



## Linking school education with Higher education: A policy prerequisite for holistic education

**Unmilan Kalita**

Department of Economics, Barnagar College, Barpeta, India.

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### Abstract

The world today is characterised by a steep competitive trend in most sectors of employment. As part of school education, skill training is important to establish a strong foundation for a thriving future. Similarly, self-awareness, excellent communication skills, problem solving, and critical thinking capabilities are some of the important areas that a student should have a grasp on while transitioning from secondary into higher education. As such, the linkage between school education and higher education has become a prerequisite for the entire education system in the long run. A major shortcoming of the Indian education system is the lack of linkage across different sectors of education. They have been working in isolation for long as if they have nothing to do with each other. Of them, the higher education sector is primarily responsible for this malaise as it has failed in providing desired level of academic support to its feeder sectors. This requires a whole series of corrective measures as it has serious policy implications for higher education in the country. This study attempts to address the linkage between school education and higher education via a focus point study of the National Curriculum Framework (2005) and National Education Policy (2020). The impetus behind this is to understand the vision of these policies in synergising these two formats of education, and whether they have successfully addressed this linkage conducive for holistic education.

**Keywords:** School Education, Higher Education, National Curriculum Framework, National Education Policy, Curriculum, Multidisciplinary

### 1. Introduction

A systematic framework for education that addresses the holistic development of students is essential for the educational as well as the overall progress of a society. Builders of our great nation dreamt of an India in which every individual discovers and realises his or her talents and potential by working with others towards restructuring the world, which continues to be characterised by conflicts between nations, within society, and between humanity and nature. To realise this, India's pedagogic efforts and policies should greatly depend on professional planning and the significant linkage of school education with higher education (Sohani & Sohani, 2012). The Indian education system is often defined by declining trends of transition rates across different levels of school education which continue to be a major impediment for its growth (Varghese, 2015). If not addressed through academic interventions at the school stage, it

will continue to hamper the overall growth of higher education as well. There are multiple reasons for these declining trends which need to be appreciated and appropriately. It is vital to understand that when students transit from one stage to another stage or change classes within or between schools, their teaching and learning are invariably calibrated in accordance with the intended learning outcomes. Some of the critical factors like acclimatisation of students with unacquainted ambience, their social and emotional adjustments are not given as much attention as they deserve in school curriculum.

These problems get accentuated as students move upward because of the load of syllabus and lack of individualised instructions. It not only makes a negative impact on their learning but also affects their ability to withstand the academic pressure and the test of time leading to continuous decline in transition rates in all subsequent stages of education (Kumawat & Sharma,

2021). There are also other factors like socio-personal, academic attainments, average annual dropout rates that contribute to declining trends. With an average annual dropout rate of about 14%, at secondary stage (PAB, 2022), the transition rate from secondary to post-secondary is going to be much less than the number of places available at that stage. Furthermore, all those who would graduate might not make the cut to higher education due to a variety of reasons like poor marks, fierce competitions, limited seats, financial constraints and several other family obligations (Khare, 2014). At this point, the employability of those students declines as they have not been well-trained to cope up with the competitive trends of the modern world.

In this paper, an effort has been made into addressing the linkage between school education and higher education via a focus point study of two vital educational policies of India, namely, the National Curriculum Framework (2005) and National Education Policy (2020). The motivation behind this is to understand their vision in synergising these two formats of education viz, school education and higher education, and whether they have they have successfully addressed this linkage for the sake of achieving holistic education.

## **2. Focus points of the National Curriculum Framework (2005)**

The National Curriculum Framework (NCF) is a system of education that has been developed keeping in mind the geographical and cultural diversity as well as social environment of India (NCERT, 2005). Known as the 4th National Curriculum Framework, it was created to improve India's education system and to create quality education. NCF's objectives mainly pertain to promote a wholesome development of the child encompassing the academic, emotional, physical, and emotional aspect, and to enable the students to develop intellectual quotient by providing them varied opportunities. It further strives to make the school environment conducive to quality learning where the students would be encouraged to participate in various activities and foster creative thinking skills by facilitating different activities and giving the liberty to express individual thoughts within the class. Besides, in response to multi-cultural attributes, it ensures that the schools donot let any student to be discriminated against based on caste or religion, and social status.

The following focus points have been cited from relevant chapters of the NCF (2005) which reflect how the framework aims to achieve the linkage between school and higher education.

2.1 "Schools, therefore, have a responsibility of providing a flexible curriculum that is accessible to all students. .... The curriculum must provide appropriate challenges and create enabling opportunities for students to experience success in learning and achievement to the best of their potential" (NCF 2005, 2.3.3).

2.2 "Child-centred' pedagogy means giving primacy to children's experiences, their voices, and their active participation.... Our school pedagogic practices, learning tasks, and the texts we create for learners tend to focus on the socialisation of children and on the 'receptive' features of children's learning. Instead, we need to nurture and build on their active and creative capabilities—their inherent interest in making meaning, in relating to the world in 'real' ways through acting on it and creating, and in relating to other humans" (NCF 2005, 2.1).

2.3 ".... it should be possible to create spaces across subjects in which children engage in the process of data collection, natural, social, mathematical or linguistic, to classify and categorise, and also analyse the same through certain knowledge areas such as ethical understanding and critical thinking. The creation of a space for explorations into social issues and knowledge without boundaries could at this stage go a long way in encouraging rational thinking (NCF 2005, 2.9).

2.4 "By the time children reach the secondary stage of education, they have acquired a sufficient knowledge base, experience, language abilities and maturity to engage with different forms of knowledge in the full sense: concepts, structure of body of knowledge, investigation methods and validation procedures. Therefore, the subjects could be more closely linked with the basic forms as listed above and the disciplines as they are recognised in higher education today" (NCF 2005, 2.9).

Further, in its vision for Science education, the NCF (2005) recognises that in a progressive forward-looking society, science can play a truly liberating role. Advances in science and technology have transformed traditional fields of work such as agriculture and industry, and led to the emergence of wholly new fields of work. At the upper primary stage, the child should be engaged in learning the principles of science through familiar experiences, working with hands to design simple technological units and modules (e.g. designing and making a working model of a windmill to lift weights) while continuing to learn more about the environment and health, including reproductive and

sexual health, through activities and surveys. Again, at the secondary stage, students should be engaged in learning science as a composite discipline in working with hands and tools to design more advanced technological modules than at the upper primary stage, and in activities and analyses on issues concerning the environment and health, including reproductive and sexual health. Specifically, mathematics at the secondary stage is very important as it enables them to revisit and consolidate basic concepts and skills learnt at the primary stage. Data handling, representation and interpretation form a significant part of the ability of dealing with information in general, which is an essential 'life skill'. Finally, at the higher secondary stage, the curriculum load should be rationalised to avoid the steep gradient between secondary and higher secondary syllabi (Banerjee & Seshaiyer, 2019). Again, in its vision for Computer Science education, NCF (2005) notes that while several countries have implemented CS and/ or IT curricula in schools, we need to be aware of the challenges that Indian school students face. It recognises that providing computer access and connectivity for all children is a tremendous technological and economic challenge.

The social sciences tend to be considered non-utility subjects and are given less importance than the natural sciences (Thapar, 2005). According to the framework, a range of courses from the social sciences and commerce may be offered, and students may exercise their choice. Subjects need not be grouped into separate 'streams', and students should have the freedom to opt for subjects or courses according to their need, interest and aptitude (Batra, 2015). The arts, visual and performing, also are an important component of learning in the curriculum. Through the arts curriculum students must be introduced to the rich and varied artistic traditions of the country (Omidvar & Ravindranath, 2017). Arts education must become both a tool and a subject taught in every school as a compulsory subject (up to Class X), and facilities for the same may be provided in every school. All the four main streams covered by the term the arts, i.e. music, dance, visual arts and theatre, should be included. In the secondary and higher secondary school stages, the art curriculum may allow children to specialise in some areas of their interest. Finally, the curriculum area should adopt a holistic definition of health within which physical education and yoga contribute to the physical, social, emotional and mental development of a child. Activities such as the National Service Scheme, Bharat Scouts and Guides, and the National Cadet

Corps are some areas where focus is imperative .

### 3. Focus points of the National Education Policy (2020)

The Vision of NEP 2020 regarding the linkage between school education and higher education (as stated in the policy document) particularly revolves around its following motivations:

3.1 "...synergy in curriculum across all levels of education from early to school education to higher education (interaction/cooperation among all levels)" (NEP 2020, pp. 5).

3.2 "For the purpose of developing holistic individuals, it is essential that an identified set of skills and values will be incorporated at each stage of learning, from pre-school to higher education" (NEP 2020, 9.1.2, pp. 33).

The NEP (2020) ever-so-slightly discusses upon the linkage between school and higher education. The policy document mostly caters to updating the school education framework while improving on the higher education status. The following focus points have been cited from relevant chapters of the NEP (2020) and Draft NEP (2019) prepared by the Kasturirangan committee (DNEP, 2019).

1. "The Secondary Stage will comprise of four years of multidisciplinary study, building on the subject-oriented pedagogical and curricular style of the Middle Stage<sup>1</sup>, but with greater depth, greater critical thinking, greater attention to life aspirations, and greater flexibility and student choice of subjects. In particular, students shall continue to have the option of exiting after Grade 10 and re-entering in the next phase to pursue vocational or any other courses available in Grades 11-12, including at a more specialized school, if so desired." [NEP 2020, 4.2]

2. "A holistic and multidisciplinary education, as described so beautifully in India's past, is indeed what is needed for the education of India to lead the country into the 21st century and the fourth industrial revolution. Even engineering institutions, such as IITs, will move towards more holistic and multidisciplinary education with more arts and humanities. Students of arts and humanities will aim to learn more science, and all will make an effort to incorporate more vocational subjects and soft skills." [NEP 2020, 11.4]

3. "Undergraduate programmes shall be interdisciplinary with curricula designed to develop broadly useful capacities and important dispositions, while offering rigorous education in specialisations, as chosen by students, from across all disciplines and fields: arts, physical and life sciences, mathematics,

social sciences and humanities, vocational and professional fields.” [DNEP 2019, P11.1.1]

4. “Each higher educational institution will have a network of government and private schools and school complexes to work with in close proximity, where potential teachers will student-teach (among other synergistic activities between HEIs and school complexes, such as community service, adult and vocational education, etc.)” [DNEP 2019, P15.2.1]

5. “Special Education Zones will be set up in disadvantaged regions across the country. It is known that there is inequitable development across regions - even within States that are otherwise performing better than the national average on human development indicators. The key idea will be to have these Zones act upon all the Policy actions for the upliftment of Under-represented groups in a concerted manner, with close joint monitoring by the Centre and the State, in order to quickly enable substantial positive differences in the areas of the country that truly need it most.” [DNEP 2019, P6.1.2]

6. “.....Enhance access by establishing more high-quality HEIs in aspirational districts and Special Education Zones containing larger numbers of SEDGs .....Develop and support high-quality HEIs that teach in local/Indian languages or bilingually”. [NEP 2020, 14.4.1]

#### **4. Evaluation of the linkage between school education and higher education**

It is well recognised that to achieve the holistic development of education within the nation as well as the state, the growth of school education and higher education should be synchronous in the long run. However, there is a much wider scope for rectification and improvement in bringing synergy both these stages of education (Kalyani, 2020). This calls for a reassessment of the current education system as it has serious policy implications in the overall educational status of the state. The following points discuss the present status of this linkage.

As evident from a study of the focus points stated above, the NCF (2005) has not clearly acknowledged the linkage between school education and higher education. However, it has acknowledged the necessity of linkage by distinctly stating “the subjects could be more closely linked with the basic forms...and the disciplines as they are recognised in higher education today”. Apart from this, the NCF has only directed some importance to the linkage through its objectives of flexibility in curriculum and academic freedom.

At the same time, the NEP (2020) has not clearly

stated arguments for linking school and higher education. However, the policy document has indicated certain actions that could help achieve this linkage. Enhancing curriculum flexibility, multidisciplinary education, stress on vocational education, linking institutions, etc., are some of the areas where NEP indirectly strives to achieve this linkage (Aithal & Aithal, 2020). Nevertheless, a distinct objective indicating the need to achieve this linkage is missing in both the policy documents.

For achieving a better synergy in both these levels of education, linkage between them is of utmost importance. Most importantly, this linkage serves to clearly draw a plan of action that can help a student to seamlessly adapt and progress in different levels of education. This will not only build a holistic system of education but also contain drop-put rates to a very large extent (Kumawat & Sharma, 2021). Further, following are some recommendations that can help improve this linkage:

#### **4.1 Need for emphasis on multidisciplinary system of education**

The world is changing rapidly along different lines. A whole lot of subjects are being born out of necessity and it is only going to increase over time. If a person was required to specialize in something today unless they can sustain themselves in today’s competitive environment with the help of a job, they would not only go bankrupt but would also hinder their progress in education. In such a situation, the best way out would be to have a multidisciplinary education where people would study different subjects, allowing them to get a job easier as a result of dipping their tools into very different streams.

Another important reason why multidisciplinary education should be promoted is that there is a greater emphasis on employability in this modern world. There are a lot of students who graduate from college with fairly decent CGPA but do not have the skills necessary to be employable by an institution or a company. Employability is directly linked to the knowledge that a student possesses about a particular subject (Khare, 2014). Increasing a person’s knowledge in one particular subject will not cut it because the job descriptions of most companies today are multifaceted. This is where multidisciplinary education comes in. Most importantly, Science, Mathematics, English, social etc., which are included in the school curriculum are convenient to choose in the field of higher education as well as important in the examinations of the Public Service Commission. Therefore, for excelling any kind

of job, be it government or corporate, a multidisciplinary-oriented intellect will always do better than most others.

#### 4.2 Need for improvement in teacher and institutional autonomy

Academic freedom is fundamentally the right of academic staff to decide what to teach, to determine their research questions and techniques, and to publish the findings of that research. Institutional autonomy is a necessary but not sufficient prerequisite for academic freedom. Most critics of university development sees governments' recent implementation of market competition systems in a number of nations as an expansion of regulation and a threat to academic freedom. With the growth, diversity, and complexity of higher education in most nations, the need to decentralize power and provide higher education institutions more autonomy has arisen (Batra, 2006).

The idea of university autonomy has been contested in India for nearly four decades. *"The concept of university autonomy is commonly misunderstood,"* according to the Gajendragadkar Committee Report (UGC, 1971). Autonomy entails academic and administrative freedom, with the goal of improving educational quality and achieving academic success. Because independent colleges are not totally delinked from affiliation, the term "delink" is a misnomer. They are affiliated with a government agency or institution, although they maintain academic autonomy.

#### 4.3 Need for greater flexibility in curriculum

Although curriculum flexibility has been stressed about many times in the NCF (2005) and NEP (2020), no progress in that direction has been seen.

Nevertheless, the flexible curriculum, if and when comes about, should focus heavily on skill development. When academics combine with ability, that is when education is complete (Altbach, 2014). Thus, a science student should have all the necessary apparatus in the laboratory to experiment with. English grammar should receive a boost with verbal and auditory skills. By being flexible, the schools can turn the most theoretical subjects into application-based where students can pick up all the skills they will ever need. Classroom topics should be related to real-time examples. The connection between interrelated subjects should be effectively established. Multiple resources and references must be brought into teaching so that skill development always remains a priority (Basant & Sen, 2010).

Further, along with the prescribed subjects from the affiliated board, the schools and colleges following a flexible curriculum should also have classes for topics that may not be present in the syllabus but are very much required (Saha, 2016). For instance, introducing coding, robotics' concepts, or even public speaking and culinary training, that are hardly mentioned in any syllabus. Introducing them will make learning practical and futuristic and help students to gain knowledge about a world that is bound to come.

As a part of this study, we recommend following the following segmentation of curriculum (figure 1.1). It shows a segmentation which depicts what a curriculum needs to achieve and how flexible should it be. It must be such that at each level where the child is growing and developing, the curriculum helps the child to understand and learn at the existing stage and then join the other segment.



Fig. 1.1: Segmentation of curriculum to reflect flexibility

#### 4. Conclusion

The technological advances of the past few decades have ushered in an era of distance-learning capability that has triggered a conversation about what, exactly, the future of education will look like. Speculation ranges across the extremes: on the one hand, that the ability to earn entire credentials online, from certificates to PhDs, will inevitably force the extinction of brick-and-mortar campuses, to the other, in which critics argue that courses taken online are so much less rich than the traditional campus and

classroom experience that they are “junk degrees.” However, the truth is that the future of education is not an exercise in theory but rather a practical one with real-world outcomes that affect millions of people. Every future policy should acknowledge this fact and in doing so adapt to the fast-emerging needs of the world and workforce. Therefore, school education should be directly linked with higher education structure so that students are fully and seamlessly integrated to the nation’s education system with no steep gradients among different levels of education.

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### **Footnotes**

<sup>1</sup> As per the new school education system of 5+3+3+4 outlined in NEP 2020, children will spend 5 years in the Foundational stage, 3 years in the Preparatory stage, 3 years in the Middle stage, and 4 years in the Secondary stage.

