

## The educational development paradigm for Indian Institute of Technology (IITD)

Smita Julakate

Fellowship from NRCT & ICSSR

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### ABSTRACT

India is one of the most potentials in the globe regarding the international trade and investment across the border owing to its large territory together with huge market capacity. More precisely, there are approximately 1,250 million Indian residents and more than 350 million Indian people are sort of middle-high income. Additionally, every kind of labor can be found in this country, lasting from unskilled study ones to the scientific expert who invests worldwide technology and know- how. In addition, India is rich in natural resources and public policies aiming to link up the South East Asian region even deeper, which in turn conduces to the most attractiveness of this nation. Nonetheless, India is relatively diverse in a variety of dimensions starting from the aspect of the economy, security until the facet of social and cultural. This brings about the lack of deepness and thoroughness in regard to the investigation of opportunity in trade and investment in every criterion of India. Consequently, this report will attempt to penetrate through the gateway of trade and investment in India not only the overall character but also the particular state ones. To be more accurate, our researcher unit opts for the most capable and easily accessible state for Thai entrepreneurs- Uttar Pradesh as a case study. We emphasize both numerous reliable secondary sources of data and primary data gathered from the survey of the route, market within the State of Uttar Pradesh and nearby territories Delhi, Bihar State, and Rajasthan State. Furthermore, we conduct brainstorming procedures and in-depth interviews with scholars, businessmen, investors either Indian or Thai ones. This empirical research will shed some light on the opportunity of culture between India and Thailand. Mainly examining State of Uttar Pradesh in several frameworks, for instance, India policy, schemes, stability, economy, trade, investment and social & cultural issues.

The benefit of education development paradigm for the Indian Institute of Technology or IITD had many campuses such as Varanasi Chennai, Guwahati, Indore, etc. There had very high technology and famous in country and abroad. Moreover, more professors and students. Professor in IITD had more knowledge to forgive their student in the class and specialist in Technology. IITD had conveniently in high Technology and students can give the chance from the company every year the company that had famous in India will be contacted to IITD for giving chance to the student. They will be graduate in that term. They trust to IITD for any reason.

**Keyword:** educational, development, paradigm

## 1. Introduction

India has a reputation in education, business administration, computer science, engineering, architecture, and medicine. The most famous of Asia and accredited. In addition, accepted by the Ministry of Education of Thailand as a whole.

At this moment, many national institutions of India ranked the prestigious international institution ranking. And is the best institution in the world ,such as, the Indian Institute of Technology (IITs), the Indian Institute of Science (IISC), the Indian School of Business (ISB), the Indian Institute of Management (IIMs) and the all Indian Institute of Medical Sciences (AIIMS);for instance, institutions are the means And compete highly, from the Indian and foreign. Yet, India still has many famous universities. That Thai people are interested such as the University of Delhi, the Jawaharal Nehru University (JNU) and the University of Pune in Pune in, many places. Which has been dubbed the Oxford of East ever?

The Thai education system has recently been featured in the Economist, the article discussed Thailand's international education rankings in the recently released Program for International Student Assessment (PISA). Thailand's scores have plunged to an overall ranking of 54 out of 70 assessed countries. PISA has found that one-third of Thailand's 15-year-olds were "functionally illiterate."

Education of the Indian Industry has a role in cultivating secularism and democracy. This includes an understanding of liberty. Human equality (Egalitarianism) and adherence to justice. That attitudes make the educational system of India has support from the government where

want India to develop in human resource same the other country. This reason cause of India is a big network of education in the world.

The system Education in University and Institute Professional institutions is under the supervision of the University Grants Commission (UGC) that same the role Education ministry in Thailand. At the same time, the rules and regulations. It is under the government of India. To gain acceptance in terms of quality and specifications. It is also accredited through the National Board of Accreditation (NBA) for technical studies and the National Assessment and Accreditation Council (NAAC) for higher education. Comparing Indian Studies Considered both good and bad. With reasonable expenses. The cost of living is considered to be less than six thousand Baht per month. This covers food expenses and others. This participatory action research aimed at investigating educational philosophies, practices, and techniques, it is generally accepted that education is the foundation of country development. Educational opportunities are a key factor in driving the economy and making progress for the country sustainable. As a result, countries around the world are striving to provide educational opportunities for their youth and their national workforce.

The movement of the global education industry. The latest trends driving the global education industry are online education and e-learning, training programs, foreign education programs and programs, and Study Preparation for Test Preparation, Online Education, and E-Learning For the above reasons, Researcher is interested in studying the educational development paradigm for the Indian Institute of Technology (IITD). In this research, the researcher hopes to help relevant agencies to apply the research results to the future planning of Thailand's educational development.

## **2. Objective**

- 1) To study the paradigm of The educational development in Indian Institute of Technology (IITD)
- 2) To study the planning of education in Indian Institute of Technology (IITD)

## **2. Literature Review**

### The meaning of paradigm

( Kuhn 1970, P.10) “A paradigm is an established set of beliefs in this scientific community (normal science); and a paradigmatic is when a change is brought about in these beliefs when scientific research demonstrates flaws (anomalies) in the beliefs”

(Landau 1972, P.35) “The view of living systems as networks provides a novel perspective on the soul hierarchies of nature. Since living systems at all levels are networks, we must visualize the web of life as living system (network) interacting in network fashion with other systems (network)”.

### 1. Introduction: What Do We Mean by Research Paradigm?

A review of literature from leaders in the field leads to a deep understanding of the meaning of a research paradigm. For example, in *The Structure of Scientific Revolutions* American philosopher Thomas Kuhn (1962) first used the word paradigm to mean a philosophical way of thinking. The word has its aetiology in Greek where it means pattern. In educational research, the term paradigm is used to describe a researcher’s ‘worldview’ (Mackenzie & Knipe, 2006).

This worldview is the perspective, or thinking, or school of thought, or set of shared beliefs, that informs the meaning or interpretation of research data; Moreover, Lather (1986) explains, a research paradigm inherently reflects the researcher’s beliefs about the world that she or he lives in and wants to live in. It constitutes the abstract beliefs and principles that shape how a researcher sees the world, and how she or he interprets and acts within that world. When we say that it defines the researcher’s worldview, we mean that a paradigm constitutes the abstract beliefs and principles that shape how a researcher sees the world, and how she or he interprets and acts within that world. A researcher looks at the world through the lens. It is the conceptual lens through which the researcher examines the methodological aspects of their research project to determine the research methods that will be used and how the data will be analysed. Guba and Lincoln (1994) who are leaders in the field define a paradigm as a basic set of beliefs or worldview that guides research action or an investigation. Similarly, the gurus of qualitative research, Denzin and Lincoln (2000), define paradigms as human constructions, which deal with first principles or ultimate indicating where the researcher is coming from so as to construct meaning embedded in data. Paradigms are thus important because they provide beliefs and

dictates, which, for scholars in a particular discipline, influence what should be studied, how it should be studied, and how the results of the study should be interpreted. The paradigm defines a researcher's philosophical orientation and, as we shall see in the conclusion to this paper, this has significant implications for every decision made in the research process, including choice of methodology and methods. Therefore, a paradigm tells us how meaning will be constructed from the data we shall gather, based on our individual experiences, (i.e. where we are coming from). It is therefore very important, that when you write your research proposal for HDR, you clearly state the paradigm in which you are locating your research.

## 2. What Are the Essential Elements of a Research Paradigm? Pertinent Literature

According to Lincoln and Guba (1985), a paradigm comprises four elements, namely, epistemology, ontology, methodology and axiology. It is important to have a firm understanding of these elements because they comprise the basic assumptions, beliefs, norms and values that each paradigm holds. Therefore, in locating your research proposal in a particular research paradigm, the understanding is that your research will uphold, and be guided by the assumptions, beliefs, norms and values of the chosen paradigm. It is therefore important that you demonstrate that you know what each of these elements mean.

2.1 Epistemology of a Paradigm Epistemology has its aetiology in Greek where the word episteme, means knowledge. Put simply, in research, epistemology is used to describe how we come to know something; how we know the truth or reality; or as Cooksey and McDonald (2011) put it, what counts as knowledge within the world. It is concerned with the very bases of knowledge – its nature, and forms and how it can be acquired, and how it can be communicated to other human beings. It focuses on the nature of human knowledge and comprehension that you, as the researcher or knower, can possibly acquire so as to be able to extend, broaden and deepen understanding in your field of research. Schwandt (1997) defines it as the study of the nature of knowledge and justification. And so, in considering the epistemology of your research, you ask questions like: Is knowledge something which can be acquired on the one hand, or, is it something which has to be personally experienced? What is the nature of knowledge and the relationship between the knower and the would-be known? What is the relationship between me, as the inquirer, and what is known? These questions are important because they help the

researcher to position themselves in the research context so that they can discover what else is new, given what is known. And so to understand the epistemological element of your paradigm, you should ask the very important question of how we know what we know? This question is the basis for investigating 'truth'. Whereas it might be debatable as to whether there is such a thing as 'truth' (Davidson, 2000), if we take factual evidence as truth, then epistemology helps you to ask factual questions, such as how do we know the truth? What counts as knowledge? These are particularly important questions because one of the criteria by which higher degree research is judged is its contribution to knowledge. In trying to articulate the answers to the above questions, researchers can draw from four sources of knowledge. Those sources are intuitive knowledge, authoritative knowledge, logical knowledge, and empirical knowledge (Slavin, 1984). If you rely on forms of knowledge such as beliefs, faith, and intuition, then the epistemological basis of your research is intuitive knowledge. If you rely on data gathered from people in the know, books, leaders in organizations, then your epistemology is grounded on authoritative knowledge. If you put emphasis on reason as the surest path to knowing the truth, then this approach is called rationalist epistemology or logical knowledge. On the other hand, if you put emphasis on the understanding that knowledge is best derived from sense experiences, and demonstrable, objective facts, then your approach leans towards empirical epistemology. Epistemology is important because, it helps you to establish the faith you put in your data. It affects how you will go about uncovering knowledge in the social context that you will investigate.

2.2 Ontology of a Paradigm Ontology is a branch of philosophy concerned with the assumptions we make in order to believe that something makes sense or is real, or the very nature or essence of the social phenomenon we are investigating (Scotland, 2012). It is the philosophical study of the nature of existence or reality, of being or becoming, as well as the basic categories of things that exist and their relations. It examines your underlying belief system as the researcher, about the nature of being and existence. It is concerned with the assumptions we make in order to believe that something makes sense or is real, or the very nature or essence of the social phenomenon we are investigating. It helps you to conceptualize the form and nature of reality and what you believe can be known about that reality. Philosophical assumptions about the nature of reality are crucial to understanding how you make meaning of the data you gather. These assumptions, concepts or propositions help to orientate your thinking

about the research problem, its significance, and how you might approach it so as to contribute to its solution. Ontology is so essential to a paradigm because it helps to provide an understanding of the things that constitute the world, as it is known (Scott & Usher, 2004). It seeks to determine the real nature, or the foundational concepts which constitute themes that we analyses to make sense of the meaning embedded in research data. It makes you ask questions such as: Is there reality out there in the social world or is it a construction, created by one's own mind? What is the nature of reality? In other words, Is reality of an objective nature, or the result of individual cognition? What is the nature of the situation being studied? Ontology enables you to examine your underlying belief system and philosophical assumptions as the researcher, about the nature of being, existence and reality. Philosophical assumptions about the nature of reality are crucial to understanding how you make meaning of the data you gather. These assumptions, concepts or propositions help to orientate your thinking about the research problem, its significance, and how you might approach it so as to answer your research question, understand the problem investigated and contribute to its solution.

2.3 Methodology of a Paradigm Methodology is the broad term used to refer to the research design, methods, approaches and procedures used in an investigation that is well planned to find out something (Keeves, 1997). For example, data gathering, participants, instruments used, and data analysis, are all parts of the broad field of methodology. In sum, the methodology articulates the logic and flow of the systematic processes followed in conducting a research project, so as to gain knowledge about a research problem. It includes assumptions made, limitations encountered and how they were mitigated or minimized. It focuses on how we come to know the world or gain knowledge about part of it (Moreno, 1947). In considering the methodology for your research proposal, you should ask yourself the question: How shall I go about obtaining the desired data, knowledge and understandings that will enable me to answer my research question and thus make a contribution to knowledge?

2.4 Axiology Axiology refers to the ethical issues that need to be considered when planning a research proposal. It considers the philosophical approach to making decisions of value or the right decisions (Finnis, 1980). It involves defining, evaluating and understanding concepts of right and wrong behaviour relating to the research. It considers what value we shall attribute to the different aspects of our research, the participants, the data and the audience to

which we shall report the results of our research. Put simply, it addresses the question: What is the nature of ethics or ethical behaviour? In answer to this question, it is important to consider your regard for human values of everyone that will be involved with or participate in your research project. This consideration is facilitated by the following questions. What values will you live by or be guided by as you conduct your research? What ought to be done to respect all participants' rights? What are the moral issues and characteristics that need to be considered? Which cultural, intercultural and moral issues arise and how will I address them? How shall I secure the goodwill of participants? How shall I conduct the research in a socially just, respectful and peaceful manner? How shall I avoid or minimise risk or harm, whether it be physical, psychological, legal, social, economic or other? (ARC, 2015). Answers to these questions are best guided by four criteria of ethical conduct namely, teleology, deontology, morality and fairness (Mill, 1969). Technically, teleology is the theory of morality which postulates that doing what is intrinsically good or desirable, is a moral obligation that should be pursued in every human endeavour. And so, teleology refers to attempts made in research to make sure that the research results in a meaningful outcome that will satisfy as many people as possible. An application of this criterion is facilitated by questions such as, are the methods used in this research pragmatic and do they make common sense? Will the actions undertaken in the research produce more benefits than harm? Am I convinced that the actions that will be taken during the research will be the right ones? Have I considered all possible consequences of this research? Deontology is the understanding that every action that will be undertaken during the research will have its own consequence, intended to benefit participants, the researcher, the scholastic community or the public at large (Scheffler, 1982). It also allows for flexibility to deal with individual participants or observations. The morality criterion refers to the intrinsic moral values that will be upheld during the research. For example, that the researcher will be truthful in their interpretation of the data. Finally, the criterion of fairness draws the researcher's attention to the need to be fair to all research participants and to ensure that their rights are upheld. Implementation of this criterion is guided by questions such as, how fair will my research actions be? Will they treat all research participants in the same way? Will my actions show favouritism and/or discrimination towards any participants? And so in the section on ethical considerations for your higher degree research proposal, you should demonstrate best ethical conduct by showing an understanding of what is



right or wrong behaviour as you conduct the research. This consideration is founded on the understanding that all humans have dignity which must be respected, and they have a fundamental human right to make choices which you as a researcher must respect. Implementation of ethical considerations focuses on four principles which you need to uphold when dealing with your participants and data. These principles have the acronym PAPA namely: Privacy, Accuracy, Property, and Accessibility, and are briefly unpacked below, following Sidgwick, (1907) and Slote, (1985).

2.4.1 Privacy Under this principle, you need to consider what information participants will be required to reveal to you or to others about themselves, their associations or organisations? It considers the conditions and safeguards under which data will be gathered and analysed. What things, for example, can participants keep to themselves, and not be forced to reveal to you or any other people?

2.4.2 Accuracy This principle considers who is responsible for the authenticity, fidelity, and, accuracy of information? Similarly, it considers how you as the researcher will cross-check with participants so they know you have recorded the data accurately. It also makes it very clear who will be held accountable for any errors in data? And, if any party were to be injured, how would they be compensated?

2.4.3 Property Under this principle, you need to consider who will own the data? Will there be any payment for the data? If so, what will be the just and fair prices, for the exchange of data? Who will own the channels, such as publications and media through which information will be disseminated?

2.4.4 Accessibility This principle considers who will have access to the data? How will the data be kept safe and secure? Under what conditions and with what safeguards will researchers and participants have access to the data? How will access to the data be gained? (Charles Kivunja and other (PhD): 26)

#### 4. Methodology

This research had plan for research as follow:

**Step 1:** This study starts with defining the scope of paradigm of the Indian Institute of Technology (IITD) as well as the technological development process of India. The deep findings are the data from College of Engineering and Technology in IITD.

**Step 2:** The researcher investigated the accuracy of the content of research is respond with the objectives of the research. In addition, design Questionnaire.

**Step 3:** Start research in India on January 9-19, 2018. The ICSSR help researcher for Letter of contacted the area and asked for assistance from the research organization to collect information in the Republic of India and IITD. The qualitative interviews were conducted through in-depth interviews.

**Step 3:** The researcher analyze recent paradigm of IITD. The researcher contacted the sample size for qualitative data collection. The researcher conducted in-depth interviews using in-depth interviews with Questionnaire of unstructured interviewers. The researcher had interview organizations involved in developing the paradigm of the institute. Indian Technology (IITD) Ministry of Human Resource Development and Ministry of Science. In addition, more carefully for the crucial role of Key informants, who had more experience and are executives at IITD, are appear as follow:

1) Indian Institute of Technology (IITD)

1. Director of Indian Institute of Technology (IITD)

1.1 Professor V. Ramgopal Rao

2. President of Indian Institute of Technology (IITD)

2.1 Shri Kumar Mangalam Birla

3. Deputy Director of Indian Institute of Technology (IITD)

3.1 Prof. Ashok Gupta Deputy Director (Operations)

3.2 Prof. M. Balakrishnan, Deputy Director (Strategic Planning)

The research check the Validity and Reliability of an Instrument as follow:

**Start with Testing Validity**

Validity refers to the degree to which an instrument accurately measures what it intends to measure. Three common types of validity for researchers and evaluators to consider are content, construct, and criterion validities.

Content validity indicates the extent to which items adequately measure or represent the content of the property or trait that the researcher wishes to measure. Subject matter expert review is often a good first step in instrument development to assess content validity, in relation to the area or field you are studying.

Construct validity indicates the extent to which a measurement method accurately represents a construct (e.g., a latent variable or phenomena that can't be measured directly, such as a person's attitude or belief) and produces an observation, distinct from that which is produced by a measure of another construct. Common methods to assess construct validity include, but are not limited to, factor analysis, correlation tests, and item response theory models (including Rasch model).

Criterion-related validity indicates the extent to which the instrument's scores correlate with an external criterion (i.e., usually another measurement from a different instrument) either at present (concurrent validity) or in the future (predictive validity). A common measurement of this type of validity is the correlation coefficient between two measures.

Often times, when developing, modifying, and interpreting the validity of a given instrument, rather than view or test each type of validity individually, researchers and evaluators test for evidence of several different forms of validity, collectively (e.g., see Samuel Messick's work regarding validity).

### **Second with Testing Reliability**

Reliability refers to the degree to which an instrument yields consistent results. Common measures of reliability include internal consistency, test-retest, and inter-rater reliabilities.

Internal consistency reliability looks at the consistency of the score of individual items on an instrument, with the scores of a set of items, or subscale, which typically consists of several items to measure a single construct. Cronbach's alpha is one of the most common methods for checking internal consistency reliability. Group variability, score reliability, number of items, sample sizes, and difficulty level of the instrument also can impact the Cronbach's alpha value.

Test-retest measures the correlation between scores from one administration of an instrument to another, usually within an interval of 2 to 3 weeks. Unlike pre-post tests, no treatment occurs between the first and second administrations of the instrument, in order to test-retest reliability. A similar type of reliability called alternate forms, involves using slightly different forms or versions of an instrument to see if different versions yield consistent results.

Inter-rater reliability checks the degree of agreement among raters (i.e., those completing items on an instrument). Common situations where more than one rater is involved may occur when more than one person conducts classroom observations, uses an observation protocol or scores an open-ended test, using a rubric or other standard protocol. Kappa statistics, correlation

coefficients, and intra-class correlation (ICC) coefficient are some of the commonly reported measures of inter-rater reliability.

**Step 4:** Sent complete the Final Report to National Research Council of Thailand.

### **5. Hypothesis Analysis**

The model of the educational development paradigm for Indian Institute of Technology?

### **6. Results and Discussion**

Clearly, the educational provisions within any given country represent one of the main determinants of the composition and growth of that country's output and exports and constitute an important ingredient in a system's capacity to borrow foreign technology effectively. For example: health and nutrition, and primary and secondary education all raise the productivity of workers, rural and urban; secondary education, including vocational, facilitates the acquisition of skills and managerial capacity; tertiary education supports the development of basic science, the appropriate selection of technology imports and the domestic adaptation and development of technologies; secondary and tertiary education also represent critical elements in the development of key institutions, of government, the law, and the financial system, among others, all essential for economic growth.

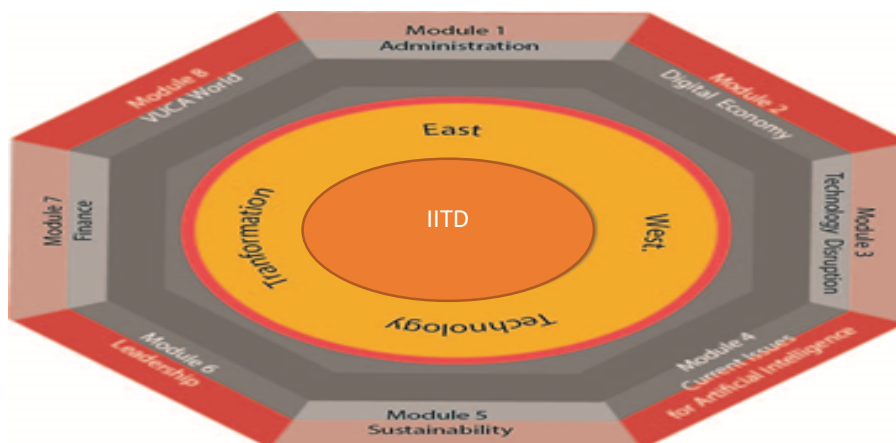
The education industry in India is generally accepted that education is the foundation of national development. Educational opportunities are a key factor in driving the economy and making progress for the country sustainable. For this reason, countries around the world are striving to offer educational opportunities to young people. Moreover, the workers in their own country. India is a country with a sound mind. The Technology and Technology Institute of India (IITD) has been ranked as a leading university in the field of technology and engineering. Ranked 64th, QS WORLD UNIVERSITY RANKINGS is a leading research and education institution. The internationally renowned institution is located in New Delhi. Has been declared an institution. The Indian Government under the Institute of Technology Act, 1963 IIT Delhi provides guidance and conducts various researches. Engineering Science Technology and art to advance in learning and Disseminate knowledge in these disciplines;

IIT Delhi is an educational institution that offers undergraduate and postgraduate degrees in Computer Science and Engineering. 1) B. Tech. In Computer Science & Engineering 2) Dual Degree Program in Computer Science & Engineering 3) M. Tech. In Computer Science &

Engineering 4) MS in Computer Science & Engineering 5) Ph.D. in Computer Science & Engineering. The IIT application process is as follows. 1) Must pass JEE (Joint Entrance Examination). 2) Must pass Mains and Advance tests. 3) Applicants must submit application information in IIT in the subject area. Likewise, for a graduate program, candidates pass the test. The GATE (Graduate Aptitude Test in Engineering) degree program for front/center of the proposed research program to evaluate an IIT Delhi and announced the list of candidates pass the test site. After attending the institute, Learners must meet the weight and credit-based semester requirements, including midterm test, test/presentation, and lab/workbook / lab tests during the semester. In addition, thesis presentation/expert assessment project for successful completion of the curriculum.

The duration of the course is 4 years, B.Tech 4 years, M.Tech 2 years, MS (Research), 2 years and Ph.D. B.Tech./Dual Degree students complete their studies at IIT. M.Tech./Ph.D. The institute offers high-quality research facilities and scholarships, academic advisors and supervisors. The interest of the Indian Institute of Technology. Most students are interested in learning IT / ITES / CS and Electronics. Including IIT support to develop learners to innovate in the product. In addition, IIT has a dedicated faculty that encourages students to think outside the box to develop a product or process to redefine the path to doing things in a better way. Business Unit Incubator Technology (TBIU) Foundation For innovation and technology transfer (FITT), the Center for Industrial Design and Development (IDDC), etc. provides facilities. In addition to active support and involvement through agencies/centers/ schools and centers of excellence, most activities are funded by the government, and some are funded through student-sponsored projects and grants. In addition, there is support for students presenting papers at national and international conferences. The design or the idea started to become creative and find a solution or modern technological facilities. IT and ICT course students can work after the completion of IITD. Students can sit for job interviews by submitting biometric information. Then, in the interview and in the reception, the choice can be offered through India or by a foreign company/employer. The IITD will have facilities by training and positioning the institution's cells. It also noted that students follow the path as an entrepreneur, choosing to work for the starter as they decide. The institution has full support in the form of mentoring programs and supports the incubation process, the transfer of other technologies. The last but not least, The model of this research show that Education use Theory such as East West Technology and transformation and The

project that can help IITD success concern with Administration, Digital Economy, Technology Disruption, Current Issues for Artificial Intelligence, Sustainability, Leadership, Corporate Finance and VUCA World. That show in figure1as belo



**figure 1:**The model of educational development paradigm for Indian Institute of Technology

## 7. Conclusion

Indian Institute of Technology (IITD) is the best model in education of India. The research show that IITD had expert in technology and plan for education is essential, benefic for human and the student must learn how to improve and development. The Goals for Sustainable development is impossible without good education. A balanced education system promotes not only economic development, but also productivity, and generates individual income per capita. Its influence is noticeable at the micro level of an individual family. The recent research show that the educational development paradigm for Indian Institute of Technology is the best practices paradigm in India. The professor and IITD continuous development has been identified as a critical element that affects to the student outcome. Developing professor through the concept of area based professor development paradigm, Model is good concept for Thailand and important to the university and the professor in university too.

## 8. Policy Recommendations to the Government

1) The agency should establish a career guidance agency. In addition, activities. To promote career motivation. To provide guidance on the workplace by coordinating networking

with local government organizations, the public, and private sectors, annually. In order for the institution to have a channel to prepare students for their education. In the occupation.

2) The school should have a Memorandum of Understanding (MoU) to create a network between schools. This is an opportunity for the institution to develop together in an integrated way. By establishing a partner who intends to enter into a strategic relationship to explore and pursue joint activities. As defined in the Joint Collaborative Principles. For this purpose, the school needs to establish partnerships by setting the intention to collaborate. 1) jointly organize short-term continuing education programs on various topics and invite each guest speaker to participate in the program; 2) organize seminars or workshops on 3) Participate in the launch of education programs to reduce fees. 4) To conduct research and development projects together to create innovative learning together five), fundraising and educational initiatives. In addition, these studies must be conducted under separate agreements.

3) The school should establish a network with the establishment to allow the student to be recruited after the course. The school must develop the curriculum to develop the learner to be suitable for the establishment.

4) Institutions and establishments should be involved in setting goals and plans/projects to create innovations, inventions, researches of learners and learners to create strategies and guidelines for both quantitative and qualitative approaches. To be competitive at regional and national level. It also supports the budget for the operation, the creation of works or the completion of quality work. They should promote and encourage the development of academic and professional service programs. The knowledge and experience gained from studying in the fields that they learned to do projects that can be used in the school or community more. Moreover, survey the satisfaction of all users to improve the quality of the improvement. The database is easy to find.

5) The agency should develop a database system that can link all data systematically and efficiently to keep up with the changes each year. Moreover, keep organized. To save time reduced workload and duplication Easy to manage.

6) Government agencies should focus on creating a Satisfaction Assessment Form to assess the satisfaction of the stakeholders in the institution. The data were analyzed to develop and improve the activities that encourage students to have a sustainable identity.

## 9. Recommendations for School Administration

1) The agency should supervise and provide advice to the institution under the jurisdiction.

In the development of education. Human resources development and develop the database system of the institution. To support small educational institutions and not ready to develop database systems. The budget for the institution is sufficient.

2) The agency should cooperate with the community, the organization. Public and private agencies that are equipped with state-of-the-art materials and equipment to allocate resources. Moreover, organize activities. The institution is a source of learning for the local community.

3) The school should provide an environment suitable for teaching and learning. It should also encourage students to have a habit of reading more. The instructor organizes activities that encourage learners to research additional books from the library. Printing media interesting enough for the students. On the other hand, from the technology media. Allow students to learn more. They can develop their skills and can summarize their reading in various forms, such as Mind mapping, or write a summary of issues for development. Reading and writing skills Teachers focus on tracking. Inspect the work piece / work of the student or student for advice and suggestions. It should be organized continuously to promote reading activities every school year.

4) The school should put in place the development of the learners to improve their thinking skills. Especially in the ability to solve problems. Use of technology media more research on the Internet and life skills, such as problem solving. By training the learner to learn and understand the problem first and then plan to solve the problem by the students to practice and examine the answer as a teaching process in the thinking.

5) The school should follow. Expected results of teacher training development. Approved, prepared, and used by each teacher. Supervision of teaching and learning, standard analysis, test, instrumentation, evaluation Using tools that can reflect success and barriers to student development. Outcome at the end of the academic year to plan all teachers have been developed to solve problems. To meet the demand for more effective learning management.

6) The school should encourage and encourage all teachers to assess the progress of the learners in a variety of ways. This is a great way to learn about the nature of the subject and its developmental level. Students are expected to evaluate their own progress to improve and



develop themselves. It also encourages all teachers to study, research and develop media. Learning to focus on the learner is important.

7) The school should conduct research work to develop policies and plans. To develop a more efficient management system.

8) The school should cooperate with the school board to recruit subcommittees from the network and relevant agencies to play a role in improving the quality of educational institutions.

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