BE PREPARED FOR FUTURISTIC SUSTAINABLE ACADEMIC OPERATION

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Abstract:

The change is a continuous process and Educational Institutions are responsible for converting the different form of man power into human capital. The reflection of change in Education System of Nepal can be traced easily from Industrial change and skill change pattern. The changes can be understood with the help of Paradigm Shift. The existing education system needs serious attention for sustainability. It is time to create own digital universe to be digital leader and develop social learning management system of individual in a unique mandala concept for sustainable future education system by overcoming the short comes of existing systems.

Key Words: Paradigm Shift, Academic Institution, Sustainable, Learning Management System, Skill Support System, Mandala

Academic Paradigm Shift:

After educational institutes were developed as a storehouse of knowledge, the process of making knowledge communicative was the first condition, then education was changed after the Second World War by placing academicians or teachers in the main role, which was called the teacher oriented age, and in the year 2000 it was explained as the Age of Academic Network. Changes are basically things that change educational activities or concepts, so they are called Paradigm Shift; this concept was put forward by Thomas Kuhn.

There is curiosity about what kind of change will happen in education before and after the corona period, to understand this, a change with another educational concept is necessary, in other words it should be called Paradigm Shift. The form of change in education after the corona period can be called the golden age only if the pre-conditions are fulfilled. In this period, the fundamental change of education will be done by making the student the main character, so this is a good opportunity. After the corona period, the main part of education is students.

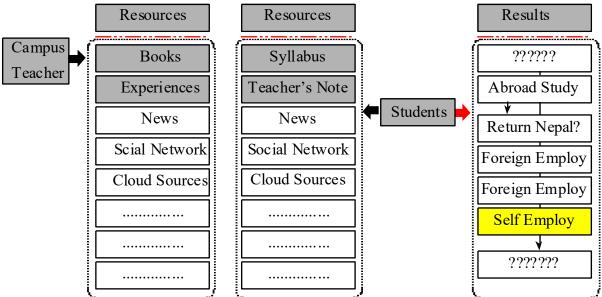


Figure 1: Current Educational System and the Sources of Education

When the source of knowledge with the educational institutions of the Network Age and the source that the students get in the name of Information Technology are the same, this era has now ended as why students should listen to you if so many easy means of learning are easily available as education card since knowledge are stored in computer away from human mind where students and teachers are having equal access [1]. A new

era has emerged, which is called the student special era, in which the same resource is available with the teacher and the school, while the role of the teacher is to assure financial future of the student by selecting the correct applied knowledge from the noise of information. You have to sit in the role of a mentor to seek financial security after learning through their effective earning. Or the role of the teacher is seen as a consultant for building the future of the student. The Figure 1 below shows the current educational system and the sources of education available to students.

It is time seeking assistant to improvise the existing conditions as shown in figure 1 by improvising the above conditions as described in figure 2 that explains the path that educational institutions should take in the future.

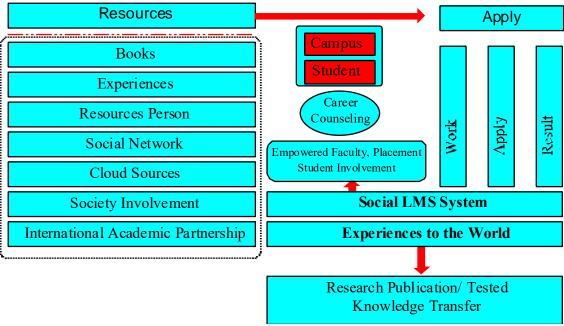


Figure 2: Possible Path of Educational Institutions for Future

There is same resource though mechanism of application is different as students and faculty are doing joint work to select the best knowledge from the noise and applying it together then collecting results from the experience of the world and developing new applied knowledge to get benefit from the power of potential knowledge.

Action for Sustainability of Academic Institution:

There are basically 2 things that guide Paradigm Shift in Knowledge that is Digital Transformation and Time demand (need of society). With a view to maintain equilibrium with changing knowledge change in education is most which can be maintained through change in teaching learning aptitude. It is felt in that Nepali originality was destroyed and foreign educational institutions became recruitment centers to fulfill their objectives recently due to lack of balance between teaching learning methodology and changing knowledge and culture. Foreign employment is growing as industry and our industries are destroying day by day. This needs to draw our attention for really improving our quality as of time demand [2].

The current situation in education and the development of technology is the next change, therefore: in higher education, we are now in the Network Age, after covid-19, technology needs to fundamentally change education. Digital transformation and industry 4.0 have also sought the need for rapid change in education, looking at this, after creating the foundation few educational qualities We need to evaluate educational qualification by connecting the activities of the class and the activities of the students in relation to changing social needs to assure employability and social transformation by optimization of ICT& AI as interdisciplinary research to cope with digital transformation. Now, every institution should have a data store to make these things professional through Class Learning Management System (CLMS)[3], the college should have an LMS. in the basic structure for coping with the change by passing through the stage of Digital Transformation. The Syllabus should anticipate the needs of the society in relation to specific subject for academic discussion. There should be a class activity with the experience obtained from professional practice of the institute established in the society. The results obtained through things learned in the class should be tested through workshop and implemented in the society as educational activities and cooperate with the local bodies and concerned to make a plan for the expansion of small businesses by creating industry culture to get rid of poverty. Educational institutions are Digital Leaders in creating an educational environment or human capital in accordance with the needs of society, so every student should be a leader of the Digital Age or Student Central Age.

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In the Student Center Age, the leadership of others is not imagined; everyone should be understood as a Digital Leader. This is what we are attempting a paradigm shift and it will be centered on the student by creating a Social Learning Management System (SLMS) to achieve this goal. If the educational institution fails to produce a leader in this change, there is a danger of becoming a tool to stop the change, so how to bring the post-Corona educational environment with the concept of sustainable development should start working from today. The education of the future seeks the potential knowledge with the power of economy assuring guarantee of return to their investment of youth age in education. This is the way only the education with the economic guarantee will reduce the foreign educational dependence and stop the middle-class educational parasite youth and educational migration. For all this, we need trained human resources for which capacity building training is most.

Objectives of the Training:

Due to diverse ethnic groups and socio-economic perspective, they demand flexible methods in teaching and learning which is easy for them to understand. Digital transformation plays vital role in phase out of passive learning which mostly teacher centric were. To cope the needs of students and digital transformation in education faculty members at this institution require updated methodologies for teaching and learning. The main aim of this training is to make faculty members being able to understand digital transformation in education and update their teaching methodologies to be more active in learning. Identically, the Training will provide a set of empowerments to meet the country's key challenges towards sustainable human capital production through upgraded teaching learning exercise at the Academic Institution.

Technology:

Status of teaching management practices and their current performance in digital economy should be backed by robust technology. The adoption of active learning in the college using thematic research lab should be facilitated by technology. Addition in the role of teacher from knowledge transformation to knowledge test and creation would be possible if they get technological and policy support to function as university company. The ways and means to link society, students / teacher to apply class room learning as problem solving. Creation of continuous learning platform through relevant stakeholder's focus group discussion and communications must be assured. The LMS will create a platform for educationalists, learners and business society to come together to create a continuous learning center. This makes the edge for society to enhance the learning in a much better facility.

This is going to be a new start from where we can educate society and provide all facilities of knowledge in a better way along with deep learning of our students based on social phenomena. This will create equilibrium between the social needs and students skill required to supply the same. This learning center will be a continuous process for maintaining the learning even for pass out students who will be members of the center along with other society members resulting into academia and industrial platform under the social circumstances. This will function as an academic skill center to learn the voice of society which will be addressed by management experts in the design of new business and implemented by business organizations by developing a complete business development plan comparison with competitors in line with External Environment.

Institutional Setup:

The following expected institutional department will be added.

- Establishment of a social learning management system
- Academic Skill Center
- Creating a continuous learning center

Regular Action and Practice:

The following practice with continuous update should be enhanced regularly.

- Methods of teaching adapted in digital transformation [4, 5, 6, 7, 8 & 9]
- Methods used in Active Learning [5, 7, 8,9,10 &11]
- Smart Teaching [4, 5, &12]
- Digital resources [12] and Lab Data Management [11, 12, 13, 14 &15]
- Application of Literature survey for learning [16 &17]
- Developing Class notes as Review Paper [7, 9, 11, 13, 18, 19, & 20]

Based on the adopted exercise, every individual should have their own universe as digital leader. This will be a new leadership where everyone is going to be leader. In this regard further research is needed and the Mandala could be developed as new eastern block chain.

Real time research is not coming out as it is a time consuming process to get published. For example; Occupational Hazards Identification and Their Risk Assessment during the Construction of Head Race Tunnel in Middle Bhotekoshi Hydroelectric Project [21] and Effectiveness of Safety Measures Implementation [22] along with Assessment of cement handling behaviour for selected construction sites of bhatbhateni supermarket [23] and Cost effectiveness assessment of different nepalese cement brands for selected sites of supermarket [24] also Foreign Aid Movements in Nepal [25] and Foreign Aid Contribution for the Development of Nepal

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[26] are study of same project and same time but both are blocked under two different web application. These limitations should be broken through the application of Mandala Concept. IMPLICATION OF THEORY OF CONSTRAINTS IN PROJECT MANAGEMENT [27], Labor productivity assessment of armed police force Nepal building construction projects [28], Effects of Price Fluctuation on the Financial Capacity of "Class A" Contractors [29], Implementability Of Municipal Transport Master Plan of Bandipur Inner Ring Road, Tanahun, Nepal [30], Review on global practice of housing demand fulfilment for low income group people[31], Comparative performance assessment of eco-friendly buildings and conventional buildings of Kathmandu valley [32], Assessment of time—cost model of public health buildings in Nepal [33], Quality Assessment of Sarbottam Cement of Nepal [34] are studies appearing in different web which is not giving integrated picture. So, we need to get all in one basket for which we must develop our own universe.

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References:

- Mishra, A. K. (2022). Teaching and Research Operation at Pokhara University. Zenodo. https://doi.org/ 10.5281/zenodo.7045640
- 2. A.K. Mishra, Nepal Ananda, P. S. Aithal, (August 2022). Industry 4.0 Concept for Nepal Operating Virtual Farming Industry. PP- 31-35, Proceedings on Future Trends in ICCT and its Applications in IT, Management and Education, Editors: Dr. Krishna Prasad, K., Dr. P. S. Aithal, & Dr. A. Jayanthiladevi, ISBN: 978-81-949961-8-7, DOI: https://doi.org/10.5281/zenodo.7215189
- 3. Bhagat, C., Mishra, A. K., &Aithal, P. S., (2022). Model for Implementation of e-Government Services in Developing Countries like Nepal. International Journal of CaseStudies in Business, IT, and Education (IJCSBE), 6(2), 320-333. DOI:https://doi.org/10.5281/zenodo.7139657
- 4. Zhang, A., & Xianqiong, F., 2022. The concept analysis of smart teaching. Nurse Education Today, Vol. 112,. https://doi.org/10.1016/j.nedt.2022.105329
- 5. Amorim, M. et al., (2018). Influence of Digital Transformation on Teaching Practices. Twenty-fourth Americas Conference on Information Systems, New Orleans,
- 6. O.E. Zolotukhina, L.N. Komyshova, Materials of the interuniversity scientific-practical conference, FSBEI of HE "Russian Academy of National Economy and Public Administration under the President of the Russian Federation", 24-28 (2016)
- 7. D.A. Antonova, E.V. Ospennikova, E.V. Spirin, Bulletin of the Perm State Humanitarian and Pedagogical University. Series: Information Computer Technologies in Education 14, 5–37 (2018)10. S.V. But
- 8. Sklyarov, K. et al. (2020). Methods of digital transformation of the educational environment of agricultural universities.E3S Web of Conferences 175, 15001 (2020) INTERAGROMASH 2020. https://doi.org/10.1051/e3sconf/202017515001
- 9. K.K. de S. Oliveira, R.A.C. de Souza (2022). Digital Transformation towards Education 4.0 Informatics in Education, 2022, Vol. 21, No. 2, 283–309. DOI: 10.15388/infedu.2022.13
- 10. Hotaling, L. (2021). Preparing the workforce for the new blue economy. In Preparing a Workforce for the New Blue Economy (pp. 387–405). Elsevier. https://doi.org/10.1016/B978-0-12-821431-2.00015-9
- 11. Hussin, A.A. (2018). Education 4.0 made simple: Ideas for teaching. International Journal of Education and Literacy Studies, 6(3), 92–98. http://dx.doi.org/10.7575/aiac.ijels.v.6n.3p.92
- 12. IDEO. (2015). The field guide to human-centered design. https://www.designkit.org/resources/1
- 13. Jurado-Navas, A., & Munoz-Luna, R. (2017). Scrum Methodology in Higher Education: Innovation in Teaching, Learning and Assessment. International Journal of Higher Education, 6(6), 1–18.https://doi.org/10.5430/ijhe.v6n6p1
- 14. Koul, S., &Nayar, B. (2021). The holistic learning educational ecosystem: A classroom 4.0 perspective. Higher Education Quarterly, 75(1), 98–112. https://doi.org/10.1111/hequ.12271
- 15. Heine, S., Krepf, M. &König, J. Digital resources as an aspect of teacher professional digital competence: One term, different definitions a systematic review. Educ Inf Technol (2022). https://doi.org/10.1007/s10639-022-11321-z
- Kukulska-Hulme, A., Beirne, E., Conole, G., Costello, E., Coughlan, T., Ferguson, R & Whitelock, D.(2020). Innovating Pedagogy 2020: Open University Innovation Report 8. Milton Keynes: Institute of Educational Technology, The Open University.https://iet.open.ac.uk/file/innovating-pedagogy-2020.pdf

9th International Conference on Modern Education and New Learning Technologies, Published By Princeton Press, United States of America – www.princetonpress.us ICMENLT-2022 Proceedings/ Date: 17th December 2022 / ISBN Number: 978-920-5-20233-4

- 17. Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkänen, K & Thomsen, M. (2016). Green economy and related concepts: An overview. Journal of cleaner production, 139, 361–371.https://doi.org/10.1016/j.jclepro.2016.08.024
- 18. Mahlow, C., &Hediger, A. (2019). Digital Transformation in Higher Education-Buzzword or Opportunity?.eLearn Magazine, 2019(5), 13. https://doi.org/10.1145/3331171
- 19. Manzanedo, R.D., & Manning, P. (2020). COVID-19: Lessons for the climate change emergency. Science of the Total Environment, 742, 140563. https://doi.org/10.1016/j.scitotenv.2020.140563
- 20. Noviyanti, E., Rusdi, R., &Ristanto, R.H. (2019). Guided discovery learning based on internet and self concept: enhancing student's critical thinking in biology. Indonesian Journal of Biology Education, 2(1), 7–14.https://doi.org/10.31002/ijobe.v2i1.1196
- 21. Chheku Lama, Dinesh Prasad Sah, & Anjay Kumar Mishra. (2019). OCCUPATIONAL HAZARDS IDENTIFICATION AND THEIR RISK ASSESSMENT DURING THE CONSTRUCTION OF HEAD RACE TUNNEL IN MIDDLE BHOTEKOSHI HYDROELECTRIC PROJECT. International Journal of Research Granthaalayah, 7(3), 227–248. https://doi.org/10.5281/zenodo.2631396
- 22. Mishra AK, Lama C, Sah DP et al. Effectiveness of Safety Measures Implementation. J Adv Res Civil Envi Engr 2019; 6(2): 1-20 DOI: https://doi.org/10.24321/2393.8307.201903
- 23. Mishra A K, Chaudhary U. Assessment of Cement Handling Behaviour for Selected Construction Sites of Bhatbhateni Supermarket. J Adv Res Const Urban Arch. 2018; 3(3): 1-11.
- 24. Mishra A K, Chaudhary U. Cost Effectiveness Assessment of Different Nepalese Cement Brands for Selected Sites of Supermarket. J Adv Res Const Urban Arch 2018; 3(3): 12-33
- 25. Mishra A. K., & Aithal P. S., (2021). Foreign Aid Contribution for the Development of Nepal. International Journal of Management, Technology, and Social Sciences (IJMTS), 6(1), 162-169. DOI: https://doi.org/10.5281/zenodo.4708643
- 26. Mishra, A.K., &Aithal, P. S., (2021).Foreign Aid Movements in Nepal. International Journal of Management, Technology, and Social Sciences (IJMTS), 6(1), 142-161. DOI: https://doi.org/10.5281/zenodo.4677825
- 27. Mishra, A. K., "Implication of Theory of Constraints in Project Management", International Journal of Advanced Trends in Engineering and Technology, Volume 5, Issue 1, Page Number 1-13, 2020. http://doi.org/10.5281/zenodo.3605056 / Impact Factor: 5.965
- 28. ErAjitMaskey, & Mishra, A.K., LABOR PRODUCTIVITY ASSESSMENT OF ARMED POLICE FORCE NEPAL BUILDING. International Journal of Current Research 12/2018; 10(11):75315-75324., ISSN: 0975-833X DOI:10.24941/ijcr.33144.11.2018
- 29. Anjay Kumar Mishra, Ujjal Regmi: Effects of Price Fluctuation on the Financial Capacity of "Class A" Contractors published in International Journal of Creative Research Thoughts IJCRT (ISSN: 2320-2882) Volume 5 | Issue 4 | December 2017
- 30. Mishra, A.K., &Rana Bijaya Magar: Implement ability of Municipal Transport Master Plan of Bandipur Inner Ring Road, Tanahu, Nepal published in internal journal of scientific and technology research ISBN2277-8616 Volume 6, issue 08, August 2017P306-313available at www.ijcrt.org
- 31. S K Shah, & A K Mishra: Review on Global Practice of Housing Demand Fulfilment for Low Income Group People. Published in NOLEGEIN-Journal of Business Ethics, Ethos & CSR, [S.l.], p. 5-16, nov. 2018. ISSN 2581-5601. Available at: http://mbajournals.in/index.php/JoBEC/article/view/187
- 32. Mishra AK,&Rai S. Comparative performance assessment of eco-friendly buildings and conventional buildings of Kathmandu valley", International Journal of Current Research 2017; 9(12): 62958-62973.
- 33. Mishra, A.K., Sudarsan, J.S. & Nithiyanantham, S. Assessment of time–cost model of public health buildings in Nepal. Asian J CivEng (2020). https://doi.org/10.1007/s42107-020-00294-4
- 34. Mishra AK, Jha A. Quality Assessment of Sarbottam Cement of Nepal. International Journal of Operations Management and Services. 2019: 9(1): 1-22. http://www.ripublication.com