EP Journal of Training and Development

Volume No. 12

Issue No. 3

September - December 2024

ENRICHED PUBLICATIONS PVT.LTD

JE - 18,Gupta Colony, Khirki Extn,
Malviya Nagar, New Delhi - 110017.
E- Mail: info@enrichedpublication.com
Phone :- +91-8877340707

EP Journal of Training and Development

Aims and Scope

EP Journal of Training and Development is a journal in the field of Human resources. The journal covers a broad range of topics in the Human resources and Training & Development field from all relevant scientific disciplines. The journal therefore has an international reputed editorial board and also an advisory board with leading international academics in the fields of HR, Economics, marketing and business management.

EP Journal of Training and Development

EP Journal of Training and Development

(Volume No. 12, Issue No. 3, September - December 2024)

Contents

Job Shop Scheduling Optimization Using Genetic Algorithm

Rohitash Singh[1‡], Ajai Jain[2]
[1]Department of Mechanical Engineering, Delhi Technological University, Delhi, Ph.D. Scholar
rohitashsingh2703@gmail.com
[2]Department of Mechanical Engineering, Professor, N.I.T, Kurukshetra (Haryana),
ajayjainfme@nitkkr.ac.in
[‡] Corresponding Author; Tel: +91 9412557868

ABSTRACT

Production scheduling is generally considered to be one of the most significant issue in the planning and operation of a manufacturing system. Better scheduling system has significant impact on cost reduction, increased productivity, customer satisfaction and overall competitive advantage. Job Shop Scheduling problem is one of the challenging combinatorial optimization problems that has drawn the attention of researchers. In job shop scheduling, there are 'n' jobs to be processed at 'm' machines with the objective of minimizing the makespan, total tardiness or any other objective.

In the present work an attempt is made to optimize the job shop scheduling problem using simulation based Genetic Algorithm Approach in the presence of multiple process plans with the objective of minimizing the makespan. Four case studies are considered to optimize the JSS problem. Sequence Oriented representation is used to encode the chromosome for Genetic Algorithm. GA operators such as Two-Point Crossover, Linear rank Selection with Stochastic Universal Sampling Method, Exchange Mutation and Elitism are applied on the chromosome and new offsprings are created. Evaluation of fitness value is done through simulation as it yields better performance than mathematical functions. A restart scheme, as suggested in literature, is also taken into consideration to avoid premature convergence. These four case studies reveal that there are more than one process plan combinations that yield the same optimized makespan.

Keywords- Job Shop Scheduling; Genetic Algorithm; Simulation; Optimization; Multiple Process Plans.

1. Introduction

Scheduling is broadly defined as the process of assigning a set of tasks to resources over a period of time [1]. Scheduling has considerable significance in manufacturing domain. The environment of scheduling problem is called the job shop. Several types of manufacturing shop configurations exist in real world such as single machine, job shops, flow shops, etc. In industries job shop problems arises because of the diverse characters of the jobs and order sizes are relatively small. Job shop problems have a set of 'n' jobs to be processed on a set of 'm' machines. Each job has a set of operations to be

performed on set of machines in a particular order and each machine can process at most one operation at a time. Job shop scheduling (JSS) deals with the allocation of jobs to various machines with the objective of minimizing the makespan, the time to complete all jobs, or minimizing the tardiness (not meeting the due date) in jobs or any other required objectives. Job shop scheduling problems are one of the most challenging Non Polynomial hard problems [2].

Thus it has drawn the attention of researchers because of its theoretical, computational and empirical significance since it was introduced. Optimization is the act of obtaining the best result under given circumstances. There are various optimization algorithms that have been developed to implement the various optimization techniques. An optimization algorithm is a procedure, which is executed iteratively by comparing various solutions till the optimum or a satisfactory solution, is found. There are two categories of optimization algorithms. One category includes those algorithms that are deterministic with specific rules for moving from one solution to another (for example Lagrangian, Branch and Bound, etc.). Another category includes those algorithms that are stochastic in nature and with probabilistic transition rules (for example, Genetic Algorithm, Simulation Annealing, Tabu Search, etc.). These algorithms are called "Metaheuristics".

In this work, a simulation based GA is used for optimization of makespan performance measure as GA is well suited for hard combinatorial problems. Genetic Algorithm uses basic Darwinian mechanism of "survival of the fittest" and repeatedly utilizes the information contained in the solution to generate new solutions with better performance. Simulation is used in this work as it yields better results than mathematical calculations [3].

2. Lıtrature Revıew

GA has been applied to scheduling problem since Davis (1985) [4] first suggested and demonstrated the feasibility by using a GA on a simple JSS Problem [5]. Kumar and Srinivasan (1996) [6] solved the JSS problems faced by an organization using GA and a combination of dispatching rules. The proposed algorithm showed an improvement of about 30% in makespan over the present system. Bierwirth and Mattfeld (1998) [7] proposed a general model for JSS which can be applied to static, dynamic and nondeterministic production environment. The algorithm was tested in a dynamic environment under different workload condition. Werner et al. (2000) [8] solved JSS problem using genetic programming. Results for a set of benchmark problems with both conventional and evolved GA were obtained. Gupta (2002) [9] discussed an excursion into various scheduling problems arising in the manufacturing environment and possible approaches that could be taken to solve them. Ombuki and Ventresca (2004) [10] proposed a hybrid GA for JSS on local search strategy. This proposed algorithm is based on

scheduling scheme that is deadlock free. Omar et al. (2006) [11] used GA to solve JSS, the initial populations were randomly including the results obtained from some well known priority rules such as the Shortest Processing Time (SPT) and the Longest Processing Time (LPT). From there the population would go through the process of reproduction, crossover and mutation to create a new population for new generation. A 5 job 5 machine problem was solved. The number of generation which in this case was 200 generations was used as stopping criteria.

Mendes (2010) [12] presented an optimization approach for the JSS problem based on GA. The algorithm produced good results in comparison to other approaches. Bagheri A. and Zandieh M. (2011) [13] consider Flexible Job Shop Scheduling Problem (FJSP) with sequence-dependent setup times to minimize makespan and mean tardiness.

Phanden et al. (2012) [14] used GA for Flexible Job Shop Scheduling. The authers introduced a simulation-based GA approach to solve flexible job shop scheduling problem. Tsung-Che Chiang et al. (2013) [15] proposed A Simple and Effective Evolutionary Algorithm for Multi-Objective Flexible Job Shop Scheduling (MOFJSP) regarding minimizing the makespan, total workload, and minimum workload.

2.1 Research Gaps & Problem Formulation

Literature review reveals that few researchers focused on JSS optimization problem with the consideration of flexible process plan. Therefore, there is a need to carry out further study in this area using GA and simulation. Thus, in the present work, an attempt will be made to optimize JSS with the consideration of flexible process plans. A Genetic algorithm based approach is planned to be utilized where simulation will be used to evaluate the fitness function as simulation yields better results than mathematical functions. Thus, the problem statement is described below:

“There is a job shop consisting of 15 machines. It can process a production order consisting of 'n' part types. Each part type can be processed with several multiple process plans. The objective is to select the process plan of each part type in order to minimize makespan using simulation based Genetic Algorithm approach”. The various assumptions that will be taken into consideration are given below:

- Production quantity of each part type is unity
- Infinite buffer capacities are assumed in front of individual machine and each part enters buffer location before the processing at machine.
- All parts are available at the start of processing.

- A part may return to an earlier visited machine. However, two consecutive operations are not allowed in the same machine.
- Shortest Processing Time (SPT) is used as dispatching rule with First Come First Serve rule as tie breaker to process the part.
- All machines are available at zero time.

3. Methodology

Following are the parameters and their values taken for our case studies:

- Number of Machines (m) = 15
- Number of Parts (n) = 12
- Crossover Probability (pc) = 0.8
- Mutation Probability (pm) = 0.2
- Elitism Rate (e_rate) = 0.9
- Population Size ( ) = 10

3.1 Representation/ Encoding

In this work, sequence oriented encoding is used for representation of chromosome. Here, a bit (gene) of chromosome is formed by a process plan number (i.e. alphabets) of a job type. Each bit of the chromosome is in fixed order to represent associate process plan of a job type. For example, there are twelve job types 1, 2, 4, 6, 7, 8, 10, 12, 14, 15, 17 and 18 having one, two, four, three, nine, ten, two, two, four, four, sixteen and eight process plans respectively and each job type can be processed through any of its given Multiple Process Plan (MPP). A chromosome following sequence oriented encoding for the above parts can be coded as [11 11 13 11 16 15 11 12 11 14 112 18]. Here the first gene i.e. 11 represents processing of job type 1 by following its 1st Process Plan of sequence 1st and the second gene i.e. 11 represents processing of job type 2 by following its 1st Process Plan of sequence 1st. Similarly third gene i.e. 13 represents processing of job type 4 using its 3rd Process Plan of sequence 1st and so on. These numbering of process plans for the particular job type as well as the job sequence are already known. In a chromosome the number in the ith position represents the selected process plan of the job type j.

3.2 Initialization

For the initialization, population is generated randomly as performance of Genetic Algorithm is found better with a random start than from a reselected starting population [16]. The population is generated randomly, covering the entire range of possible solutions.

3.3 Evaluation Of Fitness Function

After the generation of new population, fitness value of each chromosome is calculated. Fitness is the performance evaluation of chromosomes [17]. Higher the fitness value, better the performance of the chromosome. Hence, parents with higher fitness values have more chances to survive. Genetic Algorithm is naturally suitable for solving maximization problems [18]. The objective function in this research work is the minimization of makespan f(x). This minimization problem is transformed into maximization problem by using the following relation:

$F(x) = 1/(1+f(x))$

Where f(x) = makespan of a chromosome

F(x) = fitness function of GA

For finding out the makespan of each chromosome i.e. job mix f(x) simulation is used. Simulation is preferred to mathematical functions as it results in good performance close to actual system performance. Mathematical calculations are time consuming and sometimes tedious to solve. Moreover, the results obtained from mathematical functions may not reflect the performance of actual system. ProModel® software is used for simulation and to calculate the makespan for the part mix due to its adaptability and easy to use functions. Modelling of job shop for each chromosome is carried out using ProModel® and makespan is provided by software after simulation. Further, this value of the makespan is converted into the fitness value as discussed above.

3.4 Selection

Linear Ranking Selection is used for selection in the present study. In this method, individuals are sorted first according to their fitness value and the rank N is assigned to the best individual and the rank 1 to the worst individual. The individuals in the population are ranked according to their fitness and the expected value of each individual depends on its rank rather than on its absolute fitness. Once the expected value has been assigned, Stochastic Universal Sampling (SUS) method is applied to sample the population (i.e. choose parents). In this manner, a mating pool consisting of selected individuals is created.

3.5 Crossover

A two point crossover is used and applied on the individuals of mating pool. In order to carry out crossover two strings are selected randomly from the mating pool to make a pair. Each pair is then

assessed for the desirability of crossover operation with the crossover probability of 0.8. During crossover, the crossover sites are selected randomly from first to last position. Due to above crossover methodology, some illegal offspring may generate. Then repairing is done to resolve the illegitimacy of the offspring.

3.6 Mutation

In the present study, exchange mutation is utilized. In this method, two genes of a chromosome are randomly selected and their positions are swapped. The mutation probability (pm=0.2) is used and is applied on offspring produced after crossover operation. Then process plans at randomly selected sites get interchanged due to this process.

As discussed above during mutation, some illegal offsprings may generate. These illegal offsprings are generated due to limited number of multiple process plans of each part type and it may happen that during mutation one job type exceeds the limit of available multiple process plans. Thus, a repairing strategy is necessary to sort out this illegitimacy. Initially, a check is performed to find out the job types that are exceeding the limit of available multiple process plans. If there is no job type that exceeds the limit, the offspring is not illegal and does not require repairing process. However, if there is/are job type(s) that exceed the limit of available multiple process plans, then repairing process is activated. It repairs the genes of the illegal offspring by replacing it with randomly selected multiple process plans of the part type.

3.7 Reproduction

Reproduction pertains to the further generating the new generation. Once offsprings are generated after crossover and mutation operations, they along with parent population form the extended population. Elitism method of reproduction is embedded with Linear Rank Selection method. It prevents losing the best found solution. It transfers few good individuals from the previous population to the population of the next generation. In the present study, an elitism rate of 0.9 is considered to transfer the best individual from the previous population to the population of next generation

3.8 Restart

As GA proceeds, population evolves over time. Sometimes, the population has a low diversity which may cause it to be trapped in a local optimum. In order to avoid premature convergence, a restart scheme is embedded in regular GA. If the best Makespan is not promoted for more than a pre-specified number of generations (i.e. does not change), the restart phase commences to regenerate the population by the following process [19]:

Step 1: Sort the population in ascending order of fitness value

Step 2: Skip the first 10% of the individuals from the sorted list

Step 3: The remaining 90% of the strings in the sorted list are neglected and are reproduced in the following way:

a. From the first 10% best chromosome, first half (50%) of new population is produced by reciprocal exchange mutation

b. Another half (50%) of new population are produced randomly.

All newly generated genetic material will only replace 90% of the worst chromosome of the population if they hold out fitness value better than the worst chromosome of the previous population. Also repetition of the individuals in the newly generated 90% population is not permitted.

In the present work, restart scheme is applied if there is no improvement in the fitness value (makespan) for more than 15 successive generation/iterations.

3.9 Termination Criterion

Termination criterion refers to the stopping criterion for further exploration in search space. In the present work, maximum number of generation is considered as the termination criteria. The iteration procedure continue until the generation number equals to product of the number of jobs (n) and number of machines (m). For example for a 12 jobs 15 machines problem, the termination criteria is 180 (12 ×15) generations i.e. GA will stop after 180 generations and best fitness value obtained in last iteration is taken as optimal solution. Figure 1 shows the flow chart of the adopted methodology.

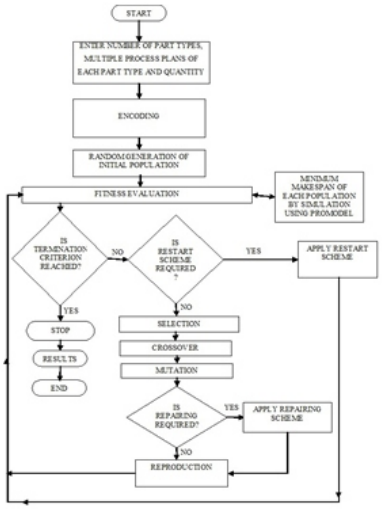

Figure 1: Flow Chart of the Adopted Methodology

4. Results And Dıscussıon

For Case Study-1, the optimized makespan is 511 Minutes. There are two process plans combinations of part type of the production order that yield same optimized makespan. The convergence curve is shown in Figure 2.

Figure 3 shows the convergence curve for the Case Study-2. The optimized makespan is 506 Minutes and for same optimized makespan, there are twenty one process plans combinations of the part type of the given production order.

Comparison of optimized makespans of case study-I and case study-II reveals that by changing the MPP of part type, optimized makespan is reduced from 511 to 506. For same optimized makespan, there are 21 process plan combinations of part types. It clearly reveals that availability of different MPP of a part type in a production order affects optimized makespan.

Figure 4 shows the convergence curve for Case Study-3. The optimized makespan is 497 Minutes. For same optimized makespan, there are nine process plans combinations of part type of the production order.

Comparison of optimized makespans of case study-II and case study-III reveals that by changing the MPP of part type 2, optimized makespan is further reduced from 506 to 497. For same optimized makespan, there are 9 process plan combinations of part types. It clearly reveals that availability of different MPP of a part type in a production order affects optimized makespan.

For Case Study-4, the optimized makespan is 495 Minutes. Figure 5 shows the convergence curve. It clearly shows that for same optimized makespan, there are nine process plans combinations of part type of the production order.

All the results are tabulated in Table-1. It reveals that if we have a choice of MPP than there are more than one process plan combinations that yield the same optimized makespan.

4.1 Figures And Tables

Table-1

Case Study No.	Process Plan Combinations That Yield The Same Result	Optimized Makespan (in Min.)
1	2	511
2	21	506
3	9	497
4	9	495

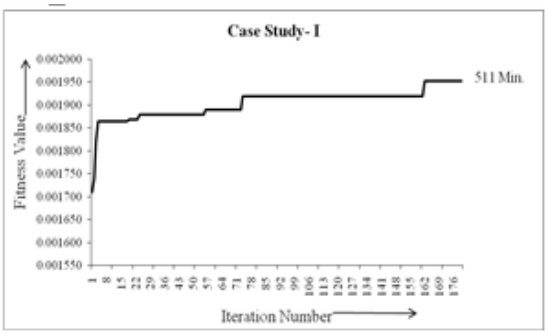

Figure 2: Convergence Curve of case study I

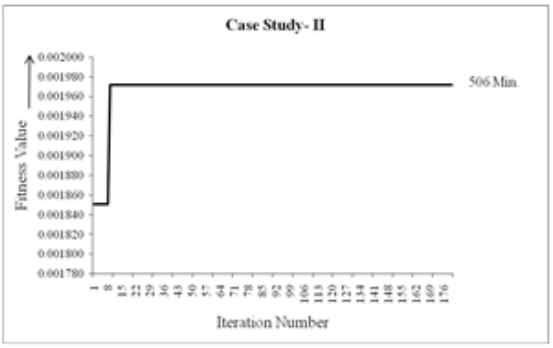

Figure 3: Convergence Curve of case study II

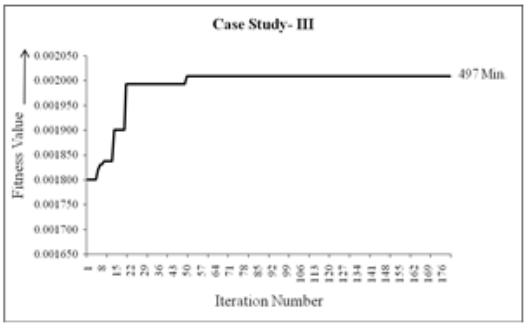

Figure 4: Convergence Curve of case study III

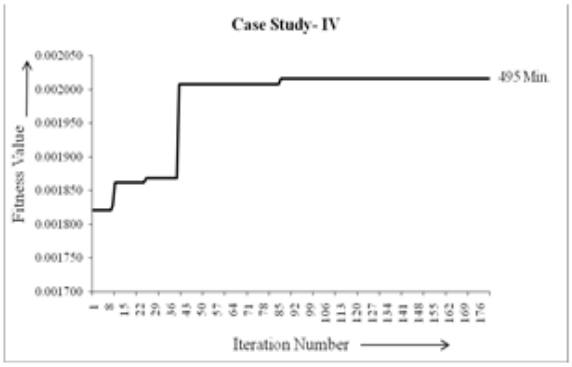

Figure 5: Convergence Curve of case study IV

5. Conclusion

In the present work, an attempt is made to optimize job shop scheduling using simulation based Genetic Algorithm approach in the presence of multiple process plans. From the case studies considered, it is concluded that for a given production order in which part type can be processed by multiple process plans, there are more than one process plan combinations of the part types in a production order that yield the same optimized makespan.

6. Scope For Future Work

The present work can be extended in several ways. It can be extended by incorporating the aspects of due dates, tardiness, earliness, flow time, throughput, etc. Dispatching rules used in this work is Shortest Processing Time (SPT). The problem can be extended by using other dispatching rules such as Longest Processing Time (LPT), Earliest Due Date (EDD), Most Work Remaining (MWR), etc. and comparative analysis of the results obtained could be done. Different combination of crossover and mutation probabilities can be implemented and results obtained can be compared. The case studies considered in the present work can be solved by other Meta-Heuristics techniques such as Simulated Annealing, Tabu Search, Neural Networks, Fuzzy Logic Techniques, etc. and comparison of the results can be done. Production Quantity used in the case study can be changed.

The jobs and processing time are manually fed to ProModel® software. This is time consuming and likely to cause errors particularly when scheduling larger problems. This can be upgraded by modifying the software by incorporating some external files to capture data from any data files available on the computer. This can considerably reduce the time consumed in entering the job details.

7. References

[1] Pinedo, M. L. (2005), "Planning and Scheduling in Manufacturing and Services:, Springer Series in Operations Research, New York.

[2] M. Mitchell, An introduction to genetic algorithms. Prentice-Hall of India, New Delhi, 2002.

[3] Rakesh Kumar Phanden, Ajai Jain, and Rajiv Verma; (2013) "An approach for integration of process planning and scheduling", International Journal of Computer Integrated Manufacturing, Vol. 26, No. 4, page 284–302.

[4] Davis, L. (1985), "Job-Shop Scheduling with Genetic Algorithm", Proceedings of the 1st International Conference on Genetic Algorithms and their Applications, Pittsburgh, PA, USA.

[5] Michalewicz Z, (1999), "Genetic Algorithm+ Data Structures=Evolution Programs", Springer Series Artificial Intelligence USA.

[6] Kumar, S. Hemant and Srinivasan, G. (1996), "A Genetic Algorithm for Job Shop Scheduling - A Case Study", Computers in Industry, Vol. 31, pp.155-160.

[7] Bierwirth Christian and Mattfeld, Dirk. C., (1998) "Production Scheduling and Rescheduling with Genetic Algorithms", Massachusetts Institute of Technology Evolutionary Computation Vol.7, Issue 1, pp. 1-17.

[8] Werner, James. C.; Aydin, Mehmet E.; Fogarty, Terence. C. (2000), "Evolving Genetic Algorithm for Job Shop Scheduling Problems", Proceedings of ACDM 2000 PEDC, Unviersity of Plymouth, UK.

[9] Gupta, Jatinder N. D.(2002) 'An excursion in scheduling theory: An overview of scheduling research in the twentieth century', Production Planning & Control, Vol: 2, pp. 105 -116.

[10] Ombuki, B. and Ventresca, M. (2004), "Local Search Genetic Algorithm for Job Shop Scheduling Problem", Journal of Applied Intelligence, Vol. 21, pp. 448-465.

[11] Omar, Mahanim; Baharum, Adam and Hasan, Yahya Abu (2006), "A JSSP using Genetic Algorithm", Proceedings of the 2nd IMT-GT regional conference on Mathematics, Statistics and Applications, University Sains Malaysia.

[12] Mendes J, (2010)," An Optimization Approach for the Job Shop Scheduling Problem", International Journal of Recent Advances in Applied Mathematics, pp. 120-125.

[13] Bagheri, A.; Zandieh, M.; (2011) "Bi-criteria flexible job shop scheduling with sequence-dependent setup times-Variable neighborhood search approach" Journal of manufacturing systems, Vol. 30, page 8-15.

[14] Rakesh Kumar Phanden et al. (2012); A Genetic Algorithm-based Approach for Flexible Job Shop Scheduling. Applied Mechanics and Materials Vols. 110-116 (2012) pp 3930-3937.

[15] Chiang Tsung-Che, Lin Hsiao-Jou; (2013) "A simple and effective evolutionary algorithm for multiobjective flexible job shop scheduling", International Journal of Production Economics, Vol. 141, page 87-98.

[16] Anderson and Ferris (1994), "Genetic Algorithms for Combinatorial Optimization: The Assembly Line Balancing Problem", ORSA Journal on Computing. Vol. 6, Issue 2, pp. 161-173.

[17] Zhou, Hong, Cheung, Waiman (2001), "Using Genetic Algorithms and Heuristics for Job Shop Scheduling with Sequence-Dependent Setup Times", Annals of Operations Research Vol. 107, pp. 65–81.

[18] Deb K, (2006), "Optimization for Engineering Design, Algorithm and Examples", PHI, New Delhi.

[19] Naderi, B.; Fatemi, S. M. T. Ghomi; Aminnayeri, M. (2009), "Scheduling Job Shop Problems with Sequence-Dependent Setup Times", International Journal of Production Research Vol. 47, No. 21, pp. 5959–5976.

Karnataka State Eligibility Test (KSET) 2013 Results: An Analysis

Mithun Kumar, M. R.[1], Nandeesha, B.[2], Chandrashekara, G. S.[3]
[1]PMO, Tata Consultancy Services (TCS), Bangalore-560066.
E-Mail: mrmithunkumar@gmail.com, Mob: +91 9886780642
[2]Senior Library and Information Assistant, All India Institute of Speech and Hearing (AIISH)
Manasagangothri, Mysore-570006
E-Mail: nandeesha.b@gmail.com, Mob: +91 9945804989
[3] Librarian, Govt. First Grade College, Kushalanagar, Madikeri (D)
E-Mail: chandrashekarags@rediffmail.com,Mobile:+91 9886306691

ABSTRACT

The paper deals with the analysis of KSET 2013 results. Total 70,813 candidates appeared for the examination under 32 subject categories, out of which 5,116 candidates were eligible, accounting to7.22% of the total number of candidates. A detailed analysis of results based on subject and examination center is also provided.

Keywords: KSET, University of Mysore, Analysis, Result, UGC, Lectureship/Assistant Professor eligibility

1. Introduction

The University of Mysore is a public state university located in Mysore, Karnataka, India. The university was founded during the reign of Krishna raja Wodeyar IV, the then Maharaja of Mysore. It was established on 27 July 1916, with the first chancellor being the Maharaja of Mysore and H. V. Nanjundaiah was the first Vice Chancellor. The university became the first outside the domain of the English administration in India, the sixth university in India as a whole, and the first ever university in Karnataka. It is a state university of the affiliating type, and became autonomous on 3 March 1956, when it gained recognition from the University Grants Commission (UGC).

The University of Mysore, Mysore is a Nodal Agency recognized by the UGC, New Delhi for conducting the Karnataka State Eligibility Test (KSET) for lectureship/Assistant Professor since 2010. KSET strictly adhering to the guidelines stipulated by the UGC-NET Bureau conducts State Eligibility Test once a year to make rigorous merit based selection for the entry level of teaching professionals. Presently, KSET conducts test in 32 subjects at 11 Nodal Centers across the Karnataka State.

Candidates who qualify the KSET will be governed by the rules and regulations for recruitment of lectures and Assistant Professors of the concerned University/Colleges/Institutions (Government/

Aided/ Private) in Karnataka State. The Certificate issued for the KSET eligibility has the lifetime validity.

Scope:

This analysis focuses on KSET 2013 result which includes 32 Subjects, 11 Nodal Centers. The data is analyzed using Microsoft Excel.

KSET 2013 Results Analysis:

The following analysis of KSET 2013 results from 32 different subjects shows the interests of the candidates to take the opportunity. It also shows the rankings, subject wise performance and clear indication about the eligibility.

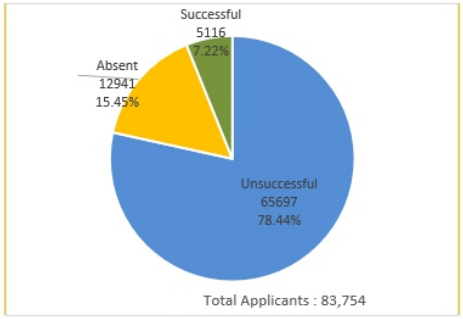

Chart 1: KSET 2013

There were total 83,754 applicants for the KSET 2013, out of which 12,941 were absent for the examination. Out of 70,813 applicants who appeared for the exam, 5,116 were successful, which is just 7.22%. 92.77% of the candidates who appeared for the examination were unsuccessful.

1. Candidates appeared by subject

Kannada subject shows the highest appearance of 10,215 candidates, accounting to 14.43% of the total number of candidates who appeared for the test, followed by History, Commerce and Economics which are close to 9%. 14 of the 32 subjects show less than 600 candidates appearing for the test, which is less than 1%. Total 1,373 candidates took the KSET for Library & Information Science, which is 1.9% of the total candidates appeared for the test.

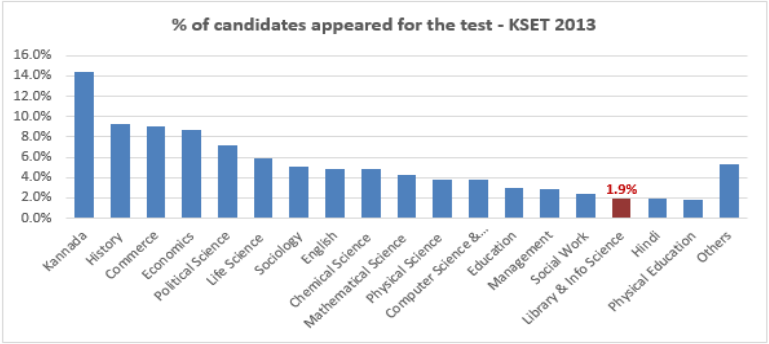

Chart 2: Percentage of candidates appeared for KSET 2013 [Total appeared: 70,813]

Tourism Administration shows the least appearance of the candidates of 0.1% (total 68 candidates) for the examination. Home Science, Folk Literature and Criminology had the attendance of less than 100 candidates.

Table 1: KSET 2013 Examination - Top 5 Subject wise appeared candidates

Rank	Subject	Appeared
1	Kannada	10215
2	History	6521
3	Commerce	6385
4	Economics	6121
5	Political Science	5055

The above table shows top 5 subject wise appeared candidates list.

2. Candidates eligibility by subject

Out of 70,813 candidates who appeared for the test, 5,116 were eligible which accounts to 7.2% of the total. Though the number of candidates appearing for the test is very less in Criminology subject, it shows the highest passing percentage of 24.2%, followed by Tourism Administration with 22.1% and Law with 16.9%.

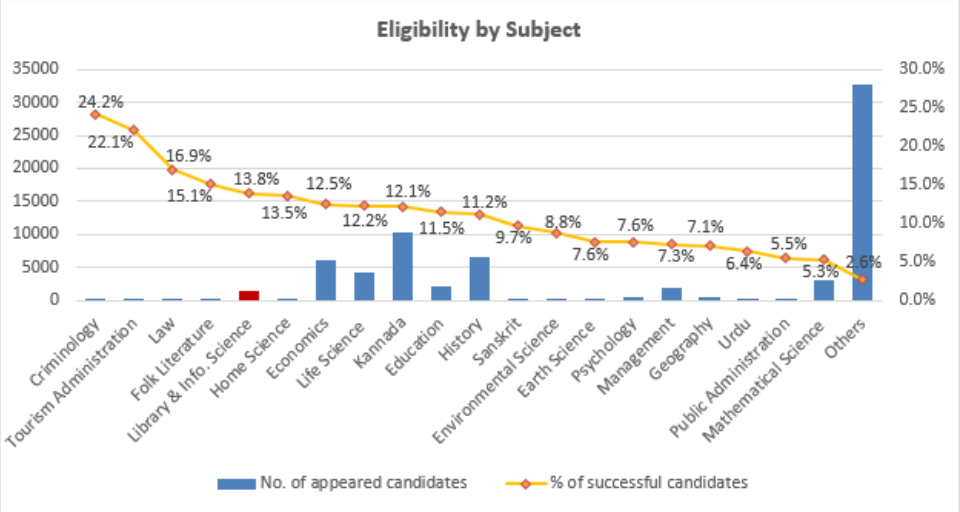

Chart 3: Passing percentage of candidates appeared for KSET 2013

Library & Information Science shows a moderate success rate of 13.8%. 1,373 candidates appeared for the examination and 190 were successful.

Table 2: KSET 2013 - Top 5 Subject wise percentage of passing

Rank	Subject	Appeared	Successful	Percentage of Passing
1	Criminology	91	22	24.18
2	Tourism Administration	68	15	22.06
3	Law	372	63	16.94
4	Folk Literature	93	14	15.05
5	Library & Info. Science	1,373	190	13.84

Above table shows the passing percentage of top 5 subjects by percentage of passing among the 32 subjects listed for KSET. Library & Information Science subject ranks the 5th in the list.

3. By Examination Center

There are total eleven centers in Karnataka from where the candidates can take the KSET examination. The following chart shows the number of candidate appeared from the listed examination centers and the respective number of successful candidates.

Mysore records the highest number of candidates appearing for the KSET 2013, followed by Bangalore, Dharwad and Gulbarga.

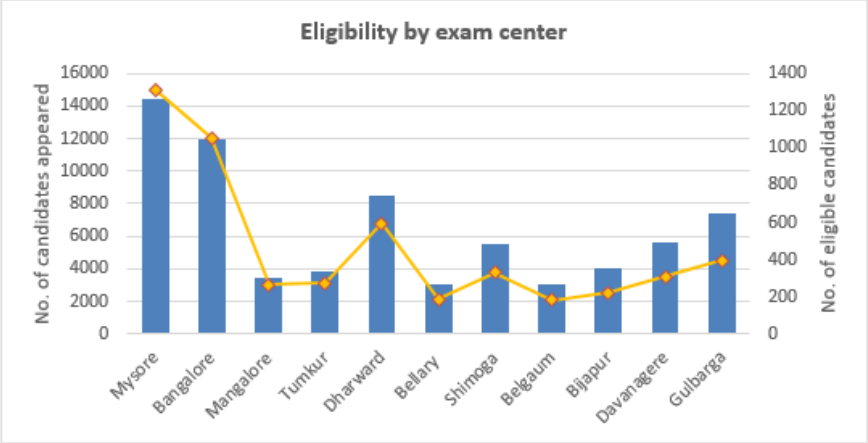

Chart 4: No. of candidates appeared Vs eligible for KSET 2013

Following chart shows examination center wise percentage of successful candidates. Around 26% of the eligible candidates were from the Mysore center, which is the highest among the eleven exam centers. Least eligibility was recorded at Gulbarga Centre with 396 candidates eligible among 7,378 candidates who appeared for the exam.

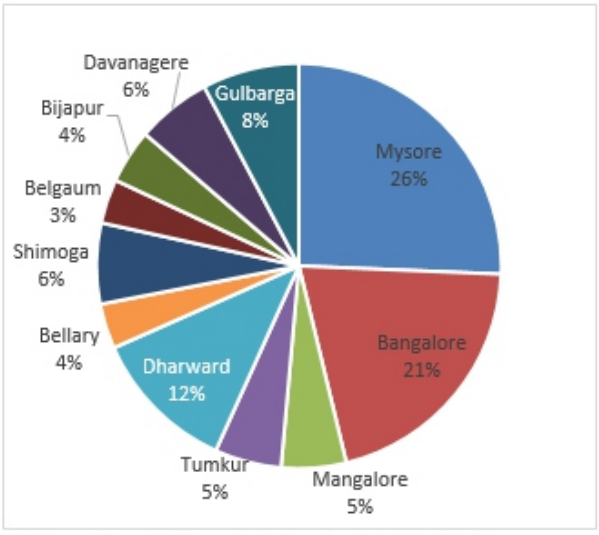

Chart 5: No. of candidates eligible for KSET 2013 by exam center

Following table shows highest score wise list, in which Urdu shows the highest passing score among all subjects followed by Economics, Kannada, Sanskrit and Library & Information Science. From the Mysore center two candidates got into the top 5 scores list.

Table 3: Top 5 score wise list with center & subject

Examination Centre	Subject	Secured Marks	Percentage
Dharwad	Urdu	292	83
Davanagere	Economics	284	81
Shimoga	Kannada	274	78
Mysore	Sanskrit	272	77
Mysore	Library & Information Science	268	76

Conclusion:

The analysis of the KSET 2013 examination results shows that almost 85% of the candidates had appeared for the examination. 12,941 candidates were not able to attend the exam due to various reasons. Out of 70,814 candidates who appeared for the test, 7.2% were eligible.

Kannada subject shows the maximum attendance of 10,215 candidates attending the exam which shows the interest among the candidates. Out of these 12% of the candidates were eligible which is much higher than the subjects like Physical Science, Sociology, and Commerce etc. Criminology and Tourism Administration subjects show 24% and 22% success rate respectively, among the candidates who appeared for the exam.

Physical Science subject shows the least success rate. Total 2711 candidates appeared for the exam and only 24 candidates got eligible, which is about 0.9%. This indicates various reasons such as lack of preparation, lower importance level and poor subject knowledge among the appeared candidates.

References:

1. KSET Available at http://kset.uni-mysore.ac.in/ (Accessed on 04 May 2014).
2. UOM Available at http://www.uni-mysore.ac.in/ (Accessed on 04 May 2014).
3. Mysore University Available at http://wikipedia.org/wiki/University_of_Mysore (Accessed on 04 May 2014).
4. VK (05-05-2014). KSET Result: Mysore is Best, Vijaya Karnataka.
5. VV (05-05-2014). 5116 Candidates Eligible for Lectureship, Vijaya Vani.

Lecture Method of Teaching and Power Point Presentation: A Comparative Study

Dr. Tilak Raj,
Assistant Professor, University Business School, Panjab University, Chandigarh

A B S T R A C T

Teaching is an art of conveying message with impact on students. Its ultimate goal is learning by inducing a behavioral change in them. Generally, a teacher tries his best to communicate knowledge to the students.When selecting teaching methods, there is no one best method. The lecture method of teaching is one of the oldest and the most widely used method of teaching. Now days, the use of power point presentation in classroom has increased significantly. Many teachers are replacing from the lecture methods of teaching to power point presentations (PPTs). The present study reviewed the theoretical and empirical literature on lecture method of teaching as well as power point presentation. Secondary sources of data have been used to reach the ultimate goals. The study revealed that lecture method is more helpful than power point presentations. Students favour lecture method of teaching more than power point presentations. Those teachers who use power point presentations put less effort than lecture method. The main objective of the study is to evaluate the traditional methods of teaching and the use of power point presentations (PPTs) in higher education.

Key Words:Lecture method of teaching, Power point presentation, higher education.

1. Introduction

Knowledge has been recognized as the key driving force in the 21st century. The economic and social transformation of a country depends on knowledge. Only knowledge can provide the foundations of a comprehensive society. Education is a light that shows the right direction to the human being. The purpose of education is not only making a student literate but adds rational thinking, knowledge and self- sufficiency. The goal of education is viewed as the transmission of knowledge by the teachers to the students and facilitating students' autonomous learning and self expression.Higher education is just as important, for it provides the cutting edge. The role of higher education and its significant contributionin economic development, social progress and political democracy of a country cannot be denied.Higher education is becoming a major driver of economic competiveness in an increasing knowledge driven global economy.

Now –days more emphasis has been given on the higher education, to the understanding of the manner and the process of providing education in the different disciplines. Especially, using of the teaching

methodology. Various technologiesare available for use in teaching in higher education. A teaching method includes the principles and methods used for instruction to be implemented by teachers to achieve the desired learning students. Teaching creates knowledge, awareness and introduces behavioral change. The effectiveness of teaching strategies depends on both the subject matter to be taught and the nature of the learner. Therefore, the selection of teaching methods must take into account not only the nature of the subject matter but also how students learn.

The teacher's primary role is to train and facilitate student learning and overall understanding of material. Commonly used teaching methods may include class participation, group discussion, lecture method,power point presentations etc. Earlier teachers were used chalkboard, whiteboard or by transparencies on an overhead projector. Today the sources have expanded to include many diversified modes like discussion method, role play method, case study method, seminars, audio/video, power point presentations society and the universe as a whole.

Lecture method of teaching is good for focusing on key concepts and principles, for presenting up-to-date information and summarizing material (McKeachie and Svinicki, 2014). In recent years, technology has changed. One of the most important types of technology used in the classroom is power point presentations assuming that incorporation of computer technologies would enhance student learning (Sewasew, D., Mengestie, M., & Abate, G., 2015). Education is the process to shape the quality life of the people which in turn enhances the betterment of the society.

In education learning is more important than teaching. Learning is students oriented whereas teaching is bipolar concerned with students and teacher.Learning occurs when information is understood and remembered by a person. Information can be conveyed in many ways. Original learning refers to the understanding, retaining and recalling the knowledge, skills and abilities. Transfer of information refers to the degree to which the knowledge, skills and abilities acquired can be used to solve some real world problem. Traditionally, learning has relied on a text book and lecture delivered. The development of modern education technology, especially the rapid development of information technology as well as the emergence of multi-media computer technology, has significant impact on education

In old days, the teacher was only the source of knowledge. The students avail the knowledge what the teacher taught. But now-days availability of various multimedia aids assist in the learning process. Now-a-days the internet and the multiple formats that can communicate over the World Wide Web, everyone has several new ways to present information. The Web allows the incorporation of animation, moving pictures, and sound into lessons, which extends our abilities to present materials that encourage

student interaction with the subject matter. Pictures and animations help bring to life scientific principles, and multimedia allows students to take a more active role in learning. They can watch experiments in action, and use a mouse or keyboard to navigate images, simulations and interactive material (Hadzi-Kostova, B., 2005). Multimedia encourages students to embrace, internalize, and learn more from information because users can attack the information from multiple directions. This kind of teaching method not only extends the amount of information that people receive and makes learning more interesting, but also increases the learning initiative and scientific accuracy (Vyas, Poonam, 2013). It is important that teachers learn to use a variety of teaching methodology.

2. Review of Literature

The literature review has presented research across the area of lecture method of teaching versus Power point presentation. Cuban (1993) has defined traditional teaching method as verbally presented material by the teacher with the help of blackboard. In traditional method instruction occurs frequently with the whole class; small group or individual instruction occurs less often; teachers look upon the textbook to guide curriculum and instructional decision making. Allan M. Jones (2003) in his study reviews the advantages and disadvantages associated with the use of power point in a teaching and learning context and suggest some guidelines and pedagogical strategies that need to be considered where it is to be used. Matthew (2007) has conducted a study on practical power point group projects for the EFL classroom. He found three different methods for using power point presentation in a classroom teaching. The first method includes student construction of picture stories, the second explain making travel plans, and the third describes guidelines for outside the classroom group work on simple research projects, such as surveys of fellow students' opinions. Vansia (2011) conducted a study of development and effectiveness of computer based learning programme in teaching mathematics and found positive outcome. Many experiments have been done in various subjects till date to find the effectiveness of multimedia. Most of the experiments suggest that multimedia approach to teaching is more effective than traditional approach to teaching. Archana Sharma (2012) has conducted a study on interactive whiteboard technology in English language teaching. This study explains one of the latest technical equipment, whiteboard, which is speedily being adopted by various educational institutions. The study also discusses the possible advantages and disadvantages of using whiteboard. Xingeng, D., and Jianxiang, L. (2012) conducted a study on Advantages and Disadvantages of PowerPoint in Lectures to Science Students. They find out its advantages as producing better visual effects, efficiencies in transferring of information and systemic structure of knowledge. As per the study power point may be induced by irrelevant information in slides. Various strategies have been suggested to avoid disadvantages of power point presentation. Dimitrios, B., Nikolaos, K. A. and Maria, K. (2013) have conducted a study on traditional teaching methods versus teaching through the application of

information and communication technologies in the accounting field to find out the effect of teaching using multimedia (power point and video supported instruction) versus traditional lecture methods on the learning of students in real classrooms at the university level.Damodharan V. S. et.al (2015) conducted a study innovative method of teaching. They have evaluated the traditional methods of teaching as well as multimedia technique of teaching. The study also suggests other useful method of teaching which can be used in imparting knowledge to the students. Study concluded that teaching must include two major components sending and receiving information to the students. The study found that teaching depends upon successful mode of communication and innovation.

Saini, P., et.al. (2015) have been studied the effect of power point and traditional lectures on students' achievement in nursing. Findings of the present study prefer and support the use of traditional chalk & talk method over PowerPoint lectures in nursing education. Sewasew, D., Mengestie, M., & Abate, G. (2015) have conducted a comparative study on power point presentation and traditional lecture method in material understandability, effectiveness and attitude. The study concluded that lecture method was more powerful and helpful than power point presentation in material understandability, and effectiveness/learning process. Students were more positive towards the lecture method than power point presentation, which implies it was more entertaining/engaging the class by a teacher.

3. Lecture Method of Teaching versus Power Point Presentation

Teaching is a complex business. Teaching is the specialized knowledge and skill to provide services to meet the educational needs of the society. In the broad since teaching is a process that that facilitates learning. Teachers are equipped with a body of knowledge having an extensive background in the world. A teacher has professional knowledge and skills gained through formal preparation and experience. It serves a great social purpose. Teachers provide personal, caring service to students by diagnosing their needs and by planning, selecting and using methods and evaluation procedures designed to promote learning. They are national builder who are carrying an incredible amount of responsibility. (Arne D, 2015). Nowadays there is democratization of knowledge and the role of the teacher is changing to that of facilitator. It is universally known that teacher is the backbone of any educational institution. Secret of quality education lies in the quality of teachers. We need to have interactive teaching and this changing role of education is inevitable with the introduction of multimedia technology (Damodharan V. S. and et. al 2015). Different teaching and learning strategies can be used for the learning objectives and outcomes.An intelligent use of teaching technologies and methods is very crucial in increasing student's achievement. Lecture method and power point presentation are the most widely used teaching methods. Let us discuss the pros and cons of these methods.

4. Lecture Method of Teaching

The oldest methodof teachingapplied in all most all educational institution is the lecture method. This method involves one way communication of knowledge. Student's participation in this method is limited to listen and sometimes write down some important notes. This method requires comparatively more mental exercise for the teacher because there are no other visual teaching aids to help him(Umar, 2012). A large amount of topics can covered in a single period this method.Lectures are probably most useful for giving a general introduction to a topic area, delivery of information, give broad overviews of content. This methodisan instrumental procedure with the help of which a teacher seeks to create interest among the students towards the subject. He also influence and encourage them to ask critical questions on various aspects. Lecture delivered by a teacher conveys information to students by which their understandings get generated and their interest gets stimulated in the subject. This develops listing skills of students and no equipment or lab required.

Lectures can do so much good as reading the books from which the lectures are taken. A good lecture should include precisely the aims, content, pace and direction of a presentation. It must be student-centered.The lecture is a creative process in which both a teacher and a student take part. The basic aim of the lecture is to help students. Teacher making use of this method should have a wider basis, by which lecture can be made interesting and productive. In terms of purpose of lecture, the expectation of a teacher from a student's after delivering the lecture has to be analyzed for which he should keep in his mind objectives of the teaching. Generally this method of teaching is used to provide some relevant background material or information of a certain topic. Through this method, students attention, understanding and memorizing are well exercised(Himanshu Mallick, 2012).

There are a number of scholars who question the effectiveness of the lecture method of teaching. In this method, active role played by the teacher and students remain passive recipient of the information.This is a purely teacher oriented method and no importance and consideration is paid to the students in any way. One of the major problems in this method is to secure the mental presence of students in the class room. It is important and also difficult to make them all attentive listener. The next challenging issue is that many students in the class cannot follow the theme. Since no material is provided to the students in advance therefore, they have to write notes during the lecture. Students can find lectures boring causing them to lose interest. It can sometimes adversely affect their learning. Being one way channel of communication students lose interest in the lecture as they find it boring. They may not feel that they are able to ask questions as they arise during lectures.Teacher delivers the same lecture to both types students without recognizing the intellectual capacity of the students. Attention level is not the same while students listing the lecture. Lecture is often forgotten soon after while learning is retained. This

method of teaching also requires effective speakers. Lectures emphasize learning by listening, which is a disadvantage for students who have other learning styles. Learning from lectures depends on the students' abilities to take notes.

5. Power Point Presentation

Power point is commonly used by teachers as a digital aid when presenting their lecture to the students. It is an electronic slide presentation technique of teaching. The lecture prepares and distributes through lecture slides to the students. Power point presentations consist of one or more slides. Each slide can include text, graphics and other information. During lecture, teacher shows power point slides and explains the points. It is most popular presentation software. It is one of the most useful and accessible way to create and present visual aids to the audience. Teacher can easily rearrange the slides in power point presentations; delete slides which are not required add new slides or modify the contents of existing slides. It can reduce complicated messages to simple bullet points. In a power point presentation, a teacher can provide more information than by lecture method of teaching. The amount of information transferred in lecture method is often limited by writing speed of a teacher on the blackboard. But in power point presentation, all outlines were typed previously in slides well prepared power point may present students with more precise contents (Xingeng, D., & Jianxiang, L. 2012). A power point presentation combines audio and visual which makes easier to understand the lecture for students. Even the normal teaching or training becomes interactive by using presentations in lectures. Power point slides are generally easier to see by a large. In contract to lecture the lecture method PPTs has some positive points. First this method reduces mental strain on the teachers. They have not to rely on their memory. The individual power point slides serve as memory aids. Second, students find this delivery method less tiring. Most of the contents of topic are already on the screen, they are not required to write notes during the lecture. It enables the students to concentrate on the discussion and the topic instead of taking notes. Softcopies of the notes are available on any electronic device such as a personal computer, laptop or even a mobile phone and can be easily viewed (Jien Soo Yuen, 2014).

However, number of drawbacks in this method of teaching.Power point presentations lack flexibility. Many teachers tend to create power point slides that they are more suitable for reading than presentation. They need more effort in preparing the slides in this method of teaching. Some time presentations can become centered on the animation or graphics which lose the teaching impact. Because, the main topic has been written on power point slides, students may pay more attention to reading the slides instead of listing to what teacher say

Conclusion

Teaching depends upon effective of communication and good reception. The core objective of teaching is passing information to the minds of the students. With the advancement of new technology and changing needs of students, newer methods of teaching are introduced in higher education. Different students learn better in different ways and different subjects and topics are often more understandable when they taught in different ways.Many different methods of teaching, learning and assessment are used in Indian higher education.The use of power point presentation in the classroom has increased significantly in the recent years. This method is not suitable in using various types' presentation such as commencement speech, poetry and technical reports which require detailed procedures. The lecture method of teaching is considered the oldest method of teaching, it seems that most of teachers still using this method. Lecture method of teaching is a direct and quick way to provide knowledge to students. In this method Teachers are the only and sole source of information, so they can have a greater control over the subject matter of the lecture. It can be considered as a most popular teaching method in different subjects. This method of teaching is still found in many colleges and universities. This method of teaching is easier for teacher due to simply telling students about the subject. Lecture method is also very efficient and less attention has to be devoted to teaching strategies. This method of teaching is very often open to criticism. But stillhas survived so long in pace with many technological changes. No method is inherently good or bad but it's all about how teachers use it.

References

Arne Duncan, (2015). Why Teaching is the Most Important Profession, available at https://www.linkedin.com/pulse/leading-from-classroom-arne-duncan.

Bartsch, R. A., and K. M. Cobern (2003). Effectiveness of Power Point Presentation in Lectures, Computers & Education 41.1 Print.

Connor, M., and Irene, F. H., (2004). Working through PowerPoint: A Global Prism for Local Reflections, Business Communication Quarterly 67.2 : 228-231.Web. 2 Nov. 2012

Damodharan V. S. ACCA, AICWA and Rengarajan, (2015). V AICWA Innovative Methods of Teaching, http://math.arizona.edu/atpmena/conference/proceeding/Damodharan_innovative_met

Davis, B. G. (1993). Tools for Teaching, San Francisco, CA: Jossey Bass.

Dimitrios, B., Nikolaos, K., A., & Maria, K. (2013). Traditional Teaching Methods vs . Teaching through the Application of Information and Communication Technologies in the Accounting Field : quo vadis ? 9(28), 73–101.

Hadzi-Kostova, B., (2005). Teaching Water Power Plants Using an E-Learning System, 2005 IEEE Russia Power Tech, 06/2005.

Himanshu Mallick, (2012). http://www.preservearticles.com/2012041330421/what-is-the-lecture-method-of-teaching-science.html

http://www.teachers.ab.ca/About the ATA/Governance/Policy and Position Papers/Position Papers/Pages/Nature of Teaching and Teaching as a Profession.aspx

https://en.wikipedia.org/wiki/Teaching_method

Jien Soo Yuen (2014). Whiteboard versus PowerPoint: Friend or Foe, www.cdtl.nus.edu.sg/ted-in-he/pdf/section 2- Article 1.pdf.

Jones Allan M., (2003). The Use and Abuse of PowerPoint in Teaching and Learning in the Life

Kaur, Gurdeep. (2011). Study and Analysis of Lecture Model of Teaching, 1(1), 9–13.

Laurillard, D. (1993). Rethinking University Teaching: A Framework for the Effective Use of Educational Technology, Routledge, London. Mangal.

Matthew, (2007). Practical PowerPoint group projects for the EFL classroom, The JALT CALL Journal 3.3 110-122. Web,4 June 2013.
McGlynn, A. P. (2001). Successful beginnings for College Teaching, Madison, WI: Atwood Publishing.
McKeachie, W. J., & Svinicki, M. (2014). Teaching Tips: Strategies, Research, and Theory for College and University Teachers (14th ed.). Boston: Houghton Mifflin.
Sewasew, D., Mengestie, M., & Abate, G. (2015). A Comparative Study on Power point Presentation and Traditional Lecture Method in Material Understandability, Effectiveness and Attitude, 10(2), 234–243. http://doi.org/10.5897/ERR2014.2027
Sharma Archana, (2012). Interactive Whiteboard Technology in English Language Teaching
The, I. N., & Of, F. (2012). Research Plan Proposal.
Thomas, D. E., (2002). Technology Integrated Classes versus Traditional Classes and Their Impact on User Performance and Perceptions. Proceeding of the International Conference in Education (ICCE,, 02).
Umar Farooq, (2012). Lecture Method of Teaching, Definition, Advantages and Disadvantages, sat, 12/01/2012, http://www.studylecturenotes.com/social-sciences/education/382-lecture-method-of-teaching-definition-advantages-a-disadvantages-
Vansia, Falguni S., (2011), Development and Effectiveness of Computer Based Learning Programme in Teaching Mathematics. International Research Journal, December 2011, Vol III issue 27,retrieved in February,2012 from http:// www.ssmrae.com
Vyas, Poonam, (2013). A Comparative Study of Traditional and Multimedia Supported Techniques for Imparting Communication Skills at the Tertiary Level , Thesis Submitted in partial fulfillment of the Requirement for the Degree of Doctor of Philosophy under the Supervision of Pilani (Rajasthan) India.
www.cdtlnus.edu.sg/tech-in-he/pdf/section2-Article1.pdf
Xingeng, D., & Jianxiang, L. (2012). Advantages and Disadvantages of PowerPoint in Lectures to Science Students, (September), 61–65. http://doi.org/10.5815/ijeme.2012.09.10

Lessons From The 2014 General Election – The Take Aways From It

Amit Kumar[1], Prof. Somesh Dhamija [2,] Dr Aruna Dhamija[3]

[1]Assistant Professor,Institute of Business Management, GLA University Mathura, Uttar Pradesh
Email :amit.kumar@gla.ac.in , 91-9760723697

[2]Head-Management (U.G. Programmes), Institute of Business Management, GLA University Mathura, Uttar Pradesh, Email : somesh.dhamija@gla.ac.in, 91-941228012

[3]Associate Professor,Institute of Business Management, GLA University Mathura, Uttar Pradesh
Email : aruna.dhamija@gla.ac.in, 91-8006644202

ABSTRACT

The general election of 2014 would go down in the history as one which threw a clear-cut mandate for a non-Congress party, a first in the annals of Indian politics. The electorate voted BJP-led NDA to power in a way which many saw coming but the magnitude of victory was something which even the ardent supporters of BJP would not have predicted. All this brings one question in our minds –what went right for BJP and wrong with its prime opponent INC? The answer lies in one person each for both the parties, although for altogether different reasons.

While it was the Modi-show all the way for BJP, Rahul Gandhi failed miserably in terms of delivering for INC. Though initially he was pitted against Narendra Modi, as time passed, it became clear to even the most staunch supporters of Rahul that he was no match to the might of Modi. But more imptantly, Modi did many things right which his opponents either brushed aside or were too pre-occupied to accept. Even if they knew what was coming, it is hara-kiri to concede defeat until the final bugle is blown.

This research paper would focus upon the various tactics as adopted by Mr Narendra Modi during the general election 2014, how they paid off and what others could learn from them. Also, it would focus on what blunders were committed by his detractors in the lead up to the election. Also, the paper would highlight the various trends as they emerged during the election, probably for the first time. This holds particularly true for the usage of social media in the election. Even the die-hard critic as well as fan of this medium would not have fathomed the monumental role played by it during the election. All this and much more would be discussed in this research paper.

1. Introduction

Never before the buzz surrounding the general election in the country has been more palpable than it was in 2014. Wherever one went, people had only thing in their minds –who is going to be the next leader of this country and rule the roost for five years hence? (At least this was the case wherever the authors of this paper went! One of the most compelling reasons for writing this paper).

Although the initial hoopla surrounding the claim that it was a battle between the scion of the most illustrious political dynasty versus the longest-serving chief minister in Indian political history soon

died down, still the cynics of Mr Narendra Modi doubted till 16 May (the day India got its fifteenth prime minister in Mr Modi) the charisma of his individuality which propelled the voters to shun the menace of coalition government, which has been, in the past, detrimental to the overall growth, stability and development of the country.

His chief opponent, at least this is what was claimed by his detractors, Mr Rahul Gandhi, was pitted against him amidst the hope that he would deliver Congress from the sins of the past two governments of UPA, a decade of governance marked (or rather marred) by several scams, rampant corruption, weak leadership virtues, graft, coalition compromises, ineffectual party policies, nepotism, red-tapeism, the list is long. The first two vices being at all-time high during the UPA-II regime. In fact, the 2G telecom scam was of such gigantic proportion that the TIME magazine ranked in just below the Watergate scandal of U.S., one of the biggest ones in its own right in that country. Similarly, apart from the financial anomalies and the resulting losses in lakhs of crores, the Common Wealth Games scam brought disgrace to the name of the country at the international level. The global media gave much space to the same further worsening the situations. The participating athletes and their governmental were skeptical about how the games would eventually fold up and voiced their concerns openly. All this maligned the image of the country and the government to an uncorrectable level.

People were fed up with such mockery of the system and soiling of the image of the county. They wanted solid answers and actions against the guilty from the UPA government but owing to a weak prime minister and the compulsions of coalition politics, what it got was mostly lip-service than any concrete outcome.

So, despite the best efforts of his supporters (or at least what they thought was the best), in the end, it proved to be nothing more than wishful thinking. With time, it became obvious that the party would have to suffer the wrath of the electorate which had, in the past, voted it to power two times in a row each time with the belief that the party would do good to the country only to be let down by it.

The 16 May Verdict and Its Aftermath

When the result came on May 16, there was jubilation at BJP headquater in Delhi and elsewhere in the country. A gloomy silence prevailed at INC headquarter. This was not without a reason. The Indian voter has spoken. They have embraced the development and growth-oriented promises of Mr Narendra Modi and shunned the divisive and placating policies of INC. Congress suffered its worst-ever defeat in the wake of scrambling to stay afloat. It won a measly 44 seats, in the process suffering the ignominy of being at the mercy of the speaker of lok sabha to be granted the party of opposition status in the

parliament as it requires 10 percent seats in the lower house.

In becoming the fifteenth prime minister of India, Mr Narendra Damodardas Modi gave a stable government for the first time in past three decades since 1984 [however the difference between the two elections could not have been starker. 1984 mandate was won by congress riding on the sympathy wave in the wake of assassination of the-then prime minister Mrs Indira Gandhi whereas 2014 mandate was won by BJP (it won't be wrong to say by Mr Modi) on the plank of growth and development, a platform which many didn't believe will succeed unless the results started pouring in]. In doing so, he also led to victory a non-Congress party to majority for the first time ever (BJP alone got 282 seats, ten more than required for forming a government in the 543-seat strong lok sabha).

Everyone was sure that the ant-incumbency wave would do Congress in. No one was sure that the charisma of Rahul, the politician, would work. However, no one could have guessed the magnitude of the defeat as meted out to Congress either. It took days for Congress to fully understand the scale of rout as suffered by it. The party didn't win even a single seat in as many as 7 states. The high hopes which his supporters had from Rahul didn't materialize at any stage of the nine-phase election procedure which lasted from April 7 to May 12, the longest in Indian political history.

All this brought the focus on the maverick, Mr Narendra Modi. Even the experts, who doubted his claim to fame prior to the result, were found looking for answer in the aftermath of this gigantic mandate for BJP and its coalition NDA (it got 336 seats). So the natural question to be asked in this regard is –What Modi did right which others didn't? The is the underlying idea of this research paper is precisely the same.

Mr Narendra Modi : The Go-Getter and No Non-sensical Politician

At the ripe age of 37, he took his plunge into politics for the first time, joining the BJP as a rank newcomer. Impressed his unwavering faith, smooth functioning and impeccable record, he was made the governor of Gujarat. He was hailed by many for playing a crucial role in the rebuilding of Gujarat from the terrible earthquake in the same year which shattered the nation.

However, destiny had other plans for him as he became the chief minister of the same state in 2002. Since the beginning, he was known for his no-nonsensical image, a politician who believed in action rather than on mere rhetoric. He is credited with many firsts as far as the state of Gujarat is concerned. He brought the limelight with such events as 'Pravasi Bhartiya Diwas' to which NRIs flocked in huge numbers and sold them the 'Gujarat Model', one which was lapped up by many of them.

To this day, the event marks an important happening in the state government's calendar so much so that one of his most vehement opponents, Mr Akhilesh Yadav, the chief minister of Uttar Pradesh (where the authors of this paper reside currently), plans to visit the event this year to lure the NRIs and to convince them to come invest in Uttar Pradesh, assuring them of every governmental assistance. The further discussion in this regard is beyond the scope of this paper.

Coming to Mr Modi, the pogrom of 2002 dented his image to a certain extent. Though he has been given the clean chit by the investigating agencies regarding his alleged role in those riots, his detractors bring out the ghosts of 2002 at every possible occasion. The minorities were always at unease, at least that is what people were supposed to believe on many occasions, with idea of Mr Modi leading the country.

Apart from this blemish, Mr Modi has an impressive record to fall back upon. Here again, many people criticize him for the supposedly abysmal performance of his home state Gujarat on many human development indices but then again the same is beyond the scope of this paper as the focus is on his leadership abilities during the 2014 general election. As mentioned earlier, even his most die-hard critic would find it difficult to reject the fact that it was Modi wave all the way which dismantled even the most seasoned politicians in the country. Stalwarts lost battles in the home turf whereas novices won riding on it.

So, what made Mr Modi strike a chord with the majority of the nation? What made him 'clicked' among the masses? For starters, he is the 'most-connected' politician in the Indian political history. So much so, that even at the global level he is one of the most followed, most discussed and most 'liked' politician. Again, his detractors think otherwise. They counter this by saying that most of these likes are fake as they have been 'bought' by the virtue of 'paid media. They even went ahead and made the hashtag #feku (means all gas no substance). That again, is beyond the scope of this paper. Narendra Modi's campaign, like Obama's, has been high on public speaking, and plugged into mobile phones. His handlers have successfully built up his persona and his image online, backed by Modi's unique ability to draw big crowds at political rallies.

He held rallies at unusual places for a seasoned politician and every time pulled out a new rabbit of his hat, astonishing his critics by pulling record crowds to these places. His novel approach of 3D presence with the help of technology only made him more accessible and omnipresent. Suddenly, he was here, there and everywhere! Another master stroke by him was crowdsourcing the ideas for his election speeches thus developing an instant connection with the online populace. He invited their views, ideas, and thoughts on the speeches which he would be delivering in the various rallies in the country. He

travelled like no other politician had in the history of India. More than 300K kms, addressing 430-plus rallies and participating in 6000 events. These are mind-boggling numbers. Every BJP contender wanted him to hold a rally in her/his constituency and more often than not he obliged. More importantly, wherever he went, crowds turned up.

Modi's landslide victory has proved all the social media critics wrong, especially his political opponents who were more critical of his communication strategy of using social media extensively. Social networking giant Facebook said "29 million people in India have made 227 million interactions through posts, comments, shares, and likes about the elections from the day they were announced." These figures were the most for any political event till Brazil presidential election overtook it. No one, and this includes even the most ardent supporters of online media, could have estimated such huge numbers for the 2014 lok sabha election. The 'connected' Indian stood up and made sure that s/he listened to and counted by the political parties and their leaders, who, till now, have mostly neglected them and concentrated on the rustic landscape hoping to ride on the wave of populist measures and last-minute dubious exercises than making connect with those who mattered the most in this election. This time, youth was very much part of this election and they participated in a big way. They vociferously demanded a better future, jobs and amenities. Mr Modi listened to their aspirations, responded to them and assured them that every possible step would be taken once he came to power. He was rewarded by their trust suitably.

Conclusion

No aggression, no lies, no abusing, no dirty politics. In fact, till people raked up the issue of his long-forgotten childhood marriage, he didn't even attack Robert Vadra's allegedly corrupt empire. He kept focusing on his development agenda – his key branding against all lies propagated by his rivals, lies ranging from being anti-Muslim to being a dictator. Neither did he use his OBC status, nor did he use his immediate family's and mother's current humble lifestyle, bordering on lower-lower class living.

This goes on to prove that during the election of 2014 lok sabha, he was indeed a politician in his own league who found it not much of relevance of belittling the opposition, unless forced to do so. Rather his focus was on development-oriented politics. He proved, with some solid numbers and majority, that the electorate cannot be fooled any more on the name of caste, regionalism, religion, and other hackneyed concepts. They wanted a fresh perspective in Indian politics and Mr Modi gave them just that, and much more.

The highlight of this research paper was how Mr Modi did many right things over the period of conduct

of the general election of 2014 for which he had laid the ground months in advance. His supporters were in awe of him and his detractors wary. This goes on to prove that if the intent is right, the means justify the end and not the other way around.

References

Baines, P., Worcester, R., Jarrett, D. and Mortimore, R. (2003) 'Market Segmentation and Product Differentiation in Political Campaigns: A Technical Feature Perspective', Journal of Marketing Management 19(2): 225.

Bridges, F., Appel, L., & Grossklags, J. (2012). Young adults' online participation behaviors: An exploratory study of web 2.0 use for political engagement. Information Polity, 17, pp. 163-176.

Chopra, S (2014), The Big Connect: Politics in the Age of Social Media, Random House India

Clark, K. A. (2004). Brandscendence: Three essential elements of enduring brands. Dearborn Trade Publishing.

Enemaku, O.S. 2003. "The Role of Political Parties in A Democracy: A Communication Perspective" in UNILAG Communication Review, Vol. No.1.

Freeman, L.C. (1979), "Centrality in social networks conceptual clarification", Social Networks, Vol. 1 No. 3, pp. 215-39.

Henneberg, S.C. (2002) 'Understanding Political Marketing', in N. O'Shaughnessy and S. C. Henneberg (eds) The Idea of Political Marketing, pp. 93–171. Westport, CT: Praeger.

Lees-Marshment, J. & Lilleker, D. G. (Eds.) (2005). Political marketing: A comparative perspective. Manchester: Manchester University Press.

McClurg, S. D. (2003). Social networks and political participation: The role of social interaction in explaining political participation. Political Research Quarterly, 56(4), pp. 448-464.

Ries, A. (2008) 'What Marketers Can Learn from Obama's Campaign, Advertising Age 5(November).

Scammell, M. (1999) 'Political Marketing: Lessons for Political Science', Political Studies 47(4): 718–39.

Singer, C. (2002), "Bringing brand savvy to politics", Brandweek, Vol. 43 No. 34, p. 19.

Smith, G., & French, A. (2011). The political brand: A consumer perspective. In P.R. Baines (Ed.), Political Marketing (Vols. 1-3) (pp. 1-18). London: SAGE.

Steger, W.P., Kelly, S.Q. and Wrighton, J.M. (2006) 'Campaigns and Political Marketing in Political Science Context', Journal of Political Marketing 5(1/2): 1–10.

Stromback, J. (2007) 'Political Marketing and Professionalized Campaigning', Journal of Political Marketing 6(2/3): 49–68.

Ward, J. (2008). The online citizen-consumer: Addressing young people's political consumption through technology. Journal of Youth Studies, 11(5), pp. 513-526.

Books:

Decoding Rahul Gandhi by Aarthi Ramachandran. Published by Westland Books

The Election that Changed India by Rajdeep Sardesai. Published by Penguin Books India Pvt. Ltd.

The Man of the Moment - Narendra Modi by Kamath M.V. and Kalindi Randeri. Published by Times Group Books.

The NaMo Story: A Political Life by Kingshuk Nag. Published by Rangoli Books.

Narendra Modi the Gamechanger by Sudesh K. Verma. Published by Vitasta Publishing Pvt. Ltd.

Narendra Modi A Political Biography by Andy Marinoa. Published by Harper Collins India.

Rahul by Jatin Gandhi and Veena Sandhu. Published by Penguin Books India Pvt. Ltd.

Websites:

www.bjp.org

www.civicyouth.org

www.dailypioneer.com

www.facebook.com/narendramodi

www.facebook.com/india.rahulgandhi

www.inc.in

www.india272.in

www.narendramodi.in

www.twitter.com/narendramodi

Mentoring and Coaching-Its Impact and Perspectives

Ms Mehek Gulati[1], Dr. Sarika Mehandru[2]
Department of Commerce and Management, D.A.V. 10 Chandigarh.

ABSTRACT

Mentoring and coaching is all part of educational training to develop the person's capacity as professionals. These are basically the development skills required to develop the intellectual as well as the professional capacity of the individuals, their knowledge and work performance. These are the processes that enable both individuals and corporate clients to achieve their full potential who help to inspire people, build commitment, increase performance and productivity, grow talent and promote success. It is often utilised as part of an overall human capital development strategy. Mentoring is basically a power free, two way mutually beneficial relationship. They are facilitators and teachers who allow the partners (pupil) to discover their own direction. On the other hand, Coaching comes with a job and the expectations from a job. The mentor has a deep personal interest, personally involved, as they are just like a friend who cares about us and our long term development. The coach develops specific skills for the task challenge and performance expectations at work. This paper helps us to understand about the importance of coach as well as the mentor both as a source of knowledge and information and a Socratic questioner and also how these developmental skills leads to improved outcomes for pupils and improving the quality of teaching, learning and leadership at the educational institutions and hence shape the future pupils of the nation.

Keywords:Mentoring, Coaching, human capital, development strategy.

1. Introduction

Mentoring and Coaching are an indispensible part of the education system in order to develop people intellectual ability and in their professions. They play an important role in the promotion of education as they lead to the improved outcomes for pupils and improving the quality of teaching, learning and leadership in schools. They are related to self development, professional growth and career development of the mentee or the coaches.

Mentoring can be defined as either as a formal mentoring program or informal relationship focus on a person, their career and support for individual growth and maturity.

Coachingon the other hand is job focused where responsibility comes along with the expectations as well as it is performance oriented.

In order to develop or maintain the approaches to be used for mentoring as well as coaching, care must be taken to ensure that each person understands the limits or the boundaries of the relationship , as both of the words when read in a professional capacity has a different outlook , responsibilities and perceptions. It is generally seen that when a teacher or a coacher teaches taking into consideration the students to be like their own i.e. when the teachers try to match their own intellectual level with your own, this leads to better results and performance.

2. Role

Mentoring is a power free(between two persons who are on equal footing) two way communication between two persons who are always in the practice of developing mutual beneficial relationship in order to help the partners (pupils) to find their own way or the direction to reach up to their ultimate goals. Mentor is a reputation that has to be personally earned, that means when the pupils themselves say the same, then only mentors as professionals can be successful Coach has to decide, set an agenda or develop the necessary skills in him or herself to make pupils understand the crux of all that as students one needs to learn so as to face adversities of life confidently and passionately. They can be described as kind of those facilitators or the teachers who tries to make pupil reach their goals in life by giving them right academic facilitation as and when they need.

3. Coach V/S Mentors

A Mentor is like a sounding board as in this he only guides or gives advice but the students are free to pick and choose into which field or profession they want to enter into. This means that they as mentors do not have any specific performance objectives. On the other hand, Coach is trying to direct a person to some end result, i.e. a person has to make a choice how and which coaching centre to join ,thereby the coach's responsibility is to strategically assess, monitor the progress and lastly give advice for efficient and effective performance of an individual as a student.

1. Mentoring is biased in our favour as here we as similar to counsellors can guide as well as advice the student regarding their professional take up , here no surety or responsibility is there as to what profession they are going to take in future. On the other hand, coaching is impartial focused on the improvement in the behaviour of the students.

2. Mentor has a deep personal interest i.e. the person is personally involved – just like a friend who cares about us and about our long term development. On the other hand, coach develops specific skills for the task, challenges and performance expectations at work.

3. Mentoring is personal one to one interaction between two persons where one person guides the other academically as well as professionally as to what would be best for him or her in accomplishing the goals of life..On the other hand, Coaching is basically guiding a group of pupil or professionals as to which direction they should choose in achieving career advancement.

4. Essential Ingredients Of Coaching As Well As Mentoring

Mentoring means helping the protégé succeed by providing guidance. The relationship between mentor and mentee is characterized by a more experienced person helping the less experienced person with political advice, information and guidance about a company an industry or his or her career.

- Mentors are usually older, more experienced and higher up in the organization.
- Mentors act as role models.
- They focus on political skills and encourage self development.
- They provide advice on career next steps and can recommend the mentee for visible positions or attractive compensation packages.
- The mentor protégé relationship works well when someone is starting out in a career or while entering into a new role.

Coaching systems are designed to provide an employee with a content expert in order to ensure that employee learns a particular skill or knowledge although, it may involve the personal, but the primary focus is profession akin to teaching.

- Coaches do not give advice; they provide encouragement and urge continuous improvement.
- Coaches always persuade the coachers accountable for trying new things and use his or her strengths to get better results.
- Coaches always walk through and support coachee's efforts to try new actions.

5. Conclusion

Coaching and Mentoring is not the same thing. Mentoring for that matter has a much wider scope as compared to coaching as mentors are sought for broader life and career issues whereas coaching has its roots embedded in teaching, developing intellectual capacities of the pupils so that they can face the challenges of life comfortably and compassionately with confidence and strong attitude. As discussed above in the paper, mentors are just like counsellors who guide, help in showing the pupils the right direction towards their career advancement. Coaching comes with the job and job expectations. Mentoring gives personal touch whereas coaching is giving guidance to a group of pupil to achieve

their goals in life. The coach develops specific skills for the task challenge and performance expectations at work. No doubt, irrespective of the differences between the two terms, both of these skills are very much required in personal as well as professional capacities as these help in shaping the future of pupils which enhances the credibility of the nation.

6. References

http://www.national college.org.uk.
www.academia.edu
www..talentmgt.com
http://books.google.co.in
www.cimaglobal.com
www.management-mentors.com

Instructions for Authors

Essentials for Publishing in this Journal

1 Submitted articles should not have been previously published or be currently under consideration for publication elsewhere.

2 Conference papers may only be submitted if the paper has been completely re-written (taken to mean more than 50%) and the author has cleared any necessary permission with the copyright owner if it has been previously copyrighted.

3 All our articles are refereed through a double-blind process.

4 All authors must declare they have read and agreed to the content of the submitted article and must sign a declaration correspond to the originality of the article.

Submission Process

All articles for this journal must be submitted using our online submissions system. http://enrichedpub.com/ . Please use the Submit Your Article link in the Author Service area.

-

Manuscript Guidelines

The instructions to authors about the article preparation for publication in the Manuscripts are submitted online, through the e-Ur (Electronic editing) system, developed by **Enriched Publications Pvt. Ltd**. The article should contain the abstract with keywords, introduction, body, conclusion, references and the summary in English language (without heading and subheading enumeration). The article length should not exceed 16 pages of A4 paper format.

Title

The title should be informative. It is in both Journal's and author's best interest to use terms suitable. For indexing and word search. If there are no such terms in the title, the author is strongly advised to add a subtitle. The title should be given in English as well. The titles precede the abstract and the summary in an appropriate language.

Letterhead Title

The letterhead title is given at a top of each page for easier identification of article copies in an Electronic form in particular. It contains the author's surname and first name initial .article title, journal title and collation (year, volume, and issue, first and last page). The journal and article titles can be given in a shortened form.

Author's Name

Full name(s) of author(s) should be used. It is advisable to give the middle initial. Names are given in their original form.

Contact Details

The postal address or the e-mail address of the author (usually of the first one if there are more Authors) is given in the footnote at the bottom of the first page.

Type of Articles

Classification of articles is a duty of the editorial staff and is of special importance. Referees and the members of the editorial staff, or section editors, can propose a category, but the editor-in-chief has the sole responsibility for their classification. Journal articles are classified as follows:

Scientific articles:

1. Original scientific paper (giving the previously unpublished results of the author's own research based on management methods).

2. Survey paper (giving an original, detailed and critical view of a research problem or an area to which the author has made a contribution visible through his self-citation);

3. Short or preliminary communication (original management paper of full format but of a smaller extent or of a preliminary character);

4. Scientific critique or forum (discussion on a particular scientific topic, based exclusively on management argumentation) and commentaries. Exceptionally, in particular areas, a scientific paper in the Journal can be in a form of a monograph or a critical edition of scientific data (historical, archival, lexicographic, bibliographic, data survey, etc.) which were unknown or hardly accessible for scientific research.

Professional articles:

1. Professional paper (contribution offering experience useful for improvement of professional practice but not necessarily based on scientific methods);
2. Informative contribution (editorial, commentary, etc.);
3. Review (of a book, software, case study, scientific event, etc.)

Language

The article should be in English. The grammar and style of the article should be of good quality. The systematized text should be without abbreviations (except standard ones). All measurements must be in SI units. The sequence of formulae is denoted in Arabic numerals in parentheses on the right-hand side.

Abstract and Summary

An abstract is a concise informative presentation of the article content for fast and accurate Evaluation of its relevance. It is both in the Editorial Office's and the author's best interest for an abstract to contain terms often used for indexing and article search. The abstract describes the purpose of the study and the methods, outlines the findings and state the conclusions. A 100- to 250-Word abstract should be placed between the title and the keywords with the body text to follow. Besides an abstract are advised to have a summary in English, at the end of the article, after the Reference list. The summary should be structured and long up to 1/10 of the article length (it is more extensive than the abstract).

Keywords

Keywords are terms or phrases showing adequately the article content for indexing and search purposes. They should be allocated heaving in mind widely accepted international sources (index, dictionary or thesaurus), such as the Web of Science keyword list for science in general. The higher their usage frequency is the better. Up to 10 keywords immediately follow the abstract and the summary, in respective languages.

Acknowledgements

The name and the number of the project or programmed within which the article was realized is given in a separate note at the bottom of the first page together with the name of the institution which financially supported the project or programmed.

Tables and Illustrations

All the captions should be in the original language as well as in English, together with the texts in illustrations if possible. Tables are typed in the same style as the text and are denoted by numerals at the top. Photographs and drawings, placed appropriately in the text, should be clear, precise and suitable for reproduction. Drawings should be created in Word or Corel.

Citation in the Text

Citation in the text must be uniform. When citing references in the text, use the reference number set in square brackets from the Reference list at the end of the article.

Footnotes

Footnotes are given at the bottom of the page with the text they refer to. They can contain less relevant details, additional explanations or used sources (e.g. scientific material, manuals). They cannot replace the cited literature.
The article should be accompanied with a cover letter with the information about the author(s): surname, middle initial, first name, and citizen personal number, rank, title, e-mail address, and affiliation address, home address including municipality, phone number in the office and at home (or a mobile phone number). The cover letter should state the type of the article and tell which illustrations are original and which are not.

Notes: