miguel Angel Ariño

Professor of Decision Sciences
IESE Business School
Barcelona, Spain (Universidad de Navarra)
CEIBS (China Europe International Business School).
Beijing, Shanghai and Shenzhen
Ph.D. in Mathematics
University of Barcelona
BA in Mathematics (Licenciatura)
University of Barcelona

Philip G. Moscoso

Technology and Operations Management
IESE Business School, University of Navarra
Ph.D in Industrial Engineering and Management, ETH Zurich
M.Sc. in Chemical Engineering, ETH Zurich

Dr. Sanjay Dixit, M.D.

Director, EP Laboratories, Philadelphia VA
Medical Center
Cardiovascular Medicine - Cardiac
Arrhythmia
Univ of Penn School of Medicine

Dr. Han-Xiang Deng

MD., Ph.D
Associate Professor and Research
Department Division of Neuromuscular
Medicine
Davee Department of Neurology and Clinical
Neuroscience
Northwestern University
Feinberg School of Medicine

Dr. Pina C. Sanelli

Associate Professor of Public Health
Weill Cornell Medical College
Associate Attending Radiologist
NewYork-Presbyterian Hospital
MRI, MRA, CT, and CTA
Neuroradiology and Diagnostic
Radiology
M.D., State University of New York at
Buffalo, School of Medicine and
Biomedical Sciences

Dr. Roberto Sanchez

Associate Professor
Department of Structural and Chemical
Biology
Mount Sinai School of Medicine
Ph.D., The Rockefeller University

Dr. Wen-Yih Sun

Professor of Earth and Atmospheric
SciencesPurdue University Director
National Center for Typhoon and
Flooding Research, Taiwan
University Chair Professor
Department of Atmospheric Sciences,
National Central University, Chung-Li,
TaiwanUniversity Chair Professor
Institute of Environmental Engineering,
National Chiao Tung University, Hsin-
chu, Taiwan.Ph.D., MS The University of
Chicago, Geophysical Sciences
BS National Taiwan University,
Atmospheric Sciences
Associate Professor of Radiology

Dr. Michael R. Rudnick

M.D., FACP
Associate Professor of Medicine
Chief, Renal Electrolyte and
Hypertension Division (PMC)
Penn Medicine, University of
Pennsylvania
Presbyterian Medical Center,
Philadelphia
Nephrology and Internal Medicine
Certified by the American Board of
Internal Medicine

Dr. Bassey Benjamin Esu

B.Sc. Marketing; MBA Marketing; Ph.D
Marketing
Lecturer, Department of Marketing,
University of Calabar
Tourism Consultant, Cross River State
Tourism Development Department
Co-ordinator , Sustainable Tourism
Initiative, Calabar, Nigeria

Dr. Aziz M. Barbar, Ph.D.

IEEE Senior Member
Chairperson, Department of Computer
Science
AUST - American University of Science &
Technology
Alfred Naccash Avenue – Ashrafieh

PRESIDENT EDITOR (HON.)

Dr. George Perry, (Neuroscientist)

Dean and Professor, College of Sciences

Denham Harman Research Award (American Aging Association)

ISI Highly Cited Researcher, Iberoamerican Molecular Biology Organization

AAAS Fellow, Correspondent Member of Spanish Royal Academy of Sciences

University of Texas at San Antonio

Postdoctoral Fellow (Department of Cell Biology)

Baylor College of Medicine

Houston, Texas, United States

CHIEF AUTHOR (HON.)

Dr. R.K. Dixit

M.Sc., Ph.D., FICCT

Chief Author, India

Email: authorind@computerresearch.org

DEAN & EDITOR-IN-CHIEF (HON.)

Vivek Dubey(HON.)

MS (Industrial Engineering),

MS (Mechanical Engineering)

University of Wisconsin, FICCT

Editor-in-Chief, USA

editorusa@computerresearch.org

Sangita Dixit

M.Sc., FICCT

Dean & Chancellor (Asia Pacific)

deanind@computerresearch.org

Suyash Dixit

(B.E., Computer Science Engineering), FICCTT

President, Web Administration and

Development , CEO at IOSRD

COO at GAOR & OSS

Er. Suyog Dixit

(M. Tech), BE (HONS. in CSE), FICCT

SAP Certified Consultant

CEO at IOSRD, GAOR & OSS

Technical Dean, Global Journals Inc. (US)

Website: www.suyogdixit.com

Email: suyog@suyogdixit.com

Pritesh Rajvaidya

(MS) Computer Science Department

California State University

BE (Computer Science), FICCT

Technical Dean, USA

Email: pritesh@computerresearch.org

Luis Galárraga

J!Research Project Leader

Saarbrücken, Germany

CONTENTS OF THE VOLUME

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Table of Contents
- v. From the Chief Editor's Desk
- vi. Research and Review Papers
 1. A New Approach for Modeling and Discovering Learning Styles by using Hidden Markov Model. *1-10*
 2. "Effect of Activity Based Approach on Achievement in Science of Students at Elementary Stage". *11-22*
 3. Kindness the Relationship between God and Creation. *23-30*
 4. Philosophy of Education: the Challenges of Globalization and Innovation in the Information Society. *31-34*
 5. "The Change Wind Blew": Diachronic and Synchronic Orientations of Sound Change in Basrah Arabic. *35-40*
 6. Learning Strategies used by Pakistani ESL Students in University of Sargodha. *41-49*
- vii. Auxiliary Memberships
- viii. Process of Submission of Research Paper
- ix. Preferred Author Guidelines
- x. Index



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE
LINGUISTICS & EDUCATION

Volume 13 Issue 4 Version 1.0 Year 2013

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-460X & Print ISSN: 0975-587X

A New Approach for Modeling and Discovering Learning Styles by using Hidden Markov Model

By Loc Nguyen

University of Science, Ho Chi Minh city, Vietnam

Abstract - Adaptive learning systems are developed rapidly in recent years and the “heart” of such systems is user model. User model is the representation of information about an individual that is essential for an adaptive system to provide the adaptation effect, i.e., to behave differently for different users. There are some main features in user model such as: knowledge, goals, learning styles, interests, background... but knowledge, learning styles and goals are features attracting researchers’ attention in adaptive e-learning domain. Learning styles were surveyed in psychological theories but it is slightly difficult to model them in the domain of computer science because learning styles are too unobvious to represent them and there is no solid inference mechanism for discovering users’ learning styles now. Moreover, researchers in domain of computer science will get confused by so many psychological theories about learning style when choosing which theory is appropriate to adaptive system.

In this paper we give the overview of learning styles for answering the question “what are learning styles?” and then propose the new approach to model and discover students’ learning styles by using Hidden Markov model (HMM).

GJHSS-G Classification : FOR Code : 130304



Strictly as per the compliance and regulations of:



© 2013. Loc Nguyen. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

A New Approach for Modeling and Discovering Learning Styles by using Hidden Markov Model

Loc Nguyen

Abstract - Adaptive learning systems are developed rapidly in recent years and the “heart” of such systems is user model. User model is the representation of information about an individual that is essential for an adaptive system to provide the adaptation effect, i.e., to behave differently for different users. There are some main features in user model such as: knowledge, goals, learning styles, interests, background... but knowledge, learning styles and goals are features attracting researchers’ attention in adaptive e-learning domain. Learning styles were surveyed in psychological theories but it is slightly difficult to model them in the domain of computer science because learning styles are too unobvious to represent them and there is no solid inference mechanism for discovering users’ learning styles now. Moreover, researchers in domain of computer science will get confused by so many psychological theories about learning style when choosing which theory is appropriate to adaptive system.

In this paper we give the overview of learning styles for answering the question “what are learning styles?” and then propose the new approach to model and discover students’ learning styles by using Hidden Markov model (HMM). HMM is such a powerful statistical tool that it allows us to predict users’ learning styles from observed evidences about them.

I. INTRODUCTION

People have different views upon the same situation, the way they perceive and estimate the world is different. So their responses to around environment are also different. For example, look at the way students prefers to study a lesson. Some have a preference for listening to instructional content (so-called *auditory* learner), some for perceiving materials as picture (*visual* learner), some for interacting physically with learning material (*tactile kinesthetic* learner), some for making connections to personal and to past learning experiences (*internal kinesthetic* learner). Such characteristics about user cognition are called learning styles but learning styles are wider than what we think about them.

Learning styles are defined as the composite of characteristic cognitive, affective and psychological factors that serve as relatively stable indicators of how a learner perceives, interacts with and responds to the learning environment. Learning style is the important factor in adaptive learning, which is the navigator helping teacher/computer to deliver the best instructions to students.

Author : The University of Science, Ho Chi Minh city, Vietnam.
E-mail : ng_phloc@yahoo.com

There are many researches and descriptions about learning style but only minorities of them are valuable and applied widely in adaptive learning. The descriptions of learning style (so-called learning style models) are categorized following criteria:

- Their theoretical importance
- Their wide spread use
- Their influence on other learning style models
- Learning style models are organized within the families such as:
 - Constitutionally based learning styles and preferences (Dunn and Dunn)
 - The cognitive structure (Witkin, Riding)
 - Stable personality type (Myers-Briggs)
 - Flexibly learning preferences (Kolb, Honey-Mumford, Felder-Silverman, Pask and Vermunt model)

In section 2, we discuss about such learning style families. In general, learning styles are analyzed comprehensively in theory of psychology but there are few of researches on structuring learning styles by mathematical tools to predict/infer users’ styles. Former researches often give users questionnaires and then analyze their answers in order to discover their styles but there are so many drawbacks of question-and-answer techniques, i.e., not questions enough, confusing questions, users’ wrong answers... that such technique is not a possible solution. It is essential to use another technique that provides more powerful inference mechanism. So, we propose the new approach which uses hidden Markov model to discover and represent users’ learning styles in section 4, 5. We should pay attention to some issues of providing adaptation of learning materials to learning styles concerned in section 3.

II. LEARNING STYLE FAMILIES

a) *Constitutionally based learning styles and preferences*

Learning styles in this family are fixed and difficult to change. This family has the famous model “Dunn and Dunn model” developed by authors Rita Dunn and Kenneth Dunn [Dunn, Dunn 2003]. With Dunn and Dunn model, learning style is divided into 5 major strands:



- Environmental: incorporates user preferences for sound, light, temperature...
- Emotional: considers user motivation, persistence, responsibility...
- Sociological: discovers user preference for learning alone, in pairs, as member of group
- Physiological: surveys perceptual strengths such as visual, auditory, kinesthetic, tactile...
- Psychological: focusing on user's psychological traits namely incorporates the information-processing elements of global versus analytic and impulsive versus reflective behaviors.
- The psychological strand classifies learning styles into modalities such as:
 - *Auditory*: Preference to listen to instructional content
 - *Visual (Picture)*: Preference to perceive materials as pictures
 - *Visual (Text)*: Preference to perceive materials as text
 - *Tactile Kinesthetic*: Preference to interact physically with learning material
 - *Internal Kinesthetic*: Preference to make connections to personal and to past learning experiences
- The physiological strand classifies learning styles into modalities such as:
 - *Impulsive*: Preference to try out new material immediately
 - *Reflective*: Preference to take time to think about a problem
 - *Global*: Preference to get the 'big picture' first, details second
 - *Analytical*: Preference to process information sequentially: details first, working towards the 'big

b) *The Cognitive Structure*

In this family, learning styles are considered as structural properties of cognitive system itself. So styles are linked to particular personality features, which implicates that cognitive styles are deeply embedded in personality structure. There are two models in this family: Witkin model and Riding model.

i. *Witkin Model*

The main aspect in Witkin model [Witkin, Moore, Goodenough, Cox 1997] is the bipolar dimensions of *field-dependence/field-independence* (FD/FI) in which:

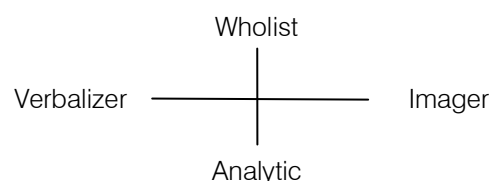
- *Field-dependence* (FD) person process information globally and attend to the most salient cues regardless of their relevance. In general, they see the global picture, ignore details and approach the task more holistically. They often get confused with non-linear learning, so, they require guided navigation in hypermedia space.
- *Field-independency* (FI) person are highly analytic, care more inherent cues in the field and are able to extract the relevant cues necessary to complete a task. In general, they focus on details and learn

more sequentially. They can set learning path themselves and have no need of guidance.

ii. *Riding Model*

Riding model [Riding, Rayner 1998] identifies learning styles into two dimensions: *Wholist-Analytic* and *Verbalizer-Imager*.

- *Wholist-Analytic* dimension expresses how an individual cognitively organize information either into whole or parts. *Wholist* tends to perceive globally before focusing on details. Otherwise, *analytic* tends to perceive everything as the collection of parts and focusing on such parts.
- *Verbalizer-Imager* dimension expresses how an individual tends to perceive information, either as text or picture. *Verbalizer* prefers to text. *Imager* prefers to picture.



c) *Stable Personal Type*

The models in this family have a common focus upon learning style as one part of the observable expression of a relatively stable personality type. We will glance the famous model in this family: Myers-Briggs Type Indicator.

i. *Myers-Briggs Type Indicator*

This model involves four different pairs of opposite preferences for how person focus and interact with around environment:

- How does a person relate to the world?
 - a. *Extravert*: try things out, focus on the world around, like working in teams
 - b. *Introvert*: think things through, focus on the inner world of ideas, prefer to work alone
- How does a person absorb/process information?
 - a. *Sensor*: concrete, realistic, practical, detail-oriented, focus on events and procedures
 - b. *Intuitive*: abstract, imaginative, concept-oriented, focus on meanings and possibilities
- How does a person make decisions?
 - a. *Thinker*: skeptical, tend to make decisions based on logic and rules
 - b. *Feeler*: appreciative, tend to make decisions based on personal and human considerations
- How does a person manage her/his life?
 - a. *Judger*: organized, set and follow agendas, make decisions quickly
 - b. *Perceiver*: disorganized, adapt to change environment, gather more information before making a decision.

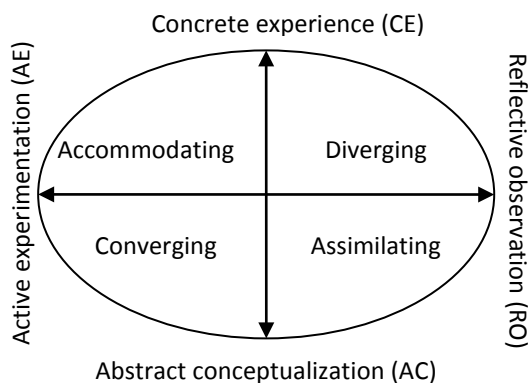
d) *Flexible stable learning preference*

With models in this family, learning style is not a fixed trait but is a differential preference for learning, which changes slightly from situation to situation. There are three typical models in this family: Kolb's Learning Style Inventory, Honey and Mumford, Felder-Silverman

i. *Kolb Learning Style Inventory*

According to Kolb [Kolb 1999], the author of this model: "learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it". The center of Kolb model is the four-stage cycle of learning which contains four stages in learning process: *Concrete Experience* (CE - feeling), *Abstract Conceptualization* (AC - thinking), *Active Experimentation* (AE - doing) and *Reflective Observation* (RO - watching). The four-stage cycle is concretized as below:

1. Learner makes acquainted with the concrete situation, accumulates the experience (CE- feeling)
2. Learner observes reflectively (RO - watching) himself
3. He conceptualizes what he watches (observations) into abstract concepts (AC - thinking)
4. He experiments actively such concepts and gets the new experience (AE - doing). The cycle repeats again.



Based on four stages, there are four learning styles: accommodating, assimilating, diverging and converging. Each couple of these stages constitutes a style, for example, CE and AE combine together in order to generate accommodating style.

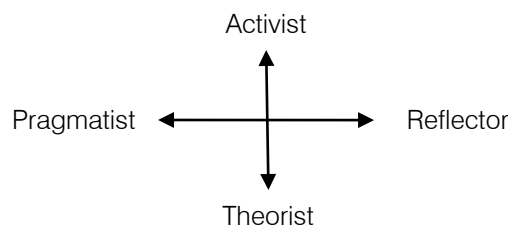
- *Accommodating* (CE/AE): emphasizes concrete experience and active experimentation. Learners prefer to apply learning material in new situations so that they solve real problems. A typical question for this style is "What if?"
- *Assimilating* (AC/RO): prefers abstract conceptualization and reflective observation. Learners respond to information presented in an organized, logical fashion and benefit if they have time for reflection. A typical question for this style is "What?"

- *Converging* (AC/AE): relies primarily on abstract conceptualization and active experimentation. Learners respond to having opportunities to work actively on well-defined tasks and to learn by trial-and-error in an environment that allows them to fail safely. A typical question for this style is "How?"
- *Diverging* (CE/RO): emphasizes concrete experience and reflective observation. Learners respond well to explanations of how course material relates to their experience, their interests, and their future careers. A typical question for this style is "Why?"

ii. *Honey and Mumford Model*

According to Peter Honey and Alan Mumford [Honey, Mumford 1992], the authors of this model, there are four learning styles:

- *Activist*: learners are open-minded and comprehend new information by doing something with it.
- *Reflector*: learners prefer to think about new information first before acting on it.
- *Theorist*: learners think things through in logical steps, assimilate different facts into coherent theory.
- *Pragmatist*: learners have practical mind, prefer to try and test techniques relevant to problems.



iii. *Felder-Silverman Model*

This model developed by Felder and Silverman [Felder, Silverman 1988] involves following dimensions:

- *Active/Reflective*. Active students understand information only if they discussed it, applied it. Reflective students think thoroughly about things before doing any practice.
- *Sensing/Intuitive*. Sensing students learn from concrete tasks related to problems and facts that could be solved by well-behaved methods. They are keen on details. Intuitive students discover alternate possibilities and relationships by themselves, working with abstractions and formula.
- *Verbal/Visual*. Verbal students like learning materials in text form. Otherwise visual student prefer to images, pictures...
- *Sequential/Global*. Sequential students structure their learning process by logically chained steps, each step following from previous one. Global students prefer to learn in random jumps. They can solve complicated problem but don't know clearly how they did it.

iv. *Pask Model*

Pask model developed by Pask [Pask 1976] states that there are two learning styles:

- *Wholist*: Learners understand problems by building up a global view
- *Serialist*: Learners prefer to details of activities, facts and follow a step-by-step learning procedure.

v. *Vermunt Model*

According to Vermunt [Vermunt 1996], the author of this model, there are four learning styles:

- *Meaning-oriented*: Learners prefer to get theory before go to examples (similar to assimilating style of Kolb model)
- *Application-directed*. Learners prefer to know the purpose of information before get theory (similar to accommodating style of Kolb model)
- *Undirected*: similar to FD style of Wikin model
- *Reproduction-oriented*: similar to FI style of Wikin model

III. PROVIDING ADAPTATION OF LEARNING MATERIALS TO LEARNING STYLES

Learning styles are discovered and explored in psychological domain but how they are incorporated into adaptive systems? We must solve the problem of "matching" learning materials with users' learning styles. The teacher must recognize styles of students and then provide individually them teaching methods associated personal learning materials (lesson, exercise, test...). Such teaching method is called learning strategy or instructional strategy or adaptive strategy. Although there are many learning style models but they share some common features, such as: the modality *visual (picture)/visual (text)* in Dunn and Dunn model is similar to *verbalizer /imager* dimension in riding model and *verbal-visual* dimension in Felder-Silverman model. Strategies are supposed according to common features of model because it is too difficult to describe comprehensively all features of model. Features of all models (learning styles) can be categorized into three groups: perception and understanding which are enumerated together with adaptive strategies as below:

Perception group: This group related learners' perception includes:

- The *visual(picture) / visual(text)* modality in Dunn and Dunn model is similar to the *verbalizer/imager* dimension in Riding model and *verbal-visual* dimension in Felder-Silverman model. Instructional strategy is that the teacher should recommend textual materials to verbalizer and pictorial materials to imager.
- The *sensing/intuitive* dimension in Felder-Silverman model is identical to the *sensor/intuitive* dimension in Myer Briggs Type Indicator. Sensing learners are recommended examples before expositions, otherwise, expositions before examples for intuitive learners.

- The *perceptive-judging* dimension in Myer Briggs Type Indicator. Perceptive learners are provided rich media such as the integrative use of pictures, tables and diagram. Otherwise, judging learners are provided lean materials.
- The *impulsive/reflective* modality in Dunn and Dunn model is similar to the *activist/reflector* dimension in Honey and Mumford model, the *active/reflective* dimension in Felder-Silverman model and the *extravert/introvert* of Myers-Briggs Type Indicator. Active (also impulsive, extravert) learners are provided activity-oriented approach: showing content of activity and links to example, theory and exercise. Reflective (also introvert) learners are provided example-oriented approach: showing content of example and links to theory, exercise and activity.
- The *theorist/pragmatist* dimension of Honey and Mumford model. Theorists are provided theory-oriented approach: showing content of theory and links to example, exercise and activity. Pragmatists are provided exercise-oriented approach: showing content of exercise and links to example, theory and activity.
- The *accommodating/assimilating* dimension of Kolb model is similar to *application-directed/ meaning-oriented* dimension of Vermunt model. The adaptive strategy for accommodating style is to provide application-based information to learners. Otherwise, theory-based information for assimilating style.

Understanding group: This group related to the way learners comprehend knowledge includes:

- The *global/analytical* modality in Dunn and Dunn model is similar to *wholist-analytic* dimension in riding model, *global/sequential* dimension in Felder-Silverman model, *wholist-serialist* dimension in Pask model. Global (also wholist) learners are provided breadth-first structure of learning material. Otherwise, analytical (also analytic, sequential, serialist) learners are recommended depth-first structure of learning materials. For the breadth-first structure, after a learner has already known all the topics at the same level, other descendant topics at lower level are recommended to her/him. For the depth-first structure, after a learner has already known a given topic T_1 and all its children (topic) at lower level, the sibling topic of T_1 (namely T_2 , at same level with T_1) will be recommended to her/him.
- The *FD/FI* dimension in Wikin model is correlated with *undirected/reproduction-oriented* dimension in Vermunt model. FD learners are provided breadth-first structure of materials, guided navigation, illustration of ideas with visual materials, advance organizer and system control. FI learners are provided depth-first structure of materials or navigational freedom, user control and individual environment.

The adaptive strategy (for learning style) is the sequence of adaptive rules which define how adaptation to learning styles is performed. Learning style strategies is classified into three following forms:

- Selection of information: Information (learning materials) is presented in various types such as: text, audio, video, graph, picture... Depending on user's learning styles, an appropriate type will be chosen to provide to user. For example, verbalizers are recommended text and imagers are suggested pictures, graphs. This form support adaptation techniques such as: adaptive presentation, altering fragments, stretch text...
- Ordering information or providing different navigation paths: The order in which learning materials are suggested to users is tuned with learning styles. For active learners, learning materials are presented in the order: activity→example→theory→exercise. For reflective learner, this order is changed such as: example→theory→exercise→activity. This form is corresponding to link adaptation techniques: direct guidance, link sorting, link hiding, link annotation.
- Providing learners with navigation support tools: Different learning tools are supported to learners according to their learning styles. For example, in Witkin model, FD learners are provided tools such as: concept map, graphic path indicator. Otherwise FI learners are provided with a control option showing a menu from which they can choose in any order (because they have high self-control).

There are two type of strategy:

- *Instructional strategy* is itself, which contains adaptive rules and is in three above forms.
- *Instructional meta-strategy* is strategy which is used to observe user actions and infer their learning styles. Thus, meta-strategy is applied in order to define strategy.

Our approach is an instructional meta-strategy that apply Markov model to infer users' learning styles. Before discussing about main techniques, it is necessary to glance over hidden Markov model.

IV. HIDDEN MARKOV MODEL

There are many real-world phenomena (so-called states) that we would like to model in order to explain our observations. Often, given sequence of observations symbols, there is demand of discovering real states. For example, there are some states of weather: *sunny, cloudy, rainy*. Based on observations such as: wind speed, atmospheric pressure, humidity, temperature..., it is possible to forecast the weather by using Hidden Markov Model (HMM). Before discussing about HMM, we should glance over the definition of Markov Model (MM). First, MM is the statistical model

which is used to model the stochastic process. MM is defined as below:

- Given a finite set of state $S = \{s_1, s_2, \dots, s_n\}$ whose cardinality is n . Let Π be the *initial state distribution* where $\pi_i \in \Pi$ represents the probability that the stochastic process begins in state s_i . In other words Π_i is the initial probability of state s_i , where $\sum_{s_i \in S} \pi_i = 1$
- The stochastic process which is modeled gets only one state from S at all times. The process is denoted as a finite vector $P = (x_1, x_2, \dots, x_n)$ whose element x_i is a state ranging in space S . Note that $x_i \in S$ is one of states in the finite set S , x_i is identical to s_i . Moreover, the process must meet fully the *Markov property*, namely, given the current state x_k of process P , the conditional probability of next state x_{k+1} is only relevant to current state x_k , not relevant any past state $(x_{k-1}, x_{k-2}, x_{k-3}, \dots)$. In other words, $Pr(x_{k+1} | x_0, x_1, \dots, x_{k-1}) = Pr(x_{k+1} | x_k)$. Such process is called first-order Markov process.
- At each lock time, the process transitions to the next state based upon the *transition probability distribution* a_{ij} which depends only on the previous state. So a_{ij} is the probability that, the process change the current state s_i to next state s_j . The probability of transitioning from any given state to some next state is 1: $\forall s_i \in S, \sum_{s_j \in S} a_{ij} = 1$. All transition probabilities $a_{ij}(s)$ constitute the *transition probability matrix* A .

Briefly, MM is the triple $\langle S, A, \Pi \rangle$. In typical MM, states are observed directly by users and transition probability matrix is the unique parameters. Otherwise, Hidden Markov Model (HMM) is similar to MM except that the underlying states become hidden from observer, they are hidden parameters. HMM adds more output parameters which are called observations. Each state (hidden parameter) has the conditional probability distribution upon such observations. HMM is responsible for discovering hidden parameters (states) from output parameters (observations), given the stochastic process. The HMM have further properties as below:

- There is the second stochastic process which produces *observations* correlating hidden states. Suppose there is a finite set of possible observations $\theta = \{\vartheta_1, \vartheta_2, \dots, \vartheta_m\}$ whose cardinality is m .
- There is a probability distribution of producing a given observation in each state. Let $b_i(k)$ be the probability of observation ϑ_k when the second stochastic process is in state s_i . The sum of probabilities of all observations which observed in a certain state is 1, $\forall i \in S, \sum_{\vartheta_k \in \theta} b_i(k) = 1$. All

probabilities of observations $b_i(k)$ constitute the observation probability matrix B .

Thus, HMM is the 5-tuple $\Delta = \langle S, \theta, A, B, \Pi \rangle$. Back to weather example, suppose you need to predict how whether is tomorrow: *sun* or *cloud* or *rain* since you know only observations about the humidity: *dry*, *dryish*, *damp*, *soggy*. The HMM is represented following:

$S = \{sun, cloud, rain\}$, $\theta = \{dry, dryish, damp, soggy\}$

sun	cloud	rain
0.5	0.5	0.5

Uniform initial state distribution Π

		weather today			
		sun	cloud	rain	
weather yesterday	sun	0.5	0.25	0.25	
	cloud	0.4	0.2	0.4	
	rain	0.1	0.7	0.2	

Transition probability matrix A

		humidity				
		dry	dryish	damp	soggy	
weather	sun	0.6	0.2	0.15	0.05	
	cloud	0.25	0.25	0.25	0.25	
	rain	0.05	0.1	0.35	0.5	

Observation probability matrix B

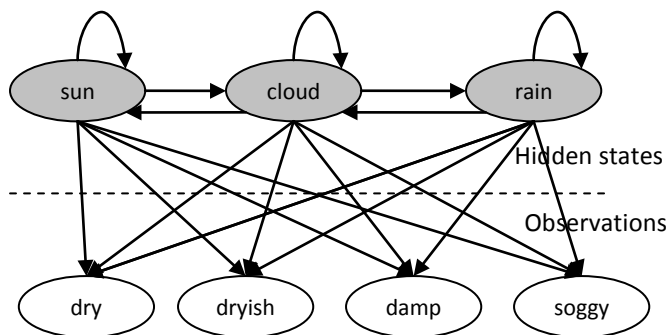


Figure 1 : HMM of weather forecast (hidden states are shaded)

Uncovering problem and Viterbi algorithm

Given HMM Δ and a sequence of observations $O = \{o_1 \rightarrow o_2 \rightarrow \dots \rightarrow o_k\}$ where $o_i \in \theta$, how to find the sequence of states $U = \{u_1 \rightarrow u_2 \rightarrow \dots \rightarrow u_k\}$ where $u_i \in S$ so that U is most likely to have produced the observation sequence O . This is the uncovering problem: which sequence of state transitions is most likely to have led to this sequence of observations. It means to maximize the selection of $U: \arg \max_U [\Pr(O | \Delta)]$. We can apply brute-force strategy: "go through all possible such O and pick the one with the maximum" but this strategy is infeasible given a very large numbers of states. In this situation, Viterbi algorithm [Dugad, Desai 1996] is the effective solution. Instead of describing details of Viterbi algorithm, we only use it to predict learner's styles given observations about her/him.

V. APPLYING HIDDEN MARKOV MODEL INTO MODELING AND INFERRING USERS' LEARNING STYLES

For modeling learning style (LS) using HMM we should determine states, observations and the relationship between states and observations in context of learning style. In other words, we must define five components S, θ, A, B, Π . Each learning style is now considered as a state. The essence of state transition in HMM is the change of user's learning style, thus, it is necessary to recognize the learning styles which are most suitable to user. After monitoring users' learning process, we collect observations about them and then discover their styles by using inference mechanism in HMM, namely Viterbi algorithm. Suppose we choose Honey-Mumford model and Felder-Silverman model as principal models which are presented by HMM. We have three dimensions: *Verbal/Visual*, *Activist/ Reflector*, *Theorist/ Pragmatist* which are modeled as three HMM(s): $\Delta_1, \Delta_2, \Delta_3$ respectively. For example, in Δ_1 , there are two states: *Verbal* and *Visual*; so $S_1 = \{verbal, visual\}$. We have:

- $\Delta_1 = \langle S_1, \theta_1, A_1, B_1, \Pi_1 \rangle$.
- $\Delta_2 = \langle S_2, \theta_2, A_2, B_2, \Pi_2 \rangle$.
- $\Delta_3 = \langle S_3, \theta_3, A_3, B_3, \Pi_3 \rangle$.

We are responsible for defining states (S_i), initial state distributions (Π_i), transition probability matrices (A_i), observations (θ_i), observation probability matrices (B_i) through five steps

1. Defining **states**: each state is corresponding to a leaning style.
 - $S_1 = \{verbal, visual\}$,
 - $S_2 = \{activist, reflector\}$,
 - $S_3 = \{theorist, pragmatist\}$.
2. Defining **initial state distributions**: we use uniform probability distribution for each Π_i .
 - $\Pi_1 = \{0.5, 0.5\}$; it means that $Pr(verbal) = Pr(visual) = 0.5$
 - $\Pi_2 = \{0.5, 0.5\}$; $Pr(activist) = Pr(reflector) = 0.5$
 - $\Pi_3 = \{0.5, 0.5\}$; $Pr(theorist) = Pr(pragmatist) = 0.5$
3. Defining **transition probability matrices**: we suppose that learners tend to keep their styles; so the conditional probability of a current state on previous state is high if both current state and previous state have the same value and otherwise. For example, $Pr(s_i=verbal | s_{i-1}=verbal) = 0.7$ is obviously higher than $Pr(s_i=verbal | s_{i-1}=visual) = 0.3$.

	verbal	visual		Activist	Reflector
verbal	0.7	0.3	Activist	0.7	0.3
visual	0.3	0.7	Reflector	0.3	0.7

	Theorist	Pragmatist
Theorist	0.7	0.3
Pragmatist	0.3	0.7

Table 1 : Transition probability matrices: A_1, A_2, A_3

4. Defining **observations**. There is a relationship between learning object learned by users and their learning styles. We assign three attributes to each learning object (such as lecture, example...):

- *Format* attribute indicating the format of learning object has three values: *text, picture, video*.
- *Type* attribute telling the type of learning object has four values: *theory, example, exercise, and puzzle*.
- *Interactive* attribute indicates the “interactive” level of learning object. The more interactive learning object is, the more learners interact together in their learning path. This attribute has three values corresponding to three levels: *low, medium, high*.

Whenever a student selects a learning object (LO), it raises observations depending on the attributes of learning object. We must account for the values of the attributes selected. For example, if a student selects a LO which has *format* attribute being *text*, *type* attribute being *theory*, *activity* attribute being *low*, there are considerable observations: *text, theory, low* (interaction). So, it is possible to infer that she/he is a theorist.

The dimension *Verbal/Visual* is involved in format attribute. The dimensions *Activist/ Reflector* and *Theorist/ Pragmatist* relate to both *type* attribute and *interactive* attribute. So we have:

- $\theta_1 = \{ \textit{Text, picture, video} \}$
- $\theta_2 = \{ \textit{Theory, example, exercise, puzzle, low (interaction), medium (interaction), high (interaction)} \}$
- $\theta_3 = \{ \textit{Theory, example, exercise, puzzle, low (interaction), medium (interaction) high (interaction)} \}$

5. Defining **observation probability matrices**. Different observations (attributes of LO) effect on states (learning styles) in different degrees. Because the “weights” of observation vary according to states, there is a question: “How to specify weights?” If we can specify these “weights”, it is easy to determine observation probability matrices.

In the Honey-Mumford model and Felder-Silverman model, verbal students prefer to text material and visual students prefer to pictorial materials. The weights of observations: *text, picture, video* on state *Verbal* are in descending order. Otherwise, the weights of observations: *text, picture, video* on state *Visual* are in ascending order. Such weights themselves are observation probabilities. We can define these weights as below:

- $Pr(\textit{text} | \textit{verbal}) = 0.6, Pr(\textit{picture} | \textit{verbal}) = 0.3, Pr(\textit{video} | \textit{verbal}) = 0.1$
- $Pr(\textit{text} | \textit{visual}) = 0.2, Pr(\textit{picture} | \textit{visual}) = 0.4, Pr(\textit{video} | \textit{visual}) = 0.4$

There are some differences in specifying observation probabilities of dimensions *Activist/Reflector* and *Theorist/ Pragmatist*. As discussed, active learners are provided activity-oriented approach: showing

content of activity (such as puzzle, game...) and links to example, theory and exercise. Reflective learners are provided example-oriented approach: showing content of example and links to theory, exercise and activity (such as puzzle, game...). The weights of observations: *puzzle, example, theory, exercise* on state *Activist* are in descending order. The weights of observations: *example, theory, exercise, puzzle* on state *Reflector* are in descending order. However, activists tend to learn high interaction materials and reflectors prefer to low interaction materials. So the weight of observations: *low* (interaction), *medium* (interaction), *high* (interaction) on state *Activist* get values: 0, 0, 1 respectively. Otherwise, the weight of observations: *low* (interaction), *medium* (interaction), *high* (interaction) on state *Reflector* get values: 1, 0, 0 respectively. We have:

- $Pr(\textit{puzzle} | \textit{activist}) = 0.4, Pr(\textit{example} | \textit{activist}) = 0.3, Pr(\textit{theory} | \textit{activist}) = 0.2, Pr(\textit{exercise} | \textit{activist}) = 0.1$
 $Pr(\textit{low} | \textit{activist}) = 0, Pr(\textit{medium} | \textit{activist}) = 0, Pr(\textit{high} | \textit{activist}) = 1.$
- $Pr(\textit{example} | \textit{reflector}) = 0.4, Pr(\textit{theory} | \textit{reflector}) = 0.3, Pr(\textit{exercise} | \textit{reflector}) = 0.2, Pr(\textit{puzzle} | \textit{reflector}) = 0.1$
 $Pr(\textit{low} | \textit{reflector}) = 1, Pr(\textit{medium} | \textit{reflector}) = 0, Pr(\textit{high} | \textit{reflector}) = 0.$

Because the sum of conditional probabilities of observations on each state is equal 1, we should normalize above probabilities.

- $Pr(\textit{puzzle} | \textit{activist}) = 0.4*4/7 = 0.22, Pr(\textit{example} | \textit{activist}) = 0.3*4/7 = 0.17, Pr(\textit{theory} | \textit{activist}) = 0.2*4/7 = 0.11, Pr(\textit{exercise} | \textit{activist}) = 0.1*4/7 = 0.05$
 $Pr(\textit{low} | \textit{activist}) = 0*3/7 = 0, Pr(\textit{medium} | \textit{activist}) = 0*3/7 = 0, Pr(\textit{high} | \textit{activist}) = 1*3/7 = 0.42$
- $Pr(\textit{example} | \textit{reflector}) = 0.4*4/7 = 0.22, Pr(\textit{theory} | \textit{reflector}) = 0.3*4/7 = 0.17, Pr(\textit{exercise} | \textit{reflector}) = 0.2*4/7 = 0.11, Pr(\textit{puzzle} | \textit{reflector}) = 0.1*4/7 = 0.05$
 $Pr(\textit{low} | \textit{reflector}) = 1*3/7 = 0.42, Pr(\textit{medium} | \textit{reflector}) = 0*3/7 = 0, Pr(\textit{high} | \textit{reflector}) = 0*3/7 = 0.$

According to Honey and Mumford model, *theorists* are provided theory-oriented approach: showing content of theory and links to example, exercise and puzzle; *pragmatists* are provided exercise-oriented approach: showing content of exercise and links to example, theory and puzzle. Thus, the conditional probabilities of observations: *example, theory, exercise, puzzle, low* (interaction), *medium* (interaction), *high* (interaction) on states: *theorists, pragmatists* are specified by the same technique discussed above.

	Text	Picture	Video
Verbal	0.6	0.3	0.1
Visual	0.2	0.4	0.4

Table 2 : Observation probability matrices: B_1, B_2, B_3

	Theory	Example	Exercise	Puzzle	Low	Medium	High
Activist	0.11	0.17	0.05	0.22	0	0	0.42
Reflector	0.17	0.22	0.11	0.05	0.42	0	0

	Theory	Example	Exercise	Puzzle	Low	Medium	High
Pragmatist	0.11	0.17	0.22	0.05	0.04	0.08	0.3
Theorist	0.22	0.17	0.11	0.05	0.3	0.08	0.04

Now three HMM (s) $\Delta_1, \Delta_2, \Delta_3$ corresponding to three dimensions of learning styles: Verbal/Visual, Activist/Reflector, Pragmatist/Theorist are represented respectively in figure 2.

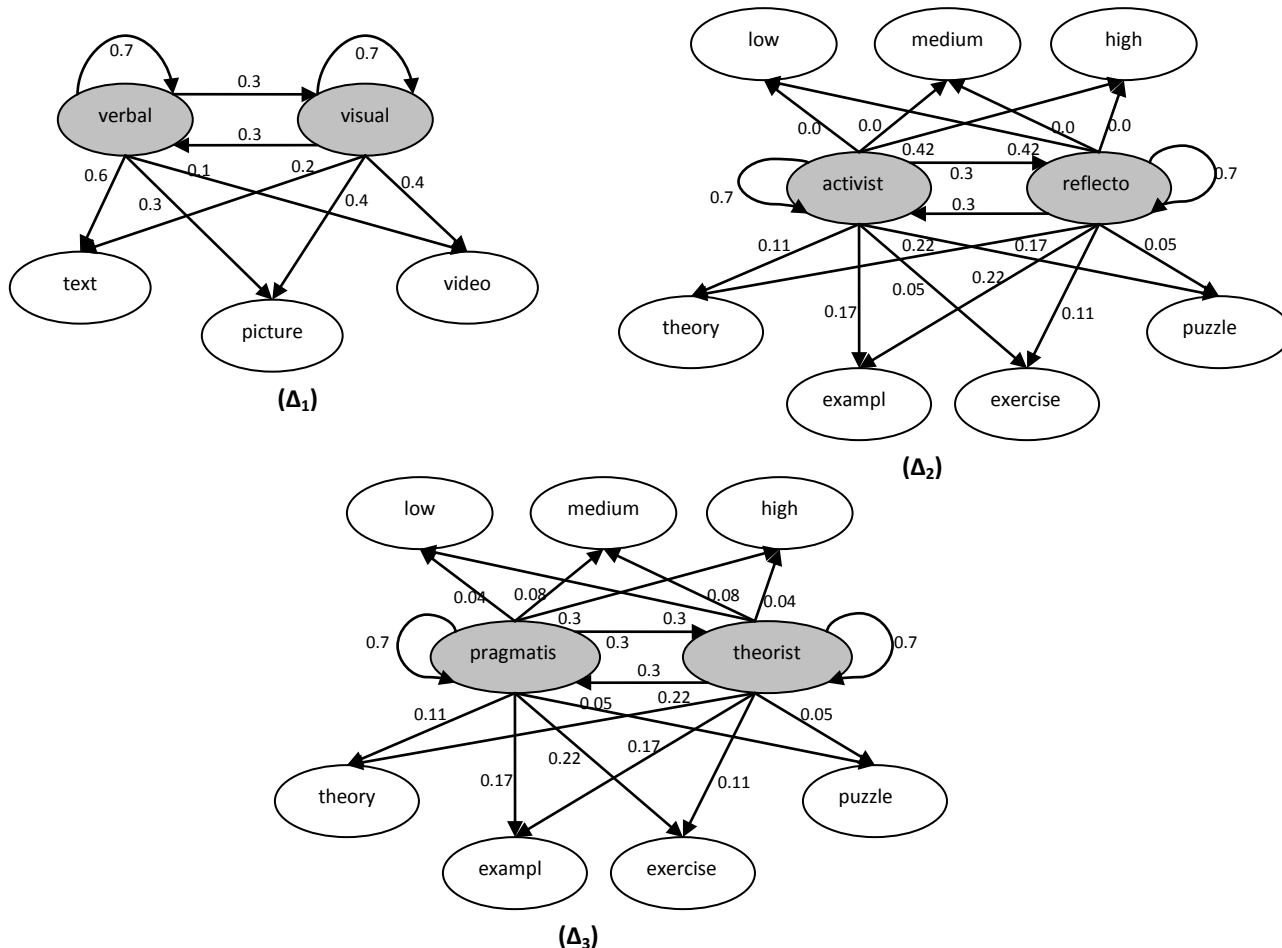


Figure 2 : HMM (s) of learning styles (hidden states are shaded)

An example for inferring student's learning styles

Suppose the learning objects that a student selects in session 1, 2 and 3 are LO_1, LO_2 and LO_3 respectively.

Table 3 : Learning objects selected

	Format	Type	Interactive
LO_1	picture	theory	not assigned
LO_2	text	example	not assigned
LO_3	text	not assigned	low

It is easy to recognize the sequence of user observations from the attributes *format, type, interactive*.

Table 4 : Sequence of student observations

Hmm – Dimension	Sequence of Observations
Δ_1 : Dimension Verbal/Visual	picture → text → text
Δ_2 : Dimension Activist/Reflector	theory → example → low
Δ_3 : Dimension Pragmatist/Theorist	theory → example → low

Using Viterbi algorithm for each HMM, it is possible to find corresponding sequence of state transitions that is most suitable to have produced such sequence of observations.

Table 5 : Sequence of state transitions

Hmm - Dimension	Sequence of Observations	Sequence of State Transitions	Student Style
Δ_1	picture → text → text	visual → verbal	verbal
Δ_2	theory → example → low	reflector → reflector → reflector	reflector
Δ_1	theory → example → low	theorist → theorist → theorist	theorist

It is easy to deduce that this student is a verbal, reflective and theoretical person. Since then, adaptive learning systems will provide appropriate instructional strategies to her/him.

VI. CONCLUSION

HMM and Viterbi algorithm provide the way to model and predict users' learning styles. We propose five steps to realize and apply HMM into two learning style models: Honey-Mumford and Felder-Silverman, in which styles are considered states and user's selected learning objects are tracked as observations. The sequence of observations becomes the input of Viterbi algorithm for inferring the real style of learner. It is possible to extend our approach into other learning style models such as: Witkin, Riding, Kolb... and there is no need to alter main techniques except that we should specify new states correlating with new learning styles and add more attributes to learning objects.

REFERENCES RÉFÉRENCES REFERENCIAS

- [Dugad, Desai 1996]. R. Dugad, U. B. Desai. A tutorial on Hidden Markov models. Signal Processing and Artificial Neural Networks Laboratory, Dept of Electrical Engineering, Indian Institute of Technology, Bombay Technical Report No.: SPANN-96.1, 1996.
- [Dunn, Dunn 2003]. Rita Dunn, Kenneth Dunn. The Dunn and Dunn Learning Style Model and Its Theoretical Cornerstone. St John's University, New York, 2003
- [Felder, Silverman 1988]. R. M. Felder, L. K. Silverman. Learning and Teaching Styles in Engineering Education. Journal of Engineering Education, 1988.
- [Kolb 1999]. D. A. Kolb. The Kolb Learning Style Inventory, Version3. Boston: Hay Group, 1999.
- [Honey, Mumford 1992]. Peter Honey, Alan Mumford. The Manual of Learning Styles. Maidenhead: Peter Honey Publications, 1992.
- [Pask 1976]. G. Pask. Styles and Strategies of Learning. British Journal of Educational Psychology, 1976.
- [Riding, Rayner 1998]. R. Riding, S. Rayner. Cognitive Styles and Learning Strategies: Understanding Style Differences in Learning Behaviour. London: David Fulton Publishers Ltd, 1998.
- [Stash, Cristea, De Bra 2005]. Natalia Stash, Alexandra Cristea, Paul De Bra. Explicit Intelligence in Adaptive Hypermedia: Generic Adaptation Languages for Learning Preferences and Styles. In Proceedings of HT2005 CIAH Workshop, Salzburg, Austria, 2005.
- [Vermunt 1996]. J. D. Vermunt. Meta-cognitive, Cognitive and Affective Aspects of Learning Styles and Strategies: a Phenomenon graphic Analysis. Higher Education, 1996.
- [Witkin, Moore, Goodenough, Cox 1997]. H. A. Witkin, C. A. Moore, D. R. Goodenough, P. W. Cox. Field-dependent and Field-independent Cognitive Styles and Their Educational Implications. Review of Educational Research, 1977.
- [Wolf 2003]. Christian Wolf. iWeaver: Towards Learning Style-based e-Learning in Computer Science Education. Australasian Computing Education Conference (ACE2003), Adelaide, Australia. Conferences in Research and Practice in Information Technology, Vol.20.



This page is intentionally left blank



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE
LINGUISTICS & EDUCATION
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460X & Print ISSN: 0975-587X

“Effect of Activity Based Approach on Achievement in Science of Students at Elementary Stage”

By Dr. Shri Krishna Mishra & Professor Badri Yadav
Shri Kanwartara Institute, India

Abstract - The present study on Activity Based Approach enhance achievement in sciences of class-VII students. Activity Based Approach consisted of different activities for the all round development of children at the elementary level. Activity should be prepared by low cost material which is available in the locality. Hence it is concluded that Activity Based Approach is significantly effective than the traditional approach of teaching.

Keywords : *effect of activity based, approach on achievement in science - students at elementary stage*”.

GJHSS-G Classification : *FOR Code : 330203*



Strictly as per the compliance and regulations of:



“Effect of Activity Based Approach on Achievement in Science of Students at Elementary Stage”

Dr. Shri Krishna Mishra^α & Professor Badri Yadav^σ

Abstract - The present study on Activity Based Approach enhance achievement in sciences of class-VII students. Activity Based Approach consisted of different activities for the all round development of children at the elementary level. Activity should be prepared by low cost material which is available in the locality. Hence it is concluded that Activity Based Approach is significantly effective than the traditional approach of teaching.

Keywords : effect of activity based, approach on achievement in science - students at elementary stage”.

I. INTRODUCTION

In view of modern developments in science and its importance in today's world. Science teaching has assumed a significant place in primary school curriculum. In India, government is concerned about the quality of science education and it has made significant changes to the country's educational system since its independence. To maximize the achievement within a given set-up is therefore, the goal of every educationist, a teacher or educational administrator. One of the goals for school science that underlies the National Science Education Standard (1996) is to educate students who are able to experience the richness and excitement of knowing about and understanding the natural world. The science education literature is filled with numerous research activities that suggest that variables such as personal, home, school, teacher etc. are helpful in increasing the achievement levels and knowledge of students in the area of science.

a) Meaning and its Importance of Science

Science is a body of empirical, theoretical and practical knowledge about natural world, produced by refresher making use of scientific methods which emphasis the observation, explanation and prediction of real world phenomena by experiment.

Humans have always been curious about the world around them. The inquiring and imaginative human mind has responded to the wonder and awe of nature in different ways, one kind of response from the

earliest times has been to observe the physical and biological environment carefully, look for any meaningful patterns and relations, make and use new tools to interact with nature, and build conceptual models to understand the world. This human Endeavour is science.

Science is a dynamic, expanding body of knowledge covering ever new domains of experience. How is this knowledge generated? What is the so-called scientific method? As with many complex things in life, the scientific method is perhaps more easily discerned than defined. But broadly speaking, it involves several interconnected steps: observation, looking for regularities and patterns, making hypotheses, devising qualitative or mathematical models, deducing their consequences; verification or falsification of theories through observations and controlled experiments, and thus arriving at the principles, theories and laws governing the physical world. There is no strict order in these various steps. Sometimes, a theory may suggest a new experiment; at other times an experiment may suggest a new theoretical model. Speculation and conjecture also have a place in science, but ultimately, a scientific theory, to be acceptable, must be verified by relevant observations and/or experiments. The laws of science are never viewed as fixed eternal truths. Even the most established and universal laws of science are always regarded as provisional, subject to modification in the light of new observations, experiments and analysis.

The methodology of science and its demarcation from other fields continue to be a matter of philosophical debate. Its professed value neutrality and objectivity have been subject to critical sociological analysis. Moreover, while science is at its best in understanding simple linear systems of nature, its predictive or explanatory power is limited when it comes to dealing with non-linear compel systems of nature. Yet, with all its limitations and failings, science is unquestionably the most reliable and powerful knowledge system about the physical world known to humans.

But science is ultimately a social Endeavour. Science is knowledge and knowledge is power. With power can come wisdom and liberation? Or, as sometimes happens unfortunately, power can breed

Author α : Principal, Shri Kanwartara Institute for Teachers Training, Shri Nagar Colony, Mandleshwar, Tehsil - Maheshwar, Dist- Khargone (M.P.), India. E-mail : shreekrishnamishra@gmail.com

Author σ : Professor, Shri Kanwartara Institute for Teachers Training, Shri Nagar Colony, Mandleshwar, Tehsil - Maheshwar, Dist - Khargone (M.P.), India. E-mail : badriyadav9@gmail.com

arrogance and tyranny. Science has the potential to be beneficial or harmful, emancipative or oppressive. History, particularly of the twentieth century, is full of examples of this dual role of science.

How do we ensure that science plays an emancipative role in the world? The key to this lies in a consensual approach to issues threatening human survival today. This is possible only through information, transparency and a tolerance for multiple viewpoints. In a progressive forward-looking society, science can play a truly liberating role, helping people out of the vicious circle of poverty, ignorance and superstition. In a democratic political framework, the possible aberrations and misuse of science can be checked by the people themselves. Science, tempered with wisdom, is the surest and the only way to human welfare. This conviction provides the basic rationale for science education.

b) *Present Scenario of Science Education*

Looking at the complex scenario of Science education in India, three issues stand out unmistakably. First Science education is still far from achieving the goal of equity enshrined in our constitution. Second, science education, even at its best develops competence but does not encourage inventiveness and creativity. Third, the overpowering examination system is basic to most, if not all, the fundamental problems of science education to address a range of issues related to science curriculum and problems in its implementation, but has particularly focused on the three issues mentioned above. First, we must use science curriculum as an instrument of social change to reduce the divide related to economic class, gender, caste, religion and region. We must use the textbooks as one of the primary instruments for equity, since for a great majority of school going children, as also for their teachers, it is the only accessible and affordable resource for education. We must encourage alternative textook writing in the country within the broad guidelines of the national curriculum framework. Information and Communication Technology (ICT) is also an important tool for bridging the social divides. ICT should be used in such away that it becomes an opportunity equalizer by providing information, communication and computing resources in remote areas.

Second, we believe that for any qualitative change from the present situation, science education in India must undergo a paradigm shift. Rote learning should be discouraged. Inquiry skills should be supported and strengthened by language, design and quantitative skills. Schools should give much greater emphasis on co-curricular and extracurricular elements aimed at stimulating investigative ability, inventiveness and creativity, even if these elements are not part of the external examination system. We strongly recommended a massive expansion of non-formal channels (for

example, a truly large scale science and technology fair with feeder fairs at cluster/ district/ state levels) to encourage schools and teachers to implement this paradigm shift.

Third, we recommend nothing short of declaring examination reform as a National Mission (like other critical missions of the country), supported by funding and high quality human resources that such a mission demands. The mission should bring scientists, technologists, educationists and teachers on a common platform and launch new ways of testing students which would reduce the high level of examination related stress, curb the maddening multiplicity of entrance examinations, and research on ways of testing multiple abilities other than formal scholastic competence.

These reforms, however, fundamentally need the over arching reform of teacher empowerment. No reform, however well motivated and well planned, can succeed unless a majority of teachers feel empowered to put in practice. With active teacher participation, the reforms suggested above could have a cascading effect on all stages of science teaching in our schools.

c) *Science and Technology*

Technology is often equated to applied science and its domain is generally thought to include mechanical, electrical, optical and electronic devices and instruments, the household and commercial gadgets, applications of chemical, biological, nuclear sciences and computer and telecommunication technologies. These various sub-domains of technology are, of course, interrelated. Viewing technology, especially modern technology, as applied science is, therefore, not wrong. Much of technology that we see around is indeed informed by the basic principles of science. However, technology as a discipline has its own autonomy and should not be regarded as a mere extension of science. After all, technology was part of ancient human civilizations and even prehistory, but science in its modern sense is relatively recent only about four centuries old. In fact there is much local technological knowledge existing around the world that is in danger of extinction due to the sweeping dominance of modern technology.

Basically science is an open-ended exploration; its end results are not fixed in advance. Technology, on the other hand, is also an exploration but usually with a definite goal in mind. Of course, technology is as much a creative process as science, since there are, in principle, infinite ways to reach the given goal. Creativity consists in new ways of designing, planning and charting out the map to the final end, as also in innovative applications of the known principles of science. Technological solutions are guided as much by design, aesthetic, economic and other practical considerations as by scientific principles.

Science is universal; technology is goal oriented and often local specific.

Our very definition of progress is linked with advances in science and technology. These advances have led to unimagined new fields of work and transformed, often beyond recognition, traditional fields like agriculture, manufacturing, construction, transport and entertainment. People today are faced with an increasingly fast-changing world where the most important skills are flexibility in adapting to new demands and creativity in taking advantage of new opportunities. These imperatives have to be kept in mind in shaping science education.

d) *Research on Pedagogy in Science Education*

About 40 years ago science education came to be recognized around the world as an independent field of research. The concerns of this research are distinct from the concerns of science and those of general education. Its methods and techniques were *initially* borrowed from the sciences but new methods are being *developed* suited to the research questions.

Motivation for this research comes from the need to improve the practice of science education. We begin by asking, which methods of teaching work better than others? Studies in the 1970s *typically* compared experimental classrooms with *Controls*. New teaching aids were tried out; lecture methods were compared with activity-based teaching, and so on. These studies gave useful results in particular contexts but it was hard to replicate them. Conditions in classrooms are varied; teacher and student characteristics too vary widely. Teaching and learning are complex, context-dependent processes and one needs to first describe this complexity in order to understand it, before eventually aiming to control it.

The early studies led to many new lines of enquiry. One line looked at the social Context of teaching and learning and of the interpersonal dynamics occurring in science lessons. This kind of research has drawn on methods from sociology, linguistics and anthropology. New tools for classroom observation have reached a considerable level of sophistication. In general one knows that a supportive relationship among students and teachers, student participation in setting goals and making decisions, clear expectations and responsibilities, and opportunities for collaboration, are some factors which lead to better student outcomes.

Observations in science are usually motivated by a theory or a hypothesis. In a classroom, however, experiments are motivated by the teacher or the textbook; the students either watch or follow instructions; they are told which particular observation to focus on, and the inference is also told to them. Let us take an example. A candle is lighted and then covered with a glass. To the question, "What does the experiment show", the common

answer is, "This experiment shows that air contains oxygen a clearly unwarranted conclusion, but one that is often accepted in classrooms.

Clearly, for experiment based science learning to be effective, there must be space and time for teachers and students to plan experiments, discuss ideas, and critically record and analyse observations. A good pedagogy must essentially be a judicious mix of approaches, with the inquiry approach being one of them.

e) *Activity Based Approach*

Through activity-based teaching has been accepted as a paradigm for science education and is also reflected in some measure in the textbooks developed at the national and state levels, it has hardly been translated to actual classroom practice. Activities still tend to be regarded as a way to verify the ideas/principles given in the text, rather than as a means for open-ended investigations. There is a general feeling that activity based teaching is expensive, takes more time that could be otherwise "fruitfully" used for 'text based' teaching, and does not prepare the child for examinations and competitive tests.

The concern about expenditure involved in activities/experiments cannot be dismissed. Most schools cannot afford well-equipped science laboratories. However, it is certainly possible to design low cost activities and experiments using easily available materials. Thus cost should not be allowed to become an excuse for neglecting the very base of learning science.

The method to teaching-learning process adopted must be suitable to the age and mental ability of pupils' social norms and available resources in the environment. The approach must be less burden to learning and increasing the eagerness and happiness of school life. The teaching-learning process conducted in different approaches like inductive and deduction analysis and synthesis. Child centred approach, lecture method and activity based approach.

The primary school children are in operational and concrete operational stages where cognitive development is very important. So, at this stage joyful learning should be important to the students. Keeping this mind activity based learning is very useful. If the activities are well selected, planned and organized in education. It influence the student learning capacity. Activity based approach in education was emphasized by different educationists like Rousseau, Devey etc.

f) *Necessity of Activity Based Approach*

The children of primary stage are incapable of formal reasoning. They cannot appropriate abstract ideas and attracted towards concrete and tangible things and also they can concentrate in a particular aspect for a short while. Curiosity is a dominant characteristics of children at this stage. They like those

activities which are full of energy and find it uneasy to sit guilt for a long period. They love to be involved in different types of activities. Their minds are seldom to rest. Need for recognition is greater at this stage. They want appreciate even for the small things which they accomplish.

Activity based teaching provide opportunity for measuring learning through experience, direct observation and participation of children. The activity based approach provide opportunity for pupils to work in a co-operative manner, helps to develop original ideas making learning process in an entertaining manner. Attainment of competencies can be possible through activity based approach in teaching learning process.

Enhancing the quality of primary education is vital key to improving the teaching method in school. If the school is able to offer to the children diverse opportunity to learning by doing various activities then the school will be an attractive place for the pupils. There activities are guided by teacher in class-room situation.

g) *Rationale of the Study*

By looking at the present educational scenario, activity based teaching has been excepted as good strategy for science education as students actively participate in the process of learning.

The learning environment wont be conducive for students unless/until a teacher devised a good strategy of teaching. It has been observed that activity based approach teaching is the cornerstone of better intellectual development and it leads to critical pedagogy. Though this approach gives emphasis on the direct participation of the students in learning process, the students getting the right concept while engaging themselves and different activities.

It must be realized that a difficult concept is simplified merely by presenting at preferly rather it needs pre-requisites ideas, experiences and activities at the different levels.

As for as science is concern, the students suit be taught different concepts, theories, principles etc. through the sense of the everyday experiences as it has seen that majority of activities and experiments are inexpensive and use readily available materials, so that this core component of science curriculum should be implemented in all schools including those with adequate infrastructure.

Different activities in which students participate both inside and outside itself are among the multiple situation that can have an effort on science achievement. Extra-scholastic activities have been associated with an improved educational level, more interpersonal competencies, higher aspirations and better attention level (Mahovey, Cairos & Farwer, 2003).

The differences between boys and girls in relation to science achievement have received a lot of

attention in recent years. While some studies indicate that in general boys achieve better (Gipps-1994, Kingdon-1999), either no difference (Ventura-1992, Calsambis-1995, Mohapatra & Mishra-2000) or girls outperform boys (Calsambis-1995, soyibo-1999) has been demonstrated.

By looking at all around the educational environment and keeping in view the researcher findings it is very much clear that activity based approach as some short of direct and indirect impact in the excellency level of the students and at the same time no studies conform whether the boys and girls are better achiever through this approach. This all things tempted the researcher to undertake the problems there in elementary school.

h) *Statement of the Problem*

"Effect of Activity Based Approach on Achievement in Science of Students at Elementary Stage".

i) *Operational Definition*

Activity based approach:- This is a method of teaching where children learn through experience, observation and active participation. The students were engaged in motor activities while learning a basic concept.

j) *Delimitation of the Study*

By keeping in view the time and resource, the scope of the present study was limited in a certain area.

- The study was conducted on the students of Shri Kanwartara High School at district-Khargone in M.P.
- The study was confined to only 7th class students.
- Due to limited time, 10 periods of science class were taken.

k) *Objectives of the Study*

The study will be undertaken having the following objectives:

- To study the effect of activity based approach on achievement in Science of Class-VII students.
- To compare the achievement score of boys and girls in Science taught through activity base approach of class-VII students.

l) *Hypotheses of the Study*

- There would be better achievement in science, if the experimental group is taught through activity based approach.
- There is no significant difference in the mean score of Science achievement of experimental group with respect to gender

II. **METHODOLOGY**

a) *Sample*

Sample of the present study are class VII students of Shri Kanwartara High School of Khargone

district of M.P., students studying in class-VII. In order to achieve the objectives and test the hypotheses of the study, the school was selected randomly. The sample was selected from the population of 113 students. The investigator has selected the sample through random sampling procedure. Sixty students were randomly selected (using a table of random number) and randomly assigned (using lottery) to two groups of 30 each.

Table 1 : Distribution of Sample

Sex	Experimental group	Control group	No. of sample
Boys	17	18	35
Girls	13	12	25
Total	30	30	60

b) Design

The present study is an experimental type of study. Experimental research includes collecting data in order to test hypotheses concerning the related variables. Generally, experimental research includes member of groups which are open for treatments. In this study, the students are assigned into two different groups by following the foot step of "pre-test-post-test control group design".

Table 2 : Pre-test-post-test control group design

Groups (Randomly assigned)	Pre-test	Independent variable	Post-test
Experimental group	T ₁₁	New treatment	T ₂₁
Control group	T ₁₂	Traditional treatment	T ₂₂

This design was selected to control all sources of internal validity and random assignment can be emphasized while selecting two groups, Pre-test controls mortality and randomization and "control group" controls maturation, history, testing and instrumentation. The only weakness in this design is pre-test-treatment-interaction. The selected children were randomly divided into two groups through lottery system. Out of the two groups one was randomly allotted to experimental group and the other to control group.

c) Tools

For this present study, the investigator used two different tools to measure the achievement of students. Both the instructional and measuring tools were used as major tool for this study.

i. Measuring tool

The teacher made achievement test was used as a measuring instrument. The test was assigned to measure student performance in Science. It was constructed by the investigator on the basis of blue-

print. It consists of 37.5%, MCQs, 25% fill in the blank, 27.5% true/false and 10% matching type questions to measure knowledge, understanding and problem solving ability of the students.

Achievement test having forty items were formulated each dimension such as 42.5% knowledge, 30% understanding and 27.5% application area related to the selected topics. The items were presented before a panel of expert to judge its content validity. The nature of the achievement test is question-cum-answer sheet.

ii. Instructional tool

The instructional tool is based on a certain lesson plan having five steps; introduction, presentation, different activities, recapitulation and evaluation lesson plans were developed in different sub-units of each topic, keeping in view the need of students and the activities to be performed for each sub-unit.

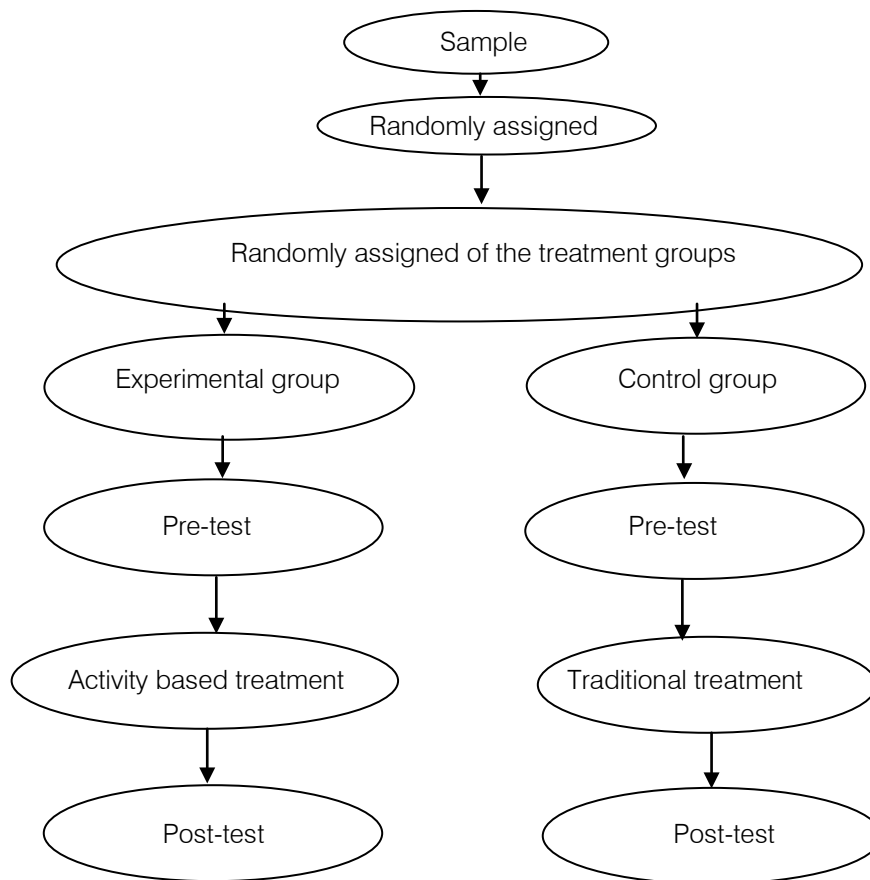
The activity based materials were developed according to the different competencies of each and every sub-unit.

d) Procedure of Data Collection

After selecting required number of the samples randomly assigned into two groups, out of the two groups one group was randomly assigned to experimental group and the other to control group. The initial achievement scores of both the groups were recorded by the teacher-made achievement test in science.

The investigator taught to experimental group through activity based approach whereas the control group by traditional method of teaching. After the completion of the treatment, both the groups were tested. Post-test scores of both the groups were compared to see the effect of activity based approach on achievement in science.

Figure : Thus the scheme of the study followed was as shows below



The post-test scores of experimental group were further analyzed to study the effect of activity based approach on the science achievement with respect to gender.

e) *Data Analysis*

Post-test scores were analyzed to see the effect of activity based approach on achievement in science. For interpretation of results both descriptive and inferential techniques were adopted. Hypotheses testing were made according to the procedure followed in testing null and directional hypotheses.

III. ANALYSIS AND INTERPRETATION

Analysis and interpretation of the data is the most important and crucial step in educational research. After data has been scored and tabulated, it has to be analysed and interpreted to drawn proper inference. Analysis of data means studying and organized materials in order to discover inherent facts. However, valid, reliable and adequate the data may be, it does not serve any worth while purpose unless carefully edited, systematically classified, tabulated and scientifically analysed. The analysis of data emphasizes the following main function.

- To make the raw data meaningful.
- To test the hypotheses.

- To obtain significant result.
- To estimate parameters.
- To draw useful interference.

a) *Results*

In the present study dependent variable is achievement in science and independent variable is activity based approach.

i. *Analysis of result regarding the effect of activity based approach on achievement in science for pre-test scores*

To study the effect of activity-based approach on the science achievement mean, standard deviation and t-value were computed and are presented in the table 3.1 given below.

Table 3.1

Statistical technique	Experimental group	Control group
Mean	22.33	22.33
S.D	5.55	4.99
SE _p	1.362	
t-value	0.367**	
df	58	

** Not-Significant at 0.05 levels. (On one tailed test)

The obtained t-value = 0.367 for 58 degrees of freedom is less than the table values of 1.67 and 2.39 at 0.05 level and 0.01 level respectively of not significant on one tailed test.

It is clear that there is no significant difference between two means scores of experimental group and control group.

- ii. *Analysis of result regarding the effect of activity based approach on the achievement in science for post-test scores.*

To study the effect of activity-based approach on the science achievement mean, standard deviation and t-value were computed and are presented in the table 3.2 given below.

Table 3.2

Statistical technique	Experimental group	Control group
Mean	32.33	27.50
S.D	4.42	5.60
SE _p	1.30	
t-value	3.969**	
df	58	

** Significant at 0.01 levels. (on one tailed test)

The obtained t-value = 3.969 for 58 degrees of freedom is grater than the table values of 1.67 and 2.39 at 0.05 level and 0.01 level respectively of significant on one tailed test.

Here the researcher has to use a one tailed test because every reason to believe that his treatment will produce an effect in the positive direction only.

Hence it is right to accept the directional hypothesis. Which indicate that there is a significant difference between the mean scores of science achievement of experimental group and control group?

Thus we may say that (99 times out of 100) the gain is significant and activity based approach may be taken as a significant enhanced for science achievement of students.

From the mean scores, it can be conclude that activity based approach enhanced the achievement of science than the traditional method of teaching.

- iii. *Analysis of impact of activity-based approach on achievement in science of students with respect to knowledge based items*

Table 3.2 (a)

Mean, S.D and t-value of post-test achievement scores in science of experimental group and control group with respect to knowledge based items

Statistical technique	Experimental group	Control group
Mean	17.83	15.33
S.D	0.884	1.192
SE _p	0.271	
t-value	9.21**	
df	58	

** Significant at 0.01 levels. (on one tailed test)

From the table it is found that obtained't' is 9.21 with df=58. The t-value to be significant at 0.05 level and 0.01 level with df=58 required the value of 1.67 and 2.39 respectively on one tailed test. Here the calculated t value is greater than required t-value. Hence there is significance difference in the achievement score of experimental group and control group.

From the mean scores it can be conclude that activity-based approach enhanced the achievement of science than the traditional methods with respect to knowledge based items.

- iv. *Analysis of impact of activity based approach on achievement in Science of students with respect to understanding based items.*

Table 3.2 (b)

Mean, S.D and t-values of post-test achievement scores in science of experimental group and control group with respect to understanding based items.

Statistical technique	Experimental group	Control group
Mean	9.466	6.80
S.D	2.291	2.54
SE _p	0.62	
t-value	4.267**	
df	58	

** Significant at 0.01 levels. (on one tailed test)

From the table it is found that obtained't' is 4.267 with df=58. The t-value to be significant at 0.05 level and 0.01 level with df=58 required the value of 1.67 and 2.39 respectively on one tailed test.

Here the calculated t-value is greater than required t-value. Hence there is significance difference in the achievement scores of experimental group and control group.

From the mean scores it can be concluded that activity based approach enhanced the achievement of science than the traditional methods with respect to understanding based items.

- v. *Analysis of impact of activity-based approach on achievement in science of students with respect to the application based items.*

Table 3.2 (c)

Mean, S.D and t-values of post-test achievement scores in science of experimental group

and control group with respect to the application based items.

Statistical technique	Experimental group	Control group
Mean	7.40	5.66
S.D	3.028	2.796
SE _D	0.746	
t-value	2.33**	
df	58	

** Significant at 0.05 levels (on one tailed test)

From the table it is found that obtained 't' is 2.33 with df=58. The t-value to be significant at 0.05 level and 0.01 level with df=58 required the value of 1.67 and 2.39 respectively on one tailed test.

Here the calculated t-value is greater than required t-value at 0.05 level but less than required t-value at 0.01 level.

Hence there is significant at 0.05 level but not significant at 0.01 level.

From the mean scores, it can be conclude that (95 items out of 100) the gain significant such as activity-based approach enhanced the achievement in Science than the traditional method of teaching w.r. to the application based items.

The following graph shows the mean different between the experimental and control group after the treatment.

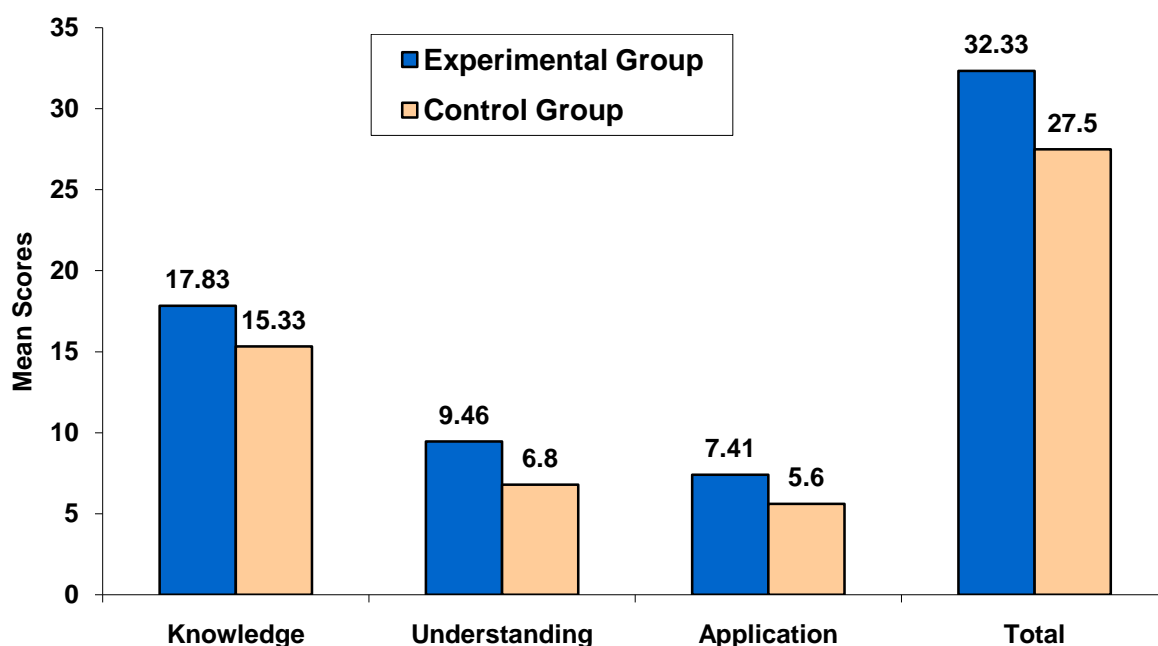


Figure A : The graph shows the mean difference between the groups

The above graph shows that the mean difference of experimental group is better than control group. It means the treatment group students performed better with regard to knowledge, understanding, application than the control group. Hence the activity-based approach is better than conventional method of teaching.

vi. Analysis of result regarding the effect of activity based approach on the science achievement of experimental group with respect to gender.

To study the effect of activity based approach on the science achievement of experimental group with respect to boys and girls means, S.D. and t-value are computed and are presented in the table 3.3 given below.

Table 3.3

Statistical technique	Boys	Girls
Mean	31.64	33.76
S.D	4.95	2.66
SE _D	1.027	
t-value	2.066**	
df	28	

** Significant at 0.05 levels (on two tailed test)

For the significance at 5% and 1% levels, the critical t-value are 2.05 and 2.76 respectively. Our computed t-value is 2.066 crosses the table value 2.05. It shows that differences are significant at 0.05 level but does not reach 2.76. Hence it is not significant at 0.01 level. Consequently we can not reject the null hypothesis at 0.01 level only reject the null hypothesis at 0.05 level.

Thus we can say that (95 times out of 100) the gain is significant.

vii. *Analysis of knowledge based item's post-test scores of experimental group with respect to gender.*

The mean, S.D and t-value of post-test scores of experimental group regarding the knowledge based items with respect to gender are computed and are presented in the table 3.3(a) given below.

Table 3.3 (a)

Statistical technique	Boys	Girls
Mean	16.324	17.03
S.D	0.922	0.634
SE _p	0.282	
t-value	2.53**	
df	28	

** Significant at 0.05 levels (on two tailed test)

We find from table that the critical value of 't' with degrees of freedom 28 at 5% level of significance is 2.05. Our computed value of t i.e. 2.53 is greater than the critical table value 2.05 and hence is significant, but not significant at 0.01 level. Because the obtained value 2.53 is less than the table value 2.76 at 0.01 level on two tailed test.

Hence we can say that (95 times out of 100) the gain significant, it means the girls is better than boys with respect to the knowledge based items.

viii. *Analysis of understanding based item's post-test scores of experimental group with respect to gender.*

Mean, S.D and t-value of post-test scores of experimental group regarding the knowledge based items with respect to gender, were computed and are presented in the table 3.3(b) given below.

Table 3.3 (b)

Statistical technique	Boys	Girls
Mean	8.88	10.24
S.D	2.867	1.846
SE _p	0.86	
t-value	1.58**	
df	28	

** Not significant at 0.05 levels (on two tailed test).

We find from table that the critical value of 't' with degrees of freedom 28 at 5% level of significance is 2.05. Our computed value of 't' i.e. 1.58 is quite smaller than the critical table value 2.05 and hence is significant.

Thus, we can conclude that no any significant difference between boys and girls regarding knowledge based item's scores of experimental group.

ix. *Analysis of application based item's post-test scores of experimental group with respect to gender.*

The Mean, S.D and t-value of post-test achievement scores of experimental group w.r. to gender regarding the application based items were computed and are respect in the table 3.3(c) given below.

Table 3.3 (c)

Statistical technique	Boys	Girls
Mean	7.35	7.46
S.D	3.30	2.61
SE _p	1.078	
t-value	0.101**	
df	28	

** Not significant at 0.05 levels (on two tailed test)

We find from table that the critical value of 't' with degrees of freedom at 5% level of significance is 2.05. Our computed value of 't' i.e. 1.101 is quite small than the critical table value 2.05 and hence is not significant on two-tailed test.

Thus, we can say that no any significant difference between boys and girls regarding application based items achievement scores of experimental group.

The following graph shows the mean different between the boys and girls of experimental group after treatment.

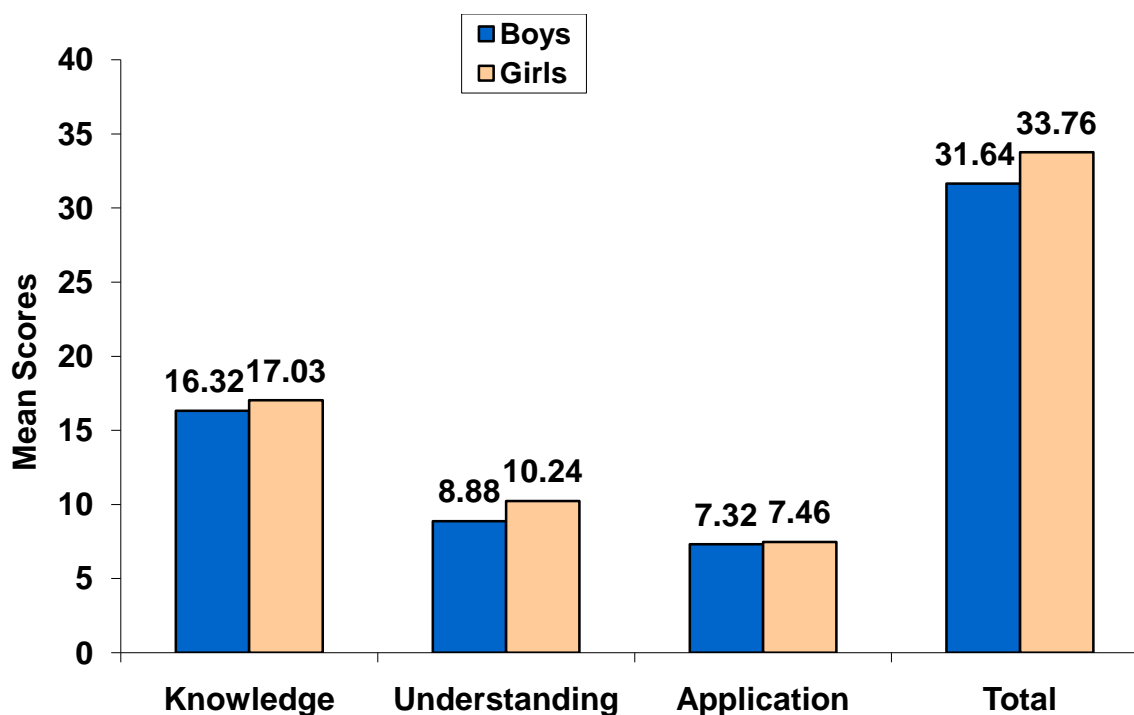


Figure B : The graph shows the mean difference on gender

The above graph shows that the mean scores of boys is less than that of girls. It can be concluded that gender has an influence on the achievement of science in the experimental group.

b) Interpretation of results

One of the major objectives of the study was to see the effect of activity based approach on achievement in science. Accordingly, hypotheses were formulated and verified employing "pretest post test control group design" with randomized groups and the results are interpreted below.

i. Treatment wise difference in Science achievement of students

The directional hypothesis H_1 is stated as "There would be better achievement in Science, if the experimental group is taught through activity based approach".

This states that

$$H_1 = M_e \neq M_c$$

Where M_e = Mean score of the experimental group

M_c = Mean score of the control group

& H_1 = Directional hypothesis

That 't' calculated under (Table 4.2) shows that the t-value is 3.969. As the calculated value is greater than the table value, the t-value is considered to be significant. Hence the directional hypothesis is accepted.

It means that the methods of teaching influence the achievement score in science on the students i.e. science achievement depends upon the pedagogy.

Examination of these two means indicated that activity based approach treatment was superior to traditional treatment with reference to knowledge, understanding and application based items.

The result of this study was supported by a number of studies (G. Mahimaran & Dr. K. Ananda-2009, Sethi, A.K.-2008, Rout, T K (2007), Agarwal & Gupta-2009, Sahu (1997), Dahara (1996) in which comparisons have been made between innovative methods of teaching and traditional methods of teaching.

ii. Gender wise difference in Science achievement

The null hypothesis H_0 is stated as "There is no significant difference in the mean score of science achievement of experimental group with respect to gender".

This states that

$$H_0 = M_B = M_G$$

Where M_B = Mean score of boys

M_G = Mean score of girls

H_0 = Null hypothesis

That 't' calculated under (Table 3.3) shows that the t-value is 2.066. Here the obtained 't' value required the table under of 2.05 to be significant at 0.05 level for 28 degrees of freedom. As the calculated value is greater than the table value, the t-value is considered to be significant at 0.05 level but not significant at 0.01 level.

It means difference between boys and girls exist. From the mean scores, it can be concluded that girls are better than boys in science achievement with respect to knowledge based items only.

Thus, we can say that girls taught by a activity based methods had superior achievement than boys with respect to knowledge based items but equal with respect to understanding and application based items.

This finding of the study was supported by the previous research findings of Khatoon, T & Sharma, M (2010), Calsambis 1995, Sayibo-1999.

IV. MAJOR FINDINGS

- (1) Experimental group of students are perform better in science than control group of students as the experimental group is taught through activity based approach and control group is taught through traditional method of teaching.
- (2) The performance of experimental group students are better regarding as the knowledge, understanding and application based items.
- (3) Gender has significant influence on the achievement of science in experimental group, while the experimental group taught through activity based approach.
- (4) The performance of girls are better than boys in experimental group with regard to only knowledge based items.
- (5) There is no significant difference between the mean scores of achievement in Science of boys and girls in experimental group with regard to understanding and application based items.
- (6) All students in experimental group are actively participate in classroom activities but control group students are not.

From the above findings it clear that there exists significantly differences between means of the achievement scores of experiments group students after teaching through activity based and means of the achievement scores of the control group students after teaching through traditional method. From the analysis and interpretation of the data it is found that the hypotheses are accepted. Lastly, it is conclude that the activity based approach has significantly positive effect on enhancing the content wise achievement and academic achievement of class-VII students.

V. EDUCATIONAL IMPLICATION

Activity based approach have greater interest and better attitude towards the material learned by students than that conventional approach (traditional method). It seems to be co-operative, competitive learning conditions, rewarding learning experiences, personalized attention to each student learning problems and social problems of students. Hence activity based approach can fulfill the need in teaching learning situation by providing quality improvement instruction.

The present study has some practical aspects and implementation for the educational system as follows :

1. Activity Based Approach provides pleasure and interest in the classroom situation.
2. Activity Based Approach can develop subject performance of the students effectively.
3. Activity Based Approach can develop academic performance of the students effectively.
4. By Activity Based Approach teacher can develop good study atmosphere, good method in teaching and different activities related to the content.
5. By Activity Based Approach one can develop creative activities of the students in teaching learning process.
6. In Activity Based Approach students has to master in a particular unit/content before going for further study.

Activity Based Approach helps the students for better achievement in any subjects in general and science in particular.

VI. SUGGESTIONS AND RECOMMENDATIONS

1. The teacher should go beyond planning, demonstrating, facilitating observing, assessing guiding, collecting selecting, arranging and maintaining the classroom environment.
2. Activity should be suitable to the ability of children coming from different background.
3. Participation and pupils initiative could be developed in group learning and organization of different activities.
4. Teacher should directly or indirectly guided the student to ensure enough freedom to do different activities.
5. Most of the activities of our life are based on sciences. Therefore activity based teaching improve the quality of science teaching.
6. Incorporation of real life situation in classroom was found to be an effective way to inculcate problem solving ability in students.
7. Teacher must be equipped with the knowledge and skills of implementing activity based approach in the school through pre-service and in-service programme. Training packages may be developed in this regard.

VII. CONCLUSION

Concluded that the present study on Activity Based Approach enhance achievement in sciences of class-VII students. Activity Based Approach consisted of different activities for the all round development of children at the elementary level. Activity should be prepared by low cost material which is available in the locality. Hence it is concluded that Activity Based Approach is significantly effective than the traditional approach of teaching.

BIBLIOGRAPHY

1. Agarwal and Gutpa, (2000). Effect of activity based instructional material on academic achievement of elementary students.
2. Balkrishna, B. (2009). Comparative Study of the effectiveness of teaching Mathematics by computer instruction and traditional method. National Journal of Research in Education and Extension.
3. Basantia, T.K & Panda, B.N., (2010). Development of Creative abilities among elementary school students through multi-dimensional Activity Based Integrated Approach in Social Studies, Indian Educational Review, Volumn.46, No.1.
4. Caisambis, S. (1995). Gender, race, ethnicity and science education in the middle grades, Journals of Research in Science Teaching, 32(3) 243-357.
5. Dahara, (1996). Joyful activity based approach and routine text based approach in EVS at primary level.
6. G. Manimaran, Dr. K Anandan (Dec.2009). Opinion of the primary teachers towards the activity based learning. Edutracks
7. Khatoon, T. & Sharma, M. (2010). Personal and Institutional Factors and their influence on Science achievement. Indian Educational Review, Volumn.46, No.1.
8. Gay, L.R. (1990). Educational Research Competencies for analysis and application. Singapore Markwel Mc Millan Publishing Company.
9. Garrett, H.E. (1996). Statistics in Psychology and Education, New York David Markey Company, Inc.
10. Mishra and Pradhan (1996). Effect of competency based Instruction on attainment of minimum level competency in Mathematics.
11. Mohapatra, M. and J. Mishra, (2000). Gender effect on achievement in science with a special reference to mechanics from primary to secondary school year. Journal of Educational Research and Extension, 37(3).
12. Naik, R.K. (2010). Effect of 5E' Learning Strategy on fifth Grade Students' Mathematics Achievement. Edusearch, Journal of Educational Research.
13. Sahu, (1997). Development and Tryout of Joyful activity based learning strategies in Mathematics for Class-VI students.
14. Sethi, A.K. (2008). Effect of activity based approach on achievement in Mathematics of elementary school students.
15. Rout, T.K. (2007). Effect of activity based learning an enhancing mathematcs achievement of class-VIII students.
16. Soyibo, K. (1999). Gender differences in Caribbean students performance on a test of errors in biology labelling. Research in Science and Technological Education, 17(1), 75-82.
17. Ventura, F. (1992). Gender, science choice and achievement: A Maltese perspective. International Journal of Science Education, 14(4), 445-461.
18. Sahoo, K.C. Padhi, S.K. & Sahoo, K. (2010). Interaction effect of certain variables on Science achievement of secondary school. VISION. Research Journal of Education, Volume-1, No.1.



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE
LINGUISTICS & EDUCATION

Volume 13 Issue 4 Version 1.0 Year 2013

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-460X & Print ISSN: 0975-587X

Kindness the Relationship between God and Creation

By Dr. Abdolmajid Mohagheghi

Yasooj University, Yasooj, Iran

Abstract - In Islamic Gnosticism the basis of creation is inherent affection (Hob) of God toward its own essence. Then He resolved to observe its perfection in a perfect mirror. In the vision of erotic school's Gnostics this mirror is the existence of the prophet Mohammad (God's blessing be on him)-and consequently messengers and saints of God- who directly enjoyed the kindness (Mohabat) of eternal true-love (Mahbub) and through him He has created the universe. So the survival and continuity of creation is based on kindness and love. Only a Gnostic can understand this and also comprehend the epitome of all divine names and attributes-including kindness; because by controlling concupiscence on the one hand it has dominated on its body and senses through universal traveling and has tamed the world and on the other hand it has removed darkened and bodily veils of the heart through movement of soul in order to manage to see the beauty of God inwardly, and visit and join to him. In fact, he reached a position "in which the essence is abstracted from its all trends, desires and tendencies, so that its willing is raised and becomes the willing of God; that is, true-love, affection and Moheb become one thing.

GJHSS-G Classification : FOR Code : 220403



Strictly as per the compliance and regulations of:



Kindness the Relationship between God and Creation

Dr. Abdolmajid Mohagheghi

I. INTRODUCTION

In Islamic Gnosticism the basis of creation is inherent affection (Hob) of God toward its own essence. Then He resolved to observe its perfection in a perfect mirror. In the vision of erotic school's Gnostics this mirror is the existence of the prophet Mohammad (God's blessing be on him)-and consequently messengers and saints of God- who directly enjoyed the kindness (Mohabat) of eternal true-love (Mahbub) and through him He has created the universe. So the survival and continuity of creation is based on kindness and love. Only a Gnostic can understand this and also comprehend the epitome of all divine names and attributes-including kindness; because by controlling concupiscence on the one hand it has dominated on its body and senses through universal traveling and has tamed the world and on the other hand it has removed darkened and bodily veils of the heart through movement of soul in order to manage to see the beauty of God inwardly, and visit and join to him. In fact, he reached a position "in which the essence is abstracted from its all trends, desires and tendencies, so that its willing is raised and becomes the willing of God; that is, true-love, affection and Moheb become one thing."¹

So kindness is the only way to reach God in Islamic Gnosticism; because real attraction (kindness) is from God and human erotic efforts are a positive response to it. So the unity between creation and God should be formed by a kindness that is resulted from perception and only messengers and saints of God managed to get such perception.

II. KINDNESS DEFINITION

Kindness is derived from "kind"(1) and means friendship and tenderness and in Gnostics' term it is the surge of heart into truelove's affection or in the other words it is a gift that is created by meeting the truelove in Moheb; since" all high moods are based on kindness... thus kindness is a pure gift."(Kashani, 1946:404)

III. REAL KINDNESS

Manifestation of God pure essence in itself in all possible forms that their existence has been potentially

proved in [essence or divine science] is interpreted as the manifestation of divine love in its inherent beauty and goodness.(For more information see Ibn Arabi, 1400 AH: 9)

Kindness (love) is therefore one of the attributes of God, as the eternal true-love says" I was an unknown treasure so I decided to be known"(2) (Eynolghozat, 2007:90). This indicates His kindness (love) which is lack of position before it is manifested in itself, and is free from any constraint (3).

Although some of Gnostics have considered love as utmost of kindness, they have distinguished between that and whim and have mentioned some Hadiths of holy Imams to prove their word- as Ahmad Jam Namaghi with this idea has attributed this Hadith to Imam Jafar Shadegh "Love is divine madness which is neither forbidden nor praised", on love he writes "whatever you consider as love, if you can seize it, it is not love but is whim...love cannot be possessed." (Zhende Pil, 1629:211)- it should be noticed that there is no substantive differences between love and kindness; because there is one goal and that is a truth free from position, in fact it is a divine truth as it is related from Prophet (God's blessing be on him) that "He makes His servant lover of Himself then He falls in love with His servant" (Eynolghozat, the same, 112)

So those like Rabeeh Odviye (death 180 or 185 Hijra), Hossein Monasour Hallaj (decedent in 309 H), Abounasr Seraj (death 387H), Aboulhasan Deylami (death 392) and other sages of erotic school believe that just God deserves love and kindness "love and kindness are the same, it's His attribute and it relies on His existence." (Roozbehan Baghli, 2004, 138)

a) *Real Moheb and Truelove*

Since kindness equals God so Moheb and first truelove is God "the Almighty was purely Moheb and lover of its own essence and His love to His essence is the greatest love and kindness. Then, He is both the first truelove and beloved and the first Moheb and lover." (Abounasr Farabi, 1358:9-98) so God existence is real lover and beloved and eternal and everlasting and real kindness -"He shall love them and they shall love Him"(Al-Maeda: 54) - is also His inherent attribute and originates from Him "If it was not His kindness how could people get the realities of kindness? This kindness relies on His existence."(Roozbehan Baghli, 1965:444)

"I said He shall love them without you have existence and I also bored your kindness and love pearl

Author : Assistant Professor of Yasooj University, Yasooj, Iran.
E-mail : mohagheghiabdolmajid@yahoo.com

there is no other one like me, I heard and I said, I've been, I heard and I said" (Abdellah Ansari, 1977:111).

This attribute of eternal true love in joining to His creation is divided into different kinds. It includes: kindness of the Almighty towards creation and kindness of creation toward God.

IV. KINDNESS OF THE ALMIGHTY TOWARDS CREATION

The Sufis of erotic school believe that God started to create the universe and humans kindly in order to alleger His perfection, in the other words existential manifestation comes from general attribute of kindness of the Almighty that if it covers all universe it is called kindness or favor "God is agent of all creatures and it is appeared by kindness and favor." (Eynolghozat, the same, 181) and if it is particular to human it is called kindness or love "[God] poured down blessing from His bounty on human soil and made it clay... [Till] because of love humans' soil became clay." (Najmoddin Razi, 1982:71-72)

The kindness bestowed by the Almighty to Adam, would be granted to all humans of the world, but only certain saint of God can hold this attraction of immortal true love, that "is in fact an allure of true love's allures that attracts Moheb toward itself and as much as it attracts it toward itself something fades from its existence till to take its all attributes from the beginning then it filches his essence by power and instead of that bestows an essence that deserves his own description", and is loyal to such amatory pact." (Sajjadi, 1994: 702). So kindness is a linking band between God and creation and not only humans but "all things whether high or inferior are moving [toward God] by enthusiasm and kind that God has laid [in their essence]." (Deylami, 1983:40)

a) *Mohammad (God's blessing be on him) Mediator between God and Creation*

In vision of some Sufis of kindness school such as Eynolghozat and Attar the existence of God and His kindness is firstly manifested in Mohammad's soul and created the universe through him. "Alas [Mohammad] was hidden in the world of "I was an unknown treasure so I decided to be known"; he was brought in "if you didn't exist never both universes came to exist. (Eynolghozat, the same, 265)

"Doubtlessly what was created from the occult at first, it was His pure light (Mohammad).

His pure light has covered all the world, and he is the elder and senior of all humans

So, kindness of Prophet of Islam- that is the light of God kindness- is mounted in all particles of the universe in order that every particle benefits the kindness of its creator as much as its own capability.

V. KINDNESS OF CREATION TOWARDS GOD (4)

There is no creature in creation world that does not have the sign of God kindness, of course this kindness is the reflection and interaction of that creature to kindness of eternal true love; inevitably this divine attribute is devised in human essence because "love causes the servant reach to God." (Eynolghozat, the same: 13)

This kindness that is emerged in the heart of submissive believer means bowing to and honoring the Lord in order to seek the true love's satisfaction by that attribute and becomes impatient and restless for visiting Him and gaining His favor and couldn't rest without Him and inures by telling His beads and avoids everybody but Him so that obey His decree and recognize Him through perfection attributes (for more information refer to Hajviri, 2007: 450).

Aboutaleb Makki offers different degrees for this kindness: Average, perfect and real, and in order to distinguish their meaning he writes "when faith is in front of heart i.e it is Fouad, believer likes God with average kindness; and if faith enters inward the heart and be in the core of the heart, he likes God with perfect kindness... [and if] the kindness of God overcomes servant's request so that the kindness of God becomes kindness of servant in every aspect then he is the real Moheb same as the real believer." (Aboutaleb Makki, 2002: 102-103)

Aboulhasan Deylami has also considered this kindness as human attributes and classified it into five orders as follows: 1- divine that belongs to monotheists; 2- intellectual that belongs to wisdoms; 3-spiritual that belongs to elites; 4- natural that belongs to the public; 5- quadruped that belongs to ragtag. (Deylami, the same: 45-46)

These five kinds of kindness could be summarized in three general kinds: 1- divine 2- spiritual [or intellectual] 3- natural [or quadruped] that belongs to ragtag and the public (5).

Now we explain these three kinds of kindness:

a) *Kindness of Monotheists (divine)*

Referring to verse "He shall love them and they shall love Him" (Al-Maeda: 54) and verse 31 of Al-Imran (6) and some traditions such as: "verily, God is beautiful and He likes beauty" (Ibn Alghazae, 1964: 608-609)- that points to the most fundamental features of Islam that is kindness- Sufis of erotic school believe that the relationship between eternal true love who possesses pure perfection and beauty and His Moheb is lovely and amorous; as they know that since no beautiful thing can reach the beauty of true love so nothing can be attractive like Him: "God possesses eternal beauty and it is the nature of beauty that to like friendship and kindness (for more information refer to Avicenna, love treatise, fifth chapter) thus, prophets give their hearts only to real

beloved. So in mentioned Sufis opinion nobody is aware of God and Moheb except Prophet of Islam "and those who believe are stronger in love for Allah (7)" (Baqara: 165). The greatness of real Moheb's dignity of God is so much that divine essence says about such person "Oh my servant you are my lover and devotee and I am also your lover and loving, whether you want or not"

As mentioned before Makki, Deylami, Abdellah Ansari, Eynolghozat Hamedani, Roozbehan Baghli and others believe that this kindness (love) belongs to monotheists- that is those who love God and God loves them. According to this they consider the relationship between servant and God a direct and bilateral relationship; it means according to "He shall love them" on the one hand human was beloved of the Almighty when he was created, and God selected him among all creatures with respect and honor and by His power He fermented his figure and blasted His spirit into him, seated him on His caliphate throne, put the crown of He shall love them on his head and made all angels prostrate him and created estate and heaven through His wisdom and soul and protects him in the world.

On the other hand according to "they shall love Him" real Moheb in this world love God because he should give positive response to "He shall love them"

No lover seeks connection with a beloved who doesn't want him

Since the light of lover's kindness brightens this heart, be sure that there is friendship in that heart. If the kindness toward God was turned in your heart, doubtlessly God holds kindness toward you (Molavi, the same, third chapter: 599)

Finally "God retook lover from existence loving by "He shall love them" attraction and took him to apex of mortal world and by manifestation of popular attributes took him from mortal world into popular survival world [so that] the reality of all things in the world seems divine. (Najmoddin Razi, 2007: 75)

Birds that flies from God's dwelling are devoted and they have no wings to fly

They have closed their eyes, in order not to see material world except God's hawk

i. *Relationship between Kindness and Soul*

If we accept descending and ascending curve for kindness, the origin of these two kindness should be the kindness of the Almighty toward Himself whose grandeur has fallen in love with His beauty, and because of His utmost goodness He has no other concern, His eternal willing wanted that His kindness and generosity cover all jinn and human, so He has imparted a light of His kindness into human soul- at first into the soul of Prophet of Islam- and then into all components of the possible and placeless world.

Abouhasan Deylami divides downswing of kindness from the world above to Hades as follows: first kindness was created in place of wisdom and wisdom

took it to soul then soul took it to nature and nature took it to hard, dark compound substances and because of this gradual demotion, it becomes more darkened and grimy (for more information refer to Deylami, the same: 45-46).

Against this kindness (descending) there is the kindness of creation toward God (ascending or ascent) that the life of all creatures- even world system and the movement of heavens and day and night coming and going- depends on this kindness that the highest rank of this ascending kindness is its connection with human soul that itself is from the world "and they ask you about the soul Say: the soul is one of the commands of my lord"

Since there is no proportion between granted divine soul and material world, inevitably it becomes accustomed to the occult; so it believes that referring to its fundamental status is necessary, inevitably kindness (love) is coercive for soul and it has no empowerment.

Lovers have fallen in violent flooding, and attached to the destiny of love

Like a grindstone always rounds around the axle groaningly (Molavi, 1987, sixth chapter: 279).

Then, kindness is an attribute of God that granted to humans' soul "kindness is taken to soul because He shall love them and this is an eternal attribute" (Najmoddin Razi, the same: 44). In other words because soul belongs to God, so in fact soul is essence and kindness is his attribute: "this fact (kindness) is a pearl in shell (soul) and the shell is in the bottom of sea (God's essence) and science can only achieve to beach; if it was in the beach it can have a portion and if it steps forwards would be sunk." (Ahmad Ghazali, 1972:8-9)

Consequently since the relationship between kindness and soul is eternal, hence it would be spiritual and everlasting and unbroken- like the relationship between tree and its fruit- so that without one of them the other is incomplete; also the kindness of creation toward God is the result of kindness of the Almighty to His own divinity and then granting a light of His attribute to the soul of human.

This attachment of soul to God is so much that soul itself recognizes that in fact it sees God by His kindness not by itself. Because he sees God through the kind glance of God to his eyes not through his own eyes thus, "his opinion about God is the same God's view on essence and this intimacy results from manifestation need that God has in itself and this unity indicates the enthusiasm of "hidden treasure" to being known which is the nature and secret of creation." (Sattari, the same: 253)

b) *Kindness of Wisdoms (spiritual)*

This kindness that belongs to elites of believers is created by heart's looking at richness, grandeur, greatness and power of God thereby faith and perfect

kindness to pure essence of God is placed in believer's heart core in such as that in the light of this kindness and faith they can gain favor of eternal true love. "Their face and sense have gained the purity of holy soul and their wisdom is refined, and their appearance conforms their essence. Whatever virtues they see they would be more sunk in its love... since it is the basis of firmament is inevitably virtuous in lovers' religion. (Roozbehan Baghli, 2004: 15-17) because they have goodness means they are pleased by people on the one hand and on the other hand the Almighty pays attention to them in the world and also they are considered as the mirror of names and attributes of pure essence "believer is mirror of believer." (Frouzanfar, 1990: 41)

He has become a mirror and except His picture whatever you see you should abandon it (Molavi, the same, fourth chapter: 728)

Mentioned Hadith is interpreted as follows: the term believer is both one of the attributes of the Almighty and the preference of devoted servant of God in proportion to other people. Then, since believer is the common attribute of God and saints, kindness -that is the core of faith- is also the intermediate between God and His saints. So fidelity of people to these saints can be means of their nearness to God and Fana Fi Allah (extinction in God):

Since eye cannot tolerate the light, it can see shining sun in water

Although it shows little light, it increases your perception. (Lahiji, 2004: 90)

So: whoever wants association with God, say him keep company with saints (Molavi, the same, second chapter: 301)

This Islamic mysticism looking is similar to Socrates's looking that noted "if selfhood wants to recognize itself it should look at the selfhood of others and he would observe divine share which is the place of wisdom, knowledge and intellect in that selfhood. By observing itself in divine share of the other selfhood, such a person can discover the essence of God in his selfhood." (For more information refer to Eva de vitray Meyerovitch, *Mystique et poesie en Islam*, 1927, p.285). In short, in such kindness, tactful Moheb considers the true love as his own mirror and he considers himself as the place of that beloved's manifestation.

i. *Relationship between Kindness and Perception*

Heart is the only place in human's body which is the source of soul lights and is sensual. So it has a lower rank than soul. Gnostics consider the soul as manifestation place of God's kindness and consider heart as place of His perception: Sohrevardi sees the kindness that belongs to soul more specific than perception; "because all kindnesses can be perception, but all perceptions cannot be kindness." (Sheikh Eshragh, 1969: 286-287)

According to God's will and in order to obtain perfection, soul fell down from apex of command world

to the lowest part of gloomy body and was imprisoned there. So if heart – that is joining band between selfhood and body- obeyed the soul, godly soldiers would present there otherwise it would be captured by body and vile trend of selfhood. So, in order to rescue the soul from body captivity and its requests, concupiscence should obey religion; because divine attraction is compounded with religion and then began to purify the heart and then it rescued him by garnishing the soul with God's attributes and promoted him to his worthy perfection. In order to obtain kindness, therefore, perfect attention should be paid to heart and its perception should be increased toward the reality of soul thereby it informs the kindness of God which exists in soul essence; "because kindness should not be gained unless perception is yielded." (Eynolghozat, 1971: 153)

So, kindness and love are the intermediate between God and creation which results from wisdom, that is hearty exploration and intuition, not through carnal desires; because "when nature's mirror becomes clean from the rust of sin, the beauty of eternity would be manifested in this mirror." (Roozbehan Baghli, 2004: 48)

The enthusiasm for visiting and meeting eternal true love is internal demand of Moheb; for he inherently adores beauty and before he descends to this world he has seen the reality of beauty and pure perfection of beloved in eternity day "Am I not your Lord? They said: yes!" (Al-Araf: 172) without intermediate and heard His melodious words and has amorously responded yes, that is why he needs for knowing God in this world and knowledge originates from love and kindness in this way; as Plato says" real love causes soul to understand intuition and finding eternal life means achieving to knowledge of the beauty of reality and pure goodness and spiritual life and human would be the perfection of science [and knowledge] when he joins God and visits His beauty." (Foroughi, 1980, vol 4: 39-40)

c) *The Public Kindness (natural)*

It is a kindness that the Almighty gives to all people from His kindness and beneficence. In this kindness "that results from delicateness of four elements... if intellects and spiritualities overcome, it is laudable otherwise it is desirable for body and is interdicted.

So this kindness is common between humans and animals, that is, if concupiscence overcomes human existence, he would fall down in animal abyss and if wisdom and soul overcome human he would promote to angels rank.

i. *Virtual (natural) Kindness an Introduction for Real Kindness (spiritual and divine)*

In relationship between creation and God it seems that conditional love in human society has been a ladder of divine love, the same anxiety that entangles the person- and earthy, humble and uncontrollable lover

falls in love with an unachievable, person of power and generous beloved –of its own kind- is observable in real love "for a while Leili's love composed of Majnoon's essence in order to becomes ready for Leili's love, then he can bear love of God." (Eynolghozat, 2007: 105)
Loving a congenial and earthy love causes you impatient

When you are awake you are agitated of her beauty, and you dream her when you sleep

When you put foot in her way, world seems nothing for you when you have her

If she wants your life, you are ready to give it up, if she obliges you, you accept her request

Such a love whose basis is vain, rules so much on you and causes sedition

Why you are astonished that Gnostics sink in meaning sea of God

Because of God remembrance they elope from people, they are inebriated by saghi so that they rejected wine

They yet hear call of "am I not your Lord" from the eternity day, and they call yes

There are so much enthusiasm in God's greatness and involved in Him that they don't see the material beauty (Sadi, 1993: 100-101)

ii. *Attendance of Kindness (virtual and natural) and Adversity*

Kindness of servant to God burns Moheb of eternal truelove like fire and it never turns off; that is why there is no kindness without adversity. Sufis' sheikhs are in agreement that adversity and scourge are divine blessing to purify human's essence in order that he does not commit a sin in submission and perception of God "whoever claims that he has kindness and he does not consider adversity as blessing, his claim is not true and he is effeminate of the way." (Zhende Pil, 1989: 185). So he should be burnt and glowed in ordeal of God in order to show his magnanimity purity in truly kindness; because whatever that is not kindness, needs reason and whatever needs reason, it is not origin." (For more information refer to the same: 54-62)

In the other words to whoever this love overcomes, arrow of oneness passes the core of his heart, breaches to his essence so that what has filled servant's existence is in fact only the eternal truelove.

I have an eye that is filled of friend's face, and I am euphoric of this eye because it is the place for visiting God

It is not good to distinguish between eye and friend, either my eye is friend or friend is my eye (Eynolghozat, the same: 101-102, 385)

Socrates also says" love is the mediator between God and people, it is His art that separation between God and human is removed... and the relationship between God and people is created by love both in dream and awaking." (Plato, 1983: 224)

In short, both kindness (virtual- real) are bilateral, coercive, and accompanied by pain and suffer, and in both beloved do not pay attention to lover, lover efforts to join beloved but it is vain. For ordinary human virtual kindness (natural) is like a wooden sword for a child so that when he grows, being able to use iron sword when combating the enemy. So if human goes beyond natural kindness and percept spiritual and divine kindness, in fact whatever he stands up against his eternal truelove, he considers it as foe of God; because in this stage monotheist just observes light of God essence:

An inquirer who believes in what he sees, his first glance is on the light of existence

A heart that observes the light and purity by perception, whatever he sees is firstly God (Lahiji, the same: 52-53)

VI. CONCLUSION

God is the essence of all creatures and real Moheb and truelove, because of certain reasonless attention that had to mankind(Prophet Mohammad), he granted His soul, that was mixed with His kindness attribute, to him and by him He shined a light of His kindness to all particles of possible and placeless world in order that through this brightness he and his followers to recognize truth way from dark bypass and finally to return to that uncontested king by obtaining real perception from kindness of God. So kindness is the bounty of God to creation and because of having such perfect bounty that is mounted in religion perfection, Prophet and saints of God are the linking bands between God and creation. And in their absence whoever follows tradition and grasps strong bond of kindness would obtain God's nearness. So, human should at first recognize God and His attributes and then mix it with tradition by following Prophet's and certain saints of God kindness so that to find right direct and to purify his friendship with God and because the kindness of his truelove is perfect he provides the merit for nearness to Him and reaching Him by obtaining perfect perception in the light of Islam. "And the foremost are the foremost, these are they who are drawn nigh (to Allah) (Al-Waqia: 10-11).

Notes

- Some Gnostics have viewed derivations cases of Mohabat(kindness) as follows:
 - It is derived from "Hob"(affection) and means friendship serenity; so that white hard good tooth is called "Hobabo alasnani"(Ghoshayri, 2004: 557).
 - It is derived from "Hob" that means cask that when it is filled with water it doesn't have room for more water. As well as when kindness occupied one's heart nothing else can be included in there but friendship of truelove. (the same: 558)

- c) It is derived from "Hob" that means scaffold and a framework that people put jug on it. Lover also tolerates beloved's respect, abjectness, suffer, affliction and oppression and he doesn't find it hard to bear. (Hajviri, 1992: 447)
 - d) It is derived from "Habbe" that means seed, that plant grows from it. Kindness is also the substance and origin of life and it would not be changed by different adversities. (The same: 446-447)
 - e) It is derived from "Hab plural form of Habbe"; and "Habbat alghalb is the core of heart" fifth manner is called Habbat alghalb that is the source of kindness of divinity Majesty (Najmoddin Razi, 1992: 196)
 - f) It is derived from "Habbab almae" and that is when heavy rain produces bubble or some bubbles have been made in goblet. (Rajae Bokharaee, 1994: 596). Kindness is also surge of heart into the truelove's affection.
 - g) It is derived from "Ahabba", "Ahabbalbaier" that is used for a camel that does not move from its place. Beloved's kindness also keeps lover's heart in his love.
 - h) Earring is called "Heb" because it accompanies the ear and is always moving (Ghshayri, the same: 558). These two attributes are also seen in lover's kindness.
 - i) A group has said that Mohabat originates from "Mohavebat"[Mohäbat]. (Mostamli Bokhari, 1949:2) that means thinking of others but friend is faded and ruptured from his heart.
2. "Exist" refers to the existence of God from the eternity to the end. "Treasure" points into divinity attributes. "Hidden" points to inward attribute of God. "So I wanted" refers to being affection and truelove. "Being known" refers to correcting and proving the perception of attributes and essence of God and description about His truelove which is the condition of perception. (Najmoddin Razi, 2007: 37-41)
 3. This love which is high and free from any kinship and validity and "have all perfections" has been called pure fact(God essence) and considered as the only source of various loves by Khaje Ahmad Ghazali (Sattari, the same: 58-9)

Jurisprudents, experts in religion and religious laws and speakers assumed that "Hob" and its derivations means bow and devotion willing for mankind, and discredited the claim of kindness of Sufis to God and considered it as paganism "because all essence of God is contrary to creation and there is no relationship between Him and creatures in order to think of kindness (Frouzanfar, 1968: 115).

In their opinion Fana Fi Allah, Bagha beallah, and believing in "issuing" substantive unity for God and human soul and combining his nature with the essence of God as well as accepting that creation is the material form of God and symbol of names and

attributes of God and that the holy divine essence is Gnostic reality of His own creation; all means that creation shares in eternity of Creator and it is a profane and polytheistic and despicable theory. This theory has extremely negative effect on thoughts of such persons as Hajviri and Ghoshayri and even Mohammad Ghazali so that they suspected that -the relationship between God and creation is kindly- so in order to approximate the conception of kindness to Motesharee understanding horizon they tried to justify it or they sought to integrate tradition with doctrine, piety and attraction. (Sattari, the same: 143, 160). For example Mohammad Ghazali considers the following cases as the signs of human kindness to God: 1- having no fear of death; 2- giving priority to God's willing rather than to one's willing; 3- saying God's prayers steadily and not forgetting His reminiscence in the heart; 4- liking whatever that is attributed to Him such as Quran and prophet; 5- being greedy in secluding with God and praying Him; assuming God's worship easily; liking obedient servants of God and being kind with them and be inimical towards unbelievers.(Mohammad Ghazali, 1992: 853-855).

As we can see Mohammad Ghazali considers divine kindness- unlike his brother Ahmad who is among of elders of kindness school- as respecting religious rituals, worshiping God and liking saints of God, and he thinks it is not true to consider an immediate kindness with eternal truelove.

Against mentioned group, Rabee, Hallaj and so on, Sufis and Gnostics of love school believe that according to " I breathed into him of my spirit(Al-Hijr:29) and this Hadith "God created human from His own form" (Feroozanfar, 1991: 114)there is no differences between God and creation and their difference is on validity not reality and in his view kindness is laudable, it means rejecting servant's willing and sinking in truelove " and this is a fire that burns willing and follower at first and wipes it up." (the same, 1988: 116)

Rabee- who is the first person that among Sufis speaks more about divine love and kindness (Ghani, 1951: 30)- assumes that "Hob" means loving God without expectancy, neither because of the enthusiasm for paradise nor because of fear of hell " I love you with two types of kindness, first is kindness of one who is lover and the second is a kindness that you deserve it. The effect of personal affection is so much that I have forgotten love of the others but you, and the effect of kindness that you deserve it is that veils are uncovered and I can see you. The grace of none of them is mine because you deserve thankfulness. (Badvi, 1988: 80-81)

Since then some of Gnostics of third to seventh centuries of Hijra dared and considered its use for God suitable. They believe that the sign of servant's friendship with God is that affection and

hatred of God toward anything is real; and affection and hatred of servant is secondary and a light of that "friends are used to see nothing but him, to take anybody except him, and forgive nobody but to him, and to go with nobody except him, and to hear except from him... and to become happy with him, and being saddened except due to him" (Jam Zhende Pil, (1976: 131-133) because, in fact only God deserves utmost love and one whose perception is more, his kindness is more perfect. "Kindness is also based on perception, as though Gnostic enjoys pleasure, interest and goodness of absolutely perfect, so in compare to other kindnesses he gains more absolute perfect and here the meaning of those who believe are stronger in love for Allah becomes clear" (Khaje Nasirodin Toosi, 1982: 129)

Some Sufis also have observed moderate, and see facilitation, luck, acceptance, generosity and favor of God as His kindness, and they consider asking God's satisfaction and following the tradition and ignoring all creations as kindness of believers "when servant becomes friend with God, God becomes friend with servant and friendship of the Almighty helps the connection of senses, consciousness, wisdom and heart of servant in order that servants' decree in submission being indicated as master decree in divinity (Ebadi, 1968: 170-173)

4. 5- Eynolghozat Hemedani has divided love (intensity of kindness) into three kinds: "1- Minor, our love towards God; 2- Great, it is love of God towards His servants; 3- Median, alas, I cannot say..." that is the very love of Go to Himself. (Eynolghozat, the same: 101-102)
5. 6- According to this verse and the verse "say: if you love Allah, then follow me, Allah will love you" (Al-Imran: 31) Sufis know themselves as a tribe that God has said He loves them and they also love God; so they think kindness between God and creation is bilateral and believe that "whoever loves God also loves him (for more information refer to Seraj Toosi, 1914: 58)

Worship has three types: 1- worship for reaching to paradise; 2- worship due to the fear of hell; 3- worship for God Himself; because the purpose of first and second group is reaching to paradise and rescuing from hell so if they worship God they used Him as an instrument not as a goal. Their purposes are accomplishment of carnal desires and have made the Almighty their mediator in order to reach them and none of them is worship due to perception of God. The third one is the real worship; because the end of creating jinn and human is worship of God that is interpreted as perception (Tabatabaee, 2007: 84-93)

REFERENCES RÉFÉRENCES REFERENCIAS

1. Holy Quran (2000) Ottoman Taha, translated by Mahdi Fouladvand, institute for studying holy Quran, first impression- second stage.
2. Ibn Arabi, Muhyiddin (1400 AH) Fusûs al-hikam (The Ringstones of Wisdom). Altalighat, Aboalala Afifi, second impression, Beirut: Dar al-ketab Alarabi
3. Ibn al-ghazae, Abouhasan Ali(1964) Trak al-atnab fi Sharh al-shahab, by the effort of Mohammad Shirvani, Tehran
4. Avicenna, love treatise, by the correction of Sayyed Mohammad Meshkat, Kalale Khavar Publishing.
5. Plato (1983) five treaties, translated by Mahmoud Sanaee, third impression.
6. Ansari, Abdeallah (1977) Words of Sheikh of Harat, by the effort of Mohammad Javad Shariat, Tehran, pocketbooks.
7. Badvi, Abdorahman (1988) Martyr of Divine Love Rabee Odviye, translated by Mohammad Tahrirchi, Tehran, Mola, second impression
8. Baghli Shirazi, Roozbehan Ibn Abi Nasr(1965) Explanation of Shathiyat; by the correction and introduction of Henry Carbon, Tehran, French Iranian studies institute in Tehran.
9. Baghli Shirazi, Roozbehan Ibn Abi Nasr (2004) Abhar alAsheghin; by the effort of Henry Carbon and Mohammad Moin, Tehran, Manoochehri, Fourth impression.
10. Jam Zhende Pil, Ahmad (1989) Ins al-Tabein, by the correction of Ali Fazel, Tehran, Toos.
11. Jam Zhende Pil, Ahmad (1976) Rozat al-Moznabin and Janat al-Moshtaghin, by the correction of Ali Fazel, Tehran, Farhang Foundation.
12. Jam Zhende Pil, Ahmad (1989) Anthology of Seraj al-Saerin, by the correction of Ali Fazel, Tehran, Farhang Foundation.
13. Deylami, Aboulhasan (1983) Atf alAlaf al-Maloof, by the correction of H.K. Ghadiye, Cairo.
14. Rajae Bokharaee, Ahmadali(1994) Dictionary of Hafez's Poems, Tehran, Elmi Publishing, seventh impression.
15. Sattari, Jalal (2006) Mystical Love, Markaz Publishing, Fourth impression.
16. Sajjadi, Jafar(1994) Mystical terms and explanations Dictionary, Tehran, Tahoori, second Impression.
17. Seraj Toosi, Abounasr (1914 AH) Allama fi Tasawof, by the correction of Reynold Alen Nicolson, Brill Liden.
18. Sadi, Abou Mohammad Moshref aldin Mosleh (1993) Boostan (letters of Sadi), by correction and explanation of Gholamhosein Yoosefi, Tehran, Fourth impression.
19. Sohravardi, Shahab Al-din (1985) Avaref Al-maaref, translated by Abou Mansour Abdalmomen Isfahani, Tehran, Elmi and Farhangi publisher.

20. Tabatabaee Sayed Mohammah Hosein, Gnosticism way (2007) Sadegh Hasanzade, Qom, religious press, second impression.
21. Toosi, Khaje Nasiroddin, (1982) Osaf Alashraf, corrected by Najib Mayel Haravi, Mashad.
22. Ebadi, Ghot Aldin(1968) Al-tasfie Fi Ahvale Almotasavefe, corrected by Gholamhosein Yoosefi, Tehran, Farhang-e Iran Foundation.
23. Attar, Far Al-din Mohammad (1993) Mantoghoter (language of birds), by the effort and correction of Sayyed Sadegh Goharin, Elmi-Farhangi publishing, ninth impression.
24. Ghazali Toosi, Abouhamed(1992), Kimiya-yi sa'adat (The Alchemy of Happiness)
25. Ghali, Ahmad(1977) Bahr Al-Haghigha, by the effort of Nasrollah Pourjavad, philosophy association.
26. Ghazali, Ahmad (1980) Savaneh, based on the correction of Helmut Riter, by the effort of Nasrollah Pourjavadi, Tehran: Farhang foundation.
27. Ghani, Ghasem, (1951) History of Mysticism in Islam, two volumes, Tehran, Zavvar, second impression.
28. Farabi, Abounasr (1979) Madine Policy, translated by Jafar Sajjadi.
29. Foroozanfar, Badiozzaman(1991) Traditions of Mathnavi, Tehran: Amirkabir publishing institute, fourth impression.
30. Foroozanfar, Badiozzaman (1968) Explanation of Mathnavi, Tehran University, Tehran.
31. Foroughi, Mohammadali (1981) The Movement of Wisdom in Europe, four volumes, Tehran, Zavvar.
32. Ghoshayri, Abdolkarim (2002) Ghoshayriye Thesis, by the correction of Badiozzaman Foroozanfar, Tehran: Elmi-Farhangi publishing center, second impression.
33. Kashani, Ezeddin Mahmoud (1946) Mesbah Al-Hedayat and Meftah al- JKefayat, by the correction and introduction of Jalal Homaee, Tehran, Sanaee.
34. Lahiji, Shamsodin Mohammad (2004) Mafatiholejaz Fi Sharhe Golshane Raz, by introduction, correction of Mohammad Barzegar Khaleghi and Effat Karbasi, Tehran, Zavvar publishing, fifth impression.
35. Mostamli Bokhari, Abou Ibrahim Ismaeel 1949) Sharh Al-Tarof Lemabhab Al-Tasawof
36. Makki, Aboutaleb(2002) Ghvat al-Gholub, Egypt, Mostafa Al-babi Al-Halabi Press company .
37. Milavi, Jalal Al-ddin Mohammad (1983) Mathnasvi Manavi, by the correction of Rynold Alen Nicolson, Six chpters, Tolve publishing, fifth impression.
38. Najmodin Razi, Abdellah Ibn Mohammhad(2007) Marmozt Asadi Dar Mramoozat Davoodi, by the correction of Mohammad R. Shfiee Kadkani, Tehran: Sokhan Publishing, first impression(second Ed)
39. Najmodin Razi, Abdellah Ib Mohammad (1992) Mersado Ibad Men Al-Mbda Ila Al-Maad, by the effort of Mohammad Amin Riyahi, Elmi-Farhangi Publishing Company. Fourth impression.
40. Nicolson, Reynold Alen(2003) Gnosticism of Muslim Gnostics, translated by Asadollah azad, Mashad: Ferdosi University, second impression.
41. Hajviri, Abouahsan Ali Ibn Osman (2007)Kashf Al-Mahjub, by the introduction of Mahmoud Ebadi, Tehran: Soroush(Broadcasting Publishing) third impression.
42. Hamedani, Eynoghozat (2007) Tamhidat, by the introduction of afif Asiran, Monoochehri Publishing, seventh impression.
43. -----(1958) Lavayeh, by the correction of Rahim Farmanesh, Tehran: Manooghehri Library.
44. Eva de Vitray Meyerovitch, *Mystique et poesie en Islam...* 1927.

¹ Nicolson, 2003:50.



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE
LINGUISTICS & EDUCATION

Volume 13 Issue 4 Version 1.0 Year 2013

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-460X & Print ISSN: 0975-587X

Philosophy of Education: the Challenges of Globalization and Innovation in the Information Society

By Zuchra Ismagambetova, Zhakipbek Altayev, Shattyk Aliyev, Yerkin Massanov
& Asset Kuranbek

University of Castilla-La Mancha, Spain

Abstract - Modern civilization has come in recent decades into a new phase in its development, called the information society. The concept of "information society" has become one of the most common. Therefore, the attempt to understand what exactly the society we live in, what are its essential features, and possible future scenarios, is important to the social and philosophical analysis.

At the heart of all these deep transformations is more increasing, almost defining role knowledge and information as play substrata of «information society». The mankind opened for itself and actively exploits a new resource-information. Information society puts forward on the arena new type of the power, at the heart of which activity-mastering by a new resource: information and knowledge.

Keywords : *information society, philosophy, education, globalization and innovation.*

GJHSS-G Classification : *FOR Code : 120302, 930599*



Strictly as per the compliance and regulations of:



© 2013. Zuchra Ismagambetova, Zhakipbek Altayev, Shattyk Aliyev, Yerkin Massanov & Asset Kuranbek. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Philosophy of Education: The Challenges of Globalization and Innovation in the Information Society

Zuchra Ismagambetova^α, Zhakipbek Altayev^σ, Shattyk Aliyev^ρ, Yerkin Massanov^ω & Asset Kuranbek[¥]

Abstract - Modern civilization has come in recent decades into a new phase in its development, called the information society. The concept of "information society" has become one of the most common. Therefore, the attempt to understand what exactly the society we live in, what are its essential features, and possible future scenarios, is important to the social and philosophical analysis.

At the heart of all these deep transformations is more increasing, almost defining role knowledge and information as play substrata of «information society». The mankind opened for itself and actively exploits a new resource-information. Information society puts forward on the arena new type of the power, at the heart of which activity-mastering by a new resource: information and knowledge. The password of the new power-intelligence as synthesis of knowledge, information and communications, the strength of mind, fundamental sociocultural values. In a postindustrial society, the power of knowledge and information is crucial in the management of the company, pushing into the background the influence of money and state coercion.

Keywords : information society, philosophy, education, globalization and innovation.

1. INTRODUCTION

Information society is an absolutely new public formation at which the infrastructure and the social relations correspond to the socialized essence of «information genotype» mankind. Information society is a natural social environment which allows the person to open completely the information nature, to use intelligence for joint creation with other people of new information on the basis of knowledge earlier saved up by previous generations.

At the heart of all these deep transformations is more increasing, almost defining role knowledge and information as play substrata of «information society». The mankind opened for itself and actively exploits a new resource-information. Information society puts forward on the arena new type of the power, at the heart of which activity-mastering by a new resource: information and knowledge. The password of the new power-intelligence as synthesis of knowledge, information and communications, the strength of mind,

fundamental sociocultural values. Information should become a material for knowledge, and then knowledge the maintenance of professionalism, intelligence of shots as bases both economic, and political, both social, and spiritual creativity.

In today's rapidly changing world, when the eyes of several generations at the same time there is a change and transformation of socio-cultural and civilizational foundations of human existence, value system, ideology and worldview, it becomes especially important issue of cultural adaptation and socialization strategies. In the social transformation of society and its transition to the new conditions of civilization development is very significant is the problem of choosing a new policy of entering the post-industrial society in his new stage of development, when combined with new technologies are generated and implemented in the social life of innovation and knowledge-intensive products infrastructure. In turn, they are the forces that cause a fundamental change and transformation on all sides of social and cultural life, leading to a qualitative change not only the public system, but also the emergence of innovative events in the spiritual system. In these circumstances, subject to quality guidelines and principles of the Reformation world, consciousness, values, science, intercultural communication, there is a change of life scenarios, attitudes to technology and technology education system and knowledge-hull.

As it was said by the scientists, the term "global informational society" first of all according to the political, economical and social-cultural aspects consists of determination of the wide spread information industry, that's developing with high level of information and education. This phenomenon is connected with global computer net, firstly with internet. A cheapness of communicational service, which is the result of the birth of these and development of the world market, is considered as two main factors for fast-development of information field and its social role.

In modern conditions the interaction of new media tools create a media culture man who not only lives in the media environment, but also develop personally through it. By personality we mean a self-acting, endowed with the will and aspirations of the human individual, which "appears connected with other

Author ^α ^σ ^ρ ^ω [¥] : Professor-School of "Philosophy and Political Science", Al-Farabi Kazakh National University, Kazakhstan.
E-mails : zuchra-50@mail.ru, altaev_2007@mail.ru, shattyk.85@mail.ru, Massanovezh@mail.ru

such human individuals and learn about their manner of treatment, the statements, the will and aspirations, meeting with their thoughts and views, opinions and takes some position with respect to their claims - pits, moods and values" [1], expressing their thoughts, opinions, judgments, as being the claims and rights, attitudes and evaluations.

In today's information-rich reality of new changes, which are significant science, innovation, education and information technology. The integration of science, innovation, education and information technology is based on the knowledge, fundamentally changing not only the social reality, but also qualitatively altering a person's attitude to the world, his world, the consciousness, values, and the role of social institutions in the cultural adaptation and socialization .

Among the many social institutions that are actively involved in the complex process of cultural adaptation and socialization, is the institution of higher education. Higher education in modern conditions of formation of a new infrastructure belongs to a complex role of acculturation and socialization in the formation of new ideological orientation and a system of spiritual values. In modern conditions, the system of higher education is becoming one of the leading cultural institutions in the complex process of acculturation rights in post-industrial society into a new world - a media culture.

One of the leading theoreticians of the modern media education, the British scientist and educator L. Masterman seven reasons to substantiate the relevance of media education in the modern world:

- 1) A high level of consumption of media saturation of contemporary societies and the media;
- 2) The ideological importance of the media and their influence on the minds of the audience;
- 3) Rapid growth in the number of media information, strengthening mechanisms for its management and distribution;
- 4) The penetration of the major media in the democratic process;
- 5) The increasing importance of visual communication and information in all areas;
- 6) The need for education of pupils / students with an orientation to meet future requirements;
- 7) The growing national and international processes of privatization of information [2].

For Kazakhstan, a particularly important stage of the program of modernization and innovative renewal of society is the improvement of educational policy, particularly in higher education. This problem stems from the fact that society requires not only innovative technology, modernized production, but also the appropriate professionals who could work in the contemporary social and cultural space, based on new knowledge and innovative outlook. Modern educational policy should be to prepare the educated, business,

enterprising, competitive professionals. Over 20 years of independent development in Kazakhstan there were qualitative changes in education policy: UNT system was introduced, the public credit, grant support. All of these reforms in educational policy, ultimately aimed at creating conditions for the formation of intellectual capital in the face with a specialist vocational education, with opportunities for cultural adaptation. In this process plays an important role not only knowledge-component, but also the spiritual and moral values, rational worldview. An important issue is the philosophical understanding of new theoretical and methodological problems of education, educational policy in the modernization of Kazakhstan's society, the challenges of globalization.

One of the important problems of the philosophical and methodological level, which seek to understand the scientists, philosophers on education policy is the task of combining the features of national culture and value aspects of the Western model of education. A very important component of this task is the translation of the principle of tolerance and solidarity through the educational program. Along with this problem is especially acute problem of preserving ethnic and cultural identity, which is very important for young people and in general for society. This problem is closely linked not only with educational policy as a social and cultural institution, fulfilling the role of cultural adaptation but also plays an important role in the cultural socialization of young people and cultural identity. Thus, in the broadcast of cultural values and patterns of cultural communication and social relations play an important role, such as cultural studies academic subjects, ethnic culture, world culture, the history of Kazakh culture, history of science in shaping the ideological orientation and world-attitude plays an important role philosophy, history of religion. Cognitive and educational value and function of these disciplines, knowledge-capital of these disciplines allow young people to not only get acquainted with various cultural and ethnic communities, to develop an idea of a multicultural diversity of the peoples of our planet, but also expands the notions of the uniqueness of their own ethnic culture, forms of interest to national the origins, traditions, language [3].

Over the years the ongoing reform of higher education in Kazakhstan aimed at forming the basis for the creation of conditions respond to the challenges of globalization. In this regard, introduced new standards of education, changed the emphasis from training, transfer of a body of knowledge, experience, on the other a more active form in which the proportion of self-education has expanded considerably. And with it the task was carried out aimed at finding new and creative methods of «learning», related research tasks, new original productions tasks and involving students in projects with a high proportion of the implementation

methods of solving problems in practice. This formulation of the new educational objectives actualized number of theoretical and methodological and educational issues. Among them is a philosophical reflection on the new educational priorities, value systems, world outlook, cognitive tasks and methodical teaching plan. There was a problem of understanding the new paradigm of education in the context of globalization and modernization.

For the first time in Kazakhstan, was introduced 3-stair continuous system of education (bachelor's, master's, doctoral PhD).

In the higher education system was introduced academic mobility of students. The first of the students who had been sent to foreign countries for the summer semester, there were undergraduates. Our first graduate students traveled to foreign countries for a period of training for 15 days, month, and then one more semester. Since last year, our university has introduced a new system - distance learning.

«Dasein» modern man, his daily practice - the practice of obtaining news, transfer of knowledge and experience with the media, the practice of recreation, entertainment, creativity, possible thanks to the media, the practice of communication-habitually associated with the media and media technology: personal computers, television, mobile phone, etc. on the right to scientists, "a type of culture and civilization, which is education, we believe, should play in the present and near future is closely linked to the dominant media sphere today, but because the philosophy of education, engaged in identifying the source of cultural values and fundamental worldview education and training, is destined to enter media culture in the region of its priority interests "[4].

Today, the development of new media technologies and media replaced the paper in the background. The emergence of radio, film, television, computer, and today - the Internet has made the newspaper about the "legacy" type of communication. Functions that have made the once so popular newspaper - news, information, education, entertainment, now serve other media, and perform much more efficiently.

Thus, the social-philosophical analysis of some aspects of developing a new information society enables us to draw some conclusions. First, the information society - is a practical social reality of global and local order. Second, a number of modern science have created a strong new management concept, the information society, dynamic, especially in the leading countries of the world. Thirdly, the modern Western concept of management information society made a significant contribution to the modern science of control and are of practical importance in building the society in different countries.

II. CONCLUSION

The result is increased levels of ME media competence / literacy audiences. Media competence is multidimensional and requires a broader perspective, based on advanced knowledge of the structure. An essential element of human development of media education is to create it's own media production, that is, owning messages to their operational discussion of virtual discussions, debates with Internet users located in different cities and countries. Media Education as a factor of cultural socialization and personal development is manifested in the fact that Kazakhstan's youth change their media preferences, choosing virtual forms of communication, Internet technology, creating their own media, thus, forming a new media space, setting the information space of their own moral criteria, its measure of responsibility.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Short Encyclopedia of Philosophy. – JSC "Publishing group" Progress. - M., 1994. - S. 244.
2. Masterman L. Teaching the Media. London: Comedia Publishing Group, 1985 - 341 p.
3. Narbekova G. Education Policy of the Republic of Kazakhstan: problems and prospects // Al-Farabi: the philosophical and political science, spiritual and educational magazine. - Almaty, № 2 (38) / 2012 - p.104.
4. Vozchikov V.A. Philosophy of Education and the media culture of the information society. - Abstract. thesis. Doctor of Philosophy.- St., 2007. - C.4.

SUMMARY

Philosophy of Education: the challenges of globalization and innovation in the Information society. This article discusses the characteristics and place of the theoretical and methodological problems of education in the context of media culture in Kazakhstan. Showing the influence of media education in the development of distance education in a information society. And also provides an analysis of cultural socialization and personal development of man in modern society, the scientific concepts related to information society scholars.

This page is intentionally left blank



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE
LINGUISTICS & EDUCATION
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460X & Print ISSN: 0975-587X

“The Change Wind Blew”: Diachronic and Synchronic Orientations of Sound Change in Basrah Arabic

By Dr. Majid Abdulatif Ibrahim
University of Jordan

Abstract - The current treatise is an attempt to unveil the phonological nature of sound change and to trace the extent to which the sound change is patterned and functioned via the historical and contextual developments of Basrah Arabic. Language change is generally attributed to three major factors: “syntagmatic change”, “paradigmatic or associative change” and “social change”. The facts and factors that underline the sound change can possibly be accounted for as to which theories have been propped. The most prominent of which are performance theories and competence theories.

Keywords : sound change, diachronic change, synchronic change, haplology, basrah arabic.

GJHSS-G Classification : FOR Code : 660202



Strictly as per the compliance and regulations of:



“The Change Wind Blew”: Diachronic and Synchronic Orientations of Sound Change in Basrah Arabic

Dr. Majid Abdulatif Ibrahim

Abstract - The current treatise is an attempt to unveil the phonological nature of sound change and to trace the extent to which the sound change is patterned and functioned via the historical and contextual developments of Basrah Arabic. Language change is generally attributed to three major factors: “syntagmatic change”, “paradigmatic or associative change” and “social change”. The facts and factors that underline the sound change can possibly be accounted for as to which theories have been propped. The most prominent of which are performance theories and competence theories.

Keywords : sound change, diachronic change, synchronic change, haplology, basrah arabic.

I. INTRODUCTION

Language change is generally attributed to three major factors. In the first place, words and sounds may affect adjacent words and sounds. This, in some cases, drags into alternative pronunciations ranging from distortedly phonetic words to innovatively pronounced words. Such variations represent perfectly normal, though informal, pronunciations which result from the influence of one sound on another within the word. Accordingly, when nearby elements affect one another within the flow of speech, the result is known as “syntagmatic change”. Secondly, words and sounds may be affected by others that are not immediately present but with which they are associated. Change of this type is termed as “paradigmatic or associative change”. Thirdly, a language may become different in accordance with external factors including new inventions where new lexemes are required and through social contact with other persons who speak different languages or dialects. A change of this sort which may influence the pronunciation, the grammar and the vocabulary of the language is called “social change”.

The present study is an attempt to highlight the phonological nature of sound change and to trace the extent to which the sound change is patterned and functioned via the historical and contextual developments of Basrah Arabic. Basrah Arabic is that variety of Arabic which is spoken in the city of Basrah, in the southern part of Iraq, by educated and uneducated speakers alike. To arrive at satisfactory findings, conver-

sational speech of a native Basrahi speaker is transcribed phonemically and then translated in Appendix (2).

II. INTERPRETATION OF SOUND CHANGE

The facts and factors that underline the sound change can possibly be accounted for as to which theories have been propped. The most prominent of which are performance theories and competence theories. The proponents of performance theories argue that sound change arises out of the linguistic system via modifications of pronunciation. According to them, many speakers of a language begin to pronounce some sounds weakly and in certain cases they entirely delete other sounds before any change had taken place in the grammar of that language. They note that when this “deviant pronunciation” became sufficiently common, it was considered standard usage and the grammar of the language itself was changed to incorporate such deviation (Kiparsky, 1970: 304).

The most important issue which the proponents of performance theories have failed to puzzle out satisfactorily is associated with the origin of performance deviations that supposedly lies behind sound change. It is believed that a growing tendency towards a greater ease of articulation is the most powerful element, i. e. sound changes are interpreted in terms of the tendency of a greater ease of articulation rather than incidental occurrence chance. This interpretation is reinforced by the view that the deletion of the outer consonant in cluster (the first consonant of an initial cluster and the last consonant of a final cluster), for example, is more frequent than the insertion of such a consonant. The alternative solution to the same problem is that sound change is simply the result of random vacillations and not of the tendency towards a greater ease of articulation as the general cause of this change (Kiparsky, *ibid.* :305).

The advocates of the competence theories of sound change uphold a reverse view. They remark that sound changes originate in the competence which is responsible for changes in performance. They admit the sound change occurs in the phonological part of the grammar. This assumption is formulated within the framework of generative grammar in a way that sound

Author : Dept. of English and Translation, Faculty of Arts, Al-Zaytoonah Private University of Jordan. E-mail : majidabd2@hotmail.com

change involves the addition of new phonological rules to the grammar (Chomsky and Halle, 1968; Postal, 1968; Botha, 1971; Dell, 1980).

One great advantage of conceiving sound change in terms of new rules added to the phonological component of a grammar is that the types of changes and types of conditionings that occur are also displayed in the rules of a synchronic grammar. That is, a large portion of the work related to the characterization of the possible sound changes is independently done in the form of a characterization of the possible phonological rules that may figure in a phonological description.

The extreme justifications concerned with sound change imply that the factors which lie behind such a change are often unknown. It is argued that some of the major changes such as the "First Sound Shift" and the "Great Vowel Shift" are particularly mysterious. In point of fact, various reasons have been suggested in this regard. One of these reasons is that when people speaking different languages come into contact, one group learns the other language but does so imperfectly in that the native habits of pronunciation are carried over into the language of the other group. Such an interpretation is referred to as the "substratum" or "super-stratum theory" based on whether it is the language of the dominant group that is influenced (Robins, 1989 and Trudgill, 2000).

A quite divergent sort of interpretation for sound change is that languages tend to develop a balanced sound system, i. e., to make sounds as different from one another by distributing them in phonological space. Accordingly, it is common for languages to have two front vowels /i, e/, and three non-front ones /u, o, a/. It is mentioned that it would be very strange if a language had five front vowels and no back ones at all because such an unbalanced system would make poor use of its available resources. It is presumed that if, for some reasons, a language loses some of its sounds, there would be intra-systemic pressure to bridge the gap by changing some of the remaining sounds (Pyles and Algeo, 1993: 35).

Sound change like assimilation, dissimilation, elision and intrusion are often accounted for in terms of increasing the ease of articulation. It is reaffirmed that some sounds can be uttered together more smoothly if they are similar rather than different sounds. It is suggested that elision and assimilation both accelerate the rate of speech, therefore, the desire or the need to talk at rapid tempo would encourage both process. In addition to these mechanical explanations of sound change, some changes are attributed to the partial awareness of the speaker, that is, these changes are deliberately made. It is capitulated that as speakers use the language, they often change it, whether mechanically or deliberately. Those changes are supposed to become for the next generation, just as a part of the inherent system, available to use or vary over

the years and centuries and they may, like English, eventually become quite a different system from what it was earlier (Trask, 1996).

Sound change has also been investigated by a number of scholars (Neu, 1980 and Phillips, 1983) in the light of the frequency of occurrence of lexical items and their word class. These scholars study the correlation between lexical diffusion of sound change and the frequency of grammatical words in English. They state that most works on the sound change occurring through lexical diffusion have concentrated on both the role of word frequency and the important role played by word class. It seems apparent that there are two features of grammatical words in English: their high word frequency and their low sentence stress; these features are examined in a review of the behavior of grammatical words in a number of sound changes. It has accordingly been noticed that low sentence stress is the main determining factor to decide whether grammatical words change first or last in the diffusion of a sound change: a result which indicates that weakening processes affect grammatical words first whereas strengthening processes affect these words last.

III. SOUND CHANGE BEHAVIOUR IN BASRAH ARABIC

a) Preliminaries

It has been observed that the sounds of language are in a continuous change. Such a change is faster and of more types in comparison with the alternation that may involve the morphology and syntax of the language. This is so because the spoken form of the language shows more flexibility in usage than the written form. In addition, the sounds of language are used in contexts different from those of the written forms. The best evidence to this fact is the great differences that are noticed between the written and the spoken forms of the language. This, in turn, implies, in most cases, that the pronunciation is modified whereas the spelling of the language is stable. Sound changes often offer clues to relative strength of phonological elements by virtue of which a system of ranking of these elements can be justified (Foley, 1977: 203).

One of the basic properties of Arabic is the relative stability of its sound system. Arabic is not, indeed, subservient to the alternation of its sounds as is the case in many languages and dialects of the world (Al-Salih, 1960: 230). Nevertheless, Colloquial Arabic is deviated from the standard variety via simplifying articulation. Simplification as such takes various shapes and justifications. Broadly speaking, sound changes that take place in Colloquial Arabic can be categorized into diachronic and synchronic. The Diachronic phonological changes refer to those changes that affect certain sounds in the different dialects of Arabic within periods of time. These changes have been generalized

in the course of time so that they have become part of the sound systems of modern Arabic dialects. Synchronic sound changes, on the other hand, represent those modifications exhibited by the various sound segments of Colloquial Arabic when they occur in certain contexts.

b) *Types of Sound Change in Basrah Arabic*

As a sub-dialect of Iraqi Arabic, Basrah Arabic has been subjected to many changes and diversions in comparison with Arabic. These changes influence the syntax, morphology and the phonology of this variety. Phonological modifications, which can be elicited in the citation form and connected speech alike, differ from morphological and syntactic ones in two major respects: First, they take place constantly and unintentionally due to the impact of the articulatory habits of the community in general. Secondly, they do not affect the meaning of the individual words or sentences where they occur as in the case of morphological and syntactic alternations. It is possible to scrutinize the essential sound changes of Basrah Arabic as follows:

- 1) Increasing the number of the original short vowels Arabic mainly via the alternation of the classical diphthongs /ay/ and /aw/ into the long vowels /ee/ and /oo/ as in /ʕeen/ "eye", /dʒee/ "army", /koon/ "universe", /qoos/ "curve" instead of /ʕayn/, /dʒay/, /kawn/ and /qaws/ respectively.
- 2) Simplifying the glottal plosive in different word-positions as in /sʕaab/ "he hit" instead of /ʔasʕaab/, /xitʕaʔ/ "he committed a mistake" for /ʔaxtʕaʔ/, /ruus/ "heads" as compared with /ruʔuus/, /fuus/ "axes" in comparison with /fuʔuus/, /hawa/ "air" for /hawaaʔ/, /duwa/ "medicine" in variation with /dawaaʔ/.
- 3) Phonemic replacement where certain segments are substituted by others for simplification as in /tʕalib/ "dog" for /kalb/, /tʕam/ "how many" in variation with /kam/, /bitʕa/ "he wept" in variation with /bakaa/, /gidir/ "pot" for /qidr/, /θigil/ "a weight" in comparison with /θuql/, gumar/ "moon" as compared with /qamar/.
- 4) Changing the original syllabic structures of classical words where the number of the original syllables is reduced in certain cases as in /kisar/ "he broke" in comparison with /kasara/, /hnaa/ "here" in variation with /hunaa/, /wara/ "behind" for /waraaʔ/.
- 5) Shift of stress location as in /sima/ "sky" as compared with /samaaʔ/, /ʕamya/ "blind" for /ʕamyaaʔ/, /batʕi/ "weep" in comparison with /bukaaʔ/, /ʕifa/ "supper" in variation with /ʕafaaʔ/.
- 6) The non-distinction between pausal and non-pausal forms where words are always spoken with a distinct pausal form whether they occur in isolation or within a phrasal context. Such a phenomenon

has its great effect on the phonetic value of some consonants and vowels. This can be exemplified by words such as /diras/ "he studied" for /darasaa/, /baab/ "door" in comparison with /baabun/, /naðʕiif/ "clean" as compared with /naðʕiifun/, /nahar/ "river" in comparison with /nahrun/.

- 7) Simplification via acrology where a group of words are combined into a single word as in /ʕbiik/ "what is wrong with you?" for /ʔayya ʕayʔin fiika/, /ʕitriid/ "what do you want?" as compared with /ʔayya ʕayin turiidʔ/, /fiimaanil laah/ "Good-bye" for /fi ʔamaanil laah/, /mneen/ "from where" as compared with /min ʔayna/.
- 8) Simplification through the reduction of a final cluster where this cluster is geminate or non-geminate as in /bit man/ "whose daughter is she?", where the final geminate cluster of /bitt/ "daughter" is reduced into a single /t/, /sit maryam/ "Madam Maryam", in which the final geminate cluster of /sitt/ "Madam" is degeminated into a single /t/.
- 9) Inserting an epenthetic vowel to break final two-element cluster changing the original syllabic structure of the word as in /tamur/ "dates" for /tamr/, /fadʕir/ "dawn" for /fadʕr/, /qadar/ "fate" in comparison with /qadr/.

IV. SOUND CHANGE AND HAPLOLOGY IN BASRAH ARABIC

a) *Preliminaries*

Like elision, haplology refers to the loss of one or more of the identical segments which occur in succession. It is mainly concerned with the deletion of similar sounds (including the reduction of the number of similar or identical syllables) which appear in sequence within one and the same word, and it can be extended to imply the loss of similar segments that occur in juxtaposition across word-boundary (Abdul-Tawwab, 1988 and Al-Khalil, 1994).

Haplology has been investigated in Arabic in relation to the tendency registered by Arabic speakers to avoid the articulation of one or more of the identical or similar segments that occur next to each other (Al-Qasim, 1993). As is the case in many other languages, haplology takes place in Arabic as a result of the difficulty inherent in articulating two or more adjacent sounds or syllables (not necessarily occurring immediately in succession) which are produced by the same organs of speech. In more technical terms, pronouncing such segments usually hinders the fluency and requires much more muscular effort on the part of the speaker. Consequently, native speakers of Arabic abandon uttering these sounds by means of advocating various strategies, the most common of which are: phonemic replacement, insertion, dissimilation, degeminate and elision.



Haplology within word-boundary in Arabic is mostly found in the context where a number of different affixes are dropped for simplification. This is so because these affixes create identical segments or syllables that follow each other. In such cases, one of the identical elements is elided for ease of articulation as in /taqaddamuun/ "you make progress", /yukrimuuni/ "they offer me something", /taktubanna/ "you write", /ʔinnii/ "it is me" in comparison with /tataqaddamuun/, /yakrumuunani/, /taktubannanna/, /ʔinnani / respectively.

In other contexts, final geminate clusters are simplified in Arabic via eliding one of the identical consonants. This process mostly takes place when certain suffixes are attached to verbs terminating with a geminate consonant as in /ʔadʕlatu/ "I misled", /ʔahsastu/ "I felt", /masastu/ "I talked badly against someone in his absence". Haplology through the reduction of the number of successive syllables in Arabic can be illustrated by words like /madda/ "he stretched" for /madada/, /wedda/ "he loved" as compared with /wadda/, /farra/ "he escaped" in variant with /farara/, /yahmarru/ "to become red" instead of /yahmariru/.

Across word-boundary, one or more of the identical successive element(s) is (are) lost in Arabic for economy of effort. The following examples are good points of evidence: /lam yuðʕhiril ʔidʕtihaad/ "he did not show diligence", /ʔal wiħdatu ʔawi littiħaad/ "unity or concord", /ʔimmal ħayaatu ʔawil mawt/ "either life or death", /yasuuʕu ʔayil masiħh/ "Jesus, that is Christ", /ħal aħmadu ʔabuuka/ "Is Ahmed your father?", /ħanil ʔaxbaar/ "about the news", /ħal maaʔil/ "on water", /ħaf ʔams/ "on the sun" as compared with /lam yuðʕhir ʔal ʔidʕtihaad/, /ʔal wiħdatu ʔaw ʔal ʔittiħaad/, /ʔimmal ʔal ħayaat ʔaw ʔal mawt/, /yasuuʕu ʔay ʔal masiħh/, /ħal ʔaħmadu ʔabuuka/, /ħanʔal ʔaxbaar/, etc.

b) *Haplology Orientations in Basrah Arabic*

Basrah Arabic displays both diachronic and synchronic haplology. The former implies the deletion of one or more of the identical or similar segments or syllables both within word boundary and in phrasal context. To put it in another way, diachronic haplology can be elicited in this variety in individual words whether these words are spoken in isolation or within a context. Such a type of deletion has become a part of the phonological system of this dialect where the various forms of diachronic haplology are transmitted from one generation to another. The latter represents the omission of one or more of the identical juxtaposed sounds or syllables due to rapid speech when such elements occur in a variety of environments.

Diachronic haplology in Basrah Arabic within word-boundary can be represented by certain lexemes of classical origin as in /ʔaakil/ "I eat", /ʔaaxið / "I take", /ʔayimma/ " plural of Imam", /giti/ "you told me", /gitla/ "I told him", /txawfiini/ " you frighten me", /tfihmiini/ "you

understand me", /tsimʕiini/ "you hear me", /tluumuuni/ "you blame me", /thiðuuni/ "you envy me", /tʔaðbuuni/ "you do not trust me" in comparison with /ʔaʔkul/, /ʔaʔxuð /, /ʔaʔimma/, /gulta li/, /gulta laha/, /ʔatuxawwiinani/, /ʔatafhamiinani/, /ʔatasmaʕiinani/, /ʔatalumuunani/, /ʔataħsидуunani/, /ʔatukaðð ibuuni /.

Historical haplology in Basrah Arabic may occur as a result of morphological or syntactic factors where a number of successive segments are dropped. This phenomenon can be found particularly in normal and phrasal formations in which two or more lexemes are combined with each other to form certain nominals and phrases as well as negation. To verify this point we may cite the following illustrative examples: /limtiħaan/ "the examination", /laħmar/ "the red", /laswad/ "the black", /laħma/ "the blind", /lasʔila/ "the questions", /ħal zuuliyya/ "on the carpet", /ħal maaʕil/ "quickly", /xaywalli/ "do not care for him", /xay ydʕiiba/ "tell him to bring it", /maasʔal/ "I do not ask", /maa ʔaaxið / "I do not take" as compared with /ʔil ʔimtiħaan/, /ʔilʔaħmar/, /ʔilʔaswad/, /ʔil ʔaħma/, /ʔil ʔasʔila/, /ħalal zuuliyya/, /ħalal maaʕil/, /xalli ywalli/, /xalli ydʕiiba/, /maa ʔasʔal/, /maa ʔaʔxuð /.

Another form of diachronic haplology in Basrah Arabic due to morphological process can be exemplified by the simplification of the final geminate cluster when certain suffixes are attached to lexemes terminating with a geminate consonant. The following examples are good cases in point: /sidd/ "close" and /sidha/ "close it", /ʔimm/ "smell" and /ʔimha/ "smell it", /ridd/ "return" and /ridha/ "return it", /xall/ "leave" and /xalha/ "leave it", / ðibb / "throw" and / ðibha / "throw it", /yamm/ "near" and /yamha/ "near to it", /bass/ "enough" and /basha/ "let her stop doing something".

Speakers of Basrah Arabic may drop one or more of the identical juxtaposed segments in rapid connected speech usually for ease of articulation. This is what is referred to as synchronic haplology that occurs within a context. Examples of such a type are /yoomil aħħad/ "on Sunday", /laħħad idʕdʕaay/ "next Sunday", /bsʕaffil ittiħaad/ "beside the union", /maariid akalfa biħha/ "I do not like to bother him with it", /huwwa maa miħtaadʕil ʔay waahid/ "he does not need the support of anybody", /laa ʕalbaal wlaaʕal xaatʕir/ "unexpectedly happening" in comparison with /yoom ʔil ʔaħħad/, /ʔil ʔaħħad ʔil dʕaay/, /bsʕaf ʔil ʔittiħaad/, /maa ʔariid ʔakalfa biħha/, /huwwa maa miħtaadʕ ʔil ʔay waahid/, laa ʕalal baal walaa ʕalal xaatʕir/.

V. CONCLUSION

In this study, we have seen that Basrah Arabic sound change can often be understood either as a diachronic phenomenon affecting the sequences of speech sounds within periods of time or as a synchronic point of view: that is, from the viewpoint of changes in the sequences of speech sounds making up the pronunciation of particular words. The majority of

such sound changes are seen in terms of the movements of the vocal organs during speech, and more particularly in terms of a tendency to reduce articulatory efforts. Moreover, many sound changes have significant consequences for the phonological system of Basrah Arabic, and these can be accounted for by scrutinizing the system consonant and vowel segments arranged in phonological space.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abdul-Tawwab, R. (1985). *Papers and Essays on Language*. Cairo: Al-Khanchi Publishing.
2. Al-Khalil, A. M. (1994). "Haplology in Arabic". in *Mu'ta Journal for Research and Studies*. Vol. 9, No.1, pp. 11-31. Mu'ta: Mu'ta University.
3. Al-Qasim, Y. (1993). "The Evidence of the Quranic Recitations as Investigated by Al-Siyuti and other Old Grammarians". in *Mu'ta Journal for Research and Studies*. Vol. 8, No.6, pp. 11-31. Mu'ta: Mu'ta University.
4. Al-Salih, S. (1960). *Studies in Philology*. Damascus: Damascus University Press.
5. Botha, R. P. (1971). "The Phonological Component of a Generative Grammar" in *Phonology*, edited by Fudge, E. C., pp. 213-231. Harmondsworth: Penguin.
6. Chomsky, N. and M. Halle. (1968). *The Sound Pattern of English*. New York: Harper and Row.
7. Dell, F. (1980). *Generative Phonology*. Cambridge: CUP.
8. Foley, J. (1977). *Foundations of Theoretical Phonology*. Cambridge: CUP.
9. Kiparsky, P. (1970). "Historical Linguistics" in *New Horizons in Linguistics*, edited by Lyons, Jones, pp. 302-315. London: Penguin.
10. Neu, H. (1980). "Ranking of Constraint on /t, d/ deletion in American English: A Statistical Analysis" in *Locating Language in Time and Space*, edited by Labov, W., pp. 7-54. New York: Academic Press.
11. Phillips, B. S. (1983). "Lexical Diffusion and Function Words" in *Journal of Linguistics*, Vol. 21, pp. 487-499.
12. Postal, P. (1968). *Aspects of Phonological Theory*. New York: Harper and Row.
13. Pyles, Th. and J. Algeo (1993). *The Origins and Development of the English Language*. New York: Harcourt.
14. Robins, R. H. (1989). *General Linguistics: An Introductory Survey*. London: Longman.
15. Trask, R. L. (1996). *Historical Linguistics*. London: Arnold.
16. Trudgill, P. (2000). *Sociolinguistics: An Introduction*. London: Penguin.

APPENDIX (1) : BASRAH SEGMENTAL SYMBOLS

a) The Vowels :

i as in ʔibin "son"	ii as in bziim "buckle"
ee as in ween "where"	
a as in matʔbax "kitchen"	aa as in waasʔʔa "medium"
	oo as in xoof "fear"
u as in duʔbul "marbles"	uu as in hduum "clothes"

b) The Consonants :

b as in bhaam "thumb"	ʒ as in sʔalʔa "blad"
w as in wlaaya "city"	
t as in taʔbaan "tired"	z as in zibid "butter"
j as in ynaam "he sleeps"	
ʔʔ as in ʔʔiin "mud"	ʃ as in ʃaʔar "hair"
d as in dmuuʔ "tears"	x as in xaadim "servant"
dʔ as in dʔaabuʔʔ "officer"	ɣ as in ɣaali "expensive"
k as in kital "he killed"	ħ as in ħilim "dream"
g as in gwaani "sacks"	ʕ as in ʕgaal "headband"
q as in qamiisʔ "shirt"	h as in hnaak "there"
ʔ as in ʔamal "hope"	tʃ as in tʃaay "tea"
f as in fazʔa "effort"	ɖʒ as in ɖʒibin "cheese"
θ as in θaani "second"	m as in moot "death"
ð as in ðeel "tail"	n as in nahar "river"
ʔ as in ʔʔaruf "envelop"	l as in liga "he found"
s as in sirdaab "cellar"	r as in rubuʔ "quarter"

APPENDIX (2)

The text is part of a conversational speech with a young man called Saadun who worked at the University of Basrah in Basrah city:

a) Text

ʔana wuladit bil-basrah ʔana ʔʔinit ʔisʔyʔir ʔidd uxuuy uxuuyakbar min ʔiddi uxuuy idʒa hnaa ʔʔayal bil-ɖʒaamiʔa ʔilħaasʔil galli lazim tidʒi ʔiddi hwa ʔʔaan ʔidda mara baʔad hwa ma mazawadʒ idʒa bil-ɖʒaamiʔa gaal lazim tigʔid tiqra daris aqilla maa adʒi u haadʒ u ʔʔalleet abʔʔi ʔʔinit ʔisʔyʔir ʔilħaasʔil maa ridit adʒi innoob ɣasʔab ɖʒaabni ɖʒaabni ʔidda u ħatʔʔni bil-madrasa u haadʒ min ilsʔaf ilawwal u dirasit ħatta wasʔalit ilsʔaf ilsaadis u nadʒahit u ʔaxa it ʔilʔahada u ʔʔalaʔit min ilmadrasa min ʔʔalaʔit ʔʔayalit hnaa bil-ɖʒaamiʔa ʔʔaan raatbi sittiin dinaar

b) Translation

I was born in Basrah. I was a child there with my brother, my brother who is older than me. My brother came here and worked at the university. Anyway, in the end he said to me "You must come to stay with me." He was married, but when he came to the university he was not married. He said "You should stay and study." I said: "I am not coming" and I kept crying. I was only a

child. In the end, I did not want to come, then he brought me by force. He sent me to school from the first grade and I studied until I got to the sixth grade. I passed and got my certificate. I left the school. When I left I began to work here at the university. I was paid here sixty dinar a month.



GLOBAL JOURNAL OF HUMAN SOCIAL SCIENCE
LINGUISTICS & EDUCATION

Volume 13 Issue 4 Version 1.0 Year 2013

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-460X & Print ISSN: 0975-587X

Learning Strategies used by Pakistani ESL Students in University of Sargodha

By Hafiza Saima Akbar, Nabila Gul, Mamoona Manzoor Sial, Iqra Nadeem
& Ijaz Ranjha

University of Sargodha

Abstract -The language which is learned after the learning of native language is called second language and the process of learning the second language is called second language acquisition (Gass & Selinker, 2008). The study of learning strategies has gained much importance in the field of second language acquisition during the past few decades (Koch, 2005). "Language learning strategies are operations employed by the learner to aid the acquisition, storage, retrieval, and use of information; specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 1990).

GJHSS-G Classification : FOR Code : 930101p



Strictly as per the compliance and regulations of:



© 2013. Hafiza Saima Akbar, Nabila Gul, Mamoona Manzoor Sial, Iqra Nadeem & Ijaz Ranjha. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Learning Strategies used by Pakistani ESL Students in University of Sargodha

Hafiza Saima Akbar ^α, Nabila Gul ^σ, Mamoona Manzoor Sial ^ρ, Iqra Nadeem ^ω & Ijaz Ranjha [¥]

I. INTRODUCTION

The language which is learned after the learning of native language is called second language and the process of learning the second language is called second language acquisition (Gass & Selinker, 2008). The study of learning strategies has gained much importance in the field of second language acquisition during the past few decades (Koch, 2005). "Language learning strategies are operations employed by the learner to aid the acquisition, storage, retrieval, and use of information; specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 1990).

Oxford(1990) provides six categories of learning strategies: cognitive, metacognitive, memory related, compensatory, affective and social strategies. Researches have shown that different factors like age, gender, motivation, learning styles, cultural differences, learning stage, learning experience, proficiency and aptitude directly influence the choice and use of learning strategies (Rubin, 1975, et al., cited by Lee, 2010). Good language learners use these strategies consciously or unconsciously to create successful learning experiences.

In second language acquisition, the types of learning strategies and learning styles differ in different cultures (Oxford, 1996a). The purpose of this study is to explore the learning strategies used by the students of University of Sargodha by using quantitative method and to find out the relationship between the strategy use and the various factors. The researcher has chosen four independent variables to find their influence on strategy use: learning stage, self-choice of studying English, intrinsic motivation (liking of English language) and self-examined proficiency.

The results obtained from the data will fill the major research gap by providing information about the strategies used by the students of University of Sargodha. This study will explore the relationship among four independent variables and students' strategy use and will find the variable which best predicts the students' strategy use. This information will help the teachers in identifying students' needs according to their requirements and guiding them in using the strategies they are lacking in use.

a) *Aims of the Study*

The main aim of this study is to investigate the strategy use by the students of University of Sargodha. It will also explore the impact of four independent variables on students' strategy use. Following will be the research questions of this study.

b) *Research Questions*

- What is the mean of total strategy use for all the students?
- What is the mean of each of the strategy category for all the students?

II. LITERATURE REVIEW

Currently emphasis is put on the active role of learners in learning process and the effective use of learning strategies shows learners' control over the learning process (Gewehr, 1998). Language learning strategies are conscious efforts of the learners to make their learning better and faster (Oxford, 1996a; Koch, 2005). Learning strategies impact the development of communicative competence (Oxford, 1996b). Students use strategies of advance planning, note taking, self-management, self-encouragement, cooperation, inferring, and deduction etc. (Gewehr, 1998). But unfortunately all learners don't adopt the learning strategies (Gewehr, 1998). According to Graham (1997) successful and unsuccessful learners are differentiated on the basis of their strategy use. Learners can't achieve their goal without the use of learning strategies (Koch, 2005).

Malley and Chamot (1990) give three strategy categories: metacognitive, cognitive and social/affective but Oxford (1990) gives six categories of learning strategies. Metacognitive strategies are used to plan, monitor and evaluate students' own learning process and are considered to be most effective in their learning (Gewher, 1998; Graham, 1997; Oxford, 1996b). Cognitive strategies manipulate incoming information in the form of summarizing, deduction, inference, note taking, induction and translation to make learning effective (Gewher, 1998; Graham, 1997; Oxford, 1996b). Compensatory strategies, like guessing and inferring are also used by good learners (Oxford, 1996b). When learners don't remember any appropriate word in the given situation, they use the words of same meaning to solve their problem (Littlewood, 1984). Most researchers called memory strategies, like combining and organized

reviewing as cognitive (Oxford, 1996b). Affective strategies, like self-encouragement and high motivation are used to control one's emotional state and anxiety level (Gewher, 1998; Graham, 1997; Oxford, 1996b). Social strategies, like asking for help, questioning and sharing worries show cooperative attitude of learners (Gewher, 1998; Graham, 1997; Oxford, 1996b). But many learners don't use social and affective strategies (Oxford, 1996b).

Gujjar, Noareen and Aslam (2010) compared the learning strategies used by the Pakistani students of formal and non-formal education system and found that formal students use strategies of memorization and socialization while non-formal students use summarizing and compensatory strategies.

Researches have shown that factors like age, motivation, goals, aptitude, language learning level, proficiency, learning style and learning field influence learning strategies choice (Oxford and Nyikos 1989). According to Gwehr (1998) factors like learning stage, age, learning style, context, experience, culture and teaching impact the strategy use.

Research of Oxford and Nyikos (1989) finds motivation as the strongest predictor of strategy use and highly motivated learners use more cognitive and metacognitive strategies. According to Gardner's hypothesis highly motivated learners are active and successful learners (Oxford, 1996a). There is a strong relationship between strategy use and proficiency level of the students (Oxford, 1996b). More proficient learners consciously use more and organized strategies (Oxford, 1996a). The research on learning strategies helps students and teachers in improving the learning process (Gewehr, 1998).

III. LEARNING STRATEGIES

Language learning Strategies (LLS) are seen as a shift from focusing on teacher and teaching to learners and learning.

Cohen (1998) defined such as swift when he states that "one potentially beneficial shift in teachers roles in from that of being exclusive the manger, controller and instructor to that of being a change agent-a facilitator of learning, whose role is to help their students to become more independent and more responsible for their own learning. In this role the teacher become partner in the learning process"

Language Learning Strategies are different from teaching Strategies (the technique used by teachers to help learners learn) in that, the learners and not the teachers, is the one who exercises control or the operations of the designed activity (O' Malley et al.1985).

Weinstein and Mayer (1986) "behaviors and thoughts that a learners engages in during learning. Which are intended to influence the learners encoding process"? Mayer (1988) "behavior of a learner that are intended to influence how the learners process information"

a) *Characteristics of Language learning Strategies (LLS)*

- Learning strategies are set of process and a routine for organizing those processes (Garner, 1988)
- LLS allow learners to become more self directed (oxfor,1906)
- Only conscious strategies are LLS, these are must be a choice involved on the part of learners (Cohen, 1990)
- They may be visible as they are (specific actions for techniques) (Green and oxford,1995) or invisible as they can involve mental processing (Williams and Burden,1997)
- Learning Strategies use is determined at a metacognitive level (Garner,1988)
- LLS can be thought to students (oxford,1906)
- Learning Strategies are under the active, strategic control of the student while in use (garner,1988)

b) *Can Strategies be Taught to Students*

- Teachers who experimented and investigated learning strategies in their teaching are convinced that strategies can be taught through direct instruction and overtime students will maintain and transfer them into new task when necessary.
- Strategies teaching should start at the beginning levels by providing them in the student's first language.
- Strategies should be integrated with in the curriculum rather than taught as separate entity.
- Teacher should identify strategies by name, describe them and model them.
- Students needs to have experience with variety of strategies by name to be able to use the one that works with them well.
- In this case of failure in language learning, students need to be assured that work with them well.

c) *The Good Language Learner Strategies*

The good Language learning strategies that we observed are to find a learning style that suits you and involve yourself in the language learning process. To develop an awareness of language both as system and as communication, also pay constant attention to expanding your language. Teacher should develop the L2 as a separate system.

IV. RESEARCH METHODOLOGY

The students of University of Sargodha will be taken as population. The sample will constitute the students from different departments. Oxford's (1989) Strategy Inventory for language learning version 7.0 (ESL/EFL) is modified to collect the data from the students.

"The SILL is self-scoring" and students get feedback immediately (Oxford, 1996a, p 109). Its validity and reliability has been checked various times. The

average Cronbach alpha reliability of SILL version 5.1 is 0.91 and its validity ranges from 0.40 to 0.80. Yang's (1992) study shows that the SILL doesn't give fake results (Oxford, 1996a, p 110). The validity of SILL is proved when the research is conducted in relation to learning style, performance and settings (Oxford, 1996b). The SILL is divided into six language learning categories: cognitive, metacognitive, memory related, compensatory, affective and social strategies. Five Likert scale responses are included in the questionnaire (Oxford, 1990)

- i. High use: 4.5 to 5.0 (almost always or always) and 3.5 to 4.4 (usually)
- ii. Medium use: 2.5 to 3.4 (sometimes)
- iii. Low use: 1.5 to 2.4 (usually not) and 1.0-1.4 (never or almost never)

The frequency and percentage of students showing high, medium and low strategy use will be calculated. Then the means and standard deviations of all and each of strategy categories will be calculated which will indicate the strategy use of the whole sample.

V. DATA ANALYSIS

Oxford's (1990) key will be used to calculate the mean strategy score which has a scale range of 1-5.

I refresh my previous memory related to the present learning tasks

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	3	10.0	10.0	10.0
usually not	3	10.0	10.0	20.0
sometimes	14	46.7	46.7	66.7
usually	10	33.3	33.3	100.0
Total	30	100.0	100.0	

We have collected the Data from 30 students and out of these students 46.7% of students sometimes refresh their previous memory related to present learning tasks.

I remember new English words by using them in sentences

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Never	2	6.7	6.7	6.7
usually not	5	16.7	16.7	23.3
sometimes	8	26.7	26.7	50.0
Usually	14	46.7	46.7	96.7
always or almost always	1	3.3	3.3	100.0
Total	30	100.0	100.0	

We have collected the data from 30 students and out of these students 46.7% usually remember new English words by using them in sentence.

I learn rhyming words together (e.g. ride and hide)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Never	3	10.0	10.0	10.0
usually not	8	26.7	26.7	36.7
sometimes	13	43.3	43.3	80.0
Usually	5	16.7	16.7	96.7
always or almost always	1	3.3	3.3	100.0
Total	30	100.0	100.0	

We have collected the data from 30 students and out of these students 43.3% sometimes learn rhyming word together.

I memorize new English words and their meanings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	usually not	3	10.0	10.0	10.0
	sometimes	4	13.3	13.3	23.3
	Usually	17	56.7	56.7	80.0
	always or almost always	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

We have collected the data from 30 students and out of these students 56.7 usually memorize new English words and their meaning.

I silently revise, what the teacher and other students say, in my mind

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	3	10.0	10.0	10.0
	sometimes	14	46.7	46.7	56.7
	usually	8	26.7	26.7	83.3
	always or almost always	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

We have collected data from 30 students out of these students 46.7 sometimes silently revise, what the teacher and other students say, in my mind.

I practice new English sounds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	3.3	3.3	3.3
	usually not	5	16.7	16.7	20.0
	sometimes	12	40.0	40.0	60.0
	usually	9	30.0	30.0	90.0
	always or almost always	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 40.0% sometimes practice new English sounds.

I take notes in English in the class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	6.7	6.7	6.7
	usually not	1	3.3	3.3	10.0
	Sometimes	10	33.3	33.3	43.3
	Usually	6	20.0	20.0	63.3
	always or almost always	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 36.7 always or almost always take notes in English in the class.

I watch English movies and TV programmes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	usually not	5	16.7	16.7	16.7
	Sometimes	12	40.0	40.0	56.7
	Usually	8	26.7	26.7	83.3
	always or almost always	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 40.0% sometimes watch English movies and TV programmes.

I listen to English songs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	6.7	6.7	6.7
	usually not	5	16.7	16.7	23.3
	Sometimes	12	40.0	40.0	63.3
	Usually	10	33.3	33.3	96.7
	always or almost always	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 40.0% sometimes listen English songs.

I read English books and newspapers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1	3.3	3.3	3.3
	usually not	3	10.0	10.0	13.3
	Sometimes	10	33.3	33.3	46.7
	Usually	14	46.7	46.7	93.3
	always or almost always	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 46.7 usually read English books and newspapers.

I write text messages in English, not in Roman

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	usually not	6	20.0	20.0	20.0
	sometimes	10	33.3	33.3	53.3
	usually	10	33.3	33.3	86.7
	always or almost always	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 33.3 usually and sometimes write text messages in English, not in Roman.

I try myself to interpret any English text

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	1	3.3	3.3	3.3
usually not	4	13.3	13.3	16.7
sometimes	6	20.0	20.0	36.7
usually	11	36.7	36.7	73.3
always or almost always	8	26.7	26.7	100.0
Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 36.7% usually try themselves to interpret any English text.

I use gestures and pauses to express myself, when I don't remember any English word during conversation.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	5	16.7	16.7	16.7
usually not	4	13.3	13.3	30.0
sometimes	9	30.0	30.0	60.0
usually	9	30.0	30.0	90.0
always or almost always	3	10.0	10.0	100.0
Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 30.0 % usually or sometimes use gesture and pauses to express themselves, when they don't remember any English word during conversation.

If I don't remember any English word, I use any other word or phrase having the same meaning

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	2	6.7	6.7	6.7
usually not	3	10.0	10.0	16.7
sometimes	6	20.0	20.0	36.7
usually	7	23.3	23.3	60.0
always or almost always	12	40.0	40.0	100.0
Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 40.0% always or almost always don't remember any English word, I use any word or phrase having the same meaning.

I review what to be discussed in the class before going into the class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	4	13.3	13.3	13.3
usually not	8	26.7	26.7	40.0
sometimes	7	23.3	23.3	63.3
usually	5	16.7	16.7	80.0
always or almost always	6	20.0	20.0	100.0
Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 26.7 usually not review what to be discussed in the class before going into the class.

I try to find opportunities to participate in the class in English

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Never	4	13.3	13.3	13.3
usually not	2	6.7	6.7	20.0
sometimes	4	13.3	13.3	33.3
Usually	14	46.7	46.7	80.0
always or almost always	6	20.0	20.0	100.0
Total	30	100.0	100.0	

We have collected the data from 30 students out of these students 46.7 usually try to find opportunities to participate in the class in English.

I prepare myself for presentations and discussions

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Never	3	10.0	10.0	10.0
usually not	4	13.3	13.3	23.3
Sometimes	5	16.7	16.7	40.0
Usually	10	33.3	33.3	73.3
always or almost always	8	26.7	26.7	100.0
Total	30	100.0	100.0	

We have collected the data from 30 students out of these students 33.3% usually prepare themselves for presentations and discussions.

I ask questions in English in my class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Never	1	3.3	3.3	3.3
usually not	1	3.3	3.3	6.7
sometimes	13	43.3	43.3	50.0
Usually	13	43.3	43.3	93.3
always or almost always	2	6.7	6.7	100.0
Total	30	100.0	100.0	

We have collected the data from 30 students out of these students 43.3% usually or sometimes ask questions in English in my class.

I do study discussions with my group mates in English

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Never	2	6.7	6.7	6.7
usually not	5	16.7	16.7	23.3
Sometimes	12	40.0	40.0	63.3
Usually	8	26.7	26.7	90.0
always or almost always	3	10.0	10.0	100.0
Total	30	100.0	100.0	

We have collected the Data from 30 students out of these students 40.0% sometimes do study discussions with their group mates in English.

I talk in English with my teachers, friends and family members

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	10.0	10.0	10.0
	usually not	4	13.3	13.3	23.3
	sometimes	17	56.7	56.7	80.0
	Usually	4	13.3	13.3	93.3
	always or almost always	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

We have collected the data from 30 students out of these students 56.7% sometimes talk in English with their teachers, friends and family members.

VI. CONCLUSION

Learning Strategies are very important for Language Acquisition. There are different Learning Strategies used to learn the second language. For this purpose we selected 20 main Strategies for knowing which Strategies are more popular in the students of University of Sargodha. By the results we concluded that the following two Strategies are more popular.

- Talk in English with my friends and teachers. (56.7%)

- I memorize new English words. (56.7%)

VII. PROPOSED IMPLICATIONS OF THE STUDY

This study will also help the teachers to instruct students about strategy use and to allow them to practice their strategies in the classrooms. The results of this study will make students aware of their learning strategies use and will help Lectures integrated with strategy instruction can be conducted by the teachers.

VIII. APPENDICES

Dear All,

We are the students of BS English, 6th semester conducting a questionnaire to know the learning strategies used by the University students.

From
Saima, Mamoona, Nabila, iqra, ijaz

Name (Optional) _____

Semester/Year: _____

Male/Female: _____

Strategy No.	Strategy	1.Never or almost never	2.Usually not	3.Sometimes	4.Usually	5.Always or almost always
1	I refresh my previous memory related to the present learning tasks.					
2	I remember new English words by using them in sentences.					
3	I learn rhyming words together (e.g. ride and hide)					
4	I memorize new English words and their meanings.					
5	I silently revise, what the teacher and other students say, in my mind.					
6	I practice new English sounds.					
7	I take notes in English in the class.					
8	I watch English movies and TV programmes.					
9	I listen to English songs.					
10	I read English books and newspapers.					
11	I write text messages in English, not in Roman.					

12	I try myself to interpret any English text.					
13	I use gestures and pauses to express myself, when I don't remember any English word during conversation.					
14	If I don't remember any English word, I use any other word or phrase having the same meaning.					
15	I review what to be discussed in the class before going into the class.					
16	I try to find opportunities to participate in the class in English.					
17	I prepare myself for presentations and discussions.					
18	I ask questions in English in my class.					
19	I do study discussions with my group mates in English.					
20	I talk in English with my teachers, friends and family members.					

REFERENCES RÉFÉRENCES REFERENCIAS

- Gass, S.M., Selinker, M. (Ed.). (2008). *Second Language Acquisition*, New York & UK: Routledge.
- Gewehr, W. (Ed.). (1998). *Aspects of Modern Language Teaching*. London & New York: Routledge.
- Graham, S. (1997). *Effective Language Learning*. Clevedon: Multilingual Matters Ltd.
- Gujjar, A.A., Naoreen, B. & Aslam, S. (2010). *A Comparative Study of the Language Learning Strategies Used by the Students of Formal and Non-Formal Systems of Education in Pakistan*. Language in India 10/5. Retrieved April 18, 2011, from <http://fce.academia.edu/AijazAhmedGujjar/Papers/368433/>
- Koch, A. (2005). *What are Language Learning Strategies and how can they contribute to a better learning?* Seminar Paper. Germany: Grin Verlag.
- Lee, C.K. (2010). An overview of language learning strategies. *Arecls*, 7, 132-152.
- Littlewood, W. (1984). *Foreign and Second Language Learning*. London & New York: Cambridge University Press.
- Malley, J.M & Chamot, A.U. (1990). *Learning Strategies in Second Language Acquisition*. New York: Cambridge University Press.
- Naiman, N., Frohlich, M., Stern, H.H. & Todesco, A. (1978), *The Good Language Learner*, Toronto, OISE
- Nisbet, J & Shucksmith, J. (1986). *Learning Strategies*. London: Routledge.
- Oxford, R & Nyikos, M. (1989). *Variables Affecting Choice of Language Learning Strategies by University Students*. The Modern Language Journal 73/3: Blackwell Publishing. Retrieved from <http://www.jstor.org/stable/327003>
- Oxford, R. L. (1990). *Language learning strategies: What teacher should know?* Boston: Heinle & Heinle.
- Oxford, R. L. (Ed.). (1996a). *Language Learning Motivation: Pathways to the new century*. Honolulu: University of Hawaii Press.
- Oxford, R. L. (Ed.). (1996b). *Language learning strategies around the world: Cross cultural perspectives*. Honolulu, Hawaii: University of Hawaii Press.

GLOBAL JOURNALS INC. (US) GUIDELINES HANDBOOK 2013

WWW.GLOBALJOURNALS.ORG

FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN HUMAN SCIENCE (FARSHS)

- FARSHS' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'FARSHS' can be added to name in the following manner. eg. Dr. John E. Hall, Ph.D., FARSHS or William Walldroff Ph. D., M.S., FARSHS
- Being FARSHS is a respectful honor. It authenticates your research activities. After becoming FARSHS, you can use 'FARSHS' title as you use your degree in suffix of your name. This will definitely will enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 60% Discount will be provided to FARSHS members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- FARSHS will be given a renowned, secure, free professional email address with 100 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- FARSHS member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 15% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- Eg. If we had taken 420 USD from author, we can send 63 USD to your account.
- FARSHS member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- After you are FARSHS. You can send us scanned copy of all of your documents. We will verify, grade and certify them within a month. It will be based on your academic records, quality of research papers published by you, and 50 more criteria. This is beneficial for your job interviews as recruiting organization need not just rely on you for authenticity and your unknown qualities, you would have authentic ranks of all of your documents. Our scale is unique worldwide.

- FARSHS member can proceed to get benefits of free research podcasting in Global Research Radio with their research documents, slides and online movies.
- After your publication anywhere in the world, you can upload your research paper with your recorded voice or you can use our professional RJs to record your paper their voice. We can also stream your conference videos and display your slides online.
- FARSHS will be eligible for free application of Standardization of their Researches by Open Scientific Standards. Standardization is next step and level after publishing in a journal. A team of research and professional will work with you to take your research to its next level, which is worldwide open standardization.
- FARSHS is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), FARSHS can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 80% of its earning by Global Journals Inc. (US) will be transferred to FARSHS member's bank account after certain threshold balance. There is no time limit for collection. FARSHS member can decide its price and we can help in decision.

MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN HUMAN SCIENCE (MARSHS)

- MARSHS title will be awarded to the person/institution after approval of Editor-in-Chief and Editorial Board. The title 'MARSHS' can be added to name in the following manner: eg. Dr. Thomas Knoll, Ph.D., MARSHS
- MARSHS can submit one paper every year for publication without any charges. The paper will be sent to two peer reviewers. The paper will be published after the acceptance of peer reviewers and Editorial Board.
- Free 2GB Web-space will be allotted to 'MARSHS' along with sub Domain to contribute and participate in our activities.
- A professional email address will be allotted with free 1GB email space.
- MARSHS will be authorized to receive e-Journal GJHSS for lifetime.

AUXILIARY MEMBERSHIPS

ANNUAL MEMBER

- Annual Member will be authorized to receive e-Journal GJHSS for one year (subscription for one year).
- The member will be allotted free 1 GB Web-space along with subDomain to contribute and participate in our activities.
- A professional email address will be allotted free 500 MB email space.

PAPER PUBLICATION

- The members can publish paper once. The paper will be sent to two-peer reviewer. The paper will be published after the acceptance of peer reviewers and Editorial Board.



PROCESS OF SUBMISSION OF RESEARCH PAPER

The Area or field of specialization may or may not be of any category as mentioned in 'Scope of Journal' menu of the GlobalJournals.org website. There are 37 Research Journal categorized with Six parental Journals GJCST, GJMR, GJRE, GJMBR, GJSFR, GJHSS. For Authors should prefer the mentioned categories. There are three widely used systems UDC, DDC and LCC. The details are available as 'Knowledge Abstract' at Home page. The major advantage of this coding is that, the research work will be exposed to and shared with all over the world as we are being abstracted and indexed worldwide.

The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC, *.DOCX).

The Author can submit the paper either online or offline. The authors should prefer online submission. Online Submission: There are three ways to submit your paper:

(A) (I) First, register yourself using top right corner of Home page then Login. If you are already registered, then login using your username and password.

(II) Choose corresponding Journal.

(III) Click 'Submit Manuscript'. Fill required information and Upload the paper.

(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.

(C) If these two are not convenient, and then email the paper directly to dean@globaljournals.org.

Offline Submission: Author can send the typed form of paper by Post. However, online submission should be preferred.



PREFERRED AUTHOR GUIDELINES

MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)

Page Size: 8.27" X 11"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, "Abstract" word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

You can use your own standard format also.

Author Guidelines:

1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript's Category,
5. Structure and Format of Manuscript,
6. After Acceptance.

1. GENERAL

Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

Scope

The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global



Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

2. ETHICAL GUIDELINES

Authors should follow the ethical guidelines as mentioned below for publication of research paper and research activities.

Papers are accepted on strict understanding that the material in whole or in part has not been, nor is being, considered for publication elsewhere. If the paper once accepted by Global Journals Inc. (US) and Editorial Board, will become the copyright of the Global Journals Inc. (US).

Authorship: The authors and coauthors should have active contribution to conception design, analysis and interpretation of findings. They should critically review the contents and drafting of the paper. All should approve the final version of the paper before submission

The Global Journals Inc. (US) follows the definition of authorship set up by the Global Academy of Research and Development. According to the Global Academy of R&D authorship, criteria must be based on:

- 1) Substantial contributions to conception and acquisition of data, analysis and interpretation of the findings.
- 2) Drafting the paper and revising it critically regarding important academic content.
- 3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.

Permissions: It is the author's responsibility to have prior permission if all or parts of earlier published illustrations are used in this paper.

Please mention proper reference and appropriate acknowledgements wherever expected.

If all or parts of previously published illustrations are used, permission must be taken from the copyright holder concerned. It is the author's responsibility to take these in writing.

Approval for reproduction/modification of any information (including figures and tables) published elsewhere must be obtained by the authors/copyright holders before submission of the manuscript. Contributors (Authors) are responsible for any copyright fee involved.

3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.



To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

4. MANUSCRIPT'S CATEGORY

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

5. STRUCTURE AND FORMAT OF MANUSCRIPT

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also. Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

Papers: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

- (a) Title should be relevant and commensurate with the theme of the paper.
- (b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.
- (c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.
- (d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.
- (e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition; sources of information must be given and numerical methods must be specified by reference, unless non-standard.
- (f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;
- (g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.
- (h) Brief Acknowledgements.
- (i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.



The Editorial Board reserves the right to make literary corrections and to make suggestions to improve brevity.

It is vital, that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

Format

Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than $1.4 \times 10^{-3} \text{ m}^3$, or 4 mm somewhat than $4 \times 10^{-3} \text{ m}$. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

Structure

All manuscripts submitted to Global Journals Inc. (US), ought to include:

Title: The title page must carry an instructive title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) wherever the work was carried out. The full postal address in addition with the e-mail address of related author must be given. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining and indexing.

Abstract, used in Original Papers and Reviews:

Optimizing Abstract for Search Engines

Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Key Words

A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy and planning a list of possible keywords and phrases to try.

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art. A few tips for deciding as strategically as possible about keyword search:



- One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

Acknowledgements: Please make these as concise as possible.

References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and Similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

The Editorial Board and Global Journals Inc. (US) recommend that, citation of online-published papers and other material should be done via a DOI (digital object identifier). If an author cites anything, which does not have a DOI, they run the risk of the cited material not being noticeable.

The Editorial Board and Global Journals Inc. (US) recommend the use of a tool such as Reference Manager for reference management and formatting.

Tables, Figures and Figure Legends

Tables: Tables should be few in number, cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g. Table 4, a self-explanatory caption and be on a separate sheet. Vertical lines should not be used.

Figures: Figures are supposed to be submitted as separate files. Always take in a citation in the text for each figure using Arabic numbers, e.g. Fig. 4. Artwork must be submitted online in electronic form by e-mailing them.

Preparation of Electronic Figures for Publication

Even though low quality images are sufficient for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit (or e-mail) EPS (line art) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings) in relation to the imitation size. Please give the data for figures in black and white or submit a Color Work Agreement Form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution (at final image size) ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs) : >350 dpi; figures containing both halftone and line images: >650 dpi.



Figure Legends: Self-explanatory legends of all figures should be incorporated separately under the heading 'Legends to Figures'. In the full-text online edition of the journal, figure legends may possibly be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should notify the reader, about the key aspects of the figure.

6. AFTER ACCEPTANCE

Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

6.1 Proof Corrections

The corresponding author will receive an e-mail alert containing a link to a website or will be attached. A working e-mail address must therefore be provided for the related author.

Acrobat Reader will be required in order to read this file. This software can be downloaded

(Free of charge) from the following website:

www.adobe.com/products/acrobat/readstep2.html. This will facilitate the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof.

Proofs must be returned to the dean at dean@globaljournals.org within three days of receipt.

As changes to proofs are costly, we inquire that you only correct typesetting errors. All illustrations are retained by the publisher. Please note that the authors are responsible for all statements made in their work, including changes made by the copy editor.

6.2 Early View of Global Journals Inc. (US) (Publication Prior to Print)

The Global Journals Inc. (US) are enclosed by our publishing's Early View service. Early View articles are complete full-text articles sent in advance of their publication. Early View articles are absolute and final. They have been completely reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after sending them. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the conventional way.

6.3 Author Services

Online production tracking is available for your article through Author Services. Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The authors will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript.

6.4 Author Material Archive Policy

Please note that if not specifically requested, publisher will dispose off hardcopy & electronic information submitted, after the two months of publication. If you require the return of any information submitted, please inform the Editorial Board or dean as soon as possible.

6.5 Offprint and Extra Copies

A PDF offprint of the online-published article will be provided free of charge to the related author, and may be distributed according to the Publisher's terms and conditions. Additional paper offprint may be ordered by emailing us at: editor@globaljournals.org .

You must strictly follow above Author Guidelines before submitting your paper or else we will not at all be responsible for any corrections in future in any of the way.



Before start writing a good quality Computer Science Research Paper, let us first understand what is Computer Science Research Paper? So, Computer Science Research Paper is the paper which is written by professionals or scientists who are associated to Computer Science and Information Technology, or doing research study in these areas. If you are novel to this field then you can consult about this field from your supervisor or guide.

TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

1. Choosing the topic: In most cases, the topic is searched by the interest of author but it can be also suggested by the guides. You can have several topics and then you can judge that in which topic or subject you are finding yourself most comfortable. This can be done by asking several questions to yourself, like Will I be able to carry our search in this area? Will I find all necessary recourses to accomplish the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

2. Evaluators are human: First thing to remember that evaluators are also human being. They are not only meant for rejecting a paper. They are here to evaluate your paper. So, present your Best.

3. Think Like Evaluators: If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

4. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

5. Ask your Guides: If you are having any difficulty in your research, then do not hesitate to share your difficulty to your guide (if you have any). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work then ask the supervisor to help you with the alternative. He might also provide you the list of essential readings.

6. Use of computer is recommended: As you are doing research in the field of Computer Science, then this point is quite obvious.

7. Use right software: Always use good quality software packages. If you are not capable to judge good software then you can lose quality of your paper unknowingly. There are various software programs available to help you, which you can get through Internet.

8. Use the Internet for help: An excellent start for your paper can be by using the Google. It is an excellent search engine, where you can have your doubts resolved. You may also read some answers for the frequent question how to write my research paper or find model research paper. From the internet library you can download books. If you have all required books make important reading selecting and analyzing the specified information. Then put together research paper sketch out.

9. Use and get big pictures: Always use encyclopedias, Wikipedia to get pictures so that you can go into the depth.

10. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right! It is a good habit, which helps to not to lose your continuity. You should always use bookmarks while searching on Internet also, which will make your search easier.

11. Revise what you wrote: When you write anything, always read it, summarize it and then finalize it.



12. Make all efforts: Make all efforts to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in introduction, that what is the need of a particular research paper. Polish your work by good skill of writing and always give an evaluator, what he wants.

13. Have backups: When you are going to do any important thing like making research paper, you should always have backup copies of it either in your computer or in paper. This will help you to not to lose any of your important.

14. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several and unnecessary diagrams will degrade the quality of your paper by creating "hotchpotch." So always, try to make and include those diagrams, which are made by your own to improve readability and understandability of your paper.

15. Use of direct quotes: When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.

16. Use proper verb tense: Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

17. Never use online paper: If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

18. Pick a good study spot: To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

19. Know what you know: Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

20. Use good quality grammar: Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

21. Arrangement of information: Each section of the main body should start with an opening sentence and there should be a changeover at the end of the section. Give only valid and powerful arguments to your topic. You may also maintain your arguments with records.

22. Never start in last minute: Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

23. Multitasking in research is not good: Doing several things at the same time proves bad habit in case of research activity. Research is an area, where everything has a particular time slot. Divide your research work in parts and do particular part in particular time slot.

24. Never copy others' work: Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

25. Take proper rest and food: No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

26. Go for seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.



27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

28. Make colleagues: Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

29. Think technically: Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

30. Think and then print: When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

31. Adding unnecessary information: Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

32. Never oversimplify everything: To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

33. Report concluded results: Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

34. After conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.



Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

- Adhere to recommended page limits

Mistakes to evade

- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

- Use standard writing style including articles ("a", "the," etc.)
- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives
- Shun use of extra pictures - include only those figures essential to presenting results

Title Page:

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.



Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript-- must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study, with the subsequent elements in any summary. Try to maintain the initial two items to no more than one ruling each.

- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As an outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

Introduction:

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.



- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

Procedures (Methods and Materials):

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.



Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



ADMINISTRATION RULES LISTED BEFORE
SUBMITTING YOUR RESEARCH PAPER TO GLOBAL JOURNALS INC. (US)

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

Segment Draft and Final Research Paper: You have to strictly follow the template of research paper. If it is not done your paper may get rejected.

- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptives of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.
- Do not give permission to anyone else to "PROOFREAD" your manuscript.
- **Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)**
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION)
BY GLOBAL JOURNALS INC. (US)

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals Inc. (US).

Grades			
	A-B	C-D	E-F
<i>Abstract</i>	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
<i>Introduction</i>	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
<i>Result</i>	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
<i>Discussion</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



INDEX

A

Accommodating · 4, 6
Acrology · 53
Annotation · 8
Anthropology · 21
Articulatory · 53, 56
Aspirations · 23, 45, 46
Assimilating · 4
Astonished · 41

C

Cancellative · 74
Cheapness · 45
Coercion · 45
Colloquial · 52, 53
Compulsory · 82
Conflicting · 80, 81
Curriculum · 17, 19, 23, 61

D

Delicateness · 40
Diachronic · 49, 51, 52, 53, 54, 56, 57

E

Emphasizes · 4, 25, 70
Enumerated · 6
Explicature, · 74
Eynolghozat · 36, 38, 39, 40, 41, 43

F

Fermented · 39

G

Garnishing · 40
Gnostics · 36, 40, 41, 42, 44
Groaningly · 39

I

Ideology · 45
Infeasible · 10
Inferring · 14, 15, 58
Intuitive · 2, 5

M

Maddening · 20
Manifestation · 36
Metacognitive · 58, 60, 61, 62
Morphological · 53, 55

O

Occurrences · 76, 77, 78, 81, 82, 83

P

Penetration · 46

Prehistory · 20
Priority · 42, 47
Probabilities · 8, 9, 10, 12, 13
Proficiency · 58, 60
Prominent · 49

Q

Quadruped · 38
Quickened · 70

R

Reaffirmed · 51

S

Saddened · 43
Shinning · 40
Skeptical · 2
Socrates · 40, 41
Sohravardi · 40, 43
Speculation · 17
Summarizing · 58, 60
Synchronic · 49, 51, 52, 54, 55

T

Tangible · 21, 72
Truelove's · 36, 38, 42

U

Uniqueness · 46
Unobvious · 1



save our planet



Global Journal of Human Social Science

Visit us on the Web at www.GlobalJournals.org | www.SocialScienceResearch.org
or email us at helpdesk@globaljournals.org



ISSN 975587

© Global Journal