Ehsanul Haq

IMPACT OF COVID-19 ON LEARNING IN INDIA: A FUNCTIONAL ANALYSIS OF 'ONLINE' AND 'OFFLINE' MODES

Abstract

The Covid-19 pandemic has accelerated the process of online mode of learning because of the closure of educational institutions and the measures required to be strictly observed to protect from the adverse effect of the pandemic. As a result, the offline mode of learning was disturbed, leading to great loss of learning among the learners. The online mode came to be viewed as an option to recover the learning losses. This paper makes a comparative analysis of the two modes of learning within the theoretical frame of Mertonian model of functionalism. The paper reflects upon the possibility of integrating the two modes. If they merge and transform each other, a third mode of learning might emerge to give new directions to the system of education in India. The paper is largely based on secondary sources and partly on the responses collected online from scholars of diverse fields. It is a qualitative functional analysis of the two modes of learning.

Keywords: Pandemic, Dysfunction, Digital Devices; Online Learner, Online Interaction.

Conceptual Background

This paper on online and offline modes of teaching and learning mechanism is being analysed under the functional frame of reference. Merton (1957:73) offers a critique to the basic postulates of broad narrative of functionalism. Here, Merton's model of functionalism needs to be briefly elaborated with its basic postulates or the features.

The basic features of functionalism and Merton's critical views are briefly explained here: Firstly, according to functionalism, each aspect of social life *performs certain function*, and in this way, they are means to *satisfy human needs* of the individuals, the groups and the *entire* society. Secondly, the function performed by each aspect of social life is the contribution of *partial activity of*

EHSANUL HAQ, Retd. Professor of Sociology/Education, Jawharlal Nehru Universtiy, New Delhi-110067, E-mail: haqjnu@yahoo.com.

the total activity of which it is a part. Thirdly, there is no functionless aspect of social life, and if so, they cannot survive, and thus, there is functional indispensability on the part of the aspects of social life. Fourthly, different aspects of human life perform different functions but they are *interdependent*, interrelated and functionally united with each other, not only to maintain and preserve themselves but also the totality or the society as a whole of which they are integral parts. If any aspect of social life does not function well towards the unified end, the entire whole is affected. In other words, society or culture is an interrelated whole or an integrated arrangement in which interrelationship and interdependence among different functioning aspects of social life can clearly be observed. All the aspects work together with sufficient degree of harmony or internal consistency without producing persistent conflict. They work together with unified end of social solidarity. Fifthly, since society or culture is a nicely balanced system of different functioning aspects of social life or separate parts or units of the society, they cannot be taken up in isolation because they are interconnected, interrelated and interdependent to one another, and therefore, they should be taken up as an *integrated whole*.

Merton has critically examined each of these categories of concepts. Firstly, Merton questions the universality of functionalism in general and these conceptual categories in particular. According to him, in highly differentiated, diversified and autonomous societies, these concepts which characterise functionalism may not totally apply. For example, when the social units of the society like the family and the school are differentiated, diversified and autonomous in their modes of functioning, then their functions may have little or no effect on their own functions and on the functions of other units of the society. Their functions may conflict with each other which may disturb the concept of functional unity. It is quite possible that some of the loosely organised and poorly integrated parts or units of the society might function in opposition to each other to bring contrary effect on the notions of functional unity, functional integration and interdependence, functional harmony or functional consistency, and thus, the idea of 'integrated whole' may be adversely affected.

Further, according to Merton, the function of one aspect of social life may be functional for one group or section of the society and may not be functional for others, and thus, that functioning aspect or unit of social life would be functional for some and dysfunctional for others at the same time. That dysfunctional aspect of social life will reduce the process of adaptation and adjustment in the society, and thus, the notion of *function* becomes incomplete if its other side of *dysfunction* is not added and analysed according to Merton. Further, according to him, the positive function may bring *social stability*, *social solidarity and social equilibrium* in the society but the negative function (dysfunction) may bring *social instability*, *social disparity and social disequilibrium as its consequences*. As pointed out by Malinowski, there is no part or aspect of the society or culture which is functionless, and therefore,

function of a given part becomes a necessity for its existence and continuity, and thus, function becomes inevitable but according to Merton, the function of a given part may be performed by different means and in different conflicting ways, and therefore, functional alternatives are need because of functional conflict. Such a situation might facilitate new conceptual categories like functional alternative, functional equivalence and functional substitute along with the concept of functional indispensability. Further, according to Merton, any function of any social form cannot apply to all the groups and sections of the society for all the time because they change over time and space. In this way, the universality of the grand narrative of functionalism is questioned by Merton who is known for his middle range theorization in place of grand theorization. According to Karl Mannheim (1952) every social fact is a function of the time and space in which it occurs. It is the time which defines social condition which gives rise to a given social fact like the birth rate being determined by a given socio-economic condition defined by time and space, and therefore, functionalism or its functional conceptual categories cannot be timeless and space-less.

Merton's critical view of functionalism is very precise and balanced than the grand narrative of functionalism. Firstly, Merton in his functional frame of analysis defines the objects of analysis, such as, the standardised, patterned and repetitive forms like the institutional patterns, social processes, social roles, social norms, cultural patterns, culturally patterned motivations, desires, beliefs, attitude, behaviour, group organization, social structure, devices of social control, etc. They are function imputed objects of analysis (Merton 1957:104). Secondly, with reference to such objects of analysis, Merton's functional frame of analysis takes into account, not only the concept of functional interdependence among various functionally imputed objects or units of the society but also the limitations on the part of those units in accomplishing their designated functions. Further, it takes into account the failure on the part of units in discharging their assigned role which may or may not affect the functions performed by other units of the society. His analysis also highlights the structural constrains in the process of performing functions and their elimination in order to achieve the desired goals effectively. Thirdly, the functional analysis generally confines to the positive contribution an object makes towards the maintenance of the social or cultural system of which it is a part. This is the static function which is focused more in functionalism than the dynamic function which is ignored. In the functional analysis, both the functional (static) and the dysfunctional (dynamic) consequences have to be analysed simultaneously because the dysfunctions are dynamic and changeoriented. According to Merton, functions are observed consequences which accelerate the processes of adaptation, adjustment and maintenance of a given system but the concept of dysfunction implies those observed consequences which reduce or decelerate those processes. The dysfunction takes place when the objects are malfunctioning. They function in opposition to other objects

and create conflict, stress, strain, tension, motives of non-conformity, etc. Thus, the dysfunction might create subjective, as well as, objective problems in accomplishing the assigned role in the society. These elements of dysfunction might decelerate and reduce the processes of adaptation and adjustment, and promote social instability or social disequilibrium, and therefore, Merton says that dysfunctional consequences are not desirable for the system. They should not be permitted to accumulate, and hence, necessary changes in the social structure of the society must be initiated in order to reduce the negative consequences of dysfunction and transform them into positive observed consequences to retain balance and regain social equilibrium (1957:105). Fourthly, in Merton's functional analysis, there are two more functionally meaningful conceptual categories. The first concept consists of objective consequences of function which contribute to the processes of adaptation or adjustment of the system. They are intended and recognised by the participants of the system and the participants are aware of those objective consequences. The second concept consists of those consequences which are neither intended nor recognised. They are unintended and unrecognised by the participant and the participants are unaware of those subjective consequences. In the first category, the participants are aware of the consequences of function and they can anticipate what is going to happen to them but in the second category, they are unaware of the consequences of function and they cannot easily anticipate what is going to happen to them. These two categories of concepts, according to Merton, are the 'manifest' and the 'latent' functions which should be analysed together according to Merton (1957:105).

Modes of Learning

With this brief conceptual background, let us now examine how the logic of Merton's model of functional analysis can be applied in the analysis of the functions of 'online' and 'offline' modes of teaching and learning. In the functional analysis of education, these modes are standardised, patterned and repetitive modes or processes of educating the learners as we perceive in the light of the logic of functional analysis. These professes of learning are functions imputed institutionalised social processes because educating learners through these modes, a number of intended, unintended, objective and subjective, observable and unobservable social consequences take place in the form of changes in the attitude and behaviour, desires and motives, socio-economic status and social role, social norms and values, horizontal and vertical mobilities and other changes among the learners of different groups and strata of the society. Such changes as the functional consequences of the exposure to different modes of learning, affect not only the individual learners but also the society as a whole. It is because of such functional utility of the two modes, the learners become socially meaningful members of the society.

However, the functional value of one mode of learning cannot be

analysed well independent of the other mode of learning and the analysis of each mode can be understood well in the context of time and space components of the larger social system. Further, the two modes of learning cannot be understood better, not only in relation to each other but also in relation to other multiple modes of learning which perform the same functions as the two modes in question. This is because of interdependence and reciprocal relationships among different modes including the two modes under analysis. The modes of learning other than the two formal modes are various informal modes which perform the same function of learning and educating the people, particularly the young learners. The family, the neighbourhood, the peer groups, the mass media and the larger society constitute a much broader network of informal processes of learning. The two specific modes of online and offline are expected to be closely interlinked with the broader learning processes because the broader (informal) and the narrower (formal) affect each other. Although, the broader informal learning processes are functionally more diffused and informalised than the narrower but more focused formal modes of learning. All of them are closely interlinked and interdependent, and they are required to function in harmony with each other with greater degree of consistency to enforce social solidarity.

The two formal modes or processes of learning function in different social settings with a common end to educate the learners. The offline mode has its own established tradition of functioning in human contacts in an organised and structured physical setting. It is functionally more precise, organised and formalised. The online mode is a relatively new mode of learning, functioning at present in a loosely precise, organised and structured setting. This is partly because the new mode does not have long tradition of its own mode of learning and partly because it goes beyond the physical site of learning. It has no boundary and it is contactless mode which can take place anywhere at any place where functional requirements of digital devices (laptop, computer, mobile, TV, audio-visual aids, internet, etc) of learning are available. It is contactless as it is virtual and screen learning. It is a kind of transmission mode of learning. At the one end of the continuum of virtual learning is the teacher in virtual presence who virtually accomplishes the task of delivery of specific body of knowledge, and at the other end, is the learner in physical presence as the recipient of what is being beamed or what learning objects are being virtually delivered to them through the screen with the help of signs and images. The objective functions of virtual learning can take place from the home itself or from any place without any visit to the physical site of learning and without any or very little human engagements and functional interconnectivity between itself and other multiple modes of learning but this is not the case with the offline mode of learning where institutional site and related infrastructural requirements are physically needed including the physical presence of the teacher, the learner and others including parents in the process of teaching and learning with sufficient degree of functional

interaction, not only between themselves but also with other multiple processes of informal learning. Thus, offline learning becomes real and relatively more interactive because of greater degree of human engagements in the discourses of learning. The basic functional infrastructural requirements of the online virtual mode are the digital devices and the virtual presence of every object of learning except the remote recipients of learning materials and instructions delivered virtually to them on the screen. The access to and the proficiency in using the digital devices are necessary functional requirements in virtual learning. The basic functional requirements of the offline mode are the physical site of learning, presence of human beings for their direct engagements in the interactive processes of learning.

With this brief introduction of the two modes of learning, their functional qualities can be analysed within the conceptual framework of Merton's model of functional analysis. From this model, we get a set of six important conceptual categories. They are: (1) functional interdependence or functional relations, (2) functions and dysfunctions, (3) manifest and latent functions (4) relative functional values and (5) functional unity between the modes to examine the logic and the manner in which an adjusted-integrated complementary mode becomes the third mode of learning. The issues related with the two modes of learning will be addressed qualitatively in this paper within these broad and selected conceptual categories. Let us take them up one by one.

1. Functional Interdependence

The issue to be address in this section is this: how far the two modes of learning are functionally related to each other or functionally interdependent along with their linkages with other multiple modes of learning which perform the same function of learning as performed by the two modes. Merton points out (1957, P.75) that 'any variable for its own value depends on the value of other variable(s), as if, the value of one can be understood better in relation the other. This is like Saussere (1974) view that in language the words are related to words but not with reality. Likewise, one mode of learning for its functional value depends on the functional value of the other mode of learning and vice versa. This expression can be phrased as 'functional relations' or 'functional interdependence' among multiple modes of learning, including the two modes in question. Therefore, the analysis and the relative understanding of the two modes and their functional relations with broader informal modes of learning are justified.

The corona virus pandemic has jeopardised human life all over the world. The educational institutions and the process of learning were dislocated. All the stakeholders of learning, particularly the young generation of learners suffered a lot due to the closer of the physical sites of learning and the changes in the entire paradigm of teaching and learning. The learners were suddenly pushed to an alternative mode of learning. This push is a major shift from the

traditional offline paradigm to a new online paradigm. The new mode is virtually interactive process of learning through the screen with no human contact while the traditional is the actual or real process of interactive learning through close human contacts. The sudden shift from one to another mode is due to the sudden outbreak of the pandemic which, not only forced the institutions to be closed but also prescribed contactless virtual learning with human distancing. This is in conflict with the face-to-face in-person learning. In the crisis situation created by the pandemic, the online mode has been picked up as an alternative by force and not by choice. However, in spite of the positive response from the public (selected public) to the new mode, the conflict between the two modes continues with the view that the traditional offline mode would be restored, as soon as, the normalcy is achieved because of the virtues of in-person learning and its close functional relationships with various informal modes of learning as compared to the contactless mode due to its inherent problems and apprehension in its functional viability in spite of its technical merits. Although, both the modes are functionally related to each other, to an extent interdependent and to a lesser or to a greater degree interrelated to other multiple sources performing the same function of learning. The multiple sources of informal learning are important because they reinforce, as well as, conflict with each other, and accordingly they affect both the formal modes of learning and their outcomes. Since, the function of teaching and learning has gone online mode, the informal sources of learning are now virtually reduced to the screen or to the digital devices of learning but the mode tends to be largely disconnected from the interconnected informalised networks of learning, although it is empowered to enhance connectivity.

The learners are now not required to visit the institutional sites of learning. They can now virtually learn at home or at any place. They are now free from the trouble of going to the physical sites of learning, free from the burden of carrying the physical load of learning materials, free from the authority of the teacher, free from the offline examination and free from the compulsion of attendance. The virtually informalised set-up of learning makes the learners more comfortable, self-disciplined and responsible because they can access the coursework anywhere at any place and at any time with the help of their acquired functional skills of digital devices of learning. They can now appear in examination online with books and learning materials. They can as per their convenience virtually interact with their parents, family members, their peers, friends and the media. Their virtual teacher makes them learn and get socialised. The teachers and parents are now working together as a unit in making e-classes functional and meaningful. In the functional device of virtual home-schooling, the onus of functional responsibility is relatively more on parents to make the functional balance between formal learning and recreational activities and a balance in sharing functional responsibilities in the e-class set-up at home. Although, the virtual homeschooling poses problems for e-learning because it is difficult to find suitable

place for the children to attend c-classes and do home work virtually and peacefully because of the disturbed and conflicting home environment, indifferent values and attitude of parents towards education, parental technical inability and the family composition. Particularly, in a loosely organised homes with a number of siblings in and around the home, the virtual home-schooling becomes a problem because the siblings by nature instead of learning through the virtual mode, they like to play with the mode. Therefore, home-schooling functionally becomes inconsistent with virtual mode but this is not the case with the offline mode of learning because of a close connectivity among the learning parents and the teachers at the physical site of learning where the parental problems are sorted out through interaction in order to maintain consistency in the learning process. The offline learning presents a real picture of interactive processes of learning and connectivity with other sources of learning. This mode is not like the screen being stared at by the remote receptors of learning. It provides the opportunity to the learners to be in constant parental supervision and guidance, to be in constant touch with the teacher for learning and for socio-psychological and emotional supports, to be in constant interaction with peer groups to learn and work together, to be actively involved in the media resources for learning and to be active in playing and taking part in various socio-cultural and sports activities. Thus, the function of offline learning in the institutional setting tends to be relatively much broader and interactive. It promotes team spirit of learning, cooperation, coordination, adaptation and adjustment with several interactive functionaries of teachinglearning process. For example, the family as the primary and the informal source of learning and the school as the secondary and the formal source of learning interact very closely and generally interdependently reinforce each other in processing the human beings as a common task to produce socially integrated and desirable human beings. In accomplishing the objective consequences of the function of learning (sociability, ability, learning and its outcomes) these two sources among the multiple sources, become functionally interdependent, inevitable and indispensable. This is how in the institutional context, the learners are exposed directly to various sources of learning which reinforce their understanding. Thus, the learning environment of the nonvirtual mode tends to be relatively more effective, although its learning impact is greatly conditioned by the qualities of the institutions and their functionaries. The access to and the skills in effective use of the new technology of learning by the multiple sources of learning in their coordinated roles in quality learning are the basic necessities which are functionally indispensable but those necessities remain largely unmet by the majority of learners, and thus, they tend to leave aside the virtual mode and revert back to the offline mode of learning. The learners feel starved of lively and interactive social conditions of learning environment for their overall development. A survey conducted among 3,176 families of different states and social categories in India shows that more than 75 per cent learners, particularly from the weaker sections, lower and

lower middle class backgrounds want to return back to the school to learn through the offline mode (The Times of India, Nov. 27, 2020, P.12). It seems that the limited and the notional functional interdependence exists among multiple functionaries of learning at the virtual site which facilitate the demand for offline learning in an active and lively interactive functional relationships among the functionaries of learning which the learners by nature appreciate. This means that the virtual mode is functionally producing subjective consequences (feeling, desire, interest and motive) in its own opposition than any meaningful objective consequences (quality learning, adequate learning outcomes, abilities and competencies) and it is due to this, that the larger section of learners tend to have the feeling of school sickness and the sickness of offline mode. The learners express their feeling to come out in an open and physically interactive mode of earning at the institutional site because of their feelings of boredom, isolation, inactiveness, contactlessnes, closeness, confinement, and over the above, the feeling of getting dehumanised as the subjective functional consequences of screen learning.

2. Functional and Dysfunctional Consequences.

(a) Functional consequences

The functional interdependence is linked with the concepts of function and dysfunction. These concepts can also be applied to analyse any social forms, particularly the repetitive patterns of the two modes or professes of learning. The functions are objective and observable consequences of the processes which according to Merton, accelerate (increase, promote and enhance) the processes of learning, adaptation, adjustment and integration of individuals, sections and groups in the society. In this sense, function plays the positive role in the society. The concept of dysfunction is also the objective consequence but it decelerates (lessens, reduces and creates stress, strain, tension and problems) the processes. In this sense, dysfunction plays a negative role in the society. Therefore, the basic functional consequences of the two social processes of learning are to enhance the processes of quality learning, learning outcomes and enable the learners to get well adjusted and integrated in the society but when they do not function well, dysfunctional consequences take place at the level of individuals, groups and sections of the society. The pressure of the dysfunctional consequences produces change to eliminate or reduce dysfunctions in order to maintain social stability and social equilibrium. Thus, the functional consequences of the two social processes of learning are the positive consequences which are needed for social equilibrium but the dysfunctional consequences of the two modes might accompany with the positive consequences. For instance, the consistency in the socializing function of the family and the school is an example of the positive functional consequence but the inconsistence in their roles in performing the socialising function becomes an example of dysfunction on the part of any one of the agencies of socialisation

because the inconsistency reduces social stability or social equilibrium. The most important positive, objective and observed consequence of the online process of learning is its relatively much faster communication of information and knowledge to the learners of every group, strata and community of the society. The online learning is so empowered that it can reach every nook and corner of the society to bring learners into the fold of virtual mode. This is creating an identity crisis in the traditional mode of offline learning. Second, observed and objective consequence of the online mode is that it is promoting an interconnected and integrated form of learning because the family and other sources of learning are taken as a unit connected with each other virtually in reinforcing learning. In this way, the use of digital technologies of learning makes learning environment virtually immersive with the focus on providing content-rich experiences with greater possibility of retaining information and knowledge by the learners. Third, objective and observed consequence of online learning is that it has created immense interest, rather obsession for the new mode among the learners because they wanted change from the traditional or conventional offline mode to the new mode of technology driven learning and understanding, as if, the traditional mode is being considered by them as dysfunctional as it created stress, strain and tension under the authority of the physical site of learning, specifically the authority of the physical presence of the teacher. The virtual learning has given them freedom, access to coursework anywhere at any place at any time. In an informal set-up of virtual learning, the learners feel more confident, comfortable, self-disciplined and responsible with greater degree of adaptability and adjustment with the system of learning. Fourth objective consequence of online learning is that it has made the learners relatively more skilled human capital because of the skilledbased technology of learning where the proficiency in handling the digital devices of learning is the basic functional requirement. This skill is needed not only in learning but also in almost every official and professional activity. Thus, the advances in digital skills make the human capital efficient which increases their life prospects as compared to the skill-deficient human capital whose life prospect is reduced. Fourth, the skills in digital technology have brought the world virtually much closer to each other and have made the world virtually interconnected global village. The global information and knowledge resources can be gathered and pooled at any place in no time with the help of digital technology. This is one of the most important objective consequences of the function of digital technology of information and knowledge. The new technology has made e-learning much faster and much easier. Fifth objective consequence is that the e-learning has made a dent on the conventional offline mode of learning in the sense that it has provided library resources online and now the learners can have access to a host of e-textbook materials and other sources of information online which can be made available to different stakeholders including learners of schools, colleges and universities. The advantage of ebooks or e-learning resources is that they are not only easily accessible but

also eco-friendly. Sixth objective consequence of the function of virtual learning is that the technological gadgets like the computer and laptop function like a virtual teacher in place of the physical presence of the teacher because the gadgets are empowered, not only to teach and guide the learners virtually but also correct their mistakes if any. They are in fact the sources of virtual or artificial intelligence because this intelligence can immediately locate the problems in thinking, speaking and writing. It can enhance the speed of reading, listening and understanding. This intelligence is a virtual creation of technological devices which in turn are the creation of the innate or inborn natural power of human mind but now the virtual intelligence which tends to be so endowed by the artificial mind that it now tends to overtake the natural power of mind. Thus, the virtual and natural intelligence tend to conflict with each other because the former tends to supersede and encroach upon the latter. However, even if the virtual intelligence is not considered as the functional alternative, equivalent and substitute to the natural intelligence, the virtual is empowered to function like the natural intelligence. Even if the artificial intelligence cannot create natural intelligence, it is empowered to sharpen natural intelligence because it virtually provides a vast amount of literature, information and knowledge, which if properly read and consumed, can direct and divert natural thinking and creative power of human mind to create and generate innovative thinking, understanding and knowledge. The new form of technologically created intelligence even if it conflicts with innate, inborn natural cognitive intelligence, it tends to have an edge over the natural and its functional value in learning. Thus, the objective consequence of artificial intelligence as compared to the natural intelligence cannot be ignored. Seventh objective consequence of the function of online learning is its greater focus on duty and empathy because the teacher and the learner have to be strictly duty-bound with no choice of absenteeism, absentmindedness and unsystematic delivery and reception of information and knowledge in the virtual classes where the two ends (teacher & learner) of the continuum of the teachinglearning have not only to teach and learn virtually but also have to enter into the empathetic relationship with each other to learn from the interactive experiences of each other and up-date their experiences. At every stage of virtual learning, the active virtual engagement of the teacher and the learner becomes a necessary functional requirement of the mode of learning. Thus, the online mode makes the process lively, harmonious and dynamic process of teaching and learning. However, the mode is not free from its dysfunctional consequences.

(b) Dysfunctional Consequences

The dysfunctional consequences of virtual mode tend to be relatively more. First and the foremost dysfunction of this mode is that it is, at present, disintegrative for the society because it is functional for certain individuals, groups, sections, strata and gender of the society but it is dysfunctional for the

larger groups or sections because it is unable to promote the processes of adaptation, adjustment and integration among each and every section of the society. If education is not accessible through any mode of learning, it reduces these processes among the deprived groups, sections and communities. According to Merton, function implies objective consequences of any mode of learning which promote these processes but dysfunction implies objective consequences of any mode of learning which reduce these processes and enhance unequal access to education which in turn creates tension, stress and strain among the deprived sections of the society, leading to social instability or social disequilibrium. In such a situation, Merton advices for necessary changes to regain social stability or equilibrium in the society. The dysfunctional objective consequences of the online mode are taking place due to unequal access to and inadequate digital devices of e-learning. The beneficiaries of the devices, at present, belong mainly to the privileged and smaller groups and sections of the society. They are the 'digital-haves' as compared to a much larger unprivileged and underprivileged groups of those who are the 'digital-have-nots' (Albert P. Rayan, 2020). Unless the 'digitaldivide' is eliminated, the functional consequences of the virtual mode will remain largely dysfunctional. This is a big challenge as to how the access to the new technology of learning can be provided to the larger section of about 320 million learners of different sections and different levels of learning. During the year 2017-18, only 42 per cent urban and 15 per cent rural households had access to internet facility but only about 34 per cent urban and 11 per cent rural had actually used this facility. 'The data suggests that majority of the learners (about 2/3) are likely to be worse off at home compared to any campus. Further, the quality of digital infrastructure for e-learning is very poor in many public and private educational institutions' (Deshpande 2020). This is the digital age but only about 24 per cent urban and 05 per cent rural households have computer facility (Sudevan 2020). The availability of and training in the digital technology is so negligible in rural areas that most learners are not at all familiar with digital devices of learning. The worst affected will always be the excluded, alienated and marginalised sections of the society (Deshpande 2020). In fact, the digital-divide is socially conditioned by the factors external to the new technology of learning.

The digital-divide is not a function of the technology per se. It is the function of the 'social-divide' existing in the society. The digital and the social divides are parallel to each other and reinforce each other. They need to be eliminated but eliminating the social-divide tends to be an utopian view but the digital-divide can be eliminated, but for this also, strong will power and adequate resources are the necessary requirements. To provide universal access to digital devices of e-learning and to create universal digital infrastructure to be available everywhere, proper planning, programme, policy and the will power are needed to implement to achieve the universal coverage of virtual mode of learning. The online mode, at present, suffers from the dysfunctional

consequences of the digital-divide but the offline mode of learning, for a long time, has suffered from the dysfunctional consequences of educational-divide as a consequence of the social-divide. The social and educational divides would continue to reinforce each other and adversely affect the institutional sites of offline mode and the society at large. In the same way, the digital-divide and unequal access to the new devices of learning reinforcing each other would adversely affect the larger society. The corona virus has suddenly increased the speed of shift from the offline to the online mode but both the modes suffer from the dysfunctional consequences of the social-divide and the digital-divide respectively. In their own ways, the two modes tend to perpetuate the social hierarchy and tend to maintain the class character of the society. The digital divide tends to be a device to perpetuate vertical, as well as, the horizontal divisions and the gap in access to technological devices of learning by class, caste, tribe, gender, community and region. The worst causalities of the lack of access would be the poorer sections, slum dwellers, lower caste and tribal groups, women and the deprived communities, particularly in rural areas. The question is as to how we can manage the dysfunctional consequences of the digital-divide, whether the society is prepared to afford uniform access to the new devices by social categories and where are the resources and how they can be utilised to achieve digital equality. We have spent 4.14 per cent on education in good times during the year, 2014-15 but we have spent only 3.2 per cent on education in bad times during the year 2020-21. Now during the year 2021-22, 6 per cent of the GDP would be needed to spend on education. The spending on education has declined by 25per cent, then, the question is how we are going to meet the functional requirements of digital appliances to bridge the digital-divide to provide equal access to learners of online mode to teach every citizen of the country effectively to safeguard the country from the dysfunctional consequences of the divide and make India a digital India (Pitroda 2020).

Second dysfunctional consequence of the process of online learning is the issue of ascertaining objectivity because of the quality of digital devices and the quality of their operation. It is quite irritating, disgusting, disturbing, agonizing and stressful when in the process of the operation of digital devices on the screen, very often the participants (expert & candidate) have to say, 'are you hearing me', 'voice not clear & be audible', 'presenter not available on the screen', 'sorry for mechanical interruptions' & internet failure', etc. Such problems in the online presentation create tension and adversely affects communication, adaptation and adjustment, and thus, reduces the chances of better learning and objective understanding. The efficient and uninterrupted digital appliances and internet facility are needed in order to make the virtual mode play a better role in learning and assessment. The effective functional consequences of the mode cannot make learning objective and socially meaningful. In order to revolutionise the way education is being imparted at the physical site of learning and assessment, the new mode must be efficient,

transparent and impartial. Some time, it looks as if the new mode is being manipulated through signs and images. It seems that the new mode may take long time to adjust in Indian situation because of the apprehensions in its functional operations. The Indian mind in general is not very techno-friendly. The Indian mental set-up, Indian ways of thinking and learning, Indian ways of assessment of objectivity and competencies and Indian values and attitude are quite different as compared to the technology-based societies. In such a situation, the new technology of learning is bound to yield dysfunctional results. Third, there are different kind of dysfunctional imageries created by the virtual window of web learning, although it is a hopeful window of solving the problems of educational inequality and unemployability of human capital but the new mode is bypassing the larger majority of the learners who are neither technofriendly, nor have access to, nor familiarity with the new technological devices of learning. They can neither afford to have those devices of learning, nor trained in their application in the process of learning, nor can the state easily afford the cost of the devices to provide them to all the learners. The craze for the new mode is partly due to the novelty and easy access to information and knowledge, and partly because of the fear of the effect of the corona virus pandemic. It is quite possible that after the normalcy is achieved, the learners might revert back to the traditional mode which is relatively more dynamic and suitable to their nature of learning because it provides multiple windows of in-person learning. It is more interactive and full of multiple interactivities in the process of learning. The craze for the online mode might subside due to its adverse consequences of boredom, isolation, confinement, Zoom fatigue and the single window learning only through the screen and virtual contactless online platform of transmission mode of mechanical reproduction of learning which might dehumanize learners and degenerate their learning interest in due course of time. Fourth, dysfunction of the online mode is that an imagery is being created by it as it intends to bring larger section of learners under its coverage, to provide them quality learning and to make the society a knowledge society, educationally better, qualitative, comprehensive, productive and socially inclusive as compared to the offline mode of learning. There is no doubt that the devices of online mode are functionally powerful tools of communication and reproduction of information and knowledge but how far those tools can deliver the quality and novelty in the processes of thinking and learning because these processes are functionally contingent, not only on the new tools of learning but also on the quality of virtual teacher and the manner in which the subject-matter of learning is planned, and effectively and systematically delivered virtually by the teacher to the learner, and how serious is the learner as the receiving end of learning. Whatever is the mode of learning, if the delivering (teacher) and the receiving (learner) ends of the continuum of teaching and learning are not serious and committed, any mode of learning would be functionally a self defeating mode. One of the most important dysfunctional objective consequences of the offline mode of learning is the

phenomenal decline in the reading, writing and learning habits among the young generation of learners, as well as, the teachers. The rising trend in the poverty of learning, as pointed out by the World Bank report on 'Poverty of Learning', 2018, is directly linked with the declining interest in reading and learning habits.

This applies to the online mode of teaching and learning also. It needs to be seen, how far, the virtual mode would be able to arouse interest, value and devotion in reading and learning of the knowledge virtually delivered to the learners and whether that knowledge virtually delivered is going to be read, learnt and digested well to improve the quality, comprehension, understanding, originality and productivity on the part of the learners. There is the possibility that the knowledge and information virtually delivered remains only on the screen, meant only for its reproduction because of general attitudinal indifference towards reading and learning. Functionally, the online mode has not yet shown any sign of departure from the deficient learning (poor learning) to the efficient learning (rich learning) and hence, might remain largely dysfunctional for not increasing the quality impact on learning and making the learner efficient and employable human capital. Fifth, along with the rise in the online mode of learning, the open book examination is increasing. This adds another dysfunctional objective and observed consequence because it reduces functionally the quality learning based on elaborate reading, writing, learning habits and comprehension. The open book examination reduces, not only the understanding of the learners but also their memory power to demonstrate the knowledge gained. The unfair means of the offline mode has now become the fair means of online mode of examination and success. The open book examination has made the task much easier, particularly in the distance mode of learning where the question paper cannot easily deviate from the prescribed structure of subject-matter or the reading materials. The examinees are not required to read and comprehend the subject-matter supplied to them online but just to lift virtually, reproduce and insert the specific passages into the specific questions asked for. To make unfair as fair means of success is the dysfunctional consequence of online mode of examination. It will reduce reading and learning habits and the adjustment of the learner in the social structure of the society. The automatic shift from one standard of schooling to another with only minimum academic achievements and the automatic promotion in the light of mechanically accumulated API without comprehensive understanding and conceptual clarity are examples of academic dysfunctions in the offline mode of learning at the institutional site, as if, the hard core reading, learning, achievement and comprehension are not the bases of selection and promotion. The online mode is not free from unfair practices. The deficient teaching and learning and the achievement through unfair means, either at the offline or the online modes would certainly reduce qualitative impact on learning or promote stress, strain, maladjustment and social instability in the society. The objective and observed functional consequences

(positive) reside within the consistent relationship between the role achieved and the role enacted but the inconsistency between them gives rise to objective and observed dysfunctional (negative) consequences.

3. Manifest (Intended) and Latent (Unintended) Functions.

As explained earlier, the manifest functions are those objective consequences which enable the learners to adjust with the modes of learning and the system of education. These are intended and recognised functions. The beneficiaries or the participants of the modes of learning are aware of such functions and their consequences. The latent functions are neither intended nor recognised consequences of which the participants are not aware. They are unintended consequences which may or may not be beneficial to the participants (John Scott and Marshall, 2009, P. 267). The latent unintended function, if not beneficial, implies transformation of the function into manifest function to facilitate adjustment in the system. The transformation is needed when unintended and unrecognised functions happen against the intended and recognised function. In other words, change is needed when some unintended, unexpected, unobservable and undesirable functions happen or performed against the intended, objective, expected, observable, and desirable functions. On the basis of this definitional clarification in the light of Merton's conceptualization, the functional analysis of the intended and unintended objective consequences of the two modes of learning have been addressed in the sections below:

(a). Manifest or Intended Consequences.

The manifest functions are in fact the positive functions performed by the modes of learning as discussed above which promote better adjustment with the system. Thus, the manifest function enforces conformity with the existing social practices. This function is being performed by the online mode of learning, once performed by the offline mode of learning. The learners of the virtual mode are adapting and adjusting with the new system of learning very fast in spite of the constrains of accessibility and skills needed in digital devices of learning. The problems of the offline mode are also partially responsible for adjustment with the online mode. First, one of the intended functions of the virtual mode is that it provides learner-friendly services because it is contactless, flexible and informal type. It is rather free from tension, stress and strain in learning. Second intended function is that the virtual mode is facilitating access to information and knowledge to the learner at the home itself or at any place with no or very little connectivity with the physical site of learning. It intends to reach the larger section of learners including disadvantaged and impaired children in remote areas. They are being connected and actively involved in learning because of free access to at least some of the digital devices of learning. The location of the learner and the physical site of learning have become meaningless. Now the learners can learn by themselves and at the home itself. Third intended consequence of e-learning is that it is making a drastic breakthrough from the conventional ways of learning through the classroom to the modern ways of learning through the class-zooms in which there are flexible online platforms of delivering innovative learning concepts, making learning ambience interactive and empowering the learners to attend lectures, do assignments, interact with their teachers through the screen at their own place, and thus, making the learners educationally and socially empowered. Fourth, the online platform of learning is providing, as another intended consequence, the artificial intelligence (AI)to enable the teacher and the learner to make the teaching-learning process virtually accurate and authentic. The computer, for example, as a major source of AI can enrich inborn cognitive power by providing virtually a vast amount of research materials, information and knowledge to learn, construct and deconstruct conceptual categories. On computer itself, for example, one can learn and relearn necessary skills of cooking, yoga, health & hygiene, games & sports and various personal and professional skills. Thus, the new technology offers, not only the vast amount of information and knowledge but also various digital collaborative platforms (like video conferencing, zoom, teams, Skype, ding talk, Goole, webinar, attendance tracking, instant messaging, chatting, cloud storage, recording and many more) of education technology(e-tech) of communication and learning which educate and empower the learners who can learn and educate themselves by sitting at home or at any place. These are some of the intended manifest functions which are beneficial to the learners or the participants who are aware of the benefits, but at the same time, there are unintended latent functions about which the learners are not aware but they might happen in the process of their participation in the online mode of learning.

(b). Latent or Unintended Consequences.

As we know the online learning as compared to the offline learning is a process of learning which may take place in a home environment or in any environment other than the institutional sites of learning because it is virtual and contactless learning where every aspect of learning is virtually transmitted to the learners. Even the teacher as an agent of the transmission mode is virtual and the contents of learning transmitted are available on the screen which can be retraced later by the learner if somehow misses to attend the transmission mode. Thus, the intended function makes the learning flexible and informal type in which the learner can learn and relearn but at the virtual site, the learner is physically alone to fend and learn by himself/herself. The loneliness of the learner makes the learner cut off from the larger non-virtual interactive processes of learning. The loneliness, sitting on the screen for a long time to learn something in isolation and confinement is bound to create a number of unintended consequences which are subjective, unseen and non-

beneficial for the learners about which the learners are unaware and unconscious. First, since, the screen learning is largely reproductive, passive, inactive, mechanical and lethargic, it may have not only the dehumanizing effect but may also have adverse effect on thinking and creative power of the learners. The continuous engagement with the machines or the digital collaborative platforms of learning provides little time to the learner to think, create and innovate. The mechanical process reduces not only the thinking skills but also the reading habit and writing skills. This is an unintended consequence about which the learners remain unaware. It is against the natural development of physical and inborn cognitive powers because the online mode forces learners to sit at home to learn virtually only via gadgets with mask at a distance with no human contact. The learners tend to be worse off at home due to inadequate space, lack of learning environment and the parental incompetency in e-teaching-learning in general. The increased and closed indoor screen learning being strenuous, monotonous, tiring and boring tends to impede the growth of physical and natural intelligence as the learners are not exposed to broader, natural and holistic environment of learning. A student of class 12th says, 'I learn via WhatsApp but I disfavour to this mode and prefer to be in a classroom because the physical site of learning is relatively more lively for my holistic development' (Sudevan 2020). This means that there is something unintended, latent and unexpected which takes place in the process of e-learning about which the participants are unaware and when they become aware of the consequences they exercise their natural choice of learning at the physical site. Second, the process of e-learning being contactless promotes unintended socio-psychological and emotional consequences which are taken up properly only in the in-person interactive processes of learning with human engagement. Every learner to an extent suffers from psycho-emotional problems and when the learner is confined to a number of hours in front of the new platform of screen learning, their psycho-emotional problems are aggravated because of additional stress, strain and tension as a consequence of solitary screen learning which provides no outlet to release the stress and train as it is possible only through in-person sharing of experiences. The pressure of accumulated latent or unintended emotional consequence of e-learning might force the learners to revert back from the online to the offline mode if they get the opportunity, and in that case, they would feel overwhelmed to enjoy the physical site because of the release of their psycho-emotional pressures. This is justified when the schools in some states reopened and came alive after about 10 months of their closure, there was a great rush of learners to the schools for offline interactive learning, as if, the e-learning is tension-prone and the offline learning is tension-free. For example, when it was officially announced that class X and XII students can go back to school from Monday (Jan. 18, 2021), both the students and their parents agreed, although they were divided on the safety issue (The Time of India Jan. 14, 2021, P.6). Similarly, when the schools reopened in the state of Kerala, 95 per cent attendance was

seen in both the government and the aided schools. Karnataka claimed attendance of about 85 per cent. This was welcomed by the teachers who even performed pooja for the safety and well-being of the learners (The Times of *India* Jan.2, 2021, P.1). The Minister of Education of Karnataka in support of the view of the National Institute of Mental Health and Neurosciences says that there is risk of online grooming because it is affecting the psycho-emotional or mental health of the learners. Their mental well-being is at risk because of internet exposure. The excessive use of internet and addiction to the gadgets of e-learning would be injurious to emotional, social and interpersonal skills. The UNICEF document states that there should be limited but not the excessive use of the internet and digital devices of learning because they adversely affect the vision and holistic development of the learners (Rayan 2020). This shows that the virtual learning produces latent, unintended and unexpected functional consequences about which the stakeholders are unaware and unconscious. Third, unintended consequence of the new mode as compared to the traditional mode is that the new mode has created certain degree of uncertainty in the mind of teachers as to how they can manage various digital platforms of learning and integrate them into teaching. There is also the element of uncertainty and anxiety in their mind, whether the learners follow, understand and comprehend what they virtually teach them, how much they learn, what is the learning outcome, whether the learning is qualitative, how to know and assess objectively the competencies learnt, how effective is the online mode of learning or whether the learners are simply paying lip-service to their task of screen learning. Such elements of uncertainty and anxiety in the mind of the teacher are subjective unintended categories of consequences. A study indicates that the teachers are uncertain about the answers of such issues even after handling the classes virtually. They say that it is a wishful thinking to get objectively the intended answers to the issues raised because of poor delivery and receptivity in the new mode of learning (Krishnamoorthy 2020). Thus, the intended or desirable functional consequences of the new mode tend to be superseded by unintended or undesirable consequences about which the participants are unaware. Fourth, another unintended consequence of the new mode is that it is largely reproductive, mechanical and quantitative under the garb of its manifest, intended and positive qualities of being functionally effective, qualitative, creative and productive. The participants are aware of the qualities of online learning but they remain unaware of the fact that it is making them reproductive and mechanical learners as the products of the transmission mode. For example, learning may take place virtually, yet its products (learners) may remain deficient human capital because a physics teacher says that 'the learners learn but it is not clear to them what actually they learn', it is not clear to them, whether the learners actually become conceptually sound products of online mode or whether they only pay lip-service to the mode and play video game. Another teacher says that the learners very quickly reproduce information and knowledge available on the computer/laptop

but they lack originality, comprehension, understanding and conceptual clarity. A research scholar with skills in the operation of digital devices can very easily assemble and reassemble computerised components of knowledge to reproduce knowledge in a thesis form but it is all reproductive at the cost of qualitative understanding and conceptual clarity because of greater dependency on the computer competencies and not on own inborn cognitive thinking power of mind. These are some of the illustrations of the unintended functional consequences of the new mode of learning about which the learners remain unaware but even if they are aware or not aware, they may prefer online mode of learning and research because it makes their academic task easier to reproduce knowledge for easy certification of knowledge at the cost of comprehensive understanding.

4. Relative Functional values.

The basic difference between the two modes is that one exists virtually and the other exists physically. This is because of their different pedagogical world views, although their function is common to educate the learner. The online mode is virtual where every component of learning including the teacher is present only virtually. Only the learners are the receptors physically of what is being beamed to them but they are also virtually present to the teacher to virtually interact with each other. This mode is the transmission mode functioning only through signs, images and codes, thus, the mode is the imaginary as real. It is a real piece of imagery with no relationship with reality (Poster 1988). It only presents an absence as a presence, the imaginary as real and that imagery absorbing real within itself becomes hyper real (signs & images) source of learning. It is like the advertising signs and images which are hyper realities, a world of self-referential signs of learning (Doshi 2003). In the online mode, learning takes place in the virtual presence through the images of the absent but in offline mode, learning takes place, not through the images of the absent as present but through the actual and real physical presence itself. Thus, one mode is virtual where actual is not present at the virtual site of learning, whereas, the other mode is real where actual is physically present at the physical site of learning. The virtual is contactless, impersonalised and informal type mode, whereas, the other mode is the actual or real offline, formalised, as well as, personalised mode. In the online mode, there is no direct human engagement and there is no or little interconnectivity between the online and other multiple sources of learning. In the offline mode, there is close human engagements and proximity in sharing of experiences and critical understanding, and direct interconnectivity between the offline and other multiple sources of learning. It is formal as well as, humanitarian and compassionate in character. It is much more than mere interaction between the teacher and the taught. It involves the development of physical and cognitive skills, critical thinking and critical evaluation, construction and deconstruction of a given body of knowledge. It also evolves new interpretations, new

connections and syntheses. It also involves exploring, inquiring and discovering solutions to complex issues. In this mode, the learners learn how to work in team of teachers, fellow classmates, parents, family members and others. This mode promotes learning through reflectivity and the dynamic formal and informal group processes. It is never isolated, confined, contactless, mechanical and virtual. It is an interconnected mode of learning in which the learner is a close and active recipient of knowledge but not like the remote and inactive receptor who is adjusted or trained to learn what is being beamed through signs and images displayed on the screen. Till the beginning of the pandemic, the classes were being held in a physical environment of interactive sessions, lectures, group work, home work, tutorials and discussions, question-answer sessions, continuous guidance and supervision, academic discourses, etc. These are very lively human engagements in the process of learning. The virtual mode is a new device of learning as against the traditional, indigenous and established mode of learning. The new mode tends to be uprooted from the established tradition of learning. It is an imposition and creation of a risk society, particularly the pedagogical crisis because of its greater focus on materialistic values, technological market and hyper realities. The new mode is not a sign of real and quality learning and productive knowledge but a source of reproduction of social injustice and social inequality. The quality learning cannot be virtual and mechanical.

The issue of negative impact of the new mode is being taken up seriously before the mode is institutionalised and mainstreamed. Although, the mode has potential for widening the space and horizon of learning but before this, its own space of learning needs to be widened, so that, every section of the society becomes technology-friendly and the e-technology is adapted and adjusted well with the Indian mind-set, Indian ways of thinking and learning and Indian values and attitude. The Indian ethos of learning is quite different than purely technology-based and technology-friendly societies. The Indian learners need readymade notes and references of what has been taught in the classroom and they want to sit together, discuss and learn in close contact with their seniors. The Indian society has organically been a close knit society and its ethos is deep rooted into affectivity, empathy, emotional attachment, togetherness, primordial loyalties, closeness, close human proximity, communality, unity in diversity, interactivity, reflectivity and human involvement. In such a society, the offline mode of learning in close human contact has been a well established, adapted, adjusted and integrated natural phenomenon since centuries. The cultural ethos of the society is so deeply rooted into the organic structure of Indian society that education is regarded with high respect where the basic tenets of education is imbibed through human engagements in order to create good human beings but not the human beings as receptors and containers of information and knowledge being produced through the engagement with machines or technological gadgets. India's glorious tradition of in-person sharing of personal, humanitarian, empathetic, emotional and psychological problems

and learning experiences at the physical sites of the temples of value-based knowledge cannot easily be shifted from the classrooms to the class-zooms, from in-person, interactive, open, broad-based and personalised glorious sites of learning to a virtual, contactless, closed, narrower, confined, monitored and impersonalised mode of learning as against the Indian ethos of learning. The notion of education is much broader than just to deliver information and knowledge virtually through digital gadgets. Most education is delivered through informal and formal sites of socially interactive processes in which the complex networks of informal institutions of learning like the family, the peer groups, the neighbourhood and the media, and the formal institutions of learning like the schools, the colleges and the Universities play important roles. The informal and formal processes, active and interactive, dependent and interdependent constitute a dynamic hub of the network of learning in which not only knowledge and information are shared in-person in the offline mode but also the empathetic, emotional, psychological and socio-economic dimensions of learning. Now the glorious and the dynamic hub of learning is disrupted by the digital gadgets which threaten the established tradition of learning which is synonymous with in-person learning with human engagements. The resistance to the threat is natural but implanting the new mode was also needed to regain the loss of learning, observe home quarantine, maintain social distancing and wear mask, and yet learn and counter the effect of the virus but implanting the new mode in Indian ethos of learning is neither the solution, nor substitute, nor alternative to quality education. It should simply be taken as the stop-gap arrangement.

But it is quite possible that the new mode, even after the normalcy, may be retained as a new normal to revolutionize education and move towards the post-modern phase of development because the new mode goes beyond the conventional ways of learning. Although, it is not clear whether the new mode would become a new normal or a new abnormal because it has created, not only a great deal of pedagogical crisis and the gap between itself and other multiple modes of learning including the offline mode but also an identity crisis in the conventional site of learning, functional maladjustment between the generations, among the functionaries of learning and a lot of confusion in the indirect learning through the signs and images manifestation of virtual presence(not in original) of the objects of learning. As if in this mode of learning, originality, reflectivity, reality and truth are not relevant. This does not mean that the new mode is opposed to truth but it conveys only the copy of the truth or original, and thus, it might convey the fake meaning of the truth to the learners. The learners might think that in the virtual learning, there is necessary social connectivity between the reality and the signs or the images of the objects of learning but that connectivity may not exist because every object of learning to which the learners are exposed is existing only virtually in abstract form as a copy of the original. Therefore, the online learning, as addressed above, might functionally produce dysfunctional consequences or

false appearance of truth or distortion of truth. However, the digital devices are powerful tools of learning and nourishing the power of mind through reproducing information and knowledge to be consumed by the individual learner. The offline learning is reflective, productive, creative and innovative because of its lively in-person interactive discourses where talent can be identified, nourished and nurtured for productive ideas and qualities. The online devices, although powerful, are unable to create and identify talents but they provide virtual support of the structure of information and knowledge to the talent or to the in-born cognitive ability to flourish. The offline learning also in a way does not create the innate power of mind because it is in-born but it is empowered to identify, nourish, nurture and socialize the in-born cognitive power, and thus, it provides externally and relatively a better learning environment at the physical site, not only for the growth of cognitive power but also for the holistic development of the learner.

Although, both the modes of learning are important because, not only the cognitive natural intelligence is needed but also the virtual intelligence or unnatural artificial intelligence because the e-technology of learning provides the superstructure of knowledge base and the internet highways with the power to guide and control human behaviour and create virtually or artificially the human like mind and body but the superstructure and the highways virtually created are contingent upon the natural power of mind, identified, nourished and nurtured through the offline environment of learning, and it is that natural power of mind which works from behind the emergence of technology itself and its consequences of virtual and artificial creations. And thus, the machines or the digital devices or the platforms of online learning have limitations because they can compete only to an extent with the natural machines of offline mode of learning. However, none of the mode of learning can create naturally created innate cognitive power of human mind but the offline learning with direct human engagements is relatively empowered more to identify, nourish and nurture that power better but the nourishment of that power totally depends on how far the amount of information and knowledge made available to the beneficiaries through the online and the offline modes is going to be seriously read, learnt and digested to incorporate and integrate into the thinking processes to apply them to create innovative and productive knowledge to benefit the society. The World Bank report on 'poverty of learning' (2018) shows a worrying trend of declining reading and learning habits during the time of offline mode of learning and we cannot say whether this trend will improve during the online mode of learning. It might worsen because the virtual learning hampers, not only the socio-psychological, emotional and physical well-being but also the reading, writing, learning habits and thinking skills.

In spite of serious dysfunctional consequences, if the new mode continues, it will at least reduce sprawling infrastructures at the physical sites,

overcrowding of campuses, campus malpractices, campus unrest and politics. Although, at present, not more than 20 per cent learners are exposed to the new mode, most teachers and the learners feel deprived of the physical site of the classroom learning where they can feely participate in academic discourses, interact with each other and enjoy then school milieu and the campus life. The new mode looks like the paperless learning like the paperless office and cashless marketing, market of technology, commercial and material values. The Indian ways of working are different where the people, neither like to do offline office work properly in the office itself, nor they would like do online office work properly from the home because the Indian mind and Indian family set up are quite different. In general, the nature of Indian family is neither work oriented nor academic oriented. Here, neither work is worshiped, nor education is valued, nor educated are respected. Only money, power and position are worshiped, valued and respected, and only they determine who should get the quality education, avail of the new pedagogy of learning and be trained into the new devices of learning, and who should be deprived of them to what extent, which region, which community, which class and caste and which gender. The discriminatory practices may exist in the online mode of learning also because it also cannot transcend the class structure of the society as has been the case in the offline mode of learning. In both the modes the class structure plays important role because the mode and class are interlinked. The offline mode is the underlying mode of the online mode. It is quite possible that after normalcy, the offline mode be restored, the online mode might disappear or both may co-exist, mixed-up and integrated with each other but the multiple divides (social, educational and digital) would continue to affect the two modes, even if the third mixed up, integrated and hydride mode of learning comes into picture. Specific policy is needed as to how to reduce the adverse effects of the existing divides on the modes, how to functionally integrate the modes, how much space each mode should get in the academic life and how to make the mixed mode effective.

5. Functional Integration.

The idea of functional unity between the two modes of learning is related to the view that the function of any repetitive social form is the contribution it makes to the total social life or to the entire social system (Radcliffe-Brown1935). This implies that all social forms or parts or social processes of the society work together with sufficient degree of harmony or internal consistency without producing persistent conflict. The idea of sufficient degree of social harmony implies that there is sufficient degree of functional unity or functional integration among them, and if this does not happen, the total social life would be disturbed. Although, Merton disagrees with this view on the ground, as stated above that in highly differentiated and diversified societies, it is impossible to think of complete social harmony into the functioning of all social forms or processes because some social forms may

always be in active opposition to others. Since, consistency or harmony in their mode of functioning may not exist, functional unity between them or among all functioning parts of the totality is not possible but it is acceptable that at least basic social harmony or consistency is needed on the part of the repetitive social activities, so that, unity or harmony prevails in the society. In this conceptual fame of functional analysis, we look at the two modes or processes of learning with the view to explore the possibility of uniting or integrating them in the interest of revolutionizing the system of education and give a push to the system to move towards a new phase of development.

The two processes of learning are the integral parts of totality of the system of education in particular and the society in general. They are expected to function in harmony to each other to bring stability to the system of education and to the total social life. The two modes apparently look dichotomous and non-contiguous, as if, they conflict and tend to compete with each other but this is not the case because they are contiguous and the offline mode is the underlying base structure of the online mode of learning. The online mode rests on its base structure provided by the offline mode. In due course of time, they might infiltrate and transform each other into a new mode of learning (Rudolph and Rudolph 1967). They have only different parameters to approach the common function of learning. The impact and popularity of the technology driven mode of learning is giving the impression that it is trying to take over its underlying base structure of offline learning and making the base suffer from the identity crisis to the extent the base becomes invisible and buried under the online mode but that underlying base cannot be buried because of its indigenous and Indianised character and its inherent power of effective inperson learning than the contactless virtual learning but both the modes of learning are powerful modes in their own ways. Functionally, the virtual mode can do what the offline mode cannot do and vice versa. One mode is the virtual source of unlimited information and knowledge to be utilised for learning and the other mode is the actual source of unlimited physical and creative human energy to be utilised for learning. In the virtual mode, digital devices of learning are functionally primary and the human engagement is functionally secondary units of learning, while in the offline mode, human engagement in learning is functionally primary and the virtual devices are secondary units of learning. The objects of learning in both the modes are common but the tools and the ways of learning are different, although fundamentally they are not different. The objects of teaching and learning are the same in both the modes but in one case, the pedagogical tools are virtual, and in the other case, the pedagogical tools are physical and manually operated with the help of human engagement. The virtual mode tends to complicate the function of learning due to its inherent dysfunctional, unintended, latent and subjective functional consequences but in due course of lime, they would hopefully be settled because it is a new mode, not well adapted and adjusted functionally. The resistance to it is natural for being inconsistent with the Indian ethos of learning and the indigenous

mode of existing tradition of learning. The contactless in-home, in-isolation, in-confinement and physically in-active learning through signs and images on the screen are contrary to the parameters of physically engaging processes of learning in close human contact with broader horizon of learning.

The two modes have their own ways of educating the learners but both are powerful modes in their own ways. If they are integrated or blended with each other and properly used, education may move towards a new phase of development. Their blending may give rise to a third hybrid mode enriched by the functional values (merits) of the two modes (Ghosh 2020). Third integrated mode may focus greatly on the functional (positive) rather than dysfunctional consequences of the two modes but the problem is how to integrate them, where to integrate them and what space each mode should get in the vast areas of academic activities. There are two major areas of academic activities within the physical sites of learning. There are the mainstream areas of core academic activities and there are non-mainstream areas of supportive activities to the core areas. The mainstream or the core areas consist of teaching, learning and research, and examination, evaluation and selection of the faculty, and a large number of interactive, interdependent and consultative activities including multiple academic discourses. The rest of the activities are supportive activities managed to provide academic conditions for the smooth functioning of the core academic activities. The supportive activities consist of the administrative apparatus for managing, providing and maintaining the infrastructural facilities to sustain the core or the mainstream education. It also consists of the management of library resources for providing the literature consisting of information and knowledge to enrich the mainstream education. The mainstream education is the core of learning because it is the professional component of learning and the rest is the non-professional component. Both the core and the supportive academic activities exist at the physical site of learning in a status hierarchy where one is governed by professional or academic achievements based on skills, knowledge and cognitive power to produce innovative, original and constructive knowledge. The professional component is the main source of academic excellence achieved by the institution of learning. While the other non-professional component of learning is the administrative component which administers the supportive activities. It takes into account the management of infrastructural facilities, routine type office work, file work, day-to-day decision taking, management and maintenance of reading materials, sports and recreational activities. The infrastructural facilities including the library resources are managed and maintained by the administrative apparatus but those who manage these facilities do not directly engage in the mainstream academic activities. The two work/status categories of the core and of the subsidiary activities are hierarchically arranged. There is division in their work activities. One belongs to the core academic/professional areas and the other belongs to the subsidiary routine type administrative areas. The role of one is professionalised and

specialised and the role of the other is routinised. One is empowered by learning and production of knowledge while the other is empowered by the rules, regulations, decisions and routine official activities. There is always some conflicting kind of relationship between the two but they also cooperate and coordinate with each other in maintaining the larger system of education.

Since, the mainstream academic activities at the physical site are directly responsible for academic role, academic standard and academic excellence, they should be out of the virtual mod because, at present, the virtual mode does not look methodologically so mature for the contribution it can make to the academic excellence and to the meaningful academic discourses needed for the growth and development of creative power of mind which is a necessary condition for creative, innovative and productive knowledge. The online mode does not provide direct exposure to various interactive and interconnected routs of knowledge, although it is a powerful mode because of its efficient technical devices of supplying immediate, quick and abundance of information and knowledge but the mode tends to be impersonal, reproductive, mechanical and routine type where there is no direct exposure to multiple sources of learning for enriching the experiences of learners. The core education being the real education cannot be transferred to the digital or the transmission mode of learning. The supportive activities including the library resources may be transferred to the online mode but equipping it properly would be more useful for the learners to access the reading materials, not only at the physical sites of learning but also at home or at any place. Although, sitting on the screen for longer time to access the materials may create vision and physical problems. And even if one wants to read those materials in a relaxed manner, one has to take the photo copy of the materials after downloading them from the technology. This is an expensive option, particularly for the average and poor students who cannot even afford to have the new technology of learning of their own. It is a misconceived notion that the online or the offline technologies of learning can increase the quality of learning and the quantum of information and knowledge. In any mode, the quality and the quantum of knowledge is governed by the personal investment (time, energy, efforts, devotion, commitment, interest in and value for learning/education) in learning made by the learners. The offline learning has produced many eminent social scientists like Romila Thaper, Bipin Chandra, Yogendra Singh, M. N. Srinivas, Andre Beteille, T.K. Oommen, C.P. Bhanbhri, Gopal Guru and many others who were not the products of the digital age and of the new technology of learning. They are the products of typewriter age and the traditional offline mode of learning. The quality and the quantum of knowledge which they have produced through the offline mode at the physical site of the typewriter age cannot easily be mached with the contributions, if any, made by the social scientists of the digital age and the virtual mode of learning. Although, the quality contributions of the virtual age is awaited but the trend in the modern ways of learning and the investment of personal resources being made by the younger generation in the new pedagogy of leaning does not show the capability of the new generation of learners to reach to that extent to which the older generation of scholars has reached in the pursuit of knowledge due to their maximum investment of personal resources in learning. How far, the younger generation exposed to the virtual mode of online learning of the digital age would be relative more productive and creative than the senior generation of scholars exposed to the offline mode of learning of the non-digital age, is to be seen in future. Further, how did the senior scholars managed to reach to that zenith of academic excellence without the modern ways of learning, the younger generation of learners must learn from them. If we go further back, we may find that our indigenous traditional system of offline learning like the Gurukul system, without the present day modern digital devices of learning, has produced great teachers like Guru Vashistha to Chayanka, great disciples like Rama to Chandragupta and the great scholar like Chanakya and similar other great scholars of the traditional seats of learning (Prasher 2020). This reflects the glory and the excellence of the traditional sites of offline ways of learning. How far, the Zoom compare to Gurukul would be effective, only the time will tell us but the importance of indigenous form of offline mode of learning at the physical site cannot be denied in making the efforts to replace it by Zoom.

In exploring the possibility of the blended mode of learning, the basic structure of learning (mainstream) must be exempted from the digital or transmission mode because of the reasons stated above but the supportive activities may function through the online mode because of the consistency between the routine type official activities and the routine type of mechanical form of contactless online communication which will speed up the official transactions in supportive activities but before this, the contradiction between the new technology (fast) and the old mind (slow) or traditional pattern of official transaction(clerks/officials sitting on paper) must be resolved. Today, the faster speed of technology in official transaction is held up by the slow mentality of the officials of the administrative apparatus of educational institutions. In order to integrate the new technology into the supportive academic activities and make it play an effective role, the mentality of work must correspond to the new technology of work.

However, both the modes can function simultaneously but in different areas of academic life. As already explained, the offline mode would be more suitable in the core areas where a lot of interactivities, interdependence, inperson face-to-face interaction and sharing of knowledge are needed which make the process of learning more lively, creative, innovation and productive. The online mode can be integrated into activities supportive to the core areas of education but before this, not only the problem of mentality of work or the work culture be changed but also the problems of internet, digital divide, inadequate digital devices, lack of effectiveness in the digital devices and the lack of connectivity must be resolved along with large scale training and

customised skill development among the users of digital technology. The proposal of integrating the virtual mode into the supportive activities is also a difficult option because of the lack of resources at the disposal of the central and the state governments, their willingness to invest for a uniform expansion of and skills in the new technology in all educational institutions and their efforts to reduce poverty of the citizens to afford the technological gadgets. However, there is a view that the online mode should also be integrated into the core academic activities. The justification given is that the online virtual mode is more personalised and interactive than the offline physically in-person mode because the 'learners can pause, rewind and repeat lessons helpful to them in meeting different learning needs. The 'pause-and -rewind' buttons are already being used in video tutorials for revisions. The learners can also alter their learning environment, select language options, review their lessons, take a quiz to see how fairly they have done, get their homework checked, get the scores delivered to them faster and discuss doubts with their teachers' (Mehta 2020). Firstly, this view cannot uniformly be applied because the online mode suits the interest of only less than 20 per cent learners and the majority of learners lacks skills, understanding, awareness and availability of digital devices of learning. Secondly, it is doubtful whether the online platform is relatively more personalised and all the learners including those who are using online mode of learning are really aware of and affectively using the 'pauseand-rewind' technique in learning and making learning personalised. Further, it is also doubtful whether, the solitary screen time, technically pause-andrewind button and the transmission mode with a switch on and off button can really help learners to learn and engage in creative thinking and productive knowledge. And, whether such a technical way of learning is really mean education. It might impede the progress and the socio-psychological and emotional well-being of learners (Rampal 2021, P.18). The e-learning in India is not a boom in education but it is a boom in information technology in the society without society being a knowledge society. In India, much less than 50 per cent of households in urban areas have computer and internet connectivity and it is much less than 15 per cent in rural areas. India has about 320 million learners and the limited facilities of online learning in the absence of offline classroom cannot meet the learning requirement of learners. Rajasthan is the hub of offline learning institutes and about 70 per cent learners of the Allen Career Institute including the disadvantaged learners are not used to the modern ways of learning. They want to restart the earlier form of classroom teaching in the physical set up. They are neither used to the digital devices of learning, nor have adequate prior training in those devices, nor those devices are available to them. Their parents are also not convinced of the advantages of the new set up of contactless mode of learning. At present, there is no alternative to the traditional offline mode which would have continued if there would have been no crisis created by the pandemic. It is this crisis which has forced the closure of the physical sites of learning and has given sudden rise to

a new mode of learning to protect the career of the young generation but the limitations of the new mode might force the society to revert back to the traditional mode of learning after the normalcy is achieved but the merits of the new mode may be availed of and a blended form or a mix pattern of learning may be experimented and then adapted and adjusted into the system of education but blending the modes would differ by the nature of academic activities within the institutional site of learning. The mainstream or the core academic activities should be mostly offline based and the supportive activities should be mostly online based. This blending is needed because the functional value of the offline mode cannot be overlooked and the functional value of the virtual learning is the need of the day. Thus, the combination of tradition (offline) and modernity (online) can be experimented to deliver better learning outcome. It is quite possible that in course of time, the tradition is absorbed by modernity or it may be the other way round. If the tradition is absorbed, the modern ways of learning can be extended to all areas of academic life but if there is strong resilience and resistance to the modern changes in the mode of learning, the modernity of learning must concede to the tradition of learning, but only the future will tell us, whether the blending is fruitful or fruitless and then, accordingly policies can be formulated to integrate or disintegrate the two modes of traditional offline and the modern online modes of learning in India.

Note

The paper is largely based on secondary sources and partly on the responses collected online from scholars of diverse fields. It is a qualitative functional analysis of the two modes of learning.

References

Baudrillard, J.	
1983.	Simulation. New York: Semiotext.
Banchariya, S.	
2020.	"DU students prefer online over offline mode of examinations", Education Times, Sept. 15.
Deshpande, S.	
2020.	"Online education must supplement, not replace, physical sites of learning", <i>The Indian Express</i> . Sept. 15.
Dorairaj, A. Joseph .	
2020.	"Seven Myths about online education", The Hindu. June 6.
Doshi, S.L.	
2003.	${\it Modernity, Postmodernity \ and \ Neo-Sociological \ Theories. \ Jaipur: \ Rawat.}$
Durkheim, E.	
1984.	The Division of Labour in Society. London: Macmillan.

Education Times report.

2020. "How education changed in the last few months: classroom not the

same and learning through screen", Education Times, sept.28.

Ghosh, R.

2020. "Can blended learning address the challenges—", Education Times,

Sept.28.

Krishnamoorthy, R.

2020. "Teachers sceptic about effectiveness of online teaching-learning

process", The Hindu. July 27.

Malinowski, B.K.

1944. A Scientific Theory of Culture. Chapel Hill: University of North

Carolina Press.

Mannheim, K.

1952. Essays in the Sociology of Knowledge. London: Routledge and Kegan

Paul.

Merton, R.K.

1957. Social Theory and Social Structure. The Free Press.

Mehta, Sumeet.

2020. "Phygital learning will rise Post the pandemic: Online and Offline will

coexist", Education Times, Special Edition, Sept.28.

Pitroda, S.

2020. "Digital India is not prepared for digital education", *The Indian Express*.

Sept.15.

Prasher, Jai Krishan.

2020. "How education migrated from Gurukul to Zoom", Education Times,

Special Edition, Sept. 28.

Poster, M. (ed.)

1988. Jean Baudrillard: Selected Writings. Stanford: Stanford University

Press.

Radeliffe-Brown, A.R.

1935. "On the concept of function in social science", American

Anthropologist, Vol.37.

Rampal, Anita.

2021. "Digital education cannot substitute for real learning, and staring at

a screen, learners only act as remote receptors of what is beamed",

An interview published in The Times of India, Jan. 22.

Ramchandran, K.K.

2020. "Should students remain tied down to computers", Education Times.

Oct.12.

Rayan, Albert P.

2020. "Online and Offline", The Hindu, June 20.

Rudolph, L.I. and Rudolph, H.R.

1967. The Modernity of Tradition. New Delhi: Orient Longmans.

Saussure, Ferdinand de.

1974. Course in General Linguistics. London: Fontana.

Scott, J and Marshall, G.

2009. A Dictionary of Sociology. Oxford University Press.

Sil, R. and Roy, A.

2020. "Will artificial intelligence transform the education system",

Education Times. Sept. 21.

Singh, A.,

2020. "Why institutions must step up to bridge digital divide", Education

Times, Sept.21.

Sudevan, P.

2020. "Why e-learning is not a sustainable solution to the Covid-19 education

crisis in India", $The\ Hindu$. May 11.

Wattal, A.M.

2020. "We must walk tightrope between online and offline learning", The

Indian Express. Sept. 15.

World Bank and ASER.

2018. Report on Poverty of Learning. New Delhi: World Bank and ASER.

Received: 10^{th} Feb 2021 Revised: 17^{rd} July 2021 Accepted: 17^{th} Aug 2021



This document was created with the Win2PDF "print to PDF" printer available at http://www.win2pdf.com

This version of Win2PDF 10 is for evaluation and non-commercial use only.

This page will not be added after purchasing Win2PDF.

http://www.win2pdf.com/purchase/