# International Multidisciplinary Research Journal

# Golden Research Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher Mrs.Laxmi Ashok Yakkaldevi Associate Editor Dr.Rajani Dalvi

Honorary Mr.Ashok Yakkaldevi

#### Welcome to GRT

#### RNI MAHMUL/2011/38595

ISSN No.2231-5063

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

#### International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil

Kamani Perera Regional Center For Strategic Studies, Sri

Lanka

Janaki Sinnasamy Librarian, University of Malaya

Romona Mihaila Spiru Haret University, Romania

Delia Serbescu Spiru Haret University, Bucharest, Romania

Anurag Misra DBS College, Kanpur

Titus PopPhD, Partium Christian University, Oradea, Romania

Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken

Abdullah Sabbagh Engineering Studies, Sydney

Ecaterina Patrascu Spiru Haret University, Bucharest

Loredana Bosca Spiru Haret University, Romania

Fabricio Moraes de Almeida

Federal University of Rondonia, Brazil George - Calin SERITAN

Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, Iasi

Hasan Baktir

English Language and Literature

Department, Kayseri

Ghayoor Abbas Chotana

Dept of Chemistry, Lahore University of

Management Sciences[PK]

Anna Maria Constantinovici AL. I. Cuza University, Romania

Ilie Pintea.

Spiru Haret University, Romania

Xiaohua Yang PhD, USA

.....More

#### Editorial Board

Pratap Vyamktrao Naikwade Iresh Swami

ASP College Devrukh, Ratnagiri, MS India Ex - VC. Solapur University, Solapur

R. R. Patil Head Geology Department Solapur

University, Solapur

Rama Bhosale Prin. and Jt. Director Higher Education,

Panvel

Salve R. N. Department of Sociology, Shivaji University, Kolhapur

Govind P. Shinde Bharati Vidvapeeth School of Distance Education Center, Navi Mumbai

Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune

Awadhesh Kumar Shirotriya Secretary, Play India Play, Meerut (U.P.) N.S. Dhaygude

Ex. Prin. Dayanand College, Solapur

Narendra Kadu

Jt. Director Higher Education, Pune

K. M. Bhandarkar

Praful Patel College of Education, Gondia

Sonal Singh

Vikram University, Ujjain

G. P. Patankar S. D. M. Degree College, Honavar, Karnataka Shaskiya Snatkottar Mahavidyalaya, Dhar

Maj. S. Bakhtiar Choudhary Director, Hyderabad AP India.

S.Parvathi Devi Ph.D.-University of Allahabad

Sonal Singh, Vikram University, Ujjain Rajendra Shendge

Director, B.C.U.D. Solapur University,

Solapur

R. R. Yalikar

Director Managment Institute, Solapur

Umesh Rajderkar

Head Humanities & Social Science

YCMOU, Nashik

S. R. Pandya

Head Education Dept. Mumbai University,

Mumbai

Alka Darshan Shrivastava

Rahul Shriram Sudke

Devi Ahilya Vishwavidyalaya, Indore

S.KANNAN

Annamalai University, TN

Satish Kumar Kalhotra

Maulana Azad National Urdu University

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India Cell: 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.org

# International Recognized Double-Blind Peer Reviewed Multidisciplinary Research Journal

#### Golden Research Thoughts

ISSN 2231-5063 Impact Factor :3.4052(UIF)

Volume - 4 | Issue - 11 | May - 2015 Available online at www.aygrt.isrj.org

#### AN INTEGRATIVE APPROACH TO TECHNOLOGY



#### Metkari Umarao Vitthal

Deputy Registrar, Solapur University, Solapur.



#### **ABSTRACT:**

The use of a diversion domain for critical thinking as a feature of the idea of three-fold, hypothesis recreation test research centre, enhanced with cutting edge portable remote innovation parts for data access, is the centre of the exploration reported in this paper. The asset outline is being spurred by the objective of consolidating both propelled gaming and interchanges foundation to understand a novel multilevel instructive experience. The paper shows how skill in two key innovation fields - gaming and information transfers - is consolidated and coordinated with control ability and sound instructional method for instructive substance era, and by this implies, how new pathways in the characteristic learning and

experience-picking up procedure may be made. An imperative rule in the examination has been to adventure play and assortment of contemporary ICT support for e-Learning and critical thinking help, including computerized diversions, remote portable innovation and learning administration frameworks. A second standard is to look for a stretched out access to these new e-Learning standards past the physical instructive grounds, through their consolidation into virtual groups.

#### **KEYWORDS**

ICT, technology in education, ICT in education.

Article Indexed in:

DOAJ Google Scholar DRJI

BASE EBSCO Open J-Gate

#### **INTRODUCTION:**

An incorporated learning environment that included topic, agreeable learning, innovation instruments, and an instructor with the right demeanour and aptitudes. Innovation here is a coordinated segment of learning. Innovation when fits easily with the educational program or instructional arrangements of educating is a characteristic of coordinated innovation. In this way, innovation as opposed to an expansion layer in the classroom is inserted inside of the outline of the instructor's lesson arrangement and the teaching method. Late research and writing in innovation and instructor instruction writing portrays this integrative process as TPACK MODEL. Educator's synchronous utilization of Technology, Pedagogy, and Content Knowledge acquires to play what is known as a TPACK display by Kohler and Mishra (2009), and initially in light of Shulman's system. This paper will utilize the terms like understudy utilization of innovation or coordinated innovation.

#### The integrated technology approach:

This methodology can be very much clarified by an assortment of taking after topics as noted in Grabe and Grabe (2005):

a.A tools approach: In the apparatuses approach, the understudies apply innovation to an errand instead of being specifically trained by innovation. Accordingly, innovation as a device is chosen to process an errand. For instance, Internet is utilized to research a theme on Ancient Indian Culture. The understudies surf the Internet, aggregates significant data and pictures and utilize this information to compose a paper on this subject. Then again, a case of innovation educated assignment would be the readymade programming that is made to show a specific point.

b.Understudy focused dynamic part of understudies: Here understudies use innovation to process data, regarding seeking burrowing from a few sources, assemble information, examine and translates information, arrange and speak to it. Here understudies build their own insight and understanding and in the process likewise choose suitable innovation to help in this valuable procedure.

c.Teachers' facilitative role: Understudy focused learning is conceivable just when educators move their part from one of a container of information to that of a facilitator of learning. Particularly in the 21st century where data is recovered with a tick of a catch, the educators' part is repetitive as a gadget of information and has turn out to be more imperative of that of a facilitator for helping in handling and applying the learning, all things considered.

d.Bona fide exercises and evaluations: Authentic exercises are standard practices of a society (referred to in Grabe and Grabe, p. 60). For instance, understudies recording their tallness and weight in an exceed expectations sheet and graphing their own development. This can turn into a credible appraisal for the educator to gage the understudies comprehension of estimation, ideas of tallness and weight, mindfulness of the body, and innovative aptitude to utilize the exceed expectations sheet.

Another way to deal with innovation use in classroom is the famous added substance or PC coordinated methodology, called Computer helped or PC based direction.

Article Indexed in:

DOAJ Google Scholar BASE EBSCO

#### COMPUTER BASED INSTRUCTION APPROACH:

In this approach, the PC assumes the mentor part and applies high level of control over the data showed and how understudies will associate with the material. The understudies while communicating to such applications obtain direct aptitudes. This is exceptionally mainstream approach, a great many programming is in the business and numerous supported by non-government associations and corporate CSR are topping off even the poor and provincial schools. There is a scope of programming in the instruction division, the exercises and bore and practice programming, and the issue based learning and re-enactment programming. The non-innovation parallel of the exercises and penetrate and hone programming in the conventional showing environment are the part of course book, exercise manual and educator's presentations in the customary teaching method. The ones in view of critical thinking and reproduction tap higher request considering. Understudies while collaborating with this kind of programming can get higher request speculation aptitudes.

The drill and practice and exercises are most appropriate to help the understudies get up to speed with the others in the class, or practice their recently obtained ideas. These sorts of virtual products can be utilized additionally for the classroom where the understudies have been mainstreamed in formal schools and are making up for lost time with the age proper learning. The reenactment and issue based learning sort of programming are most appropriate to test understudies' higher request speculation abilities and propelled ramifications of scholarly ideas. What is normal in both these sorts of programming is that the PC builds and controls the learning procedure.

Albeit, PC focused is not synonymous to instructor focused methodology. The recreation and issue based sets the PC based approach particularly from the educator focused methodology. While instructor based guideline needs to be disheartened, PC based direction has useful esteem as understudy is dynamic and participates in higher request considering (issue based and reproduction) or learning fortification procedures (penetrate and rehearse). Innovation is impartial thus unfriendly impacts of instructor focused methodology like educator control and intimidation, inclination, and repetition learning are not seen here. The coordinated proportion in PC based redoes with understudies need and level. Be that as it may, its utilization is just added substance extremely fitting to scaffold understudies' level with age proper learning points of reference. Bore and practice, and exercise programming are most regularly utilized as a part of the range of dialect and arithmetic. Issue based programming is generally utilized as a part of sciences and re-enactments like Oregon Trail. A few CSRs of IT organizations in India have delivered and dispersed different helpful and provocative programming and CD based devices that utilization contextual analyses, logical examinations, and the relating appraisals. These instruments give rich learning encounters to understudies of all ages.

#### Major differences between the computer based and technology integrated approaches:

Rigid v/s customized design: The PC based methodology has the substance and outline arranged for the masses and in this way adjustment in particular settings is impractical. In the coordinated innovation approach, the educator outlines the utilization of innovation taking into account the needs of the understudies in the classroom.

Instructive v/s constructive role of technology: When all is said in done in the PC based methodology

Article Indexed in:

#### AN INTEGRATIVE APPROACH TO TECHNOLOGY

the learning procedure is as of now customized and understudies either reacts or connects with the applications. Since the learning procedures are controlled by the PC programming, the understudy assumes the part of a beneficiary and the educator of an executive. Then again in the coordinated innovation approach the innovation not so much PC is incorporated by outline in the educational program and teaching method. The understudy chooses and applies an assortment of innovation that best suits the undertaking and the learning procedure. Along these lines, innovation is more at a support of the learning procedure and understudies encouraged by the instructor assumes a dynamic part.

Additive v/s collaborative: The PC based methodology is an added substance way to deal with showing and adapting in the classroom. The diverse sort of programming can be led in the PC labs or the understudies can utilize it at home. The coordinated innovation methodology obliges a shared learning environment, precisely planned and encouraged by the instructor. It is best executed inside of the classroom than in the PC labs.

Role of the teacher: In the PC based learning approach the instructor assumes a base part. The educator chooses the product and directs the working of it for the understudies. In the incorporated innovation approach, the educator plays and dynamic and facilitative part. The educators plan the lesson, incorporate innovation apparatuses in it, and at times even make an application, and actualize the lesson.

Assessment: In the PC based learning approach, the PC programming has an inbuilt evaluation for every errand and skill. In the incorporated methodology, the educator plans the evaluation that could conceivably incorporate innovation apparatuses. Therefore the educator might likewise modify the appraisals to suit the diverse levels of adapting in the classroom. Valid evaluations planned by the instructor as examined above in the paper are helpful for this methodology.

Combination of the two approaches: Given that the issues of access and instructor mentality and aptitudes are decreased, a perfect class would be one that consolidates both the methodologies. Higher evaluations that oblige complex comprehension of science and math idea need a very much prepared instructor who joins both the ways to deal with utilization of innovation in the classroom. For instance, a lesson on Newton's law of movement. The educators may arrange two to three weeks of lesson. Where she can precisely and cleverly join CD construct apparatuses that exhibits data in light of the law, encourages hands on analyses in material science with genuine questions, and encourages task based gathering exercises where understudies make exceed expectations sheets to record their trials and afterward make site or PowerPoint presentation arranging their two weeks learning.

#### Teaching and Learning with technology in underprivileged educational settings

Kids from underprivileged foundations allude to youngsters from lower financial families from booked rank/tribe and minority groups. Regularly saw amid visits in provincial setting that with quick preparing and activities taken by non-government division, the educators get presented to different showing and learning material and a comprehension of play way system. At the point when looked

Article Indexed in:

carefully, one understands that the action based learning stays as an extra approach. The instructors comprehension to this methodology is constrained to pull in consideration of understudies and keep them persuaded. At the same time, the importance of action based way to deal with the real adapting in the classroom is not comprehended or acknowledged. Accordingly, one can find that the kids included in exercises like singing, utilizing glimmer cards to compose letters, playing recreations to recognize the letters. The majority of the times these exercises are directed in arrangement one after another, if one have a tendency to spend over an hour in these classrooms one will find that these are only extra exercises or support exercises. The educator will hop back to writing board utilization and instructor coordinated direction to what he or she calls instructing.

Thus, innovation in such settings if sought after may be utilized as an added substance approach. The late contributor enthusiasm ascending in figuring the Government schools and other NGO run learning focuses with liberal gifts of PCs and extras. An imperative thing to ask here is whether such mediations will only change over educator focused to innovation focused classrooms.

Expertise based centre is another enormous target of Government and numerous corporate CSRs. numerous accept that innovation taught in schools where youngsters from underprivileged foundations learn will guarantee gifted workforce later on. Be that as it may, there are various PC focuses and organizations even in the most in reverse towns that can give innovative abilities. It doesn't take an entire school life cycle to take in the PC rudiments and propelled capacities. Such ability based intention to interface schools with innovation is hegemonic and a shallow and feeble specialized sanity to acquire a social change the lives of poor people.

#### Which approach is best for the children in underprivileged educational settings?

Both PC based learning approach and coordinated innovation methodology has practical quality for kids with underprivileged foundations.

PC based adapting in underprivileged settings can be improved in settings where there is a steady stream of kids mainstreamed into the normal instruction framework. These kids according to RTE act, 2009 need to be coordinated in age fitting classrooms. Exercises and bore and practice programming can help these kids learn ideas of lower evaluations and make up for lost time with whatever is left of the understudies in the classroom. As this application has insignificant instructor supervision and assistance, it is a big deal saver for the educators who generally battle instructing in a class with altogether different learning levels. The reproduction and issue based learning programming will give a decent higher request intuition jolts to the kids in underprivileged instructive settings who might regularly not have a very much prepared instructor who can develop a coordinated innovation environment.

Incorporated innovation methodology can work ponders for the kids from underprivileged foundations. Persecution, accommodation and vulnerability overwhelm the everyday substances in the lives of these kids and their families. Coordinated innovation methodology stamped with the subjects talked about above will impart a feeling of certainty and self-regard in these kids. They will never again be the beneficiaries however makers of innovation items. Likewise, it will show innovation as inserted and everyday lives, and not as an infrequent extravagance intended for alternate classes. They will soon understand that they can utilize these recently procured aptitudes to change their social substances.

Article Indexed in:

From instructors' viewpoint a coordinated innovation will strengthen understudy focused realizing which appears to have fizzled because of educators' lack of awareness and unwillingness for facilitative part. Educators in towns and remote territories are exceptionally quick to learn innovation aptitudes. This energy to learn and utilization innovation ought to be tapped to present and backer the helpful teaching method.

From access perspective, incorporated innovation methodology won't require numerous PCs and 24 hours power supply which are regularly cited as access issues for innovation joining.

Country underprivileged settings are not homogeneous as far as its social synthesis. It incorporates tribal, non-tribal, plan position, minority, and dislodged groups in clash regions. The adapting needs of these kids are likewise exceptionally changed. This special learning need of the understudies can be best adjusted inside of an incorporated innovation approach where instructors and understudies effectively develop classroom environment and learning, and innovation devices.

#### Integrated technology a dream or reality:

Albeit coveted, incorporated innovation methodology is a long way from reality. The miracle of incorporated innovation methodology changing the way educators and understudies draw in and construct their adapting together stay underutilized. Different variables that add to this consternation particularly in the underprivileged instructive settings as examined in this paper may be: disappointment of understanding and executing constructivist teaching method in the instruction framework, the overwhelming consideration on monetary benefit of learning innovation for these understudies, and the absence of limit building of educators and school executives around there.

The most basic element is instructor limit building. The educators need to be prepared to comprehend the distinction between PC based and incorporated utilization of innovation, utilization suitable innovation with an understudy focused approach, and begin the procedure of rolling out a systemic improvement in the training framework. The National Policy on Information and Communication Technology (ICT) In School Education (2011) is a complete report that conceives such methodologies talked about in this paper. Anyhow, its execution is more than testing. The discriminating segment is not get to but rather educator availability in understanding and executing innovation in classroom. A savvy venture ahead would be to begin the procedure at pre-service level. The PT3 system supported by the government in the United States was a fruitful case where innovation incorporation at pre-service level had done miracles. This systemic system had the accompanying key parts: pre-service educators were supplied with PCs on advance premise, the personnel demonstrated innovation incorporation in classroom in their training courses, the pre-service instructors were put with guide instructors who encouraged their classroom educating with innovation, and pre-service instructors upholding innovation use in classrooms through meetings and scholastic distributions.

Instructor instruction programs in India can embrace comparative projects. There is colossal extension in making handle work or understudy showing open doors where the pre-service instructors are presented to provincial and tribal schools, show innovation incorporation in those schools, and get to be change specialists for a helpful understudy focused adapting in India schools. In any case, the preservice educators can receive little cantered projects. Case in point, showing advanced narrating to rustic youngsters and instructors. In this productive procedure kids gather and expand on the fables of their tribal or provincial society, and effectively arrange and archive their old custom in a current

Article Indexed in:

#### AN INTEGRATIVE APPROACH TO TECHNOLOGY

technocratic mode, for example, cams and PowerPoint. Such fruitful projects can slowly make reason for a bigger interest for productive incorporated innovation methodologies, and great exploration and documentation can nail the need of a bigger systemic change.

#### **REFERENCES:**

- 1. Grabe, M. & Grabe, C. (2005). Integrating Technology for Meaningful Learning (4th Edition). Hougton Mifflin Company, NY.
- 2.Koehler, M. & Mishra, N. (2009). What Is Technological Pedagogical Content Knowledge? Contemporary Issues in Technology and Teacher Education.Vol. 9 (1).
- 3. National Policy on Information and Communication Technology (ICT) In School Education (Revised Draft February 2011). Department of School Education and Literacy Ministry of Human Resource Development Government of India

Article Indexed in:

DOAJ Google Scholar BASE EBSCO

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

# Associated and Indexed, India

- International Scientific Journal Consortium
- \* OPEN J-GATE

# Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts 258/34 Raviwar Peth Solapur-413005,Maharashtra Contact-9595359435 E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com Website: www.aygrt.isrj.org