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Efficacy of Innovative Learning Engagement Modes

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Abstract Change is an indispensible part of an organization. Change always brings modifications and alterations, which leads to innovations. Classroom pedagogy is not an exception in this. This research is an attempt in the direction to comprehend and make innovations in classroom learning. The paper focuses on the measuring the effectiveness of implemented innovative learning engagement modes in a regular classroom practices. The action research was carried out for this purpose. Sample includes the B.Sc. B.Ed. students of Navrachan University, Vadodara. Mainly, role play, interview, personal diary writing and analysis, bulletin board presentations, peer tutoring and mentoring were the learning engagement modes. The open ended questionnaire was constituted in order to collect the data. Content analysis was done to arrive at the findings and conclusion. The positive impact of the implemented methodologies has been observed form the findings. Findings also support the regular usage of these types of learning engagement modes in regular classroom practices.

Keyword : Innovative practices, learning engagement modes, efficacy, classroom pedagogy, classroom practices, teaching – learning,

INTRODUCTION

New Ways to Learning = New Ways of Teaching.

Classroom practices the heart of educational process requires the constant change and modifications, i.e., innovations as per the change in time. It should be in accordance with needs and demands of the contemporary world. Present day learners are highly active, up-dated and innovative. Practicing the traditional approaches in an old fashion way is no longer suitable. Research has shown that "integrating experiential learning activities in the classroom increases interest in the subject matter and understanding of course content" (Poorman, 2002). Zhao, Y. et al. (2002), Their article reports on a study of the complex and messy process of classroom technology integration. The main purpose of the study was to address the large

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question of "why don't teachers innovate when they are given computers?" Rather than whether computers can improve student learning. Specifically, they were interested in understanding the conditions under which technology innovation can take place in classrooms. The study found 11 salient factors that significantly affect the degree of success of classroom technology innovations. Some of these factors have been commonly mentioned in the literature, but the study found new dimensions to them. Others have not been identified in the literature. Each factor can be placed in one of three interactive domains, the teacher, the innovation, and the context. The article discusses the 11 factors in detail and proposes a model of the relationship among the different factors and their domains. They concluded the study with the remark that by carefully studying teachers' experiences with using technology to support teaching in ordinary schools throughout a school year, researchers were able to develop a good understanding of the conditions under which technology integration can happen. The conditions include factors located in three domains: the teacher, the project, and the context.

Innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources that includes all processes by which new ideas are generated and converted into useful products. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. This is accomplished through more effective products, processes, services, technologies, or ideas. To address to the challenge of the present times; we the teachers needs to design new instructional models that re-imagine the role of educators, the use of time, the configuration of physical space and to use data and technology in order to meet the needs of each student. Innovation in the context of this study refers to the novelty, i.e., newness of the existing pedagogy. Kozma, (2003) in his study on Technology and Classroom Practices: An International Study examines the findings from 174 case studies of innovative pedagogical practices using technology from 28 participating countries. Beyond commonly exhibited practices, the study identifies specific patterns of classroom practice that are more likely to be associated with reports of certain desirable student outcomes. Neo, T. & Neo, M. (2004) have also recommended a need to adjust the educator's approach to teaching, preparing content and delivering learning materials as per the contemporary multimedia educational design which will reinforce and strengthen the traditional instructional communication process and foster a number of innovative methods to communicate knowledge to the learners. In this context, the role of a teacher becomes more diverse than the earlier ones. He / she should know how to serve the traditional *Roti-Sabji* in the form of a *Frankie* to the learners. This study is thus an attempt to foster

the wholistic development of the learners, as well as, teachers. Bonwell, C. & Eison, J. *(1991) have also concluded in their paper with the same notion that;* In retrospect, it appears that previous classroom initiatives and written materials about active learning have all too often been isolated and fragmented. The resulting pedagogical efforts have therefore lacked coherence, and the goal of interactive classrooms has remained unfulfilled. Through the coordinated efforts of individual faculty, faculty developers, academic administrators, and educational researchers, however, higher education in the coming decade CAN make promise of active learning – a reality!

It is equally important to know the outcome of the implemented mode of learning engagement. Thus, action research was carried out to check the effectiveness. This study focuses on effectiveness of innovative learning engagement modes as regular practices. It also looks at, how the innovation helps in making the teaching – learning process interesting and meaningful.

RESEARCH SETTINGS

The action research was carried out with B.Sc. B.Ed. students of Navrachana University. As part of the regular teaching practices the innovative modes were executed. Innovation in the context of this study refers to the novelty, i.e., newness of the existing pedagogy. The learner's autonomy is considered as key feature in process, as well as, product. Involvement of learner in process includes the preparation of the entire logistic of learning engagement modes, which is to be implemented, under the guidance of a teacher. The product part involves the evaluation outcomes, which are declared after compiling the peer and mentor evaluation reports. Prior to that the rubric is prepared by participatory involvement of students. The responses / feedback of the learner is used to improve the strategic planning. Adopted learning engagement modes for teaching – learning process were,

- Role play
- Interview
- Personal diary writing and analysis
- Bulletin board presentations
- Peer mentoring and tutoring
- Procedure and Rational to adopt different learning engagement modes;

Role Play

This particular learning engagement mode was adopted for topic, named, Enabling Learning Environment – Nature of inter relationships between and

among learners-teachers; teachers; teacher- principal; parents-school; office-teachers-learners. The nature of inter relationship was the focal point of role-play where students were suppose to play different roles. After the performance, the teacher as facilitator carried out the discussion session. By adopting this method it has been observed that learners were in a better position to understand the interaction pattern, role of principal, teacher, students, parents and office personals in the school and role-play as an effective technique of teaching – learning. When role-play is used in a school setting, students extend their knowledge of a subject by researching a character within a given course of study. Student interest is raised in subject matter, thus generating interest within the subject (Poorman, 2002). Students become active participants in their education rather than passive observers. It allows students to feel empathy for others when portraying a character involved in turbulent times in history (Steindorf, 2001).

Interview

The topic for which interview as learning engagement mode was adopted is 'Balancing the Institutional and Home Roles'. Learners have prepared the interview schedule under the guidance of a teacher and interviewed around 08 faculty members of the Navrachana University. Than the discussion on the mentioned topic was carried out in the presence of a teacher based on the collected data sheet of each student.

Personal Diary

This learning engagement mode was adopted for the topics, like, Initiatory Experiences and School as an organized Endeavour. Students were supposed to write their personal experiences of school life along with the daily experiences and structure observed by them in the school. This was also facilitated by different school visit. After writing a diary for a reasonable period of time learners were in a position to come up with different concepts related to the topic, such as, nuturrents, deterrents, internal arrangements in the school, external liaison of the school, different stakeholders etc. It was felt that one's own experience is the best teacher to teach and understand many of the concepts. Therefore, this learning engagement mode was selected.

Bulletin Board Presentation

The main aim behind adopting his mode was to make students understand the different activities undertaken by a teacher in the school and to develop the esthetic creativity of learner. Students were divided into groups and they

presented their learning on bulletin board. Based on their presentation the discussion forum was conducted by a teacher to accelerate their learning. Learners are already aware about different activities conducted by a teacher in a school. Therefore, instead of lecture this particular learning engagement mode was taught off by a teacher to demonstrate their understanding.

Peer Mentoring and Tutoring

This learning engagement mode was adopted to make learners aware about the importance and usefulness of mentorship and tutorial as one of the teaching method. Peer tutoring has been reported to be an effective tool for improving both student academic and social development (Cohen, 1982). The basics of atomic structure were chosen as a topic that the senior students will have to teach to their junior friends. It was felt by the faculty as a researcher that this methodology will certainly prove as the best method to teach the basics of guidance and counseling and tutorial method along with the content mastery in a given area. Philip (2010), the findings of her study illustrate that there is potential in peer tutoring, it is possible to use the excellence from your own students to guide others in need toward higher achievement. While that higher achieving student is explaining, rewording and then re-explaining, they too are benefitting from the peer tutoring.

OBJECTIVE OF THE STUDY

To study the efficacy of the adopted learning engagement modes

METHODOLOGY

Population

All the students of School of Science and Education of Navrachana University, Vadodara constituted the population of the study.

Sample

The B.Sc. B.Ed. students (Total no. 30) of School of Science and Education of Navrachana University, Vadodara constituted the sample of the study.

Tool

In order to study the effectiveness of the learning engagement modes the open-ended questionnaire was constructed.

Data Collection

Questionnaire was given to the students to fill in order to collect the data.

Data Analysis

The collected data was analyzed using content analysis method. Under content analysis, the researcher categorized the students' opinions and percentage ratio of the same was calculated. The analysis along with the percentage is presented below as findings.

Findings

- All the students (100%) opined that the adopted learning engagement modes were appropriate to the chosen topic. Given reasons are; it makes the understanding better, gives practical knowledge and foster the creativity of students.
- All most all students (99.9%) found that the adopted teaching – learning methodology is better than the regular traditional practices. The various reasons given, like, it caters the individual differences, good for generating knowledge, feedback is very much informative and useful for further improvement, includes creative basis for learning, active involvement of students hence very much interesting and beneficial for learners.
- In response to the involvement of stakeholders in the teaching – learning process, all the students (100%) agreed that stakeholders must be involved into the process. The mentioned stakeholders are; principal, teachers, students, parents, family, societal authorities, employers, school personals, government bodies, education field workers, trusties and board members.
- Majority of the students agreed (90.9%) that the adopted methodology is able to cater the students' interest in learning. Very few students (4.54%) said that sometimes it is boring. A few students (4.54%) are with view that it is not catering the interest of learners.
- Majority of the students (86.36%) felt that the learning engagement modes provide the learner's autonomy to a greater extent. A few students (9.09%) felt that to some extent it takes care of the learner's autonomy. Very few students (4.45%) felt that it does not take care of the learner's autonomy.
- Majority of the students (86.36%) were of the opinion that the adopted learning engagement modes are in a position to arouse the new ideas and critical thinking in the content matter. This strengthens the learning and sustains the interest. A few students (13.63%) opined that sometimes it is able to take care of the critical and creative thinking.

- All students (100%) are in favour of the implementation of these methodologies in regular set up of classroom interaction.
- Mix response has been observed with respect to the time slot allotted for the preparation of the activity. Some students (31.81%) said that the allotted time slot is appropriate; some students (40.9%) said that sometimes it is appropriate and some students (27.27%) said that the allotted time slot is not appropriate.
- Again, the mix response has been found concerning burden created due to the adoption of different learning engagement modes. 50% students find it enjoyable and 50% students find it burdensome.
- All students (100%) find the assessment procedure appropriate, joyful and coherence with content.

CONCLUSION

The findings indicates that the novel ways of teaching and learning are helpful in making the educational task interesting and adoption of these types of methodologies must be encouraged and rewarded. Over all the positive impact has been seen for the novel ideas of a teacher in regular classroom settings. Such innovations need to be given a platform to be practiced in regular classrooms to continue the zeal and zest of a learner and to meet the demands of contemporary age. Such innovations will definitely be a boon to prove the equation '*New Ways to Learning = New ways of Teaching*' will be proved.

REFERENCE

Bonwell, C. & Eison, J. (1991) Active Learning: Creating Excitement in the Classroom. ERIC Digest, ERIC Clearinghouse on Higher Education Washington DC. http://www.oid.ucla.edu/about/units/tatp/old/lounge/pedagogy/downloads/active-learning- eric.pdf

Cohen, P. A., Kulik, J. A., & Kulik, C-L. C. (1982). Educational outcomes of peer tutoring: A meta-analysis of findings. American Educational Research Journal, 19(2), 237-248. EJ 272 101 http://dx.doi.org/10.3102/00028312019002237

Hopkins, D. (2008), A Teacher's Guide to Classroom Research, http://books.google.co.in/books?hl=en&lr=&id=8DjWktuaMAoC&oi=fnd&pg=PP1&dq=research+on+effectiveness+of+classroom+innovations&ots=Qd_RFxU0b6&sig=Z2urR9X_TrmZuuilhT0VCFLI7Ro#v=onepage&q=research%20on%20effectiveness%20of%20classroom%20innovations&f=false

Innovation enters the classroom, The magazine of workplace research, insight, and Trends issue 60.

Kampylis, G. and Punie, Y. (2012) Innovating Learning: Key Elements for Developing Creative Classrooms in Europe, Stefania Bocconi, Panagiotis. European Commission , Joint Research Centre , ISSN 1831-9424, ftp://ftp.jrc.es/pub/EURdoc/JRC72278.pdf

Kozma, R. B. (2003), Technology and Classroom Practices: An International Study, Journal of Research on Technology in Education. Volume 36 Number 1. http://dx.doi.org/10.1080/15391523.2003.10782399

Morgan, E. (2013), Preparing for the 21st Century Global Culture: A Study in Classroom Innovation and Effective Public Relations, http://www.nspra.org/e_network/2012- 12_trendtracker

Neo, T. & Neo, M. (2004), Classroom innovation: engaging students in interactive multimedia learning, Campus-Wide Information Systems, Vol. 21 Issue: 3, pp.118 – 124

New Classrooms Innovation Partners (2012), http://www.newclassrooms.org/believe.html

Philip, L. (2012), Peer Tutoring: Student Achievement, Confidence and the Teacher's Role, Action Research Project Report. http://scimath.unl.edu/MIM/files/research/LaFleur_AR_FinalLA.pdf.

Poorman, P. B. (2002), Biography and role-playing: fostering empathy in abnormal psychology. Teaching of Psychology, 29 (1), 32-36. http://dx.doi.org/10.1207/S15328023TOP2901_08

Solomon, J. et. All (1992), Teaching about the nature of science through history: Action research in the classroom, Journal of Research in Science Teaching.Volume 29, Issue 4, pages 409–421. http://dx.doi.org/10.1002/tea.3660290408

Steindorf, S. (2001), A student researched website simulates escape from slavery. Christian Science Monitor. 94. (13), 12.

Zhao, Y. et al. (2002), Conditions for Classroom Technology Innovations, Teachers Cotlege Record Volume 104, Number 3, April 2002, Columbia University.

APPENDIX

Questionnaire for Students

Dear students,

Read each question thoroughly and record your responses. You are expected to supplement with descriptive views / answers wherever required.

Your valuable responses will be kept confidential. The data will be utilized for research purpose only.

Thanking You,

Dr. Shilpa S. Popat
(Assistant Professor, Navrachana University, Vadodara.)

1. How are far the adopted learning engagement modes appropriate for the chosen topic?
2. How the adopted learning engagement modes are different from the regular teaching?
3. Suggest the measures for better implementation.
4. Suggest the measures for improvement in the selected learning engagement modes.
5. How many stakeholders are need to be concerned for the methodological innovations?
6. Which are the aspects that you like most in the learning engagement modes?
7. Which are the aspect that you feel need to be removed from the methodological part.
8. How far are the adopted learning engagement modes able to cater students' interest in the learning process?
9. How far are the adopted learning engagement modes able to provide learner's autonomy in the learning process?
10. How far are the adopted learning engagement modes able to arise the new ideas and critical thinking in the content area?
11. How far are the learning engagement modes useful for knowledge construction?
12. Give your opinion for the implementation of such type of learning engagement modes in a regular set up of classroom interactions.
13. Give your critical view on the time slot allotted to you for the preparation for the class.
14. Are these methods creating any burden on a part of a student? If yes, suggest modifications.
15. Comment on the relevance of the assessment procedure with the learning engagement mode.
16. Comment on the relevance of the assessment procedure with the content.
17. Give your opinion for the assessment procedure involve.