

GLOBAL JOURNAL

OF SCIENCE FRONTIER RESEARCH: E

Interdisciplinary

Instructional Design Model

Peat-Derived Humic Acids

Highlights

Combinations of Rhaponticoides

Vocational Education and Training

Discovering Thoughts, Inventing Future

VOLUME 14

ISSUE 3

VERSION 1.0



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: E
INTERDISCIPLINARY



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: E
INTERDISCIPLINARY

VOLUME 14 ISSUE 3 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of Science
Frontier Research. 2014.

All rights reserved.

This is a special issue published in version 1.0
of "Global Journal of Science Frontier
Research." By Global Journals Inc.

All articles are open access articles distributed
under "Global Journal of Science Frontier
Research"

Reading License, which permits restricted use.
Entire contents are copyright by of "Global
Journal of Science Frontier Research" 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-1463/](http://globaljournals.us/terms-and-condition/menu-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 Headquarters
301st Edgewater Place Suite, 100 Edgewater Dr.-Pl,
Wakefield MASSACHUSETTS, Pin: 01880,
United States of America
USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, 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: investors@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)

INTEGRATED EDITORIAL BOARD
(COMPUTER SCIENCE, ENGINEERING, MEDICAL, MANAGEMENT, NATURAL
SCIENCE, SOCIAL SCIENCE)

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 ISSUE

- i. Copyright Notice
 - ii. Editorial Board Members
 - iii. Chief Author and Dean
 - iv. Contents of the Issue
-
1. Production based Learning: An Instructional Design Model in the Context of Vocational Education and Training (VET). **1-5**
 2. Swaying Aspects of Employee Performance (Quantitative Study of Fertilizer Sector). **7-11**
 3. New combinations of *Rhaponticoides* (Asteraceae, Cardueae) from Afghanistan. **13-17**
-
- v. Fellows and Auxiliary Memberships
 - vi. Process of Submission of Research Paper
 - vii. Preferred Author Guidelines
 - viii. Index



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: E
INTERDISCIPLINARY

Volume 14 Issue 3 Version 1.0 Year 2014

Type : Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-4626 & Print ISSN: 0975-5896

Production based Learning: An Instructional Design Model in the Context of Vocational Education and Training (VET)

By Ganefri & Hendra Hidayat

Padang State University, Indonesia

Abstract- This research was aimed to create valid, practical, and effective syntax of production based learning model in the context of Vocational Education and Training (VET). Production based learning is an alternative learning model of VET which is relevant to the needs of learners in developing their knowledge, attitude, and skills in learning process. Research methodology used was Research and Development by conducting expert validity test with Focus Group Discussion (FGD) and limited test towards production learning based model. The results of this research were formed in syntax of production based learning model which consisted of; (1) Analysis of curriculum and learners characteristics; (2) Identification and product analysis; (3) Creating important questions about product; (4) Questions mapping; (5) analysis of equipment and materials needed of the product which was going to be made; (6) making schedule of implementation of making product; (7) process of making product; (8) evaluated regularly; and (9) creating business plan. Finally, by applying production based learning model in Vocational Education and Training (VET) can help learners preparing themselves to enter work, as well as developing their critical thinking and having good moral attitude.

Keywords: *production based learning model, instructional design model.*

GJSFR-E Classification : *FOR Code : 130213p*



PRODUCTIONBASEDLEARNINGANINSTRUCTIONALDESIGNMODELINTHECONTEXTOFVOCATIONALEUCATIONANDTRAININGVET

Strictly as per the compliance and regulations of :



RESEARCH | DIVERSITY | ETHICS

Production based Learning: An Instructional Design Model in the Context of Vocational Education and Training (VET)

Ganefri ^α & Hendra Hidayat ^σ

Abstract This research was aimed to create valid, practical, and effective syntax of production based learning model in the context of Vocational Education and Training (VET). Production based learning is an alternative learning model of VET which is relevant to the needs of learners in developing their knowledge, attitude, and skills in learning process. Reserach methodology used was Research and Development by conducting expert validity test with Focus Group Discussion (FGD) and limited test towards production learning based model. The results of this reasearch were formed in syntax of production based learning model which consisted of; (1) Analysis of curriculum and learners characteristics; (2) Identification and product analysis; (3) Creating important questions about product; (4) Questions mapping; (5) analysis of equipment and materials needed of the product which was going to be made; (6) making schedule of implementation of making product; (7) process of making product; (8) evaluated regularly; and (9) creating bussiness plan. Finally, by applying production based learning model in Vocational Education and Training (VET) can help learners preparing themselves to enter work, as well as developing their critical thinking and having good moral attitude. In addition, it also can motivate the learners to be more active in the learning process which would contribute to the learners learning outcomes.

Keywords: *production based learning model, instructional design model.*

I. INTRODUCTION

Vocational Education and training (VET) is a part of education system which prepares an individual for a work or a group of work, and also can develop him/her in the field of work itself. In order to be able to achieve the goals of the VET, as determined in government regulation UU No. 20 year 2003 article 15, the needs for learning components which can support learning process. One of the components is learning model which is appropriate to the standard to support education in order to be able to work effectively and efficiently.

Learning model is one of important components in supporting learning process. Therefore, it is needed to conduct a development in its empowering and organizing, to achieve desired goals. Models are description of a reality reflection which will be done as stated by [1] *"models by definition are a reflection of*

reality-temporary stand-ins for something more specific and real; model are helpful in explaining that may be difficult to describe; a model may illustrate a process; a model may be a representation of something".

In fact, learning process is still far from principles which have been stated in PP No. 32 year 2013 and UU No. 20 year 2003 article 15. Besides, VET is hoped to create competent workers in increasing productivity and efficiency and also readiness for international workers market competition in the era of globalization. However, based on the data of Central Stats Agency (BPS) in launching numbers of unemployment are stood at 5,7% or 7,15 million people. This number has decreased compared to February 2013, 6,17% (7,41 million people). Moreover, BPS recorded that workers who have educational background are elementary school are still dominate employment. 52 million people or 46, 95 percent of Total of Indonesian Workers, Elementary school graduates. For workers which are Junior High School are 20,5 million people or 18,47 percent and people which have higher education only 10,5 million people, where 2,9 million people are Diploma and 7,6 million people are university graduate. This data describe that university graduate are still weak in the workers market. It is caused by learning process which is oriented to the output not to outcomes.

This is no exception to the implementation of the learning processes which are carried out in the Faculty of Engineering of The State University of Padang which still results output from each skills and have not touched outcomes. Therefore, it is needed an alternative solution in developing learning model which can give chance to the students to be active as in cognitive, affective, and psychomotor. One of the learning model which is developed is Production Based Learning Model. In the steps of its implementation are psrt of active learning, where the students are given chances to develop skills and their creativity in the learning process.

II. RESEARCH OBJECTIVES

The aim of this development is to develop production based learning model which is valid, practice, and effective in VET.

Author α : Padang State University. e-mail: ganefri_ft@yahoo.co.id

Author σ : Bung Hatta University. e-mail: hendrahidayatmpd@gmail.com

III. REVIEW OF RELATED LITERATURE OF VOCATIONAL EDUCATION AND TRAINING (VET)

At the beginning, people said that vocational education was a simply training which was aimed for a skill only. (*Vocational education is simply training for skill only*) or just *training the hands*. VET is a part of education system which prepares an individual for a work or a group of work. In accordance to [4], who stated that “...vocational education is that part of education which makes an individual more employable in one group of occupations than in another.”

Meanwhile, [13] state that VET is education for a or some kinds of work which individual interested in for his/her social needs. [3] argues that “*Vocational education is also designed to develop skills, abilities, understanding, attitudes, work habits and appreciation encompassing knowledge and information needed by a worker to enter and make progress in employment on a useful and productive basis*”. [17] stated that “educational programmes that assist people as they develop towards occupations and careers and is understood in relation to three components: technology, people and society. In his view vocational education is any education that provides experiences, visual stimuli, affective awareness, cognitive information, or psychomotor skills; and that enhances the vocational development processes of exploring, establishing, and maintaining oneself in the world of work”.

Moreover, [15] propose that “vocational and technical is a program of specialized studies designed to prepare the learner for employment in a particular occupation”. It is supported by [2] who states that, “Vocational education as organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career require other than a baccalaureate of advanced degree.” [10] also supports that “Vocational education should facilitate students' creative and critical capacities to detect meaningful problems or challenges in their own experiences and surrounding cultural conditions, pose liberating and morally responsible visions, and actively engage in the struggles of living a coherent story of vocation or meaningful work”

From the explanation above, VET can be meant as an activity which develops every people potency in accordance to skills and interest which people have based on knowledge and skills to survive and work which is appropriate to areas of expertise and also be able to create a job for them.

IV. REVIEW OF RELATED LITERATURE OF PRODUCTION BASED LEARNING MODEL

Model is a systematic pattern or reference which can be a guide for educators. Learning models is

a direction from the implementation of learning which are applied by educators with the aim to guide the students being active in the learning process.

[9] terms the learning model as work procedure which is regular and systematic and containing of thoughts, description or explanation of a concept. [12] means a learning as process of interaction between educators and students which can support them to study actively, participative, interactively by using methods, approaches, and media, and appropriate learning environment. [11] defines learning as the basic of adding information and new knowledge processes.

Therefore, it can be stated that learning model is a procedure or steps which are needed by educators to facilitate their students to study actively, participative, and interactively with the aim to be able to achieve the aims of education; the development of self potency of students optimally.

Based production learning Model give students the chances to develop thinking, and skills and also cooperation. In the learning process by using this model, the students are expected to be active for instance; creating important question that related to the product that are going to be made. According to [5], “production-based learning model is defined as the procedures or steps that need to be performed by the educator to facilitate learners to actively learn, participate and interact, with a competency-orientation to produce a product either goods or services required”.

V. RESEARCH METHOD

The research design which will be used is *development research*. This research is included to the research that develops and results new product in a learning system which will be applied to the students as the users.

a) Procedure of Production Based Learning Model Development

i. Needs Analysis

This analysis includes learning facilities analysis, students' needs analysis, students' characteristics, educators' skills analysis in some obstacles which they faced during learning process.

ii. Design

In this step, the first thing that should be done is determine the main concept of learning model design which is integrated to the materials and determine courses which will be used as the subject of the research and then analyze the students first condition.

iii. Evaluasi

The development in the evaluation step will do the test by expert by filling observation sheet. From the observation sheet will be get the suggestion from the expert and students. The validity will be done by expert test by using focus group discussion and limited test towards production based learning model. Meanwhile,

the test for students' will be done in three steps. They are small group test, big group test to see the practicality and effectivity of the product that is made and developed. Respond regarding appropriateness will be get after students give response in the sheet give, based on suggestion and response of expert and students, the product will be revised.

VI. RESULTS OF RESEARCH

The research results syntax of production based learning model which can be applied in the learning process of VET. The syntax consists of: (1) Analysis of curriculum and learners characteristics; (2) Identification and product analysis; (3) Creating important questions about product; (4) Questions mapping; (5) analysis of equipment and materials needed of the product which was going to be made; (6) making schedule of implementation of making product; (7) process of making product; (8) evaluated regularly; and (9) creating business plan. It can be seen in picture 1. Nine levels of production based learning model.

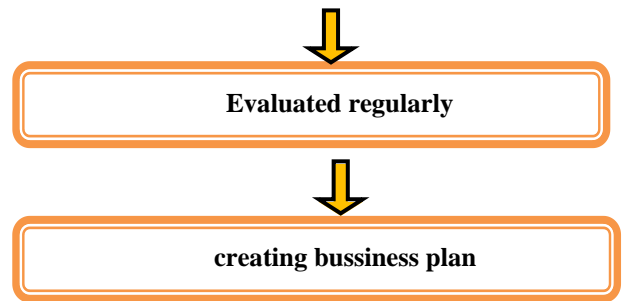
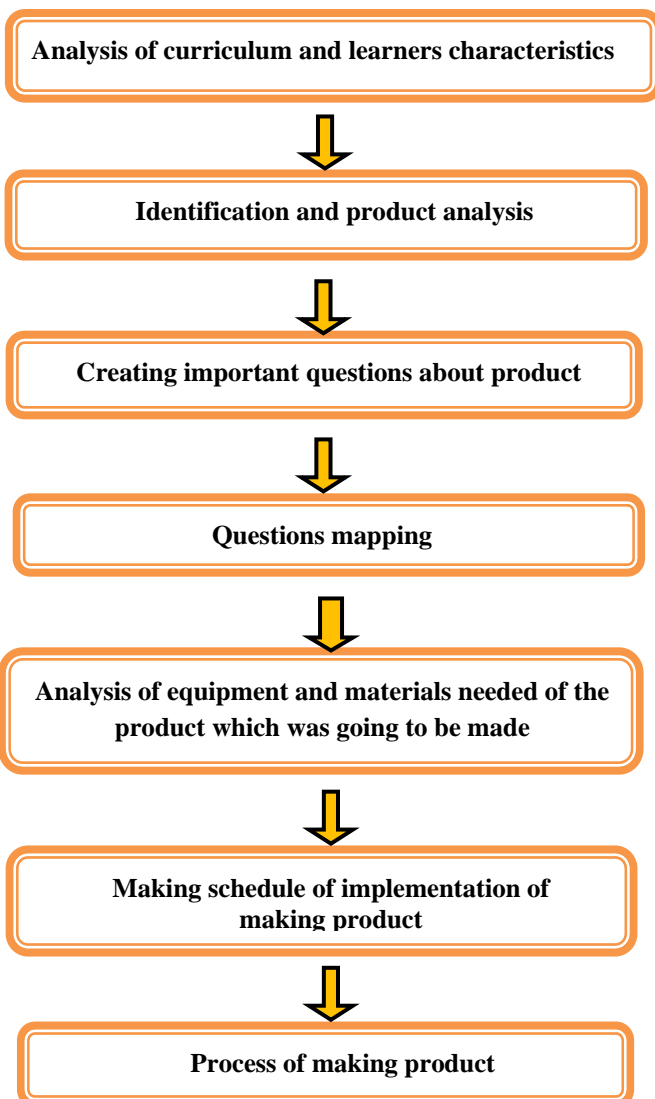


Figure 1 : Nine levels of Production Base Learning Model

VII. DISCUSSION

Based on the results of the research of syntax of production based learning model where its implementation is done systematically and logic as the explanation below:

a) *Analysis of curriculum and learners characteristics*

In this step, the analysis was done in courses of practice, identify the materials practices which was fit to the needs of the implementation of production based learning. Then, analysis of students characteristics are done by identify the learning process which done through individual and group. Analysis is needed to identify the appropriateness the precondition of the students and learning style which fit to the curriculum used [14].

b) *Product identification and analysis*

Product identification is important to see the appropriateness with the minimal competencies of courses. By knowing the minimal competencies of the courses, it is hoped that product can answer the kind of product that are going to be created. Besides, the product should also fit to the social need – the product should meet the minimum standard of courses competencies, it also social needs. Product created should also considered that the product has answered the problem in the social or not yet. Through the steps of Production Based Learning, it is hoped that it can answer the social needs especially for products that related to the daily needs.

c) *Creating important question about product*

Exploration and elaboration individually and group of the product analyzed which is aimed to create some questions around the product identified and analyzed before. In the learning process is started with important question, it is good for students activities. [16], according to [8], “started from giving challenging questions about”.

d) *Questioning mapping*

Questions from the students is classified based on needs and its urgency towards the product. This mapping is aimed to make the students understand the meaning of the questions that related to the product,

supported by [7] stated that when the learners learn something and can find the meaning. In this step, the mapping can be done if the students understand the questions which have essential meaning.

e) *Analysis of equipment and materials needed of the product which was going to be made*

In this step, it is important to analyze tools and materials which are needed based on the mapping. If the tools and materials have been prepared well, it is hoped that the creating process is run well.

f) *Making schedule of implementation of creating product*

The determination of when the product is finished, deadline, and this process can be done collaboratively, cooperatively between lecturers' and students.

g) *Process of making product*

In the process of creating product, it is important to notice the completeness of tools and materials and its time completion. As in the case of implementation of the courses, that is *Media Pembelajaran Berbasis TIK*, this course is practice course which have result a product and has not been structured. Therefore, by using the model which is designed can result a product which meet the minimal standard competencies of the course and social needs. In this case, media is really needed for all lecturers in the learning process.

h) *Regular Evaluation*

The assessment are done holistically since the beginning to the end, besides it is also specified for creating process implementation, we can use matrix of assessment in the form of rubric.

i) *Creating business plan*

In this step, the students are given, chances to make business plan of the product which is done through production based learning model. Creating this business plan gives the description about a product for instance; students make a business plan of Power Saving Devices. The business plan created is able to describe the aspect of entrepreneur such as product benefits, price, competitor, and marketing product. Therefore, by implementing the production based learning model, the students can results a product that is needed by social and also develop their entrepreneurship.

Production based learning model is an alternative in solving the problem of learning process of VET. In fact, the learnig process is still oriented to the shortterm result and just transfers the knowledge, not understanding the knowledge. (Griffith, 2007) it a fact that; "traditional scinece course focus on presenting the results of the scinetific process rather than the story of how scientist arrived at these results". Therefore, if the process of learning is understood by the students, the goals of VET can be achieved and compet as the skilled

workers and develop themselves including entrepreneurship based on their skills.

Moreover, production based learning model has impact to the students' affective, because the students and lecturers are collaboratively in the learning process. The students also get opportunity to work together, and asking a question among them, giving response and suggestion towards the product, start from the scheduling steps creating, and evaluation. The learning which is done collaboratively including all process of learning, the students are taught each other. Moreover, it is not impossible the students will teach their lecturer. As the previous discussion production based learning model which applied the concept of student center, however, in the implementation the lecturers are still supervise. In the Production based learning model has impact to affective, cognitive, and psychomotor. It is supported by [18] where in his research summarized that the learning based on project facilitate the development of some competencies such as communication, cooperation, and writing skills.

VIII. CONCLUSION

Production based learning model is an alternative of learning model which is appropriate to VET, by using this model, the learning will be more meaningful. Moreover, Production based learning model which has been applied in VET can help learners in preparing entering the world of work, be able to develop critical thinking, and having good morale. Therefore, it can give support to the learners to be more active in the learning process which have impact to the results of learning process and their outcomes.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Brown, Abbie and D. Green, Timothy. (2011). *The Essentials of Instruction Design Connecting Fundamental Principles with Process and Practice*. Second Edition, Pearson Education, Boston, Amerika Serikat.
2. Calhoun, C.C., and Finch A.V. (1982). *Vocational education: concept and operations*. Belmont California, Wardsworth Publishing Company.
3. Danko, A.I. (2006). *Entrepreneurship Education for Vocational and Technical Education Students*. Second edition. Pp. 2-3.
4. Evan, R. N., Edwin, L. H. (1978). *Foundation of Vocational Education*. Penerbit: Charles E. Merrill Publishing Company. Columbus, Ohio.
5. Ganefri. (2013). *The Development of Production-Based Learning Approach to Entrepreneurial Spirit for Engineering Students*. *Journal Asian Social Science*; Vol. 9, No. 12; 2013. ISSN 1911-2017 E-ISSN 1911-2025.
6. Jefriando, Maikel. 2014. *BPS: Angka Pengangguran Turun Jadi 5,7%*. [online]. <http://finance.detik.com/read/2014/05/05/130150/2573257/4/bps-angka-pen>

- gangguan-turun-jadi-57. Diakses pada tanggal 28 Juni 2014.
7. Johnson, E.B.(2007). Contextual Teaching and Learning: Menjadikan Kegiatan Belajar-Mengajar Mengasyikan dan Bermakna, Terjemahan : Ibnu Setiawan, MLC: Bandung.
 8. Lawson,A.E.(1995).Science Teaching and The Development of Thinking.Wadswort : California.
 9. Prawiradilaga, Dewi Salma. 2008. Prinsip Desain Pembelajaran. Penerbit: Universitas Negeri Jakarta. Jakarta.
 10. Rehm, Marsha L. 1999. Vocation as Meaning Making Narrative: Implications for Vocational Education. Journal of Vocational Education Research. 24 No.3, 145-59.
 11. Sanjaya, Winna. 2006. Strategi Pembelajaran: Berorientasi Standar Proses Pendidikan. Penerbit: Kencana Prenada Media Grup. Jakarta.
 12. Sardiman. 2007. Interaksi & Motivasi Belajar Mengajar. Penerbit: PT. Raja Grafindo Persada. Jakarta.
 13. Slamet. 1990. Pondasi Pendidikan Kejuruan dan Pelatihan (VET). Lembaran Perkuliahan. Pascasarjana IKIP Yogyakarta.
 14. Smaldino, Sharon E, dkk. 2012. *Instructional Technology And Media For Learning Ninth edition*. New Jersey Columbus, Ohio: PEARSON Merrill Prentice Hall.
 15. Syarif. B, Aljufri. (2008). *Pendidikan Teknologi dan Kejuruan*. Makalah disampaikan dalam Seminar Internasional APTEKINDO, FT UNP Padang.
 16. The George Lucas Educational Foundation .(2005).Instructional Module Project Based Learning. Diambil pada tanggal 10 Juli 2007 dari. [http://www.edutopia.org/modules/PBL/ whatpbl.php](http://www.edutopia.org/modules/PBL/whatpbl.php)
 17. Thompson, J. F. (1973). Foundations of vocational education: Social and philosophical concepts. New Jersey: Prentice-Hall.
 18. Wrigley, H.S.(1998).Knowledge in Action: The Promise of Project-Based Learning. Diambil pada tanggal 10 Juli 2007 dari <http://www.ncsall.net/?id=384>

This page is intentionally left blank



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: E
INTERDISCIPLINARY

Volume 14 Issue 3 Version 1.0 Year 2014

Type : Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-4626 & Print ISSN: 0975-5896

Swaying Aspects of Employee Performance (Quantitative Study of Fertilizer Sector)

By Anam Batool, Naqvi Hamad, Muhammad Anosh, Nadeem Iqbal
& Nadia Batool

NCBA&E DG Khan Campus, Pakistan

Abstract- Employee play vigorous role in the growth of an organization. Learning the skills is the essential process of improving performance throughout a company Training especially by involving employees in the decision-making. The purpose of this paper is to seek out the effects of influencing factors of employee's performance in fertilizer sector of D.G Khan Pakistan. With the help of influencing factors includes the training, motivation, feedback, job involvement find out most significant factor that's leads the employee performance in fertilizer sector of D.G Khan, Pakistan. In this study data was collected on primary basis through close ended questionnaires from employees of fertilizer sector of D.G Khan Pakistan. On the basis of 84 respondents results were analyzed with the help regression and correlation. Employee performance, training, motivation, feedback and job involvement were never analyzed together in previous studies. From the analysis, it was clear that above mention influencing factors play vital role in the fertilizer sector of D G Khan and it also acted as a motivational force that influences employee performance.

Keywords: employee performance (EP), training (TR), motivation (MTV), feedback (FB), job involvement (JI).

GJSFR-E Classification : FOR Code : 940109



Strictly as per the compliance and regulations of :



© 2014. Anam Batool, Naqvi Hamad, Muhammad Anosh, Nadeem Iqbal & Nadia Batool. 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.

Swaying Aspects of Employee Performance (Quantitative Study of Fertilizer Sector)

Anam Batool ^α, Naqvi Hamad ^ο, Muhammad Anosh ^ρ, Nadeem Iqbal ^ω & Nadia Batool^ϕ

Abstract- Employee play vigorous role in the growth of an organization. Learning the skills is the essential process of improving performance throughout a company Training especially by involving employees in the decision-making. The purpose of this paper is to seek out the effects of influencing factors of employee's performance in fertilizer sector of D.G Khan Pakistan. With the help of influencing factors includes the training, motivation, feedback, job involvement find out most significant factor that's leads the employee performance in fertilizer sector of D.G Khan, Pakistan. In this study data was collected on primary basis through close ended questionnaires from employees of fertilizer sector of D.G Khan Pakistan. On the basis of 84 respondents results were analyzed with the help regression and correlation. Employee performance, training, motivation, feedback and job involvement were never analyzed together in previous studies. From the analysis, it was clear that above mention influencing factors play vital role in the fertilizer sector of D G Khan and it also acted as a motivational force that influences employee performance. The study suggested that the all companies related to the fertilizer sectors should focus on the swaying aspects of the employee performance so they could get potential outcomes form workforce.

Keywords: employee performance (EP), training (TR), motivation (MTV), feedback (FB), job involvement (JI).

1. INTRODUCTION

An employee is a person who is paid against work for an organization or for another person. Employees perform most important role in any of the business. Training that is a learning skill that you need for a particular job or a particular activity. Training increase the goal-oriented process directed towards ensuring organizational process is to maximize productivity of employees, teams and also the organization. If there is no training than the employees do not have any type of work or activity which requires special training and knowledge to get their task or objectives and they do not give the feedback. Researchers explain organization description or a summary of a particular situation they relate to the employee performance both male and females in equal rights and importance in the organization. An employee that do work for an organization to show successful

performance and when the success of any organization is increase than they involve in the decision especially in a large organization. The success or failure of any organization or company they directly link or depend to the performance of the employees.

DeCenzo & Robbins (2000) Elaborate training as a " Experience the things in that way that will lead toward the job perfection and expertise that helps to perform job duties in well prescribed manners". Trainings are held to developed the difference between existing performance and anticipated potential performance. Trainings are planned by HRD for the specific task accomplishment (Weil & Woodall 2005). Motivation is how employee behave while working and completing a particular Task. Observation of outward indexes is quite difficult to find but not motivation (Denhardt et al., 2008). Human motivation is very complex as well as studied from the ground root in multiple restraints like Sociology, Political science, Psychology and much more. Meanwhile motivation is "what urge employee to behave in particular way" (Denhardt et al., 2008). Defining the goals and targets is the basic activity of an organization, either working locally or globally. For the achievement of these goals and targets feedback or communication liaison is required so that the factors that diverts the employee from its goals could be find out and removed from the organization. Feedback always helps to make remedy for them. Continuous and sustaining coordination among all team members and concerns departments is the primary task of each organization. Feedback and backup helps to look after the employees what pain they are gaining and what favors they are enjoying in Particular organization. Circumstances becomes very worst whenever team work is required for any task most of the researchers explain in different ways and each researcher has different argument about job involvement. Mostly descriptions are same as the organizational commitment and organizational citizenship behavior. (Robinson et al., 2004).

Most of the companies and organizations hire the most educated person and also the trained persons where they get more and more skills through the training session. When the employee performance is best than company or organization given any bonus, discount and allowance and they motivate their employees to do a good and better training. Individual, teams, organization and also the society they get the benefit through

Author α ρ ϕ: National College of Business Administration & Economics Lahore, Sub Campus D.G Khan campus, 2Km Jampur Road D. G Khan, Pakistan. e-mail: anoshilyas@gmail.com.com

Author σ ω: The Ghazi University D.G Khan 2 3.

learning process. Success depends on the training and support, preparation, careful implementation, review and also the judgment of the evaluation.

Learning process is necessary in order for something or to make certain that it happens that is interpretation of facts, rules, efficient and efficient activities that involve other people they depend upon the growth of something into the particular skill about a particular subject to control and organizing business. This research helps us to find out how much training effect or directly related the performance of employees related to fertilizer sector? How much the employee performance learning process depends upon the training and how much they increase the organizational productivity of fertilizer sector?

Process of gaining knowledge or force to do something that if covers a wide range of details, ideas or items for a particular job or a study and involve learning that goes beyond today's job and they focus on the long-term. 1 To get information about the training, motivation, feedback and job involvement results to the employee performance that totally depends upon the organizations 2 To identify the importance of employee performance.

II. LITERATURE REVIEW

There is a difference between the trained employees and untrained employees because the employees who are not trained they have not the ability to face the difficulties in your own organization. When employees are more and more trained they have an ability to describe situation or activities in which people or firms compete with each other and get a benefit (Houger, 2006).

Training employees have many benefits such as learning process, satisfaction of their job, and increase in doing something which they want to do that's why there is a positive impact or effect to the organization. The job satisfaction, learning and knowledge these all of depend upon the benefits of employees to work for an organization (Arthur et al 2003). For doing something is what causes you to want to do it which describes things that exist inside the organization or a country or a particular area is the one which is most important or successful that behaves to satisfy their own satisfaction level (Forsyth, 2006).

The employees who are learned through training session they satisfy with their jobs and they also satisfy the customers of the organization (Tsai et al., 2006). Learning process is the achievement of the goal-oriented task and also helps to increase the company profit. Most of the companies and organizations hire the most educated person and also the trained persons where they get more and more skills through the training session.

Workers could be very satisfied what they are getting against their work or job what they do but there

are limitless illustrations where employee is not fully motivated to do a specific job (Igalens&Roussel, 1999). According to (Field) Motivation is administered by two ways. Extrinsic rewards are superficially controlled. Value is given to someone by other person, usually in companies higher managers give value to lower staff in the form of pay bonuses, promotions, time off, special assignments, office fixtures, awards, verbal praise, and so on that's help to initiate motivational stimulus outside the employee (Field, 2006). Intrinsic Rewards are self-controlled, that's makes employee to feel happy after accomplish a task. Employee feel nice because of personal development, and being a competent. Intrinsic reward stimulus is never depend on actions of others. (Fielding, 2006). Find out the gap and need for training and seek out the effective programs for training according to the need. How to initiate them and in the last find the valuable results. McCourt, W. & Derek, E. 2003. Each researcher does the research according to the required work; also explain some of the importance regarding research. In resents years training is the factor who plan vital role in employee performance that also act as a competitive factor in the market for the rivals (Bardwell et al. 2004). Beardwell et al. 2004 employee skills and abilities and also influenced by the technological and organizational diversification but investment in training and development is still considerable for the leading companies include how to train where to train and how to get output from the employees of the company. Organizational performance is based on the employee performance and employee work always influence the general performance of the organization. According to the Wright & Geroy (2001) employee performance, skills and abilities always influenced by the effective training activities. Dessler (2008) said there is no assurance of the performance even employees are chosen carefully because potential to perform is one thing and actually performing is another, therefore an employee can't perform its best in job till pass through training process. This is why new staff at company is always oriented by concern departments.

In the reality humans perform some actions and in the result some situations are characterized in which all the humans are able to receive the feedback about the work they have done and the abilities they got after complication of the work (Eberlin et al, 2010). In all works either service or production, orientation is necessary to get the feedback from their employees about there working environment and work station, (Farooq 2011) said "Marginal increment in the production could be get through systematic response . Some of the researchers also elaborate the job involvement in intellectual and emotional obligation towards the organization (Richman, 2006) or by the way an employee performs its work in the organization (Frank et al., 2004). All the researchers have different

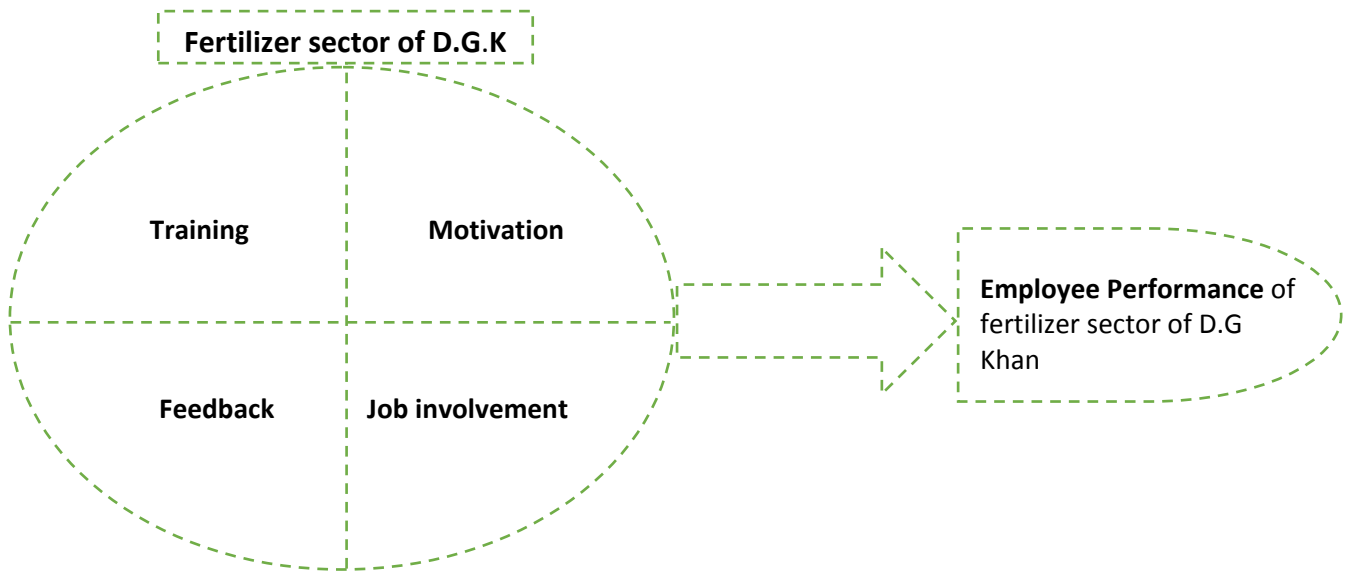
arguments Kahn (1990, p. 694) said “the harnessing of organization members’ selves to their work roles; in involvement, people employ and express themselves physically, cognitively, and emotionally while performing the duties” in simple words involvement mean physical and mental presence of the employee in workstation during his or her working hours. Diefendorff et al., (2002) during his research found signification correlation ($r = 0.19, p < 0.05$) job involvement and performance. Finally Rotenberry and Moberg (2007), used same technique of job involvement. Diefendorff et al., (2002), found’s positive correlation ($r = 0.15, p < 0.05$) between job involvement and in-role performance. . The results are not quite encouraging but there are some proofs

that’s explain job involvement can positively affect or influence the performance of an employee.

III. THEORETICAL AND PRACTICAL SIGNIFICANCE

On the basis of literature review, with the help of employee performance, training, motivation, feedback and job involvement we generate following hypothesis. In the hypothesis employee performance of the fertilizer company is used as a dependent variable and rest of the variable are used as the independent variable and seek out the individual effects of the independent variable on dependent variable.

IV. THEORETICAL FRAMEWORK



V. HYPOTHESIS

- H_1 There is a significant and positive relationship between Training of employee on employee performance of fertilizer sector of D.G Khan.
- H_2 There is a significant and positive relationship between Motivation of employee on employee performance of fertilizer sector of D.G Khan.
- H_3 There is a significant and positive relationship between Feedback of employee on employee performance of fertilizer sector of D.G Khan.
- H_4 There is a significant and positive relationship between Job involvement of employee on employee performance of fertilizer sector of D.G Khan .

VI. RESEARCH METHODOLOGY

Data collection technique that used in this research was the close ended questionnaires that were considered the best way to collect primary data. A

random sample of 120 respondents was selected and questionnaires were distributed in different fertilizer companies of D.G Khan including Fuji Fertilizer Company Limited, Engro Fertilizer Limited, PakArab Fertilizer limited and Fatima Fertilizer Limited. The respondents were from management staff, field staff and warehouse in-charges and logistic officers of fertilizer sector. From the 120 observations 84 questionnaires were considered accurate and analysis was made on the basis of these observations. Regression and correlation methods are used for analysis purpose.

VII. RESULTS & DISCUSSIONS

Results show the correlation between five factors i.e. Training of the employee, Motivation of the employee, Feedback of the employee, Job involvement of the employee with performance of the employee. Accordingly, all variables have a positive and significant

relationship with the employee performance of fertilizer sector. However, the degree of correlation among the variable is different with the highest correlation value of Motivation(0.941) followed by Training (0.938), feedback (0.728) and job involvement (0.520) of the employee performance of fertilizer sector D.G Khan .The highly

correlated factor that influences the performance. Accordingly, the training of employee is an important factor that cannot be overlooked in a study of employee performance. Majority of the respondents indicated Training as main consideration.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968 ^a	.936	.919	.19381

a. Predictors: (Constant), JI, FB, TR, MTV

Correlations

		EP	TR	MTV	FB
TR	Pearson correlation	.938			
MTV	Pearson correlation	.941	.923		
FB	Pearson correlation	.728	.652	.795	
JI	Pearson correlation	.520	.621	.653	.418

VIII. MULTIPLE REGRESSIONS ANALYSIS

In this study, there are four independent variables namely Training of the employee, Motivation of employee, feedback from the employee, job involvement of the employee considered to influence the performance of the employee. To test the effects of these variables on the employee performance, the study

used the multiple regression analysis. The table below shows the multiple regression result between four independent variables. It indicates that all the four independent variables (Training of the employee, Motivation of employee, feedback from the employee, job involvement of the employee) combined significantly influence the performance of the employee.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.315	.128		2.452	.027
	TR	.386	.142	.495	2.726	.016
	MTV	.531	.214	.596	2.447	.026
	FB	.405	.088	.406	2.355	.037
	JI	.271	.035	.378	2.221	.042

a. Dependent Variable: EP

IX. CONCLUSION & RECOMMENDATIONS

When the training, motivation, feedback and job involvement increase employee performance of fertilizer sector is also increase. The purpose is that when the training session is complete than what employees get through training session in fertilizer sector. Learning

process in fertilizer sector increase the management success to do something that is goal-oriented. Training employees have many benefits such as they satisfy with their job. Training designed to provide learners with knowledge and skills needed for their present jobs. In learning session they know about the new different methods for the use of their practical purpose. To get a

feedback is also a basic way of performance. When the employee performance is best than company or organization give bonus and allowance they motivate their employees to do a good and better work. The result is that training and motivation have the positive relationship to the performance of the employees.

The findings reported in this study suggest that training and development in fertilizer sector D.G Khan have an influence on the performance of employees. This result is generally consistent with prior management literature on training and development. In order to advance more specific knowledge of training and development from the sample companies, different questions are presented to the respondents and thus examined. These questions are focusing on employee participation in training, selection for training, methods of training and relevance of training to the work of the respondents. The above questions have been of particular interest because they facilitate an understanding of the training practice in the companies under study. The results from the questions on employee participation in training and selection for training indicate that fertilizer companies have good and perhaps clear policies regarding training and development as most of the respondents indicated that they have participated in training and that most of them were provided with opportunities to train under the compulsory practice of the fertilizer company for all employees and/or on joining the fertilizer company.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Arthur, w., Bennett, W., Eden, P.S., & Bell, S. T. (2003). Effectiveness of training in organization: A Meta analysis of design and evaluation features, *Journal of Applied Psychology*, 88 (2), 234_245.
2. Beardwell, I., Holden, L. & Claydon, T. 2004 *Human Resource Management a Contemporary Approach*. 4th Ed. Harlow. Prentice Hall.
3. DeCenzo, A. D, & Robbins, P. S. (2000). *Personnel / Human Resource Management* 4th ed. Prentice-Hall, New Delhi, India.
4. Denhardt, et al (2008). *Managing human behavior in public and Nonprofit organizations*. London: Sage Pulication Inc.
5. Diefendorff, J., Brown, D., Kamin, A., and Lord, B. (2002). Examining the roles of binvolvement and work centrality in predicting organizational citizenship Weil, A., & Woodall, J. 2005. HRD in France: the corporate perspective. *Journal of European Industrial Training*, 29,7, 529–540.
6. Diefendorff, J., Brown, D., Kamin, A., and Lord, B. (2002). Examining the roles of job involvement and work centrality in predicting organizational citizenship.
7. Dessler, G. (2008). *Human Resource Management* 11th ed. Pearson International Edition.
8. Eberlein, M., Ludwig, S., and Nfziger, J. (2010). *The Effects of Feedback on Self-Assessment*, Blackwell Publishing Limited. *Bulletin of Economics Research*, 63(2), 177-197.
9. Farooq, (2011). *Impact of Training and Feedback on Employee Performance*, *Far East Journal of Psychology and Business* Vol. 5 No. 1 October 2011.
10. Frank, F.D., Finnegan, R.P. and Taylor, C.R. (2004) 'The race for talent: retaining and engaging workers in the 21st century', *Human Resource Planning*, Vol 27, No 3, pp12-25.
11. Fielding, R.L. (2006). *Employee motivation strategies*.
12. Forsyth, P (2006). *How to motivate people* 2nd Edition. London TheKoganPag.
13. Richman, A. (2006) 'Everyone wants an engaged workforce how can you create it?' *Workspan*, Vol 49, pp36-39.
14. Houger, V, P., (2006). *Trends of Employee Performance. Collaborative efforts Between Manager and Employees*, *Journal of Performance Improvement*, 45(5), pp. 26-31.
15. Igalens, J. and Roussel, P. (1999). A study of the relationship between compensation package, work motivation and job satisfaction. *Journal of Organisational Behaviour* 20 (7), 1003 -1025.
16. Kahn W (1990). Psychological conditions of personal engagement and disengagement at work. *Acad. Manage. J.* 33: 692-724.
17. McCourt, W. & Derek, E. 2003. *Global Human Resource Management: Managing People in Developing and Transitional Countries*. Cheltenham, UK: Edward Elgar.
18. Robinson, D., Perryman, S. and Hayday, S. (2004) *The Drivers of Employee Engagement*. Brighton, Institute for Employment Studies.
19. Rotenberry, P.F., & Moberg, P.J. (2007). Assessing the impact of job involvement on performance. *Management Research News*, 30, 203-215.
20. Tsai, W, T, (2006). Effects of training Framing, General Self-efficacy and Training Motivation on Trainees, *Training Effectiveness*. Emerald publishers, 35(1). pp.51-65.
21. Wright, P. & Geroy, D. G. 2001. Changing the mindset: the training myth and the need for word-class performance. *International Journal of Human Resource Management* 12,4, 586–600.

This page is intentionally left blank



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: E
INTERDISCIPLINARY

Volume 14 Issue 3 Version 1.0 Year 2014

Type : Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-4626 & Print ISSN: 0975-5896

New Combinations of *Rhaponticoides* (Asteraceae, Cardueae) from Afghanistan

By M. Ranjbar & K. Negaresh

Bu-Ali Sina University, Iran

Abstract- In a forthcoming systematic treatment of Afghanistan species of *Rhaponticoides*, herbarium collections were examined, and as a result, increased the number species of the genus to 3 spp. for Afghanistan. Morphologically, the species of the genus are classified into three subsections: *Iranicae* (1 spp.), *Ruthenicae* (1 spp.) and *Turkestanicae* (1 spp.) in Afghanistan. Two new combinations are proposed for *Centaurea gerhardii* and *C. turkestanica*, and lectotype is designated for *R. turkestanica*. Finally, a first key of the *Rhaponticoides* species in Afghanistan is presented here.

Keywords: *Afghanistan, identification key, lectotypification, new combinations, Rhaponticoides*

GJSFR-E Classification : FOR Code : 270299p



Strictly as per the compliance and regulations of :



New combinations of *Rhaponticoides* (Asteraceae, Cardueae) from Afghanistan

M. Ranjbar ^α & K. Negaresh ^σ

Abstract- In a forthcoming systematic treatment of Afghanistan species of *Rhaponticoides*, herbarium collections were examined, and as a result, increased the number species of the genus to 3 spp. for Afghanistan. Morphologically, the species of the genus are classified into three subsections: *Iranicae* (1 spp.), *Ruthenicae* (1 spp.) and *Turkestanicae* (1 spp.) in Afghanistan. Two new combinations are proposed for *Centaurea gerhardii* and *C. turkestanica*, and lectotype is designated for *R. turkestanica*. Finally, a first key of the *Rhaponticoides* species in Afghanistan is presented here.

Keywords: Afghanistan, identification key, lectotypification, new combinations, *Rhaponticoides*.

I. INTRODUCTION

R*haponticoides* Vail. (Greuter *et al.* 2001, 2005; Greuter 2003) is the name of a distinct group of perennial species, its systematic position has been determined as basal within the subtribe Centaureinae (Wagenitz & Hellwig 1996; Bremer 1994; Hellwig 2004), tribe Cardueae and family Asteraceae (Tzvelev 1963; Wagenitz 1975, 1980; Greuter 2003; Hellwig 2004). The genus is represented by 33 species in 3 sections and 7 subsections based on the morphological criteria, ranging from Portugal and Morocco in the west to Mongolia in the east, most being either narrow endemics or having very disjunct distributions (Wagenitz 1986, Agababian 1997, Hellwig 2004, Eren 2007, Puntillo & Peruzzi 2009). However, *C. ruthenica* Lam. is only species of the genus that demonstrates a wide distribution range from Central Europe to Western Asia. According to Agababian (1997), the mesophilous western species are more ancient than the eastern taxa which may have originated from an old broad-leaved West Anatolian base.

In Flora Iranica Wagenitz (1980) recognized 6 species for *Centaurea* sect. *Centaurea*, 2 of which occur in Afghanistan (namely *C. ruthenica* and *C. turkestanica* Franch.). Both species are well defined based on the following morphological features: mostly pinnatifid or pinnatisect leaves with serrate segments, subglabrous branched above with a few large capitula, ovoid or cupuliform involucre, coriaceous, nearly exappendiculate and glabrous phyllaries with several dark longitudinal nerves near an obtuse apex, flowers yellow and strongly radiant with staminodes (Wagenitz

1980). *C. ruthenica* was further already transferred to *Rhaponticoides* by Greuter & Agababian (Greuter 2003).

This article follows previous studies conducted on Centaureinae in Western Asia (Ranjbar *et al.* 2011, 2012a, 2012b, 2013a; Ranjbar & Negaresh 2012, 2013a, 2013b), and aims to detail the taxonomy of *Rhaponticoides* in Afghanistan.

II. MATERIALS AND METHODS

The present study is mainly based on herbarium material. Several sheets have been examined for each species, received on loan from the herbaria W and WU, as well as on digitised type material from the herbarium of K and P. The authors observed all morphological data presented and used in the key and comparison of the species from the herbarium material cited in the text under the new combinations or in the Appendix, respectively.

III. DISCUSSION

The main morphological characters (e.g. phyllaries with several dark blackish-green nerves near apex, multiseriate pappus, transversely wrinkled achenes and pinnatifid or pinnatisect leaves with serrate or remotely denticulate segments) demonstrated the studied plants clearly belong to *Rhaponticoides*. *Centaurea gerhardii* and *C. turkestanica* have rounded phyllaries with a hyaline margin, wrinkled achenes and usually divided leaves or dissected in densely regular cartilaginous-denticulate segments, showing congruence to those of *Rhaponticoides* (formerly *Centaurea* sect. *Centaurea*) species. According to Wagenitz (1980), *C. turkestanica* belongs to *Centaurea* sect. *Centaurea*, and Agababian (1997) placed it in sect. *Centaurea* subsect. *turkestanicae* M. V. Agab., while *C. gerhardii* described by Agababian (1997) is placed in *Centaurea* subsect. *Iranicae* M. V. Agab., there both species belonging to *Centaurea* subg. *Centaurea*. The latter subgenus is recognized by Greuter (2003) as the genus *Rhaponticoides*, a name previously used by Vaillant for a large and artificial genus of 29 or 30 species, characterized by blunt, non-pungent phyllaries of homogeneous consistency (Greuter *et al.* 2005). As a consequence of our analysis, two new combinations based on *Centaurea gerhardii* and *C. turkestanica* are proposed under *Rhaponticoides* below.

Author ^α : e-mail: ranjbar @basu.ac.ir

Author ^σ : Department of Biology, Herbarium division, Bu-Ali-Sina University, P.O. Box 65175/4161, Hamedan, Iran.

IV. CONCLUSIONS: TAXONOMIC PROPOSAL

Rhaponticoides (subsect. *Iranicae* M. V. Agab.) *gerhardii* (M. V. Agab.) Ranjbar & Negaresh, comb. nov. (Fig. 1)

Basionym. — *Centaurea gerhardii* M. V. Agab., *Lagasalia* 19(1–2): 897 (1997).

Typus. — Afghanistan, NE Badakhshan: in valle Kokchia N Kishm, near conglomerate slope site, 1450 m, 30.V.1971, *Gibbons 560* (holo-, K!).

Phenology. — Flowering from May to July; fruit ripening from July to August.

Distribution and Ecology. — *Centaurea turkestanica* occurs in Afghanistan. It is an Irano-Turanian element known only from the midmontane zone, occurring on rocky slopes, near conglomerate slope site at altitudes of 1400–1500 m.

Additional Specimens Examined. — Afghanistan, NE Badakhshan: in valle Kokchia N Kishm, near conglomerate slope site, 1450 m, 30.V.1971, *Gibbons 560* (K!).

Rhaponticoides (subsect. *Turkestanicae* M. V. Agab.) *turkestanica* (Franch.) Ranjbar & Negaresh, comb. nov. (Fig. 2)

Basionym. — *Centaurea turkestanica* Franch., *Annales. Sciences. Natales. Botanique. sér. 6, 16: 325* (1883).

LECTOTYPUS. — Kirgizstan, dans les montagnes du Tchirtchik, ca. 1350 m, *Capus 684* (lecto-, P!; isolecto-, P! (designated here): two sheets).

Phenology. — Flowering from May to July; fruit ripening from July to August.

Distribution and Ecology. — *Centaurea turkestanica* occurs in Afghanistan and Kirgizstan. It is an Irano-Turanian element known only from the midmontane zone, occurring on dry rubbly and rocky slopes, talus, eroded shaly hills and banks at altitudes of 500–2400 m.

Additional Specimens Examined. — Kirgizstan, Namangane (Ferghanah), ca. 500 m, *Capus 685* (syn-, P!). Afghanistan, Deh Kundi, Siah Darreh prope Segatak ad viam versus Deh Kundi, 2350 m, 30.VII.1970, *Podlech 19058* (W!)

KEY TO THE SPECIES OF *Rhaponticoides* IN AFGHANISTAN

1. Leaves undivided or with 1-2 lobes in lower, mucronate at apex; median and upper cauline leaves decurrent; pappus 7-9 mm long *R. turkestanica* Leaves entirely pinnatisect or pinnatipartite, acute at apex; median and upper cauline leaves not decurrent; pappus 4-6 mm long 2.
2. Involucres hemiglobose, 25-30 mm wide; median appendages of phyllaries suborbicular and 10-14 mm wide; inner pappus bristles almost as long as outer one *R. gerhardii* Involucres ovoid, 14-20 mm wide; median. appendages of phyllaries narrowly triangular and 0.5 mm wide; inner pappus bristles

usually strongly reduced *R. ruthenica*.

V. ACKNOWLEDGMENTS

We are indebted to the curators of the following herbaria: K, LD, P, W and WU, for their contribution during the revision of materials. This research has received financial support from the Bu-Ali Sina University.



Figure 1 : Holotype of *Rhaponticoides gerhardii* (M. V. Agab.) Ranjbar & Negaresh (Gibbons 560, K).

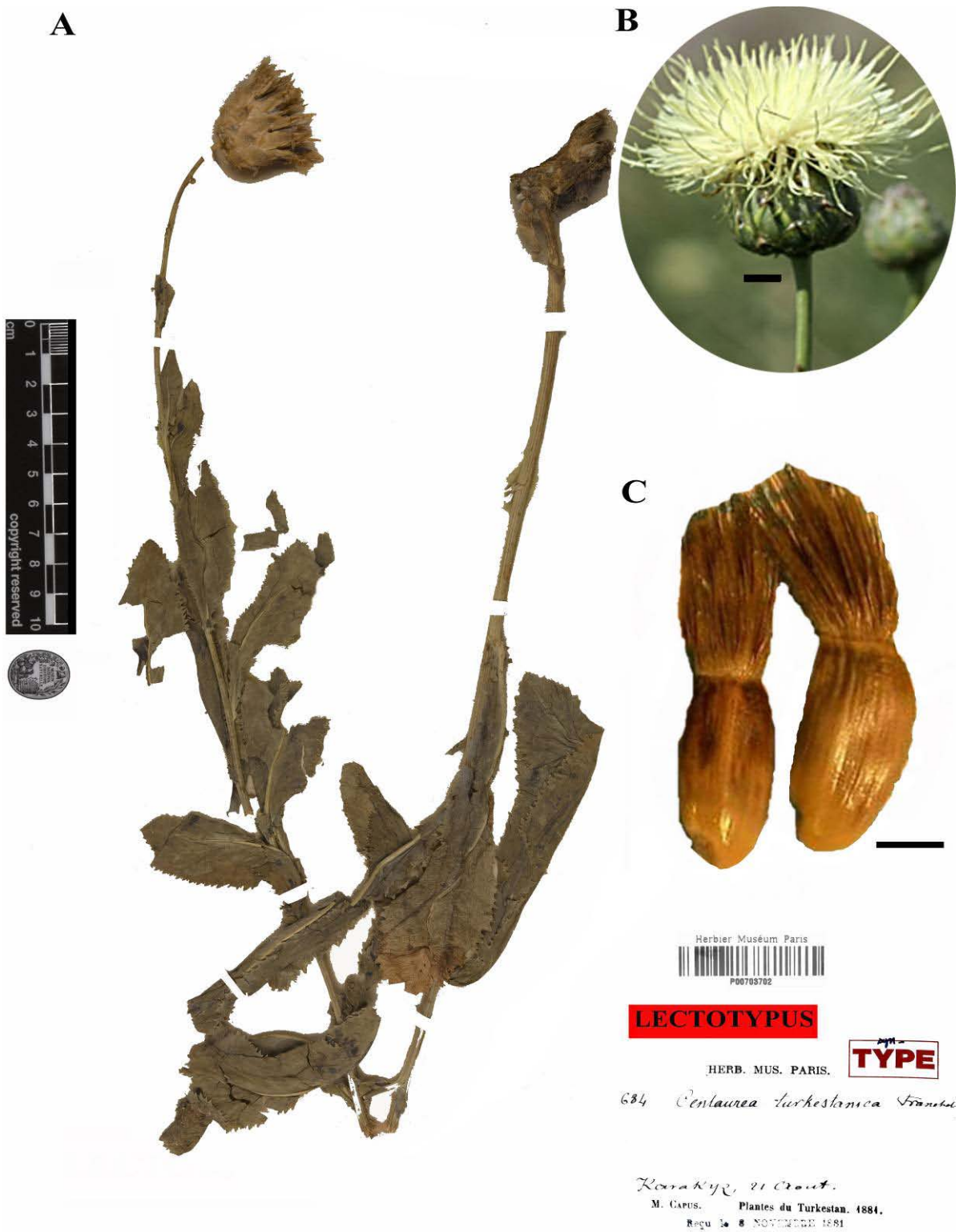


Figure 2: A, Lectotype of *Rhaponticoides turkestanica* (Franch.) Ranjbar & Negaresh (Capus 684, P); B, Capitule; C, Achenes with pappus. Scale bar: A, 5 mm; B, 2 mm. Photograph 2B by L. Valdshmyt

REFERENCES

1. AGABABIAN M.V. 1997. — *Centaurea* subg. *Centaurea* (Compositae): Delimitation and distribution of sections and subsections. *Lagascalia* 19(1-2): 889-902.
2. BREMER K. 1994. — *Asteraceae: Cladistics and Classification*. Timber Press, Portland.
3. EREN Ö. 2007. — The genus *Rhaponticoides* Vaill. (Asteraceae) in Turkey: a new species and first key. *Plant Systematics and Evolution* 267: 13-23.

4. GREUTER W. 2003. — The Euro+Med treatment of Cardueae (Compositae)—generic concepts and required new names. *Willdenowia* 33: 49-61.
5. GREUTER W., AGABABIAN M. & WAGENITZ G. 2005. — Vaillant on Compositae: Systematic impact and nomenclatural consequences. *Taxon* 54: 149-174.
6. GREUTER W., WAGENITZ G., AGABABIAN M. & HELLWIG F.H. 2001. — Proposal to conserve the name *Centaurea* (Compositae) with a conserved type. *Taxon* 50: 1201-1205.
7. HELLWIG F.H. 2004. — Centaureinae (Asteraceae) in the Mediterranean—history of ecogeographical radiation. *Plant Systematics and Evolution* 246: 137-162.
8. PUNTILLO D. & PERUZZI L. 2009. — A new species of *Rhaponticoides* (Asteraceae) from southern Italy. *Folia Geobotanica* 44:191-197.
9. RANJBAR M., NEGARESH K. & KARAMIAN R. 2011. — Taxonomic notes on the *Klasea calcarea* group (Asteraceae) from Iran. *Feddes Repertorium* 122: 465-471.
10. RANJBAR M., NEGARESH K. & KARAMIAN R. 2012a. — *Centaurea regia* subsp. *javanroudense*, a new subspecies of *Centaurea* sect. *Cynaroides* (Asteraceae) from the flora of Iran. *Biological Diversity and Conservation* 5(1): 5-10.
11. RANJBAR M., NEGARESH K., KARAMIAN R. & JOHARCHI M.R. 2012b. — *Klasea nana* (Asteraceae), a new species from NE Iran. *Annales Botanici Fennici* 49: 402-406.
12. RANJBAR M. & NEGARESH K. 2012. — A note on the genus *Cyanus* (Asteraceae, Cardueae) from Iran. *Biological Diversity and Conservation* 5(3): 18-23.
13. RANJBAR M. & NEGARESH K. 2013a. — A revision on *Centaurea* sect. *Phaeopappus* (Asteraceae). *Phytotaxa* 123(1):1-40.
14. RANJBAR M. & NEGARESH K. 2013b. — A contribution to genus *Amberboa* (Asteraceae, Cardueae—Centaureinae) from Iran. *Willdenowia* 43: 271-277.
15. RANJBAR M., NEGARESH K. & KARAMIAN R. 2013. — *Centaurea shahuensis* and *C. ravansarensis* spp. nov. (Asteraceae, Cardueae) from west Iran. *Nordic Journal of Botany* 31(4, 1):430-436.
16. TZVELEV N.N. 1963. — *Centaurea* subgenus *Centaurea*: 375-385, in BOBROV E.G. & CZEREPANOV S.K. (eds.), *Flora USSR* 28. Izdatel'stvo Akademii Nauk USSR, Moskva Leningrad.
17. WAGENITZ G. 1975. — *Centaurea* L.: 484-485, in DAVIS P.H. (ed.), *Flora of Turkey and the East Aegean Islands* 5. Edinburgh University Press, Edinburgh.
18. WAGENITZ G. 1980. — *Centaurea* L.: 327-331, in RECHINGER K.H. (ed.), *Flora Iranica* 139b. Akademische Druck- und Verlagsanstalt, Graz.
19. WAGENITZ G. 1986. — *Centaurea* in South-West Asia: Patterns of distribution and biodiversity. *Proceeding of the Royal Society Edinburgh* 89B: 11-21.
20. WAGENITZ G. & HELLWIG F.H. 1996. — Evolution of characters and phylogeny of the Centaureinae: 491-510, in Hind D.J.N. & Beentje H.J. (eds.), *Compositae: Systematics. Proceeding of the International Compositae Conference, Kew* 1994.
21. **APPENDIX Studied specimens of *Rhaponticoides ruthenica***
22. Iran, West Azerbaijan: Chalil Kuh, in faucibus NW Selvana, in rupium fissuris, 1750–2000 m, *Rechinger* 48895 (W!). Afghanistan, Ghorat: Darrah-e Ghuk prope Puni, 2200 m, 6.VI.1971, *Podlech* 21933 (W!); Wakhan: in valle Daryao Baroghil, 3200–3300 m, *Anders* 7850 (W!).



GLOBAL JOURNALS INC. (US) GUIDELINES HANDBOOK 2014

WWW.GLOBALJOURNALS.ORG

FELLOWS

FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN SCIENCE (FARSS)

Global Journals Incorporate (USA) is accredited by Open Association of Research Society (OARS), U.S.A and in turn, awards “FARSS” title to individuals. The 'FARSS' title is accorded to a selected professional after the approval of the Editor-in-Chief/Editorial Board Members/Dean.



- The “FARSS” is a dignified title which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., FARSS or William Walldroff, M.S., FARSS.

FARSS accrediting is an honor. It authenticates your research activities. After recognition as FARSS, you can add 'FARSS' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and reputation to your name. You may use it on your professional Counseling Materials such as CV, Resume, and Visiting Card etc.

The following benefits can be availed by you only for next three years from the date of certification:



FARSS designated members are entitled to avail a 40% discount while publishing their research papers (of a single author) with Global Journals Incorporation (USA), if the same is accepted by Editorial Board/Peer Reviewers. If you are a main author or co-author in case of multiple authors, you will be entitled to avail discount of 10%.

Once FARSS title is accorded, the Fellow is authorized to organize a symposium/seminar/conference on behalf of Global Journal Incorporation (USA). The Fellow can also participate in conference/seminar/symposium organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent.



You may join as member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. In addition, it is also desirable that you should organize seminar/symposium/conference at least once.

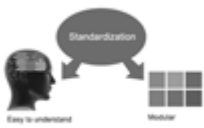
We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.





The FARSS can go through standards of OARS. You can also play vital role if you have any suggestions so that proper amendment can take place to improve the same for the benefit of entire research community.

As FARSS, you will be given a renowned, secure and free professional email address with 100 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.



The FARSS will be eligible for a free application of standardization of their researches. Standardization of research will be subject to acceptability within stipulated norms as the next step after publishing in a journal. We shall depute a team of specialized research professionals who will render their services for elevating your researches to next higher level, which is worldwide open standardization.

The FARSS member can apply for grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A. Once you are designated as FARSS, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria. After certification of all your credentials by OARS, they will be published on your Fellow Profile link on website <https://associationofresearch.org> which will be helpful to upgrade the dignity.



The FARSS members can avail the benefits of free research podcasting in Global Research Radio with their research documents. After publishing the work, (including published elsewhere worldwide with proper authorization) you can upload your research paper with your recorded voice or you can utilize chargeable services of our professional RJs to record your paper in their voice on request.



The FARSS member also entitled to get the benefits of free research podcasting of their research documents through video clips. We can also streamline your conference videos and display your slides/ online slides and online research video clips at reasonable charges, on request.





The FARSS is eligible to earn from sales proceeds of his/her researches/reference/review Books or literature, while publishing with Global Journals. The FARSS can decide whether he/she would like to publish his/her research in a closed manner. In this case, whenever readers purchase that individual research paper for reading, maximum 60% of its profit earned as royalty by Global Journals, will be credited to his/her bank account. The entire entitled amount will be credited to his/her bank account exceeding limit of minimum fixed balance. There is no minimum time limit for collection. The FARSS member can decide its price and we can help in making the right decision.

The FARSS member is eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get remuneration of 15% of author fees, taken from the author of a respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account.



MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN SCIENCE (MARSS)

The ' MARSS ' title is accorded to a selected professional after the approval of the Editor-in-Chief / Editorial Board Members/Dean.

The “MARSS” is a dignified ornament which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., MARSS or William Walldroff, M.S., MARSS.



MARSS accrediting is an honor. It authenticates your research activities. After becoming MARSS, you can add 'MARSS' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and repute to your name. You may use it on your professional Counseling Materials such as CV, Resume, Visiting Card and Name Plate etc.

The following benefits can be availed by you only for next three years from the date of certification.



MARSS designated members are entitled to avail a 25% discount while publishing their research papers (of a single author) in Global Journals Inc., if the same is accepted by our Editorial Board and Peer Reviewers. If you are a main author or co-author of a group of authors, you will get discount of 10%.

As MARSS, you will be given a renowned, secure and free professional email address with 30 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.





We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.

The MARSS member can apply for approval, grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A.



Once you are designated as MARSS, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria.

It is mandatory to read all terms and conditions carefully.



AUXILIARY MEMBERSHIPS

Institutional Fellow of Global Journals Incorporation (USA)-OARS (USA)

Global Journals Incorporation (USA) is accredited by Open Association of Research Society, U.S.A (OARS) and in turn, affiliates research institutions as “Institutional Fellow of Open Association of Research Society” (IFOARS).



The “FARSC” is a dignified title which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.

The IFOARS institution is entitled to form a Board comprised of one Chairperson and three to five board members preferably from different streams. The Board will be recognized as “Institutional Board of Open Association of Research Society”-(IBOARS).

The Institute will be entitled to following benefits:



The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA) The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.

The author fees of such paper may be waived off up to 40%.

The Global Journals Incorporation (USA) at its discretion can also refer double blind peer reviewed paper at their end to the board for the verification and to get recommendation for final stage of acceptance of publication.



The IBOARS can organize symposium/seminar/conference in their country on behalf of Global Journals Incorporation (USA)-OARS (USA). The terms and conditions can be discussed separately.

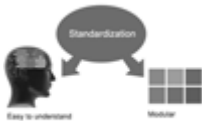
The Board can also play vital role by exploring and giving valuable suggestions regarding the Standards of “Open Association of Research Society, U.S.A (OARS)” so that proper amendment can take place for the benefit of entire research community. We shall provide details of particular standard only on receipt of request from the Board.



The board members can also join us as Individual Fellow with 40% discount on total fees applicable to Individual Fellow. They will be entitled to avail all the benefits as declared. Please visit Individual Fellow-sub menu of GlobalJournals.org to have more relevant details.



We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.



After nomination of your institution as “Institutional Fellow” and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf. The board can also take up the additional allied activities for betterment after our consultation.

The following entitlements are applicable to individual Fellows:

Open Association of Research Society, U.S.A (OARS) By-laws states that an individual Fellow may use the designations as applicable, or the corresponding initials. The Credentials of individual Fellow and Associate designations signify that the individual has gained knowledge of the fundamental concepts. One is magnanimous and proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice.



Open Association of Research Society (US)/ Global Journals Incorporation (USA), as described in Corporate Statements, are educational, research publishing and professional membership organizations. Achieving our individual Fellow or Associate status is based mainly on meeting stated educational research requirements.

Disbursement of 40% Royalty earned through Global Journals : Researcher = 50%, Peer Reviewer = 37.50%, Institution = 12.50% E.g. Out of 40%, the 20% benefit should be passed on to researcher, 15 % benefit towards remuneration should be given to a reviewer and remaining 5% is to be retained by the institution.



We shall provide print version of 12 issues of any three journals [as per your requirement] out of our 38 journals worth \$ 2376 USD.

Other:

The individual Fellow and Associate designations accredited by Open Association of Research Society (US) credentials signify guarantees following achievements:

- The professional accredited with Fellow honor, is entitled to various benefits viz. name, fame, honor, regular flow of income, secured bright future, social status etc.



- In addition to above, if one is single author, then entitled to 40% discount on publishing research paper and can get 10% discount if one is co-author or main author among group of authors.
- The Fellow can organize symposium/seminar/conference on behalf of Global Journals Incorporation (USA) and he/she can also attend the same organized by other institutes on behalf of Global Journals.
- The Fellow can become member of Editorial Board Member after completing 3yrs.
- The Fellow can earn 60% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.
- Fellow can also join as paid peer reviewer and earn 15% remuneration of author charges and can also get an opportunity to join as member of the Editorial Board of Global Journals Incorporation (USA)
- • This individual has learned the basic methods of applying those concepts and techniques to common challenging situations. This individual has further demonstrated an in-depth understanding of the application of suitable techniques to a particular area of research practice.

Note :

//

- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.
- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.
- In case of “Difference of Opinion [if any]” among the Board members, our decision will be final and binding to everyone.

//



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.



Color Charges: It is the rule of the Global Journals Inc. (US) for authors to pay the full cost for the reproduction of their color artwork. Hence, please note that, if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a color work agreement form before your paper can be published.

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 .



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 brevity. 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 abstract 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.



THE ADMINISTRATION RULES

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).

Topics	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

Antiradical · 5
Asteraceae · 29, 31, 33, 34, 35, 36

B

Balneotherapy · 1, 8, 9
Basionym. · 31
Berbasis · 20

E

Estrogenic · 1, 8

F

Fibroblasts · 1, 2, 6, 9, 11, 13

G

Galactosidase · 1, 3, 8, 11, 14
Galactosidase · 5

I

Incubation · 5, 7, 9, 11

L

Liaison · 23

N

Nanodroplets · 68, 69, 71

O

Ombrotrophic · 3, 14
Osteoarthritis · 1

M

Mutagenicity · 1

P

Pembelajaran · 20, 21
Polyethylenepolyamine · 52
Proliferation · 1, 3, 4, 6, 7, 9, 10, 11
Prophylaxis · 111
Psychomotor · 17, 18, 20

Q

Quinone · 1

R

Rheumatoid · 57

S

Sapropel · 1
Sphagnum · 9, 14

T

Turkestanica · 29, 30, 31, 34

V

Vinylpyridine · 46, 47, 48, 52, 54



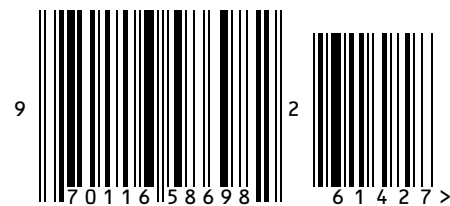
save our planet



Global Journal of Science Frontier Research

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

ISSN 9755896



© Global Journals