₹ 200 ISSN - 2249-555X
Volume : 1 Issue : 8 May 2012

Journal for All Subjects

www.ijar.in

Listed in International ISSN Directory, Paris.

ISSN - 2249-555X

Indian Journal of Applied Research

Journal for All Subjects

Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College, New Congres Bhavan, Paldi,
Ahmedabad-380006, Gujarat, INDIA
Contact.: +91-9824097643 E-mail : editor@ijar.in

INDEX

Sr. No.	Title	Author	Subject	Page No.
1	Accounting Programs for Cost Accounting	Prof. Kalola Rimaben A.	Accountancy	1-3
2	Petrography of the Volcanic and Metavolcanic Rocks of Middle Siang Valley, East Siang District, Arunachal Pradesh, India	P. Bhattacharyya , T.K. Goswami, C. Taye	Applied Geology	4-8
3	Petrography and geochemistry of the host rock of sulphide mineralisation in Potin area, Subansiri district, Arunachal Pradesh, India	P. Bhattacharyya , B.K. Tamuli, D. Majumdar	Applied Geology	9-13
4	Better Work Environment for Small Scale Industries in Developing Countries	Tapan Kumar Majumdar	Architecture	14-15
5	Generation of Bioelectricty from Waste water and Cow's urine	H.Vignesh, Hema Kalai Rani	Biotechnology	16-19
6	Constraints in Grapes Production: An Experience of Tamil Nadu Grapes Growers	Mr. Suresh. G, Dr. S. Krishnamurthy	Commerce	20-22
7	Determinants Of Dividend – A Study With Reference to Selected Companies in India	Dr.M.N.Periasamy	Commerce	23-26
8	Coffee Consumption in India: An Exploratory Study	Shri Arvind A. Dhond	Commerce	27-29
9	A Study on Impact of Women of Self Help GROUPs	D. Bhuvana	Commerce	30-31
10	Impact Of Micro Finance Through Shg-Bank Linkage Programme In Salem District, Tamilnadu	Dr. M. Sumathy, E. Nixon Amirtharaj	Commerce	32-33
11	"A Study On Job Stress With Special Reference To Textile Industries In Tirupur"	DR.M. DHANABHAKYAM , T.SUMATHI	Commerce	34-37
12	The Role of Individual Enterprise and Entrepreneurship in The Economic Development of India, Challenges and Opportunities	A.K.Chandra, B.P.Singh, V.S. Negi	Commerce	38-40
13	Customer Preferences And Attitudes Towards Maruti Cars In Pollachi Taluk	N. MANOHARAN, Dr. R. GANAPATHI	Commerce	41-45
14	(Disaster Management in India : An overview)	Dr. Pawar Ashok S. , Dr. Sunita J. Rathod , Shri. Budhwant R.G.	Economics	46-48
15	Economic condition of Banjara and Vanjari communities in India :An overview	Dr. Pawar Ashok S. , Dr.Rathod Sunita J. , Tidke Atish S.	Economics	49-51
16	(Rajshri Shahu Maharajache Shikshan Sarvatrikaran v Stri Sabalikaran Vishayak Drastikon)	Dr. Pawar Ashok S., Dr. Sunita J. Rathod ,Dr. Vishal Tayade	Economics	52-53
17	"Problems Of Self Help Group Members In Bidar District Of Karnataka"	DR.SANGAPPA V. MAMANSHETTY	Economics	54-56
18	The Role of Private And Public Sectors: An Analysis of Methodological Steps In Understanding Growth Cycles	Dr. Shivsharanappa Dhaba	Economics	57-59
19	"Reforms, Incidence Of Poverty And Employment In India"	Dr. Devraj G. Ganvit	Economics	60-62
20	An Innovative Teaching Module to Enhance The Knowledge In Grammar Among The High School Students Of Palghat District	Elsamma Sebastian	Education	63-64
21	Construction of a web course material and evaluating its performance vis a vis conventional approach towards learning: a pilot study	Ms. Sreetanuka Nath	Education	65-67

22	Academic Achievement In Relation to Time Perception and Coping Styles	Dr. D. Hassan, Dr. V. Tulasi Das	Education	68-71
23	Use Of E-Resources to Enhance Performance by the Student-Teachers	Dr. S. K. Panneer Selvam	Education	72-74
24	Studies on The Removal of Blue 4 Dye from Textile Effluents Using Cotton Stem	N. Prasanna, Renjitha Saji , S. Bhuvaneswari ,A. Priya	Engineering	75-77
25	Implementation of Self controlled Arbiter for High Speed Communication in on-chip	Kaushik Mukherjee, A.Ch. Sudhir , Dr. B Prabhakara Raob	Engineering	78-82
26	Rate Sequence Space (S2) π	B. Sivaraman , K. Chandrasekhara Rao , K. Vairamanickam Vairamanickam	Engineering	83-84
27	The Asphalt in The Hot And Cold Areas	Eng. Nasr Ahmad, Prof.Dr. Eng. Mihai Iliescu	Engineering	85-86
28	Corrective Measures to Reduce Physical Work Strain of Dairy Farming	Vinay Deepa, Sharma Suneeta	Ergonomics	87-89
29	Rural Women in Transition: A Case of Women Entrepreneurs	Varinder Randhawa , Ritu Mittal, Parul Gupta	Home Science	90-93
30	Nutritional Status and Impact of Functional Food Supplement on the Performance of Athletes	Uma Mageshwari.S , Mary Jenefer Sharmila.P	Home Science	94-96
31	Effective HRM for Global Competitiveness	Dr Mahalaxmi Krishnan	Human Resource Management	97-100
32	Role of Materials in English Language Teaching and Learning	Dr. Wajahat Hussain	Literature	101-102
33	Expatriate Women in The Fiction of Ruth Prawer Jhabvala	P. Mohanapriya	Literature	103-104
34	Prakruti Pariyavaran and Sahitya	Dr. Sanjay Rathod	Literature	105
35	Samkalin Hindi Kavita me Manviya Jivan ke Badalte	Dr. Sanjay Rathod	Literature	106-107
36	A Servant Turned an Administrator: A Study of Naikar's Kanakadasa: The Golden Servant	Ashok Hulibandi	Literature	108-110
37	A Study on Metacognitive Strategy in Terms of Reading Comprehension of Post Graduate English Literature Students	J.P.Vandhana, T.Sakthivel	Literature	111-112
38	The Psychic Patterns In The Protagonist Of Bharati Mukherjee's Wife.	B.Kalidoss,Dr. S.Kanakaraj,	Literature	113-114
39	Integrating action research paradigm into decision making -An investigation of an action research model	Haresh B. Barot	Management	115-117
40	A Study on Green Marketing Mix Towards Green Products	Urmila Vikas Patil	Management	118-120
41	Viral Marketing – Is It A Mirage or Reality?	Dr. Viral Shilu	Management	121-122
42	Evalution of Mandura Bhasma with & without Triphala Churna in Management Of 'Panduroga'	Dr.D.Anuradha, Dr. M.Srinivasulu	Management	123-125
43	A Conceptual Overview of Value Creation in Business Relationships	Abhishek Pande	Management	126-127
44	Plight of Women Entrepreneurs: A Diagnostic Study	Anuradha Averineni	Management	128-130
45	"Profitability Analysis Of Merger Textile Companies In India During Pre And Post-Merger Periods"	Dr. M. Dhanabhakyam ,R.Umadevi	Management	131-133

46	Impact Of Ngo's On Rural Marketing	R. DURGA RANI,Dr. R. GANAPATHI	Management	134-135
47	Status Of Mutual Fund In India	D. JAYANTHI,Dr. R. GANAPATHI,	Management	136-138
48	A Study on "The relevance of Human Resource Accounting in the Present Scenario"	Dr.Giridhar K.V. , Krupa V.D.	Management	139-140
49	Customers Attitude Towards Domestic Air Conditioners With Reference To Lg	M. LAKSHMI PRIYA, Dr. R. GANAPATHI,	Management	141-149
50	Interaction of Gender and Sexual Appeal on Effect of TV Advertisements	P. Shanthi, Dr. S. Thiyagarajan	Marketing	150-151
51	Study on Dislike towards TV advertisements – An empirical Evidence	Ruhani Mahajan, Sahil Goyal	Marketing	152-154
52	Emotions: Ace Tool For Marketing	Ashish Nathwani	Marketing	155-157
53	Comparison of Fluticasone propionate with Beclomethasone dipropionate in patients of Bronchial asthma"	RAMAKRISHNA GHUBDE, ARCHANA SHEKOKAR	Medical Science	158-160
54	A study of incidence and risk factors for neonatal systemic candidiasis	Dr Sheila Aiyer, Dr Pareshkumar A. Thakkar, Dr. Komal K. Patel, Dr. Kaushik A. Mehta	Medical Science	161-163
55	Pharmacoeconomic appraisal of antimicrobial utilization in a medical college hospital	Dr. Parveen Kumar Sharma, Dr. Rekha Bansal	Medical Science	164-166
56	Various aspects of antimicrobial utilization in OPD of a medical college hospital	Dr. Parveen Kumar Sharma, Dr. Rekha Bansal	Medical Science	167-168
57	Subjective well Being and Job Satisfaction Among Survivors of Economic Downturn	Vijaya. R, M. Y. Manjula	Psychology	169-172
58	Knowledge of Mothers About Nutrition of Child Under Five Years of Age	Dr.K.Jothy, Ms.S.Kalaiselvi	Social Sciences	173-175
59	Geriatric in India and Their Right to Health	Minni K. T.	Sociology	176-177

Volume : 1 | Issue : 7 | May 2012 ISSN - 2249-555X

Research Paper Education

Construction of a web course material and evaluating its performance vis a vis conventional approach towards learning: a pilot study

* Ms. Sreetanuka Nath

* Assistant Professor, K.J.Somaiya College of Education, Training and Research, Vidyavihar , Mumbai

ABSTRACT

The tremendous progression of the Internet has set the ground for the rapid development of learning material on the Web, so that many universities, colleges, and private companies throughout the world are developing courses in this new medium. There should be a shift from a technology-centered approach, as is currently the case, to a student- and content-centered approach wherein the decision to go for a Web learning would not be driven by the technology and what it can do or not, but by the students' needs and profile (e.g., education level, cognitive style, motivation), and the nature of content to acquire (e.g., conceptual vs. applied, declarative vs. procedural). That's where the necessity for developing ones website tailored to cater the needs of targeted audience arises. After all, the goal is to train people successfully, not to develop and use the technology for itself. This paper studies the effect of this "self help" web based learning material and comparing with traditional learning and understand the impact of the technological solution.

Keywords :

INTRODUCTION:

In preparing to enter the next century, educators face the challenge of serving a student population and society that is increasingly diverse. Moving into the next century, the student population is expected to be the fastest growing segment. Cantelon, in his 1995 book, 'Facilitating Web based Education', projects "... most of education will take place off-campus through technological methods of delivery". While web based education is already a fact of life for most universities and an increasing number of community colleges, knowing the intrinsic problems and overcoming them will be critical to successful implementation of web based programs on a larger scale in the future. In web learning students and teachers will find themselves playing different roles than is the norm in traditional education. The teacher is no longer the sole source of knowledge but instead becomes a facilitator to support student learning, while the student actively participates in what and how knowledge is imparted. More than any other teaching method, internet or web learning requires a collaborative effort between student and teacher, unbounded by the traditional limits of time, space, and single-instructor effort.

Technology has changed the face of education. Advances in telecommunications technology has opened up the possibility of personal and group interaction in web based education.

Both computer and audio conferencing permit the introduction of class discussions without the group meeting face to face. Phone calls and electronic mail replaces personal office visits. The web learner can now have almost the same instructional contact and interaction as the student on campus. But remote access education does not need to eliminate all the benefits of human contact. In fact, the proliferation of the modem, teleconferencing, and the World Wide Web provide a rich expanse of both information and contacts that were previously unavailable.

Changes in technology have accelerated the growth of internet or web based learning. The improved access and availability of electronic technology has enabled more students to participate in the learning process. Students who enroll in web learning courses do so for convenience. They are either time-bound due to work or travel schedules or location-bound due to geographic or family responsibilities. The improved access and availability of electronic technology has enabled more students to participate in the learning process.

Learning is the act or process of developing skill and knowledge. Modern web based learning and computing provides the means for fundamentally changing the way in which instruction is delivered to the students. It's true that many websites have nice features like interactive examples, videos, animations, narrative and written texts, multimedia features etc. But the materials in most of the websites are given in a very haphazard and in a very vast manner which may not be required in totality. This actually makes the readers at times very much directionless.

Jill M. Galusha, University of Southern Mississippi (1997), tells us that Web learning is student-centered learning; thus knowing the characteristics and demographics of the Web learners helps us understand the potential barriers to leaning. Knowledge about student characteristics and motivators help us understand who is likely to participate in web education and, conversely, why others choose not to participate.

Hence there should be shift from technology centered approach to student and content centered approach where the decision to go for web-learning would not be driven by technology or what it can do or not but by students' need and profile and the nature of the content to be acquired. That is where the necessity for developing one's website tailored to cater the need of the targeted audience arises. After all, the goal is to train people successfully and not to develop and use the technology for itself. Hence, websites are required to be tailored to provide students with self-help learning resources to compliment traditional learning. This paper studies the effect of tailored web design as a self-help web learning resource and compares with traditional learning and understands the impact of technological solution.

OBJECTIVES OF THE STUDY:-

To develop and design tailored web page for teaching specific content of standard IXth Science.

To study the effect of this web based material on learning in distance mode and comparing with traditional face to face learning and understand the impact of the technological solution.

HYPOTHESIS:-
There is no significant difference between the pre-test achievement scores of experimental group and control group.

There is no significant difference between the post-test achievement scores of experimental group and control group.

METHODOLOGY AND DESIGN OF THE STUDY:-
For the present study the researcher has selected the Experimental Method by keeping in mind the objectives of the study and the problem. In order to select a suitable research design for conducting the experiment and assign the subjects to different experimental treatments to measure the outcomes of experiment and assign the subjects to different experimental treatments to measure the outcomes of experiment, the researcher must be well acquainted with different types of experimental designs.

The researcher has used Quasi experimental research design involving Pretest-Posttest Equivalent Groups Design. The pre-tests was administered before the application of the experimental and control treatments and post-tests at the end of the treatment period. Gain scores were compared and subjected to test of significance of the difference between means. Pre-test scores were used in analysis of covariance to statistically control for any differences between the groups at the beginning of the study.

SAMPLE OF THE STUDY
Sample for the present study includes 30 students of secondary school (CBSE Board) from class IX. 15 students of secondary school (CBSE Board) from class IX from AECS- 1, Anushaktinagar, Mumbai, Maharashtra were taken as experimental group and 15 students of secondary school (CBSE Board) from class IX from AECS- 4, Anushaktinagar, Mumbai, Maharashtra were taken as control group.

TOOLS OF THE STUDY
Designing a web site for publishing tailored contents for teaching selected chapters of curriculum “Activities in Science - Newton’s Laws of Motion” after having gone through the 7 Must-Haves to starting a website namely, getting domain name, finding a host, target ones audience, designing the website, build the website, publish the website, Testing and maintenance. Internet forum was prepared for conversation with the students in the form of posted messages. Web-based office suite and data storage service was used for sharing, opening and editing by multiple users. Web mail used as an additional tool for conversation. The researcher prepared achievement test involving pre-test and post-test to check the effectiveness of distance mode web based learning viz- a- viz traditional method of classroom learning.

TESTING OF HYPOTHESIS
Incidental sampling technique was used to select the samples for both experimental and control group. Achievement test was implemented for pre and post testing the students of both the experimental and control group. Thus he technique used to test the above mentioned hypothesis is ANCOVA. Means of Pre-test and Post-test scores of Experimental group are 3.733333 and 8.533333 respectively and for control group are 3.666667 and 5.533333 respectively. The results of the summary of ANCOVA of Pre-test and Post-test Scores of achievement test indicates FX = 0.017857 and FY = 68.81068. From table F df 1/28 F AT 0.05 level =4.20 and F at 0.01 level= 7.64. Neither F is significant which shows that the experimenter was quite successful in getting equivalent groups. Thus, Ho1 is accepted. Computation of adjusted SS for Y shows -Fy.x = 120.9405. From Table F df = 27, t0.05=4.21; t0.01= 7.68 Fy.x is 120.9405, which is highly significant far beyond the 0.01 level (F0.01 = 7.68). This FY.X should now be compared with Fy of 68.81068 obtained before correcting for variability in the initial pre-test scores. Myx (difference) = 2.967 SDY.X =0.738648 SEMy.x=0.190718 .SEd between adjusted means =0.269716. Now, testing the difference by t test- FOR df = 27, t0.05=4.21; t0.01= 7.68. significant difference at 0.05 level is 1.135504 and significant difference at 0.01 level is 2.071419. Myx (difference) = 2.967 is much greater than 2.0714 at 0.01 level, hence experimental groupn differs significantly from control group at .01 level. Hence null hypothesis(Ho2) is rejected. Thus it shows elevation in the performance of experimental group students by using tailored website.

DISCUSSION
In the present study the reasons for the elevation in the performance of experimental group students by using tailored website can be sketched as:

The Internet provides to learning a much-needed interactivity. Also, being interactive it allows collaborative learning opportunities to the learners, who can interact with their teachers as well as with peer groups or co-learners. The nature of this interaction could be real-time, through a system like CU-SeeMe or IRC. It could also be through mailing lists and e-mail. Whether delayed or real-time the quality of interaction is important in the process of learning. The learners have some control over the time and pace of their study and they can ask question at: anytime. Web based courses also provide instant feedback on tests. Thus the check your progress exercises of the print medium could be made more interactive, since learners can now submit assignments online and can receive comments immediately too. However, what is most important for online courses (which are global in nature because of a diverse student group) is the possibility of collaborative learning for the global student body.

Collaborative learning through computer mediated communication enhances team performance through tools for communicating each person’s ideas, structuring group dialogue and decision making, recording the rationale behind choices, and facilitating collective activities. Students can complete group projects and assignments over the network. The Internet provides the learner with constructivist experiences through collaboration and facilitates comprehension, long-term retention and the ability to generalise instructional materials.

Multimedia develops concepts in an easy way to achieve its objectives in accordance with the age level it aims for, and the concepts are outlined in a direct way. The topics treated are those in the school curriculum. The font used is pleasant and readable. Graphics stir the interest of the user. Acquisition of information is stimulated because of the attractive presentation and because information is properly related to school needs and the age group.

Language is simple and direct. Spelling and grammatical structures are correct, and the writing is fluent and rich. Concepts are consistent and adapted to the target school level (CBSE Std IX). The writing is orderly. The format is harmonious and offers some variety. Paragraphs are well spaced, and technical images are used well to highlight important information. Each screen has an appropriate amount of information. Good Impact on users.

The Web site runs smoothly with no programming errors. The order of the material is coherent, so one can move through the site efficiently. Animations/recordings appear quickly, and when the site is used through a CD-ROM version, demands on RAM memory are small. Time spent waiting for something to be executed is optimally shortened.

The information is presented in an open-ended sequence allowing the coverage of objectives. Elements are well distributed on the screens, images clarify objectives, and characters are original and attractive. These images do not distract the user once they are familiar. The images transmit an appropriate quantity of information and clarify ideas without it being too obvious that the images are adapted to the message. Additionally, the appearance and sequence of images are relevant.

In web based learning the learners can access and use resources available on the Internet. Learning through Internet is not constrained by rigid timing. Learning can now be done at any time convenient to the user. The timing of the library, interaction with teachers or peers is not rigid. They can be approached at one's own convenience.

Internet not only provides access to information instantaneously and at low cost but also provides access to the latest information as updating online courses is much easier and relatively inexpensive.

Accessibility has increased for those living away from the training centre, in the far regions, or in other countries. Accessibility is enhanced for those with restricted mobility (e.g., handicapped, injured, elderly) and for those with family duties.

The students have full control whether he goes slowly or fast in regards with the way he learns. He can choose to start learning with the topics that are familiar to him. Learners can take time in those which are comparatively hard. The speed of learning is upto the learner.

Students' performance can be assessed and feedback can be give easily using assignments like online test, projects, and assignments. In countries like India many students from remote areas are deprived of the learning experience facilitated by expert teaches. 'Self-help' learning through internet can provide an opportunity to such students to avail good teachers' expertise.

CONCLUSION:

Rapid technological advancement may produce problems and challenges for educational institutions when their products and services are rendered obsolete virtually within short time horizon. The web teacher who has properly learned his/her craft will have transferable skills and knowledge in such volatile marketplace is readily apparent. It is insurance for survival of the web based contents. The websites has high dynamic rates of birth and death. The internet is a graveyard of websites who tried but failed to keep up with the contents that the visitors really need from them. The effective and efficient web-based teaching/learning is just getting started and survival is the test for quality assurance. In this way through tailor made websites one can keep one's website updated for its target audience and save from being obsolete.

REFERENCES

1. Aziz Marjan Khattak et.al, (2007), Evaluation of nutritional knowledge of mothers about their chilsren, Gomal Journal of Medical Sciences, Vol.5 No.1 Pakistan. 2. Bamji S, Mahtab., (2003), Early Nutrition and Health –Indian Perspective Current Science, Volume 85, pp 54-59. 3. Development Washington, D.C.204 page. (1992). The World food problem. (Online) Available from: http://go.worldbank.org/ (accessed 2007 Jul 22). 4. Grace K. Langi (2008), Knowledge and Perception of Mothers about Nutritional Status of Children under five years of age, Master of primary health care management, Indonesia 5. Joshi HS, Gupta R, Joshi M C, Mahajan Vipul (2011) Determinants of Nutritional Status of School Children- A Cross Sectional Study in the Western Religion of Nepal; NJIRM 2011; Vol.2 (1). Jan-March p10. 6. UNICEF(2004), State of World's Children, 2004

Sara Publishing Academy
Indian Journal Of Applied Research
Journal for All Subjects

Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College,
New Congres Bhavan, Paldi, Ahmedabad-380006.
Contact.: +91-9824097643 E-mail : editor@ijar.in

Printed at Unique Offset, Novatsing Rupam Estate, Opp. Abhay Estate, Tavdipura, Shahibaug, Ahmedabad