# INNOVATIVE PRACTICES AND TEACHING METHODS IN HIGHER EDUCATION

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## 1. INTRODUCTION

Tamil Nadu enjoys the privilege of being one of the most developed states in the Country in the field of Higher Education 27 Universities are functioning in Tamilnadu and of these 12 Universities are getting their Block Grants from the Government of Tamilnadu through the Directorate of Collegiate Education Presently 503 colleges are functioning under the administrative control of the Directorate of Collegiate Education.

The Government of Tamil Nadu's **Vision 2023** documents states that "Without a body of sufficiently skilled and balanced workforce, no economy can hope to develop to its potential. Vision 2023, under its Education and Skills mission, aims to establish a robust human resources pipeline."

## 2. SPECIAL INITIATIVES TOWARDS EXCELLENCE

The special initiatives taken by Government towards excellence is "Networking of Universities" (META UNIVERSITY) and "Clustering of Colleges" for academic and research activities in emerging areas of knowledge. Ensuring state-of-art infrastructure in higher education institutions and equipping the classrooms, laboratories with the latest trends in technology applications for teaching and learning and to revitalize Universities and Higher Education Institutions; Providing international exposure and experience to students and teachers through special schemes; Organizing exclusive training programmes for up scaling the quality of teaching in Higher Education Institutions; Promoting Policy reforms in administration to complement the academic activities, initiated; Achieving faster, sustainable and inclusive growth through social inclusion; transforming education to become alive to public needs; ensuring "quality inclusive education" with potential for self-development, for the Differently Abled.

With the initiative taken by Government on Higher Education, there is need for study on innovative practices and innovative teaching methods to be followed in Higher Education.

## 3. OBJECTIVES OF THE STUDY

The objectives are

- 1) To Study on Government of Tamil Nadu's Vision, Mission and Objectives in Higher Education.
- 2) To Study on innovative practices to be undertaken in Higher Education.
- 3) To Study on innovative teaching methods to be followed in Higher Education.

## 4. METHODOLOGY

The methodology adopted is collection of data from Policy Note 2013-14 of Higher Education Department of Government of Tamil Nadu and other secondary sources like websites.

# 5.1 GOVERNMENT VISION, MISSION AND OBJECTIVES

The Vision of Government is to make Institutions of Higher Education emerge as Centres of Innovation, Excellence and Development; to provide world class quality education especially to students from rural and backward areas and marginalized families and to develop, recognize and enhance talent and skills in youth; to equip and enable youth to meet the emerging challenges and demands of the century with due emphasis on inclusion in higher education.

The MISSION of the Government is "To promote Human Resource Development through self-actualized Institutions, producing high quality ethical professionals in sufficient number to make this State and Country prosperous, and to make Tamil Nadu a global hub for University Education."

The Objectives of Government is to enhance the quality of Higher Education to world class standards, in Arts and Science Colleges, Polytechnics and Engineering Colleges, through special initiatives and schemes; to make available knowledgeable and skilled manpower through industry institution linkage for research, for inculcating entrepreneurship culture and gainful employment and to popularize the application of Science and Technology among common people.

# 5.2 INNOVATIVE PRACTICES IN HIGHER EDUCATION.

The various innovative practices to be practiced in Higher Education are given below.

- i) Foreign language laboratories are to be established in all Government and Private Colleges for enhancing language skills of students in English, Chinese, Japanese, German etc., enabling them to compete in the world market.
- ii) Entrepreneurship cum Skill Development Centres is to be established in all Colleges to develop the entrepreneurial skills in students for establishing enterprises, to trigger creativity in them and to help in securing decent employment commensurate with the needs of the job-market.
- **iii)** Curriculum Development Cells is to be established to restructure curricula to be on par with global standards to build a workforce underpinning demands of the industry and other business organizations.
- iv) College Business Collaboration Centres is to be established which would act as agencies for co-ordinating Colleges leading Industries and other business organizations in Tamil Nadu, India and abroad.
- v) Incubation and Technology Transfer Centres should be established in all Colleges. The focus of these centres would be "incubation activities" transfer of innovative technology for practical purposes among communities and converting creative ideas into commercially viable products.
- vi) Post Graduate Centres of Excellence should have been established with High Tech Laboratories.
- **vii) Soft Skill Centres** is to be established in all Colleges to provide training programmes to teach life skills to students and to develop their personality traits.
- viii) Community Colleges are to be opened in all Colleges to provide Vocational Education programmes and Employment opportunities for the local communities.
- ix) Zonal Centres of Tamil Nadu is to be opened in colleges offering distance education to facilitate students to access information and learning materials, close to their place of residence.
- x) PG Extension Centres is to be opened in all Colleges to offer PG Courses and help students to pursue research with advanced technology. Rural students will be greatly benefitted and these students will achieve the desired levels of competence like their counterparts in urban areas. These Centres with High Tech Laboratories

ensure access to Post Graduate Courses and quality research to the rural and economically weaker students.

## 5.3 INNOVATIVE TEACHING METHODS IN HIGHER EDUCATION.

The various innovative teaching methods that should be followed in Higher Education are given below.

- i) Smart Classrooms with Video- Conferencing facilities should be established in all Colleges. This will improve class-room teaching with hi-tech support.
- ii) Study Abroad Programme for Faculty and Students is to be established to the students and faculty especially from economically, under privileged classes in rural areas.
- iii) Centres for Technical and Academic Writing should be established to develop the skills of students in writing academic reports and drafting other forms of written communication.
- iv) The foreign professors of repute should be invited to expose students and teachers of institutions to international strategies of teaching and learning as well as gaining from the sharing of expertise.
- v) Networking of all libraries in Government and Private Colleges will enable students to access books, journals and reference materials through internet. This will be an advanced technology for making knowledge and information easily accessible.
- vi) Special care should be given for slow learners / below average students, especially the first generation learners in all Colleges to prevent dropouts and to enable them to be on par with others, academically.
- vii) The ICT Academy should be opened in all Colleges to prepare their students to become "industry ready" and employable.
- **viii)** Laptop Computers should be given to all students to enjoy the benefits of the best standards in education.

# 6. FINDINGS, SUGGESTIONS AND CONCLUSIONS

For innovative practices in Higher Education there is need for creation of Foreign language laboratories, Entrepreneurship cum Skill Development Centres, Curriculum Development Cells, College Business Collaboration Centres, Incubation and Technology Transfer Centres, Post Graduate Centres of Excellence, Soft Skill Centres, Community

Colleges, Zonal Centres and PG Extension Centres should be created in all Government and Private Colleges in Tamil Nadu.

For innovative Teaching Methods in Higher Education there is need for Smart Classrooms with Video- Conferencing facilities, Study Abroad Programme for Faculty and Students, Centres for Technical and Academic Writing, Inviting foreign professors of repute, Networking of all libraries, Special care for slow learners / below average students, opening ICT Academy in all Government and Private Colleges and providing Laptop Computers to all students to enjoy the benefits of the best standards in education.

# **REFERENCES**

- [1] E. Bhaskaran, (2011), "The Technical Efficiency of Chennai Auto Industry Cluster,"

  Society of Automotive Engineers (SAE), International, Technical Paper,

  http://papers.sae.org/2011-28-0100
- [2] E.Bhaskaran, (2012), "Technical Efficiency of Automotive Industry Cluster in Chennai"
  <u>Journal of the Institution of Engineers (India): Series C, Springer</u>, July 2012, Volume 93,

  <u>Issue 3</u>, pp 243-49, <a href="http://link.springer.com/article/10.1007/s40032-012-0029-x">http://link.springer.com/article/10.1007/s40032-012-0029-x</a>
- [3] E.Bhaskaran, (2012), "Lean Manufacturing Auto Cluster at Chennai", Journal of the Institution of Engineers (India): Series C Springer India, October 2012, Volume 93, Issue
  4, pp 383-390 http://link.springer.com/article/10.1007%2Fs40032-012-0035-z
- [4] E.Bhaskaran, (2013) "Sustainable Development in Indian Automotive Component Clusters" *Journal of the Institution of Engineers (India): Series C* Springer, January 2013, Volume 94, <u>Issue 1</u>, pp 81-84, <a href="http://link.springer.com/article/10.1007/s40032-012-0039-8">http://link.springer.com/article/10.1007/s40032-012-0039-8</a>
- [5] E.Bhaskaran,, (2013) "The Productivity and Technical Efficiency of Textile Industry Clusters" <u>Journal of the Institution of Engineers (India): Series C</u>, Springer, July 2013, Volume 94, <u>Issue 3</u>, pp 245-251, <a href="http://link.springer.com/article/10.1007%2Fs40032-013-0073-1">http://link.springer.com/article/10.1007%2Fs40032-013-0073-1</a>
- [6] E.Bhaskaran, (2014) "The Productivity Analysis of Chennai Automotive Industry Cluster "Journal of the Institution of Engineers (India): Series C, Springer, July 2014, Volume 95, <a href="Issue 3">Issue 3</a>, pp 239-249, <a href="http://link.springer.com/article/10.1007%2Fs40032-014-0120-66">http://link.springer.com/article/10.1007%2Fs40032-014-0120-66</a>
- [7] www.indcom.tn.gov.in and www.tn.gov.in

- [8] E.Bhaskaran,.(2016) "The Quantitative Analysis of Chennai Automotive Industry Cluster" Journal of Institution of Engineers (India): Series C, Springer, July 2016, Volume 97, Issue 3, pp 357–373, https://link.springer.com/article/10.1007/s40032-016-0255-8
  - [9] E.Bhaskaran,.(2017), "Study of CNSL Processing Plants Located in Cuddalore District of Tamil Nadu, India", *Journal of The Institution of Engineers (India): Series A*, Springer, June 2017, Volume 98, <u>Issue 1–2</u>, pp. 115–120, <a href="https://link.springer.com/article/10.1007/s40030-017-0191-5">https://link.springer.com/article/10.1007/s40030-017-0191-5</a>
  - [10] Website of Wikipedia.
  - [11] Website of Higher Education Department, Government of Tamil Nadu.
  - [12] Policy Note 2013-14 of Higher Education Department, Government of Tamil Nadu.
  - [13] Website of Human Resource Development Department, Government of India.
  - [14] Website of different Universities in Tamil Nadu.

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