

THE MULTIDISCIPLINARY AND HOLISTIC TEACHING & LEARNING LANDSCAPE IN HIGHER EDUCATION: AN INTERPRETATIVE PAPER

Ms. Arpita Gupta

Research Scholar, Rabindranath Tagore University, Bhopal

ABSTRACT

It is employing a multidisciplinary approach that the prospective students tend to prepare themselves for a copious depository of skills which includes the finer aspects of critical thinking, time management, teamwork, problem-solving, composition, research methodologies, and the allied disciplines. The multidisciplinary study comprises and happens to be an amalgamation of several fields of study or academic interests. A student, while at school following the subjects of, sciences, arts, history, mathematics, regional and international languages is programmed to be tuned into and be capable of dealing with several other subjects at a time and is subjected to learning heterogeneity of disciplines. This research is an attempt to unravel the true essence of holistic education. The Research article is more of an interpretative & Qualitative paper and discusses the branches of the multidisciplinary Education System and what all encompasses it.

Keywords: Multidisciplinary, Depository, Heterogeneity, Holistic, Amalgamation.

Introduction

Let us, at the outset, examine in detail the aspects of multi-disciplinary and holistic education. These two disciplines are destined towards discovering and developing the capacities inherent in human beings, which encompasses their physical, social, emotional, and intellectual capacities. It is firmly believed that the education system would eventually help in nurturing well-rounded personalities who would have all the traits as would make a complete, well-endowed human being, not only within the social circles but also in the professional, corporate, or business worlds.

The specifications given in the National Education Policy 2020 envision and ordain an atmosphere of multidisciplinary education oriented towards developing all the capacities of human beings cohesively. Examining the details of multidisciplinary education, one harbor upon a situation where in a student of humanities could take up a few subjects of interest from journalism or a student of law could, out of own personal interest, follow a few classes on bakery from the hotel management school.

Such holistic education will therefore impart a sense of curiosity and leads eventually the enhancement of social and interpersonal communication skills. The regular usage of creative skills complements a social psychological and emotional evolution which in the case of the students is much needed. This develops a deep,

personal interest and encourages the students, and promotes their willingness to learn. In addition to addressing barely the mental health of the student, the focus could also include his or her outlook toward society, towards the academic, and even towards the spiritual characteristics of progress.

According to Forbes (2003), holistic education encompasses the holistic and cognitive development of a student making them the finest versions of themselves.

Amongst the advantages of a multidisciplinary approach to teaching, an important factor is that one gets to have a full-rounded overall approach and the resultant appreciation of the world with a different perspective.

One of the time-tested and most proven ways to learn about a discipline, which does not fall into one's regular framework of education is following or interacting with colleagues and partners who belong to totally different groups. Several examples of this can be given. For instance, the students of marketing could meet with experts in information technology, and the students pursuing technology could be in touch with scholars of biology or genetic engineering. We owe a great deal to the literature and textures which emanated from the ancient schools and universities of India, a close study of which reveals that universities, in ancient times too focused on the overall and holistic progress of their pupils. Most of these amalgamations of disciplines concentrated upon a union of arts, sciences, and vocational subjects. Soft

skills, out of all these have now emerged as one of the most essential subjects which are taught and practiced across a whole world of subjects and disciplines.

Subjects ranging right from vocational fields such as stitching, tailoring, carpentry and pottery-making up to engineering, biology, and medicine and getting into fine arts and debates, etc. should be considered as arts. It is this fashion of imbibing knowledge of several arts which has come to be known as Liberal Arts.

Integration of varied subjects like Science, Technology, Engineering, and Maths (STEM) has resulted in positive learning outcomes, and has enhanced creativity and the HOT – Higher Order Thinking capacities. It is under all these that the research opportunities have also increased. Modern times need people who are well-rounded, multi-faceted, and multi-takers. They are the ones who would eventually be able to understand and integrate the intellectual, physical, emotional, and spiritual balance of human beings.

It is sincerely believed that such an all-inclusive and complete system of education shall be, in the long run, the approach adopted by all people engaged or going to be engaged in the technical, professional, and vocational domains.

Multi-disciplinarily in Education

One of the key reforms that NEP encapsulates is the transformation of Indian Higher Education through a focus on making education “Multidisciplinary”. Indian universities strive hard to create an ecosystem that offers programs and courses that truly reflects “multi-disciplinarily” in its true nature. Education stimulates creative thinking and fosters intellectual curiosity in students’ minds. Curriculum that is flexible and offers flexibility to the students to choose from a wide range of subjects without any restrictions or boundaries in terms of streams chosen. This will eventually lead to a holistic development of the students, wherein they will imbibe transferable skills and competencies in the form of critical thinking abilities, analyses & problem-solving, adaptability, self-management, and most of all, an element of multi-disciplinarily will synthesis of new ideas & perspectives. Studying courses that are trans-disciplinary, that too without any academic boundaries or restrictions will develop logical reasoning attitude and self-management skills in students. This integrates multiple knowledge

domains and through curretting an integrated curriculum that gives students a chance to access different knowledge domains. Flexibility is the key to multi-disciplinarily as learning is the most effective when it’s imparted in heterogeneous ways. Learning beyond the limitations of their disciplines will promote significant and cognitive learning. The same could be practiced through a “Curriculum Enhancement and Enrichment Process” that integrates courses that are multidisciplinary and gives a free hand to the students to synthesize courses of different natures& academic disciplines and curate their combination/pool of courses based on their career interests and inclination, thus creating a cohesive body of knowledge. Multi-disciplinary programs should also offer concentrations in specific areas/fields to ensure that students have a career option in a specified core area or field of study and also retain a diverse education which will be a value addition for the students in many ways. These courses could include general education courses in the form of social sciences, humanities, English, international languages, history, and science.

The enhancement of the student learning experience can only happen when the teaching-learning tools are being utilized to their full level.

Experiential learning

Engagement in learning is crucial for effective learning. In simple words, it is referred to as “**learning by doing**” as it creates maximum output and makes the whole learning experience wholesome and long-lasting. These are not just confined to Internships, lab experiments, research, or study abroad modules. There should be interactive simulations and situational handling courses or modules, concepts of incubation centers for students, and CO-OP programs (in academic linkages with industry) that provides an opportunity for students to exercise the knowledge and skill gained inside a classroom in a real-life work scenario which connects the learning to employers’ practices and standards of operations. The application of learned knowledge, skill, and attitude should go beyond industry and also address the community in the form of unpaid services. This will enable the students to learn from natural consequences and phenomena eventually giving them opportunities to learn from their mistakes and would equally inherit the sense of accountability in them for the results thus leading to more

intellectually, emotionally, socially & physically engaged students with a sense of holistic cultural & Professional Awareness. Preparing the students for jobs that don't exist today but are fast emerging as the world is growing. Modules and courses that are experimental in their true sense should form a part of the next-gen curriculum.

Self-Learning Exercises

Formal learning comes with a time constraint. A new paradigm shift in the higher education sector is the rapid growth of self-learning modules and courses. Applied learning becomes more applied when it is learned via a non-formal mode of education using self-paced learning materials and that too without a location constraint. In a regular 9-5 educational setting, Sessions (one after the other), the so-called conducting learning environment only stays conducting for the initial 3-4 hours.

Self-learning modules enable students to pick the topics which the students would like to revisit or carry on from where they left the last day. In comparison to regular classroom teaching these are considered more interactive in the form of voiceovers, interactions and interviews with the matter concerned, quizzes, and animations. The curriculum should be a blend of classroom teaching; it is often said that the best education is what happens outside the traditional classroom setting. Technology-enabled learning also acts as a great tool for those who cannot afford a formalized education from a recognized academic institution.

The curriculum should integrate more and more self-learning modules to address significant skill and learning gaps. A radical shift in the learning culture is the need and blended learning is the key. A course with a mix of classroom teaching modules paired with self-learning modules and activities will lead to learning which is more applied and will also last long. A regular 50 min class on a course module should comprise 40 % of learning from the instructor in a classroom setting, 30 % of self-learning through various technological tools, and 20% of learning with a mentor (from a similar field of operation, preferably from Industry).

Immersive Critical Thinking Based Modules

Skills leading to critical thinking mindsets form a part of the curriculum. Problem-solving and decision-making skill-based exercises should form a part of all courses. A significant thrust on developing learners' abilities and capabilities through an education that is fulfilling,

comprehensive, and not confined to the boundaries of traditional pedagogical tools is the need of the hour. Critical thinking academic activities accustom the students to be active learners and to make them so the institutions have to work towards increasing the student's ability to reason and question ideas and assumptions. Bringing in Case studies and live projects as a component in courses will impart the much-required critical thinking abilities to the future leaders of tomorrow.

Introduction of Modern Language

Quality education should be truly wholesome and in this competitive world, learning a foreign language is not just about learning it as a part of curriculum. The study of Modern languages has gained its importance because of its linguistic value and not to forget, it gives an added advantage to the students. As the world continues to become increasingly connected, besides dedicated modern language Programs (Offered by many universities) other undergraduate and post-graduate courses include at least one international language (French, German, Spanish, Mandarin, or Italian) to amplify the importance of international or modern language. They will surely assist students in their hunt to find lucrative employment opportunities. Companies and Corporate are at their peak and aggressively working towards market expansion across boundaries. The same could be embedded in programs in the form of ability enhancement courses.

Practicing what is taught

All Programs across disciplines to aim for preparing practitioners in their respective fields. Experience is a great teacher. An enhanced learning model could incorporate and integrate practice sessions in course modules. Students should be more involved in higher order thinking levers of Bloom's taxonomy which analysis, synthesis, and evaluation are inquiry-based learning are synonymous with real-world education learning. Students reflect on what they have learned and apply/ practice in a real applied environment. The same could be practiced through activist and constructivist learning models and allowing students to serve as a teacher and gain mastery over knowledge and skill through practice. Practice-based learning eventually leads to lifelong learning and encourages improvement goals to optimize learning. It is a culmination of theory and works with a strategic orientation throughout the teaching-

learning process. Practicing exercises allows the students to measure their effectiveness revisit their concerns and practice again eventually leading to a self-sufficient Professional. Focus on teamwork diversity and a teaching pedagogy with a perfect blend of imparting social, ethical, and professional perspectives (Corbacho et al, 2021).

EdTech Tie Ups

The technology company works with campus recruits who have been identified for particular business groups to provide collaborative programs in niche/digital skills. Student skill development and relevance to the ecosystem are facilitated by partnerships with EdTech companies. Today's EdTech platforms are expanding their focus beyond the market of mid-career professionals seeking skill upgrades. They are now collaborating with colleges and universities to provide students with courses geared at preparing them for the workplace, offering them real-world experience through projects, and filling in any holes in current university curricula, particularly in non-metro areas. Additionally, they aid kids in getting ready for entrance tests at the federal and state levels. To offer courses in data science, digital marketing, and business analytics, the university partners with EdTech platforms including Coursera, Simplilearn, and Up Grad and offer courses in data science, digital marketing, business analytics, and lean management.

The purpose is to keep students informed about specialized fields and specialized markets that are not offered in traditional schools. By collaborating with these companies, some of which have access to the best foreign universities, we can provide our students with the best lectures available anywhere. There are various options for students to sign up. One way is to enroll in an elective course that awards a certificate. A project-based course is an additional option. It has been introduced to the university curriculum that students must enroll in online courses that can enhance their overall growth and help them become more marketable.

Field Assignments

Fieldwork projects are crucial for teaching because they give students hands-on experience with the subject matter, which is impossible with theoretical literature. Fieldwork assignments improve knowledge of local patterns and spatial distributions, linkages, and relationships. Fieldwork assignments make it easier to get local-level data

that cannot be obtained through secondary sources. It is crucial because it aids in gathering the data needed to thoroughly examine the problems under study by the predetermined objectives. Fieldwork assignments help the investigator understand the problem and processes in their entirety and where they occur. During fieldwork, all living and field-related abilities are applied practically. Students acquire knowledge and can use it in the field or the sector itself. It aids the student in having a better understanding of the theoretical ideas. The learner has the opportunity to experience a wide range of locations and educational landscapes. Gain knowledge and sensibility about the abilities and applicability of a field. Most importantly, it is pleasant and provides students with a wonderful, long-lasting experience. Students are presented with the actual statistics before applying and implementing them in the field-based TDL projects that are part of the program. When field-based projects are provided to students as a requirement for their curriculum, students further get exposure.

Incubation

Centre for Innovation and entrepreneurial incubation and Management. The goal is to promote entrepreneurialism among students, with colleges and universities acting as hubs. It serves as a platform for fostering, promoting, and growing entrepreneurial and innovative abilities among its students, research scholars, and alumni, as well as students from the surrounding area. The incubation center provides young people and new-generation entrepreneurs with a place to develop their creative ideas into workable business plans. Our main goal is to provide a platform for aspiring entrepreneurs to launch a business with the fewest possible risks. By using mentors with a range of experience, incubation will make sure that incubates have access to technical support. Young people who are interested in creative endeavors and have a natural zest for entrepreneurship should be encouraged to benefit from this innovative project.

Universities all over the world are working harder to develop their entrepreneurial skills to stay competitive, create new revenue streams through contract research or licensing, and adhere to government policies. Students are the most effective resource institutions have to encourage entrepreneurship. However, there is no tested idea of how to inspire students to start their businesses. Elucidate the role that opportunities for student

entrepreneurship encouragement played in students' decision to pursue an entrepreneurial career. The academic institutions assist in creating a climate that supports student entrepreneurship and works to persuade students to choose entrepreneurial professions.

Students are assisted by the incubator center in effectively scoping, designing, and implementing projects through resources, instruction, advice, and guidance. A different type of student than those who generally participate in our offer may be drawn by incubator support, which also enables highly engaged students to become leaders in their communities. As part of ongoing programs, new initiatives are piloted through incubation; alternatively, a student-identified social or environmental need may lead to the creation of a brand-new project. Students can grow and develop as entrepreneurs with the support of curriculum topics like entrepreneurship.

The need for implementing Challenge Based Learning (CBL) in the higher education landscape is evident and to be looked upon (Eliseo et al, 2020)

Engagement in Social Activities

Participating in social activities can give students' self-confidence, self-esteem, and sense of fulfillment in life a positive boost. Students feel a feeling of pride and identity when they are doing good deeds for others and the community, which naturally gives them a sense of success. And the more confident the students are in themselves, the more probable it is that they will have a positive outlook on their life and their future aspirations. Participating in social activities helps fight depression. Another crucial advantage of community service is that it lowers the likelihood of developing depression.

Students who regularly interact with people and form strong support networks through community service or other activities are less likely to experience stress or despair. Social interaction has also been demonstrated to lessen stress and anxiety while enhancing mood. Student social activities promote physical wellness. Social interaction is healthy at any age, but it's particularly helpful for adults. At the university level, social engagements are strictly adhered to and valued highly.

Participation & Contribution to Educational Development

University Education is not just confined to academic Excellence but goes beyond in curating

socially responsible and self-motivated leaders with the high level of professionalism and other required attributes.

Graduates from all fields need to be knowledgeable about sustainability. Universities can assist in raising public awareness, creating the necessary conditions for informed decision-making, responsible behavior, and consumer choice, as well as in offering the new knowledge and skills required to face the difficulties of sustainable development in a society. Universities are thought to have had a significant role in societal growth and transformation processes.

Their primary responsibility is to produce highly skilled labor and research output to satisfy predetermined goals. Universities may also contribute to the creation of new civil society organizations, the growth of fresh cultural ideals, and the education and socialization of members of the new generation.

Interdisciplinary and interdisciplinary integration & Synthesis of processes will give rise to synergistic & applied knowledge (Arshinov, 1994).

Multidisciplinary Learning through Online Tools & Tech

The Academic landscape has witnessed an Upsurge, especially post Covid in the Teaching & Learning pedagogy through courses offered via online education media like Swayam/MOOC and other digital learning platforms like EDX & Course Era. The vocational courses which undergo a struggle when it comes to reach ability and students opting for the same are now taken up by the majority of students, thanks to the technology and Academic teaching concepts like blended learning and DIY (Do It Yourself) modules to make learning more robust and constructive (Sharma, 2020).

Discussion

The National Education Policy presented in the year 2020 is the outcome of deep-rooted thinking, discussion, deliberation, pondering, and reflection with its new strategies targeted towards totally revamping the framework of education in the primary, secondary, and tertiary levels. The policies given therein are practical and implementable and can, with the progress of time, be applied and infused into the framework of educational systems in India.

Re-engagement in education is the need of the hour (Brown et al, 2018). The same can only be made

possible and will yield results if all the above-mentioned heads are practiced in the true sense.

The Policy states, “multidisciplinary and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world to ensure the unity and integrity of all knowledge” (NEP, 2020)

The Policy states, “multidisciplinary and holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world to ensure the unity and integrity of all knowledge” (NEP, 2020).

Introduction of a sense of multi-disciplinarily is important, wherein a prospective student is not just given to follow a particular format, but is allowed the liberty to exercise choice conforming to his/her personal preferences, aptitude, abilities, skills, and talent and will eventually harness the competencies inherent in every student. Targeting itself towards making education an activity wherein a student is given the choice of pursuing other areas of interest, just to widen the horizon of his general awareness is a great step towards the holistic and overall development of a student in terms of his physical, emotional, psychological and intellectual progress.

Encouragement of the concept of Learning by Doing or experiential learning, which mostly conducts itself outside the four walls of the educational institution helps bring out the talent in the students which might not have been fully possible only through theoretical learning. These are also self-learning or trial-and-error incidents, bringing the students to a point wherein he/she learns from self-created errors. However, it is difficult to put multidisciplinary education into practice as the same has not been defined in its true

sense (Kveraga & Jones, 2011). With the world developing more and more closeness and proximity in terms of trade and commerce, the need to effectively and precisely communicate with overseas counterparts is becoming a necessity, which is leading towards the introduction of the study of foreign languages, the introduction of which at different levels of study has been a giant step by the Ministry of Education. The system of field assignments in which a student sees the knowledge imbibed in the classroom being turned into an actual practice will leave an indelible mark in the memory of a student.

Believing strongly in the truth that nobody can separate himself from the society to which he belongs, a student, apart from the academic world, must feel the necessity to be closely connected with society and come to terms with the fact that every organization must give back to the society and help enhance its status. It is subscribing to this thought that the public-private partnership is encouraged through a student’s engagement in social activities this will develop further the sense of inter-personal relationship and create a more congenial atmosphere.

Finally, we all must make the best efforts to learn from the different universities, institutes, polytechnics, and schools in the world and implement the same, up to whichever extent possible, within our systems of education at different levels. This will bring in a sense of modernism and give us opportunities to think about ways and means of continuously improving upon our efforts to support the most contemporary systems of learning and development.

References

1. Laurillard, D.: E-learning in higher education. In: Paul, A. (ed.) *Changing Higher Education: The Development of Learning and Teaching*. Routledge, London (2005)
2. Arshinov V.I. (1994) Synergistic knowledge in the context of the problem of unity of the two cultures *Higher Education in Russia*, No. 4.
3. Forbes, S. (2003). *Holistic education: An analysis of its ideas in nature*. Brandon, VT: Foundation for Educational Renewal.
4. Kveraga, R., & Jones, S. B. (2011). Improving Quality Through Multidisciplinary Education. *Anesthesiology Clinics*, 29(1), 99–110. doi: 10.1016/j.anclin.2010.11.
5. McKay-Brown, L., McGrath, R., Dalton, L., Graham, L., Smith, A., Ring, J., & Eyre, K. (2018). Reengagement with Education: A Multidisciplinary Home-School-Clinic Approach Developed in Australia for School-Refusing Youth. *Cognitive and Behavioral Practice*. doi: 10.1016/j.cbpra.2018.08.003 10.1016/j.cbpra.2018.08.003
6. Corbacho, A. M., Minini, L., Pereyra, M., González-Fernández, A. E., Echániz, R., Repetto, L., ... Basile, M. (2021). Interdisciplinary higher education with a focus on academic motivation and teamwork

- diversity. International Journal of Educational Research Open, 2-2, 100062. doi: 10.1016/j.ijedro.2021.1000
7. Eliseo, L., Vilalta, P., Rosario M.V., Lakshmi, G. & Chang, G. (2020). Challenge-Based Learning: A Multidisciplinary Teaching and Learning Approach in the Digital Era – UoL4.0 Challenge: A CBL Implementation, Engineering Education in Digital EraDOI: 10.4018/978-1-7998-2562-3.ch007
8. Viveka Nand Sharma, Dr. Arvind Hans (2020) Dynamics Between Virtual Teaching and Effective Knowledge Process for Hotel Management Students During Covid19 Pandemic. Elementary Education Online, 19 (4),7375-7387. doi:10.17051/ilkonline.2020.04.765139