TRANSFORMATIVE E-GOVERNANCE AND ACCESS IN HIGHER EDUCATION

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ABSTRACT
The systematic and comprehensive nature of higher education is a necessary and pre-requisite condition for the development of a prosperous nation in any part of the world. Higher education revealed its roots in the last decade of the twentieth century with the expansion of technological devolution, which shifted the modes of traditional foundation to Virtual Learning Environments (VLE) to reveal its activities, working areas, and phenomenon. This article basically aims to clarify the ideas of the e-governing approach in terms of higher educational background with the intricate correlation between various government department officials in an administrative scenario. From the analytical point of view, it must be attempted to consider the roles and responsibilities of government officials in terms of public-private ownership and also to evaluate the performance of e-government initiatives, especially in the higher educational background.
Keywords: E-governance, Transformation, Access, Higher Education

INTRODUCTION

In ancient civilization to modern context, higher education opens and expands knowledge with the assistance of congruent learners for the effective enumeration and harmonious development of a nation. A remarkable expansion has resulted from the intricate collaboration of E-governance and educational administration and management. Electronic governance and use of information communication technology (ICT) bring a remarkable change in the education system. They teach students to appreciate a new age that is the information era. It has now gained status, especially in the COVID-19 pandemic situation. In today's modern scientific and technological world, nurturing and cultivating innovative management and administrative contemplation in the teaching-learning environment are key issues for changing circumstances or situation phenomena. E-governance is an approach that cultivates cost benefit and cost-effective analysis in education organising both within the government and non-government organisations and other agencies. In the last decade, India has seen an extraordinary increase in higher education institutions (HEIs) due to LPG which stands for Liberalization, Privatization, and Globalization. It is now becoming a more challenging task to administer and coordinate various higher education institutions (HEIs) in a countrywide manner. In general, the e-governance approach provides services and assistance through online interaction like websites or blogs for strengthening various administrative requirements in the educational process, like registration, student information, attendance sheets, library work, prompts and awareness, performances, examinations, and reports. The majority of software-based services associated with the National Knowledge Network (NKN) provide online access and client-centric approach modules for monitoring an organization's activity and online performance. E-government can transform higher education institutions to be based on the principle of citizen services, provide information accessibility, enable citizen centric participation, empower citizens in the field of public grievances, and strengthen citizens with the fundamental principle of economic and social inclusion for the wholesome betterment of a harmonious and progressive society. Now it is becoming more evident that various service-related communications between governments (G2O), government-to-institution (G2I), and government-to-government (G2G) through office processing can lead to mutual interconnectivity among different members. Government and governance are sometimes used interchangeably. Government fundamentally denotes a system in which a state or nation is governed, whereas "governance" is an approach of scientific art and management, conducting rules and regulations for a free and fair transaction business. Basically, higher education institutions in India are reconciling ICT integration, which indicates an emergent form of transformative e-governance. ICT innovates a novel way of doing things with the fundamental principle of accuracy, ideal interconnectivity, and digitalized transactions. Higher education reveals a globalised form of composition. It has become an umbrella term for those who possess an industrial orientation, making an effective

impression in the market economy and knowledge explosion. Technology-based higher education institutions provide a more knowledgeable experience between learner and instructor. For long-term usability among users, it is needed for transparency, accountability, and continuity in today's competitive learner scenario. The approach of E-governance can play a pivotal role in today's globalised world, especially in COVID-19 pandemic situations. Public as well as private members of an organization will benefit from e-governance services. This may also be true in higher education institutions.

OBJECTIVES OF THE STUDY

The present study is to clarify the following stipulated objectives:
- To understand the transformative e-governing approach and its implications for higher education institutions
- To illustrate the difference between transformative e-government and the e-governing approach
- Reformation and retransmission of the electronic governance approach in an educational scenario

METHODOLOGICAL ANALYSIS

This article is based on the descriptive method in nature. In any other study, a rigorous review of related literature and content analysis is applied to collecting and compiling information. Required and essential information accumulated from various reputed journals, websites, books, and reports in the news media etc. related to this topic is also followed to frame an efficient and effective article.

TRANSFORMATIVE E-GOVERNING APPROACH

In the initial analysis, it is clear that, from the early nineteenth to the twenty-first centuries, analytical evidence demonstrated a clear depiction of industrial growth orientation, technological devolution, and, more importantly, in modern complex societal development phenomena, rapid growth in the education sector has given a new dimension to cost benefit and cost effectiveness approaches in education. The term E-governance implies, basically an approach rather than a system, an intricate correlation between public servants and the masses in society. Thus, it indicates a broader perspective, an approach to be merged with the transformative potential of government procedures in the changing world and an analytical system orientation towards 'viewing, observing, and acting procedure.

MAJOR INTEGRATIVE INGREDIENT IN TRANSFORMATIVE E-GOVERNANCE

There are some intricate and entangled components that are responsible for the reconstructive capabilities of government functioning approach in changing situations: the emergence of technological devolution, the devolution of decentralisation of information services, reconstructive capabilities innovation and the conflict between stagnation and modernity. ICT integration or Technology Based Service Orientation (TBSE) makes humans more progressive in nature and motivates a new way of doing things. Thus, it is an approach that ensures better public facilities on the basis of cost benefit and cost-effective analysis among citizens, employees, and business organisations. Another most important view is to reconcile the electronic readiness or online acceptance approach among public and private members of an organization. Modern ICT integration not only converts traditional information into bits, bytes, megabytes, and gigabytes, but also enriches it through an electronic platform. It enhances the performance of various departments in government organisations by collecting, processing, and compiling information in a convenient way. It improves services through the principle of user needs and satisfaction, thus reducing the seamless online stagflation. In today's scenario, the government must ensure trust between governments and citizens on the basis of transparency, continuity, and the most important factor, privacy. With rapid industrialization and modernization, changing patterns of lifestyle and society are reconciled to government economic policy formulation on the basis of internet-based communication or ICT, e-commerce as a fruitful result of existence in a modern business context. A holistic approach to constructive reconciliation is depicted in Figure 1.
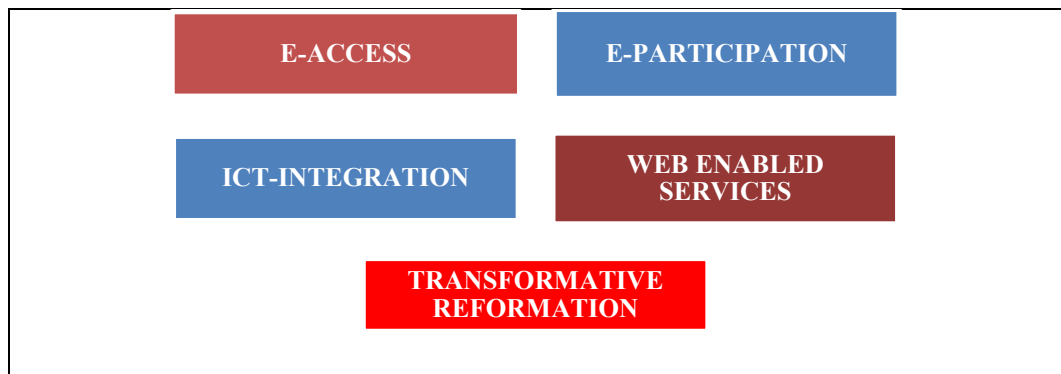
Figure 1. E-governance: A holistic approach to constructive reconciliation.

Another historical force is the innovative management and administration in public and private enterprises. To maximise public administrators' ability to think, reason, and practise in the "stages of growth" in e-government and their organization. Transformative e-governance initiates a new form of interaction among implementing stakeholders, beneficiaries, and the government. To measure and evaluate the performance of e-government administrators, "Gartner's Model of e-Government" broadly classifies e-government into four distinct phases (M. Altieri and S. Drew 2010, pp. 80–81). This model can briefly describe the overall evolution of e-governance in bureaucratic administration. "Stage 1: One-Way Interaction": This stage is basically founded on information sources or one-way interactive mode through a website. Sometimes it may also be called a "paper brochure". It is intrinsically passive in nature. Here, an analyzer provides open-source software to the user to get free access and information mobilization.

"Stage 2: Interactivity": The interaction phase basically offers simple interaction among different institutions or organisations in a worldwide manner. Interaction via websites or e-mail that provides useful information in government-to-government (G2G), government-to-people (G2P), and government-to-private agency (G2P) modes to improve communication.

"Stage 3: Different activities like admission procedure, fees payment, result publication, tests preparation in the field of teaching-learning and other administrative activities like paying taxes, corrigendum or draught publication, also include applying day-to-day general living phenomena. This includes residential certificate application to renewal form or licenses.

"Stage 4: Innovative Transplantation": The most important phase, closely related to innovative management practises in an administrative cultural scenario, involves an increasing and more inventive aptitude between government members and staff in public organisations. Nowadays, e-participation, or paperless transactions, is a new moment in the organisational climate.

E-GOVERNANCE IN HIGHER EDUCATION INSTITUTIONS

Higher education is an umbrella term that includes teaching, learning, and research orientation. As a retrospective reconciliation from ancient times to the modern context, India has gained numerous prospective higher education institutions like Nalanda, Vikram shila and Taxila in its educational background. So, higher education can play a pivotal role in forming the harmonious and progressive development of an individual as well as society. Higher education expands knowledge and develops critical thinking and reasoning skills to solve multiple problems in a day-to-day context in a convenient way. Higher education is one way to produce human resources in teaching, learning, management, design, and research. The scientific-technological development and economic prosperity of a country are mostly based on the reflective higher education system, which enumerates and renounces needs and capabilities-based education, which is mostly relevant to the CBCS method or approach. From time to time, the development of indigenous technology creates a new form or shape of education in different branches, especially in medical sciences, agriculture, and food cultivation, etc. In COVID-19 pandemic situations, teaching through online media and tools is essential and one of the noblest ways to maintain consistency in quality teaching-learning, interaction, or communicative transparency, and requires technical expertise and other allied services. From a researcher's viewpoint, it's very evident to analyse the opinions of different stakeholders in educational organisations like instructors, learners, academicians, parents, and the general public to opine their valuable feedback about the teaching/learning process through online modes. According to a survey done by the respective researchers, the findings distinguished between the oriental (traditional chalk and talk method) and occidental (modern online technologies) controversy. Students were more interested and satisfied with the traditional

oriental/traditional chalk and talk method than with online technological device-oriented teaching methods (Gandaki, M. Deshpande, and D.C. Sivananda 2021) (Figure 2). More than 86.3% of stakeholders have preferred classroom teaching with face-to-face interaction-based learning.
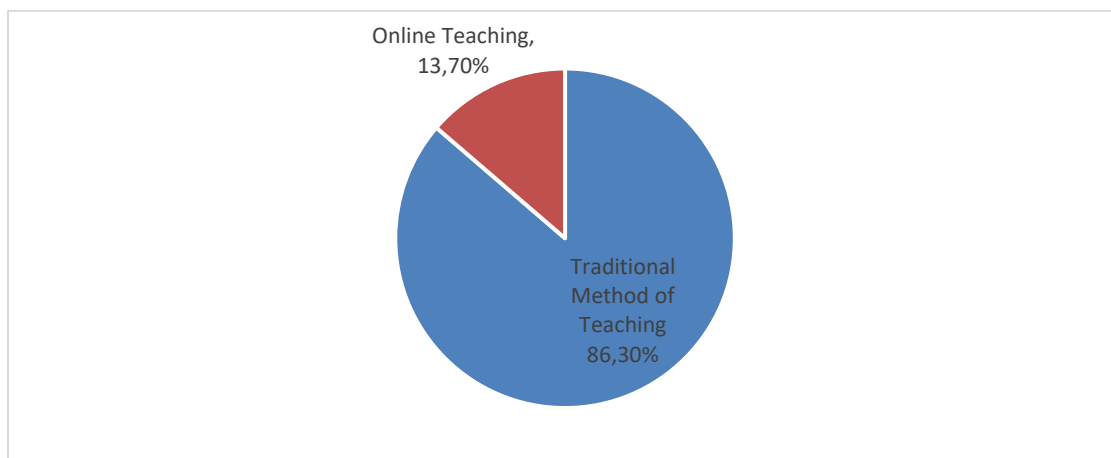

Figure 2. Approaches of Teaching Pedagogical Research, e-ISSN: 2468-4929.

In educational situations, the implementation of the e-governance approach in educational institutions is based on various dimensions or approaches. Let's understand the exact nature and forms of online teaching and learning phenomena in pandemic situations.

ICT INTEGRATING MODELS

In a pandemic situation, most colleges and universities in our country have started using online teaching instead of offline modes of teaching to maintain the COVID rules and regulations like social distancing. Various educational governing bodies, such as the UGC, AICTE, and NCTE, have developed and encircled online education in recent decades to facilitate teaching, learning, exam preparation, and evaluative judgment. Different online teaching tools like e-mail, What's App, Google Meet, and Zoom have gained enormous importance for the smooth conduct of business activities in any organization. In a research study finding, educational technology (ET) accumulated new prospects, enabling universal monetization skills. In online teaching, most of the participants use Zoom, approx. 81.7% of the participants, whereas the rest of the participants use Google Meet, Go To Meeting, Cisco WebEx, and Impartus (Naik, Deshpande, Sivananda, and Patel 2021). For the sake of virtual teaching-learning, the government ensures the process of transparency, continuity, and expertise in content delivery with the assistance of collaborative approaches like public-private ownership, different apps, and online platforms at all levels of education.

FOR TEACHING-LEARNING ENRICHMMENT AMONG TEACHERS-LEARNERS:

Now, the various government apps related to education ensure transparency and continuity for all states and union territories of India. The government's approach is now being called a blend combination between offline and online modes of teaching. The different learning initiatives for prospective teachers are collated in Figure 3 and Figure 4 respectively.
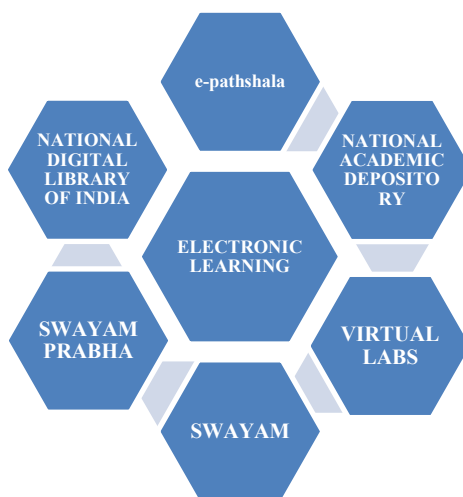
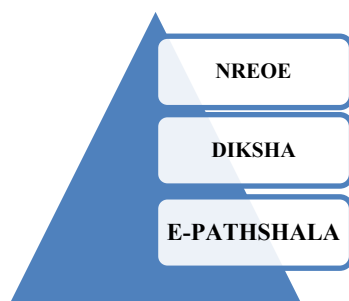Figure 3. Learning initiatives for prospective teachers (teachers-learners)

Figure 4. SHAGUN online platform

LEARNING INITIATIVES FOR PROFESSIONAL DEVELOPMENT OF TEACHERS

 In recent years, the coronavirus pandemic has shifted the entire education process to be teacher centric. Even the instructors, or teachers, are now challenging the tremendous task of teaching in a virtual manner. For the sake of traditional teaching to virtual teaching-learning, the use of technological tools and devices is a universal phenomenon. Apps, in particular, have a multidimensional use in the process of education. They allow teachers to have access to inevitable resources and learning materials for the sake of more enrichable and precise content collection. Figure 5 describes various educational apps for online teaching-learning.
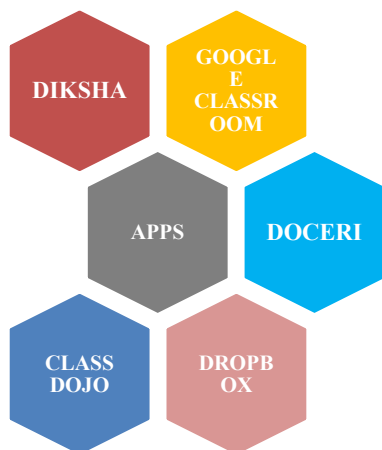

Figure 5. Educational apps concerned to online teaching-learning.

INITIATIVES OF EDUTECH COMPANIES FOR CLASSROOM LEARNERS

The term e-learning is the abbreviated to generate a new way of learning, to be based on virtual or artificial manner. Learners uses mobile learning methods into three different viewpoints- portability (indicates mobile devices uses in distinct locations), instant connectivity (mobile devices used to access information at anywhere and anytime) and context sensitivity (mobile devices can be used to gather and accumulated graphical data or simulated data, Ansari and Tripathy on 03 March 2021). The regular usage of online material of different edutech companies are mentioned in Table 1.

Table 1: The regular usage of online material of different edutech companies

Parameters	Byju's	Toppr	Unacademy	Vedantu
Average Daily Time Spent on Site (mm:ss)	02:46	03:53	05:45	05:31
Average page views daily per visitor	2.03	3.02	4.39	3.34
Bounce Rate	67.6%	59.4%	45.8%	52.9%

ADMINISTRATIVE (INTERNAL) SERVICES

In University and Colleges, the major services available for students and faculty members include:

1. Mock tests and online study materials will be made available.
2. The authentication process will be based on a personal ID and password scheme.
3. Online web enabled services for continuous and comprehensive evaluation.
4. Several web-based application services related to university administration, such as i) registration, ii) digital library facilities, iii) e-mail facilities through scheduling, iv) results publication, and v) online webinars.
5. Online meetings are available through web apps such as Google Meet and Zoom.
6. Representation of the budget and audit report.

CONCLUDING DISCUSSION

In the decade of LPG (Liberalized, Privatized, and Globalized) to COVID-19 pandemic situations, the need for an efficient and effective administration, communication ingredients, and access to information and improved collaboration in a worldwide manner is a basic thrust in today's higher education system. Electronic governance can only be used to ensure the smooth operation of information databases, the sharing of necessary ingredients, and the enhancement of information analytics capacity should ensure the transparency and continuity among different educational institutions by enacting various regulations and maintaining security through updated software and devices. With the advent of ICT and IT components, the government can perform various functions such as modelling, accounting, drafting, and implementing educational policies and principles in a convenient manner. With the help of e-governance, the government can perform and publish rankings such as NIRF (National Institutional Ranking Framework), NAAC visiting report, MGNREGA details, and also PFMS updated information. Through this model, the government will be able to compare and analyse the performances of different institutions and departments in government officials.

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