



## APPLYING 'JIT' CONCEPT IN EDUCATION FOR FUTURE OF TEACHER EDUCATION

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### **Abstract**

*JIT is the learning and teaching approach in our education. The principle of JIT is to eliminate sources of manufacturing waste by getting right quantity of raw materials and producing the right quantity of products in the right place at the right time. This concept can be also applied in teacher education. Just -in- Time Teaching (JITT) is teaching and learning approach that combines the best features of traditional in class instruction with the communication and resource potential available via the Web. Uses of JITT in education. Following are some use of JITT. A) Effect of JITT on Students' Success: B) Just-in- Time Learning (JITL).*

**Key Words**— *Just in-Time(JIT), Just -in- Time Teaching (JITT), Uses of JITT in education, Just-in- Time Learning (JITL):*



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### **INTRODUCTION:-**

JIT (Just in -Time) is a Japanese manufacturing management method developed in 1970s. It was first adopted at Toyota manufacturing plants by Taiichi Ohno. The main concern at that time was to meet consumer demands. Because of the success of JIT management. Taiichi Ohno was named the Father of JIT.(Cheng, 1996). After the first introduction of JIT by Toyota many companies followed up and around mid 1970s, it gained extended support and is widely used by many companies. In recent years this technique is also used in the field of education.

### **NEED AND IMPORTANCE OF THE STUDY:-**

Today we are using traditional method in our teaching learning method. Also today is the days of technology, but we are not giving more attention to use technology in our daily teaching –learning process. That is why for students' saving time and work we want use of ICT in education system.

JIT is the learning and teaching approach in our education. If we use this in our teaching learning method we get the benefit of qualitative and quantitative achievement in our students.

**OBJECTIVES OF THE STUDY :-**

- 1) To study about JIT.
- 2) To learn use of JIT in education.
- 3) Please be certain to follow all instructions given over here to prepare your paper.

**Just in-Time (JIT):-**

JIT is strategy that concentrates on making quality products, in the quantity needed, when it is needed. This strategy exposes waste and makes continuous improvement possible. It is a concept where an items is delivered and when it is needed. JIT is a philosophy of continuous improvement in which non-value-adding activities are identified and removed for the following purpose of –

- i) Reducing cost
- ii) Improving quality
- iii) Improving performance
- iv) Improving delivery
- v) Adding Flexibility

The principle of JIT is to eliminate sources of manufacturing waste by getting right quantity of raw materials and producing the right quantity of products in the right place at the right time. This concept can be also applied in teacher education.

**JIT in Teacher Education:**

JIT concept is borrowed from management filed and now it is adapted in education in accordance with the nature of the educational field. The teaching and learning processes become more meaningful and appropriate when we apply these strategies. They can also be applied in the curriculum development, evaluation and other areas in education.

**Just -in- Time Teaching (JITT):-**

Just -in- Time Teaching (JITT) is teaching and learning approach that combines the best features of traditional in class instruction with the communication and resource potential available via the Web. JITT is a technique for teaching and learning that uses the Internet to improve student success by enhancing and extending classroom instruction via the Web. JITT is designed to bring pedagogically successful methods for teaching and learning. It ensures interactive engagement (active learning), constructivism, and prompt feedback (formative

assessment). It motivate the students to take charge of their own learning by providing them with instant feedback and encouraging to help each other learn.

The essence of JITT is the feedback loop between the Web and classroom. Faculty use the Internet to post course material and Web-based Warm Up assignment before class, and students use materials on the Web to prepare for each class.

**Uses of JITT in education:-**Following are some use of JITT

**A) Effect of JITT on Students' Success:**

JITT promote students' success in various aspects, which are given here are-

**1. JITT Increases Classroom Interactivity:-**

One of the “Seven Principles for Good Practice in Undergraduate Education” is to encourage interaction between students and faculty via warm up exercises and cooperate learning exercises. A JITT classroom has substantially more student –student interaction and –faculty interaction.

**2. JITT Provides Formative Assessment:-**

JITT provides an excellent way to give students feedback on their understanding before taking test for a grade. By examining students' warm up responses as “works in progress” and providing quick and specific feedback during class, and allowing for in class cooperative active learning, students are given many opportunities to explore their own thought processes about a particular concept, and revise their thinking if necessary.

**3. JITT Increases Student Success as Measured by Course Retention Rates:-**

Some upper level courses are more conceptual or theoretical in nature (for example). So a large a number of students who do not perform well in class or withdraw from the class or receive low grade. Studies say that students using JITT completed their course with good grades.

**4. JITT Improves Class Preparation:-**

To make the best use of in- class time, it is very important for students to come to class prepared. In a JITT classroom that is not taught using a traditional lecture format- the value of the class depends on the quality of the participation. The learners are asked to well in advance to attend the class. To determine whether students changed or improved their likelihood of class preparation as a result of using JITT the professors asked students a few questions to determine whether they were preparing for class. Studies say that students who were preparing grades reported preparing for class. Students who were not doing well in the class scoring low grades also self-reported that they were not preparing class. It is likely that this lack of preparation as well as other factors relating to their course performance.

### **5. JITT Improves Student Study Habits:-**

Students from JITT classrooms showed significant and measurable gains in achievement. Based on course attitude surveys, course evaluations, and student focus groups, it has been stated that the students prefer JITT than traditional lecture classes (Kathleen A. Marrs and Gregor Novak, 2003).

### **B) Just-in-Time Learning (JITL):**

In education Just-in-Time learning is available at the time a learner needs it in order to perform a task, rather than only at the time provider wants to make it available. Just-in-Time learning (JITL) is an emerging educational paradigm where learners identify specially what they need to learn and access it quickly from a wide variety of educational providers, instead of taking whole courses from local educational institutions on their fixed schedule. Ideally, Just-in-Time learning is the exact content and delivery method that the learner needs and it is available at the time and place the learner needs it. In Just-in-Time learning learners get the right knowledge (to the right person) at the time when it is needed not weeks or months later. Just-in-Time learning helps learners stay on top today's fast-paced educational world.

The current academic system of courses, credits, and evaluation methods is increasingly too unwieldy to meet learners' needs. Courses are large blocks of content; a learner often only needs small parts of that content, and they are increasingly able to get what they need from other providers.

Just-in-Time learning cooperates as well as CD-ROMs, satellite channels and videotapes. The learners like the Just-in-Time learning approaches because they can learn at their own pace, wherever and whenever they like. Learners can customize their learning to fit their needs and engage in online collaborative learning communities where they can exchange experiences and access the latest information from around the world and quickly update their skills. Electronic learning or e-learning is delivered straight to the desktop of the learner through an internet or intranet connection.

### **Advantages of Just-in-Time learning:-**

The advantage of JITL are as follows-

- i. Content can be stored and reused by others.
- ii. Improved efficiency. Learners can devote small blocks of time to learning new skills.
- iii. Mobile learning. Learning can take place anywhere there is a computer, laptop or even Personal Digital Assistant.
- iv. Personalization and interactivity.

## **REFERENCES**

### **Books:**

*Arulsamy, S., & Sivakumar, P., (2009). Application of ICT in Education: New Delhi: Neelkamal Publication.*

### **Periodicals and Journals**

*Kathleen A. Marrs, & Gregor Novak (2004). Just in Time Teaching in Biology: Creating an Active Learner Classroom Using Internet”, Cell Biology Education-A Journal of Life Science Education, Vol.3.*