# Awareness and Applicabilty of Biometric System Amongst Post Graduate Teacher Training

Priyanka Singh

Faculty of Education, Banasthali Vidyapith, Rajasthan, India

## Abstract

Classroom management techniques encourages students to attend all classes, on time and at the same time, ensure that if implanted, the faculty used a class roaster system that was required by university administration. But practically its been observed that students in university miss classes for various reasons. Hence, adding ICT enhanced technology to a classroom can equip teachers with a new range of classroom management issues.  This research aimed at studying the student's awareness towards Biometric technology system. Biometrics, an advance computer based technology is designed for automated recognition of humans using physiological or behavioral characteristics is much used device in classrooms. The study even focused on knowing the affect of awareness towards biometric technology system on its application on forty post graduate teacher trainees of Faculty of Education from Banasthali University.  Four phase process was carried out in developing the inventory and procuring the data related to awareness towards biometric technological system and its application. The findings revealed low awareness towards physical feature and working nature of Biometric technological system. Yet the awareness towards biometric technological system did not have any affect on its usage.

**Key Words:** Biometric System, Classroom Management, Biometric Awareness, Biometric Applicability.

## Introduction

Classroom management techniques encourages students to attend all classes, on time and at the same time, ensure that if implanted, the faculty used a class roaster system m that was required by university administration. But practically it's been observed that students in university miss classes for various reasons. Hence, adding ICT enhanced technology to a classroom can equip teachers with a new range of classroom management issues.

Therefore the study on implementation of biometric system in a technology based attendance system can support recent movements in enhancing student attendance and improving performance outcomes. Thereby Biometric Technology is a means for classroom management for students other than that study on integrating this type of technology significantly can influence strategy – based research on individual and group student attendance in university classrooms. Thirdly a technology- based attendance based on biometric system can be a competitive environment among student's different subject classrooms.

**Classroom Management**

Classroom management is the orchestration of classroom life. Organizing procedures and resources, arranging the environment to maximize efficiency, monitoring student progress are the manage ring aspect in an organization. Successful classroom management has been defined as producing a high rate of work involvement with low rate of deviancy in academic settings'. Classroom management is the strategies and an educator uses to maintain a classroom environment that is conductive to students' and learning.

Classroom management will differ from one teacher one teacher to another because of the teachers' personality, teaching styles, preparedness and number of students in the classroom at any given time. Effective classroom management

involves teacher being prepared for lesson, motivating students. Biometric attendance system, providing proper and effective discipline e, making student feel comfortable, student, self esteem and designing constructive learning.

## Classroom Management Component

Classroom behavior can pose a challenge to a teacher at any stage of his or her carrier. But keeping in mind a few critical components of classroom, management helps to maintain and control the classroom. Neglecting to do so could result in students who lack an ability to focus on classroom content and fail to respond to your disciplinary efforts. Classroom management component are Such as teacher, student & curriculum, administration functioning, attendance and effective teaching time.

## Biometric Technology

The technology is a device used to measure and analyze personal characteristics, both physiological and behavioral. Biometric systems has its prime focus in distributions of biometric security products e.g.- biometrics finger print scanner, facial recognition attendance system, proximity and smart card based products, surveillance products; CCTV camera, IT products, thin clients, network attached storage, firewall and many more to  system integrators. Biometric system is a leading developer and suppliers of innovative advanced facial& fingerprint and rapid solutions used in access control and time & attendance applications. We also have a well training team of professionals which help us in increasing our competency to deal with the bulk orders. Biometric time attendance system used to track each and every person coming to your place is actually who he claims to be or not with its time and other details. It uses finger and face recognition system to verify person's identity and record its time in and time out with all required details.

## Physical Feature of Biometric System

- **SENSOR TOOL:** The sensor tool plays a very important role in biometric system. There are various types of sensor tools which are being used in biometrics likes human eye, hand, finger, voice & DNA recognizers. The sensor tool can be defined as a mechanism which   provides the person specific recognition through the human specific body parts features.

- **SCANNERS:** The scanner in biometrics can be defined as a mechanism which recognizes the human body features are three  types of biometric scanner as follows.1. Optical scanner 2. Capacitive scanner 3. Thermal scanner

- **STATUS INDICATION LIGHT**: The biometric system consists of an indication system after the proper recognition of human specific. Usually this status indication would be alight which blip after the recognition.

- **SENSOR TOUCH KEYPAD**:  This is a keypad which works over sensor touch technology and an integrating part of biometric system.

- **TEMPLATE READER WINDOW**: This template reader window is provided to get the result on a screen which of L.E.D (Light Emitting Diode) kind of.

- **U.S.B MEMORY SLOT**: This slot is provided to exchange the data in the biometric system.

- **CENTRAL PROCESSING UNIT (C.P.U)**: The central processing unit is the device which is used in biometric system for fast identification of humans. It consists of various integrating parts.

- **NAVIGATION KEY**: The navigation keys are the movement mechanism of menu to up, down, left and right.

- **DOOR SENSOR**: This door sensor is the final output of biometric. The door sensor is a device which controls the door opening after the biometric procedure.

## Operation of Biometric System

Biometric system is an attendance standalones and network attendances / access control system using fingerprint identification technology.

- Sensor pad is carrying out the fingerprint scanning in the biometric system. This sensor pad recognizes the ridges, furrows like features of finger.

- The scanner of biometric then transfers the human feature into the binary numbers.

- These binary number stored in the database as the biotech template for the specific one.

- When a student use the biometric system then his/her template try to get match with the stored database template.

- If he/she is registered already in the database templates then the templates get matched the status indication light illuminated and the door sensor make allow to get enter.

## Objectives

The objectives of the study were as follows.

1. To study the awareness towards biometric system amongst teacher trainees.
2. To study the applicability of biometric system amongst teacher trainees.

## Methodology

The study is about "Awareness and applicability of biometric system amongst post graduate teacher training" was conducted into four phases. Forty post graduate teacher trainees were selected the faculty of education from Banasthali University, Rajasthan randomly chosen.

In the first phase Biometric Technological System & its components was studied Book, journal and through Internet through various other than Biometric System Physical feature and its operation were explored. Next one Applicability of the Biometric Technological System in classroom was studied. In which various application of Biometric Technological System i.e. Classroom Management in respect to Entry Control, Student Attendance, Tracking of student, Teacher's Presence, Regularity and Punctuality were sorted out. The other component studied were Self Monitoring and Record keeping. In the second phase information related Biometric system faculties operating Biometric system were distinguished. Thereafter the teacher trainees of post graduate were to be selected. In postgraduate Teacher trainees forty enrolled were sorted out. In the third phase the required tools for the study were constructed. Primarily Biometric Awareness Questionnaire was designed according to the components of Biometric system and its functioning nature. Secondly, Biometric Technological System Inventory was designed in corpora ting management aspect of Biometric System. The fourth phase included implementation of tool, its collection and data analysis. The teacher trainees were given the freedom to take the test, thus the teacher trainees took the test in random order. Prior to taking the test proper instruction were given incorporating the basic parts i.e. Physical and Operation of Biometric system and included items.

The data collected from Biometric Awareness Questionnaire and Biometric Technological System Inventory was analyzed.

## Findings

1. Biometric technology system was known to teacher trainees of post graduate.

2. Post graduate teacher trainees were not much aware of the physical feature or the working nature of the biometric technological system.

## Conclusion

The present study related to Awareness and Applicability of Biometric system amongst Post graduate Teacher Training. In recent years such technology has gained wide recognition and academic acceptance. Therefore this study has wide implications for Teachers, Teacher trainees & Administrators. The study also contributes in the direction of administrators

providing awareness and applicability of biometric system. This study tells about the need and importance of biometric technological system for the better classroom man agent, class control, self monitor and record keeping. Though the teachers are responsible for child developments the Teacher Trainees too share the responsibility of self development. In this context biometric system helps to recognize and avail the opportunity of recognizing the system, its physical nature, operation and applicability of biometric technological system. On usage the tool the Teacher Trainees can analyze their awareness of biometric technological system. They can also become aware of their manage ring ability of this technology.

Thereby the Teacher Trainees can enhance their knowledge and increase the usage of technology.

**Delimitations**

The study was limited to classroom implementation.

1. Post graduate students related to biometric technological system was chosen for the study.

2. Students of school related o biometric technological system situated in Banasthali Vidyapith were observed.

3. The awareness and applicability biometric technological System was studied.

4. The students of those faculties were chosen where biometric technological system was implanted and used.

**References**

Bauer.J.S & Kenton, J. (2005). Toward Technology integration in the schools: Why it is not happening. Journal of Technology and Teacher Education, 13(4), 519-540.

Bhattacharya, Debnath, Ratulranjan. (2009). Biometric Authentication A review, Heritage Institute of technology Kolkata, India .International Journal u-and e- service, science and technology, vol.2,no.3,sep 2009

Carolyn, M. Evert son, s. carol S. Weinstein. (2006). Handbook of classroom management. Lawrence Erbium Associates, New Delhi, India

Gupta, S.L. Gupta Hitesh (2011). Research Methodology. International Book House Pvt. Ltd. New Delhi, India

http:///wwwapamainiuniversity_us/PJST.htm

Kukula, Eric.P., Stephen J Elliot's, Vincent G.Duffy. (2007). The effects of Human Interaction of on Biometric system performance, computer and information science miscellaneous papers, volume 12, Publisher : Springer, pages: 904-914..

Manyla, A.B. (2005). Role of Teacher in Classroom management, Classroom management Teacher learner interaction. Books enclose Jaipur, India.

Shammeri, zail ad. (2012). Benefits of using Tested Attendance System to enhance, Student Attendance and Achievement in Higher Education. University for Science and Technology, Kuwait. Journal of Advanced Social Research vol. No.3 May, 2012, 120-125.

Sharma, R.A. (2008), Fundamentals of Educational Research & statistics. R.Lal Book Depot, Begum Bridge, Meerut, India.

Showa, U and O.A.Idowa (2012). Development of Attendances Management system using Biometrics. Lagos state University, Nigeria. The Pacific Journal of Science and Technology, Vol 13/ November, May 2012 (spring)