Use, Misuse, and Abuse of ICT in Nepalese Education Policy: A WPR Analysis

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Abstract

Of late, a young school student from Mahottari's Shree Kishor Janta Madhyamik Vidhyalay, has exposed the administration's blatant deceit. He was most concerned about the conspicuous dearth of high-quality education (see this Facebook video at: https://www.facebook.com/watch?v=308978328234703). Surprisingly, the school is egregiously deficient in even the most basic conveniences required for a conducive learning atmosphere. There are glaringly insufficient restrooms, not enough clean drinking water, and even not enough teachers at this facility. The sheer pace at which the internet and digital learning, among other technological advancements, have become so crucial in today's everyday academic practices, pedagogy and parlance has become alarming. Owing to its efficiency, reliability, and the liberalization of knowledge, as well as its functionality in addressing crises such as the most recent Covid-19 pandemic, ICT has become an essential, irreplaceable tool. Hence, this paper explores the use, abuse and misuse of Information and Communication Technology, highlighting since its inception in 2012. This study explores how Information and Communication Technology (ICT) has been incorporated into Nepal's educational approach. The study applies the "What is the Problem Represented to be?" (WPR) analytical framework to examine the policy's implementation, outcomes, potential, and challenges within Nepal's educational system. ICT adoption aims to switch from traditional to student-centered learning by 2018 to increase educational access and quality. The report underlines persistent policy implementation, teacher ICT training, public-private partnerships, and community engagement as ways to preserve the use of ICT in education. It exhorts decision-makers to ensure policy objectives are carried out effectively and encourages resource allocation to address these problems. It also emphasizes how ICT may revolutionize schooling. The study uses a

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thorough WPR analysis to look at how ICT has been incorporated into Nepal's educational policy, highlighting challenges, inconsistencies, and workable solutions to make the most of ICT's potential to improve educational quality and accessibility.

Keywords: ICT, Nepalese Education Policy, Problem, WPR

Context and purpose

In this paper, I embark on a critical policy analysis of Information and Communication Technology (ICT) integration in teaching and learning in the Nepalese education landscape formulated in (2012). This Policy advocates for improving teachers' ICT proficiency and recommends using ICT to transform from a traditional mode of teaching-learning to a student-centered one. The primary purpose of the Policy is to change education access to ICT-based quality learning by 2018. To attain this purpose, I administer 'What is the Problem Represented to be?' (WPR) of Baachi Policy analysis framework from initiation to implementation, products, prospects, and challenges of the ICT policy, its use, misuse, and abuse.

The Ministry of Education (MoE) regulates the education system of Nepal. It provides Policy for the management and implementation of Education. The formal education system in Nepal, which the government created, is divided into three segments: school education, higher Education, and Technical Education. School education refers to grades one through twelve (MoE, 2014). ICT is a new concept that has recently been combined into several fields (Joshi, D.R. 2016). Some policies, like the School Sector Reform Program (2009-2015), the Three-Year Plan (2011-2013), and the ICT in Education Master Plan (2013-2017), have been developed to strengthen ICT in schools (Ministry of Education 20013).

The primary purpose of Education in Nepal is to equip people with the knowledge, abilities, and attitudes needed to participate in the nation's development actively and to integrate Nepal into the global community by ensuring that everyone has access to high-quality education, emphasizing primary education. The Constitution of Nepal 2072 guarantees the fundamental right to an education. Some of the initiatives to guarantee equitable access to Education have been outlined in the current National Plans on Education: Education for All (EFA), National Plan of Action/NPA (2001-2015), Three Year Plan (2011-2013), and School Sector Reform Plan/SSRP (2009-2015). To realize the objective of Education in Nepal, the Ministry of Education (MoE) of the Government of Nepal (GoN) has implemented several interventions. One method for achieving Education's more general objectives has been the use of

information and communication technologies (ICT) in the classroom.

ICT in global academia has taken a quantum leap, forcing Nepal to embrace the changes. That's why the Government of Nepal, Ministry of Education, through the National Curriculum Framework (NCF), has introduced ICT as a subject as well as ICT as a tool for instruction in school education. Private academic institutes have already initiated ICT as a separate subject as well as ICT as a methodology of the teaching-learning process (Rana et al.; K. 2020). However, these initiatives need to be implemented into a broader national framework to ensure equitable access to and quality of Education.

The following policy provisions are found in the IT Policy (2010): Increased Internet connectivity for all schools; coordination and cooperation with regional, national, and international organizations to build a skilled labour force for ongoing, relevant, and high-quality Education; In order to produce skilled human resources, industry-academia collaboration (IAC) is encouraged, as is the creation and implementation of a unique IT program that focuses on students, teachers, and schools (Nepal Telecommunication Authority 2012).

Methodology: 'What is the problem represented to be' (WPR)

The WPR technique is a methodology or resource created to make it simpler to critically analyze the subversive nature of public policies. The notion of the WPR lies in anything one advises doing in response to displays what they view as problematic, which needs to change. This argument holds that implicit descriptions of the problem are included in policies and policy proposals (also known as problem representations). For instance, if ICT is advocated to enhance teachers' proficiency and training, and professional development, the proposition is that their lack of training is the crux of the problem, holding them back. A WPR study aims to investigate policies to determine how the problem is portrayed in them and then critically examine this problem representation.

The most important goal is to clarify the politics behind these positive actions. Investigating how these things came to be and are still generated regularly challenges the widely held notion that things are simple things, people are just people, and that countries and other geographical entities exist (Bacchi & Goodwin, 2016).

The progenitor of the WPR analysis, Baachi (2012), prescribes six crucial key questions to break down the nature of the Policy.

Q 1. What is the problem representation to be?

Q 2. What presuppositions or assumptions underlie this representation of the problem?
Q 3. How has this representation of the problem come about?
Q 4. What is left unproblematic in this problem representation? Where are the silences? Can the problem be thought about differently?
Q 5. What effects are produced by this representation of the problem?
Q 6. How/where is this representation of the problem produced, disseminated, and defended? How could it be questioned, replaced, and disrupted?

WPR analysis framework questions adapted from (Baachi, 2012) Table A

Q 1. What is the problem representation to be?

In 2012 the Government of Nepal unveiled the ICT Policy for Education, introducing information technology into Nepalese academia and promoting distance learning without any specific educational policy (Nepal Telecommunication Authority, 2012). The 2005 National Curriculum Framework for School Education (MoES, 2005) also included ICT as a teaching methodology and a separate subject. Subsequently, the 2007 curriculum revision reaffirmed these objectives (MoE, 2007). Similarly, the MoE emphasized ICT infrastructure and ICT training, and the School Sector Reformed Plan 2009-2015 (MoE, 2009) strongly emphasized ICT integration in educational activities. Furthermore, the School Sector Development Plan 2016–2023 prioritizes ICT in Education to improve Nepalese teaching and learning. It emphasizes its use, although it also mentions the project's inadequate funding (MoE, 2016). Due to lack of primary application of ICT policy in Nepalese Education is a crucial source of worry. Like the first, ICT in Education has strategic importance beyond simply implementing the declared ICT policy. The practicality of ICT use in village schools must be acknowledged in national Policy. However, most of the population lives in village areas. Furthermore, the difficulties faced by rural schools in seeking to integrate ICT into their curriculum should be more extensively discussed among the stakeholders of academia (Rana et al., K. (2020).

The rapid growth of ICT in and around the global academia is considered a wake-up call for implementing ICT to meet the national goal of Nepali education. That is why ICT is bound to take place in the classroom. Teaching and learning transformation aim to improve teaching methods and create new learning strategies. The use of ICT in Education has changed a teacher's role from one of an instructors to one of a facilitator. A shared workspace and resources, simple access to current information, encouraging collaborative learning, and the development of various teaching

and learning methodologies are all benefits of e-learning or a virtual learning environment Chapagain, D. P. (2006).

Although the Nepalese government's ICT policy for Education, in principle, covers distance learning and teacher professional development, its actual implementation has already wreaked havoc on the national academic environment. Due to a lack of infrastructure, teachers have ignored the use of ICT. Teaching and learning transformation aim to modify how lessons are delivered and how learning strategies are created, which are grossly missed in rural areas, mainly in Mashes province two. E-learning, or a virtual learning environment, has produced a shared workspace and resources, simple access to current knowledge, encouragement of collaborative learning, and the development of various teaching and learning methodologies, but its implementation has become a grave concern. At the same time, the absence of teachers for professional development should not be negated as a stumbling block to this ICT policy implementation (Rana et al., K. (2020). Thus, the solution lies at the bottom of the problem: infrastructure enhancement, ICT training for teachers, and monitoring and evaluation are imperative (Giri, S. 2015). This dire situation elaborates the need of further questioning the implementation of ICT in Nepalese every Nepalese classroom practices, rural context in general and in Madhes province two in particular.

Q2: What presupposition or assumptions underlie ICT in Nepali Education Policy the problem?

In the ICT policy for Nepali education paper, the crucial presuppositions relating to E-Education, E-School, E-teaching / learning, promoting ICT efficiency providing professional development of the teachers have been stated to meet the national goal of the MoE (2011). However, there needs to be an established ICT in Education Policy in Education in Nepal. To fill the gap, the IT Policy (2010), SRRP (2009-2015), and Three-Year Plan 2011-1013 of the Government of Nepal has provided some policies and strategies for developing and integrating ICT in Education. The ICT policy reads:

E-Learning systems will be promoted to extend the reach of educational services, including teachers' training programs. The development and the adoption of IT enabled Educational Management Information Systems within public and private educational institutions will be promoted and facilitated to improve the quality of managing educational delivery activities, operations, and monitoring. Integrating computer skills into the teaching and learning process at primary, high school and

tertiary levels will be promoted and facilitated. Expansion of access to the Internet to all schools; Coordination and collaboration with national and international institutions to develop skilled human resources for continuous, relevant, and quality Education; Promotion of Industry-Academia Collaboration (IAC); and Formulation and implementation of IT program focusing on students, teachers, and schools in order to develop competent human resources (MoE, 2013, Information & Communication Technology (ICT) in Education Master Plan 2013-2017).

An academic researcher Rana, K. B. (2017) opines that Nepal has been compelled to accept the changes due to the dramatic development of ICT in global academia. For this reason, the Government of Nepal Ministry of Education, has developed a Master Plan for ICT in Education in Nepal and held discussion-starting and workshop-organizing activities on ICT in Education.

This Master Plan specifies goals, objectives, primary strategies, and actions with a schedule for the growth and use of ICT in Education while considering existing educational policies and practices. This plan will serve as a roadmap for the long-term strategy and the planning and implementation of ICT in Education in Nepal over the next five years. This plan's principal goal is to successfully integrate ICT into the teaching and learning process across all education sub-sectors to increase access to Education, improve education quality, and advance equity Rana, K. B. (2017).

Q3: How has this representation of the problem come about?

ICT in Nepali education theory meets the global demand, but its implementation is the Policy's crux. The highly developed global ICT market led to the Nepali government's introduction of an ICT policy in Education. Although the government created the Policy and required it in schools, it made no financial commitments to support resource infrastructures or provide teachers with ICT training. And hence there needs to be sufficient evidence for implementing the Policy. Similarly, despite the government of Nepal's Policy highlighting the strategic relevance of ICT in Education, there appears to be no evidence of comparable funding allocated for ICT implementation (K. Rana 2016).

Nepal is transforming from an agrarian society to a remittance-based economy, exporting its cheap unskilled labour internationally, mainly in gulf countries. Due to the high inflow of cash economy, Nepal has turned into a consumer nation. It also positively impacts national education achievement (Bansak, C., Chezum, B., & Giri, A. (2015). In this transitional period, the formation of national education policies

has been highly influenced and affected by international organizations like WB and UN's sister organizations. Regmi, K. D. (2017) claims that the neoliberal notion lies in Nepal's ICT policy, primarily marketization, privatization, and decentralization, which underlie the Bank's proposals for educational reform. Regmi concludes that a neoliberal approach to Education can hardly address Nepal's development issues.

According to Battista, Dutta, Geiger and Lanvin (2015), The Global Information Technology Report 2015 emphasized the role of ICT as a means of social development and transformation by generating access and opportunities for people. Thus, ICT influences everyday life everyday parlance.

Moreover, Information and Communication Technology (ICT) demands, and contributions to universal access to Education, Equity in Education, quality learning and teaching delivery, teachers' professional development, and more efficient education management, governance, and administration are the significant challenges in the implementation process.

UNESCO has been playing a role in implementing policies and plans by extending its know-how in many countries worldwide. And most of them have adopted UNESCO-supported policies to meet UNESCO expectations and to improve their standards of Education Rana, K. B. (2017). In the world of web technology that connects people from various corners of the world easily. So, Davis (2001) suggested replacing the word 'National' with 'International' in 'National Grid for Learning and thinking about a vision of designing ICT educational plans beyond one nation. In global academia, children flourish where social media, mobile technology and virtual communities are fundamental to communicating, learning, and developing their knowledge.

However, the primary concern of ICT policy in Nepalese Education is its implementation in all public schools. Similarly, another is the strategic value of ICT in Education. The performance of the stated ICT policy in Education is in doubt. More than that, the masses live in rural regions. But there needs to be a mention of the mass in the Policy.

Q4: What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently?

Despite the brilliant ICT policy in Nepal, Nepali academia has been facing unsurmountable implementation problems. Dhital, H. (2018) states several issues with advancing information and communication technologies in government education. Due to inadequate curriculum content and restricted access to ICTs,

schools in Nepal still need to utilize ICTs to acquire new knowledge and skills. Bad finance, a lack of basic infrastructure, a shortage of competent workers, and a lack of policy development and implementation are other problems. The physical infrastructure needed to adopt ICT is the main obstacle in our situation. Nepal needs to catch up in terms of performance. This keeps the digital divide and access to ICT facilities from narrowing, a significant concern confronting Nepal.

MoE of Nepal states Nepal's Education Policy in ICT and Teachers' Understanding of It.
ICT has been considered an effective tool for educational transformation.
through improved teaching-learning processes, widening the learning horizon.

(ICT in Education Master Plan – 2013, Ministry of Education, Nepal)

Furthermore, the lackadaisical attitude of the bureaucrats, a corrupted political climate, and donors' interest, along with the ICT policy in Nepali academia, is Language for Accessing ICT. Similarly, Government Policy on Teacher Training, Government Support for ICT, Development of ICT Infrastructure in the Schools, Teachers' ICT Competence, along with the language for accessing ICT can be the significant highlights that can be taken as unproblematic in this problem representation, which has a created a crevasse between Education in the centre and the margins in Nepalese academic context. Those issues have been silenced, but it's crying.

Q5: What effects are produced by this representation of the problem?

School is arguably the most crucial part of one's life, where Education begins, where students learn the knowledge and skills they need. Their life gets transformed. However, in today's time and context, without quality education backed by rudimentary ICT skills, the students will be left in poverty, aggravating the issue more. Students from socioeconomically disadvantaged groups, such as ethnic minorities, rural areas, and low-income families, continue to perform worse academically than their counterparts from more affluent neighborhoods. There is already a considerable gap created between government schools and private schools. Those parents who can't afford the high fee of the private school are mainly facing difficulties in equipping themselves to have proper work after their studies. That's why a rallying cry exists for implementing ICT in Nepalese public Education. The national goal of the ICT won't be fulfilled, leading Nepalese in poverty forever.

Similarly, Nepalese will be left far behind in the global education industry forever. And poverty alleviation through ICT education will be merely a slogan. When the

government fails to invest in human capital, the nation can stay caught up in this cutthroat competitive work market. Education is the means of transformation of life. When a person is equipped with quality education, he is bound to serve the nation in general and as the human world as a whole, so if not now, when is the burning question of this time.

Q6: How/where is this representation of the problem product, dissemination and defended? How could it be questioned, disputed, and disrupted?

The main purpose of the ICT policy in Nepalese academia is to compete in the international global labour market by producing skilled manpower while simultaneously increasing Instructional Efficacy: Teaching with Digital Technology. Teachers are still the source of transformation of society in the Nepalese context. Suppose the teachers are trained and educated to use digital technology when the schools incorporate it into learning and teaching activities. In that case, it will exponentially increase the efficiency of teaching-learning activities to maintain such an expensive technological practice in the school. It is advised that parents and community people be provided with a foundational understanding of ICT and remain involved in its maintenance. Participating in ICT management in schools can help children learn more effectively with technology, stay engaged beyond school in the global arena, and multiply educational resources.

Furthermore, society gets benefits if easy access to the modern teaching-learning ecology is created. It will help them stay informed about natural disasters and improve communication in their wake. Rana, K. B. (2017).

Conclusion

The WPR analysis pointed mainly to three areas of policy contradictions listed as (1) inconsistent policy implementation for ICT in Nepali education: all the stakeholders of the public school, (2) ICT for the professional development of the teachers, (3) Parents, teachers and students misunderstanding, use, abuse and misuse of the ICT in the classroom. The WPR analysis highlights the prospects and challenges ahead.

1. Inconsistent policy implementation for ICT in Nepali education:
   The WPR analysis presents the implementation challenges mainly in public schools because of the lack of ICT prerequisites. Enabling conditions in government schools and providing ICT infrastructure and teaching-learning resources for pedagogy are two ways to create an ICT-enabled learning environment (Rana 2017). Interestingly, according to the School Sector

Development Plan, 2016–23, primary schools have no financing to acquire ICT infrastructure (MoE, 2016). The Government of Nepal also plans to establish a public-private partnership to provide ICT infrastructure in government schools, as stated expressly in the ICT Policy 2015. (MoIC, 2015). Hence the demand for quality education through ICT has created tension among the stakeholders, mainly in the plain area, undeveloped rural parts of *Madhes* and *Pahad*, two of the three geographical regions of Nepal; the third being the *Himalayas*.

1. Professional development use of the teachers, providing them ICT Training:
   ICT has opened unprecedented avenues of learning: online learning, E-learning, Virtual University, E-coaching, E-education, E-journals, M-leaning etc (Joshi, D.R. 2016). But due to inconsistent use of ICT, misunderstanding of the ICT in the school administration also presents sheer negligence of the teachers, education office and monitoring and evaluation centre of the school. It hints towards the wake-up call for proper use of ICT in Nepalese pedagogy.

1. Parents, teachers and students misunderstand, use, abuse and misuse of ICT every day:
   There need to be more parents, teachers and students' understanding of ICT in Nepal. Teachers shy away while implementing ICT in the classroom. Most teachers opine that students are far more practical in ICT, so rather than learning, we should let them explore them, which has encouraged students to misuse ICT in their laid-back learning approach.

   Similarly, parents' traditional way of thinking has discouraged teachers' preparation for ICT use in the classroom. Mainly in Nepali, private so-called best higher secondary schools discourage the use of ICT, citing that it has decreased the students' attention span and lowered their achievement.

Policy Recommendation

Provided that there must be infrastructure development, the Government of Nepal (MoE) has felt the urgency of implementing ICT in the classroom, allocating equal distribution of the budget for the development of the teachers in all the geographical locations of Nepal: Pahad, Madhes and Inner Madhes.

The stipulated timeframe must address the significant challenges of the implementation of ICT. Here I want to cite an example of negligence of the GoN'e examination board. Amid the chaotic pandemic situation, the board conducted the exam for BA's first year in early 2021, supposed to be taken in 2020, and the

concerned department only recently published the result months in November 2022: showing the lack of readiness in times of crisis. However, the government, parachuted researchers of Nepalese educational locations have not penetrated much. Some of the findings are completely based on the intention of the political motifs and the sharing among the political cadres in the University department. There must be a prudent budget allocation for implementing the Policy simultaneously. To ensure that the commitment of the Nepalese government must be fulfilled the desire reaches those who need it most, and work must be done (Benveniste et al., 2007).

Therefore, a lot of works need to be done with a lot of resources to accomplish the ICT objectives in the Madhes province and inner Madhes, which has been completed neglected from the Central government to the apathetic nature of local governing bodies and the member of civil society, reform objectives, according to ICT policy implementation and WPR analysis. It must be realized that there is no shortcut to implementing the ICT policy for quality teaching-learning; teachers in government and private schools should be given the necessary and appropriate ICT training. Policymakers should ensure that ICT policy declarations are realistic and easily translatable into practice. By raising awareness through the media and cultivating a good attitude towards using ICT in government schools, the degree of ICT literacy should be increased Dhital, H. (2018).

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