

LEARNING OUTCOMES AND LEARNING INDICATORS: SHIFT IN INDIAN ELEMENTARY EDUCATION

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Abstract: In its endeavour of Universalisation of Elementary Education, India has succeeded widely in terms of enrolment and access; however, retention remains a challenge as quality of education is a huge concern. The policy directives under National Policy on Education (NPE) 1986 and Programme of Action (POA) 1992 require that the essential levels of learning be laid down and children's achievement should periodically be assessed so as to keep track of the progress towards the NPE goal of ensuring that all children achieve essential levels of learning. Various initiatives under curricular and assessment reforms as mandated by the Right to Education (RTE) Act have been rolled out by the States in order to address quality issues and improve learning outcomes. Since there is a shift in the national curriculum frameworks developed subsequent to NPE-1986, the article is an attempt towards understanding this shift on these essential levels of learning/learning outcomes and their potential use to tap quality in children's learning.

Keywords: Right to Education (RTE), Minimum Levels of Learning, Learning Outcomes, Learning Indicators

1. INTRODUCTION

To provide elementary education to all children, various initiatives with large investment have been launched across all States and UTs in India during last few decades. According to the All-India Educational Survey conducted by the National Council of Educational Research and Training (NCERT) in 2007, 87.98 per cent out of approx. 6.5 lakh primary schools and 79.06 per cent out of 2.45 lakh upper primary schools are situated in rural areas. The Annual Status of Education Report (ASER) 2012, mentions that 96.5% of all rural children between the ages of 6-14 were enrolled in school. In addition to this, various non-formal education centres are either converted to the special training centres for the out of school children/dropouts or are now upgraded as regular schools for the children in the neighbourhood as per the Right to Education (RTE) Act 2009. There is a wide variation across regions, states, districts, and rural/urban sectors as far as the quantitative aspects such as institutional infrastructure, teaching-learning resources such as availability of teachers as mandated under the RTE Act, are concerned and all these variations also affect the extent of accomplishment of the goals of enrolment, access and quality. It is undeniable that the strategies to be adopted need to keep the contextual variations in view while addressing the quality component, the sole aim of which should be to enable each child to learn, grow and develop holistically in different dimensions that include psycho-social besides the cognitive domain. The quantitative expansion, although, enhanced accessibility of the elementary education to the unreached section of the population eliciting a successful step towards Universalisation of Elementary Education(UEE) yet the quality aspects show a dismal picture as evident from various educational surveys conducted from time to time indicate declining levels of students' performance. As per the Global Monitoring Report (GMR 2013), national and international assessments data suggest that, in most of the countries, children are not mastering basic skills. Low achievement is widespread. In a PISA study covering forty-three countries, 18% of 15-year-olds in OECD countries (mostly high-income) performed at the lowest of five reading literacy levels. India was one of them and was the last but one country among these.

As we shape a new global sustainable development agenda after 2015, the Global Monitoring Report- 2013 shows equality in access and learning must stand at the heart of future education goals. It needs to be ensured that all



children are learning the basics and that they have the opportunity to acquire the transferable skills needed to become global citizens. This requires setting goals that are clear and measurable, to allow for the tracking and monitoring for bridging the gaps that remain. Thus, it is imperative that within a system of education, the national/state educational bodies need to have information about how well the system is doing to make rational decisions by administrators, planners and policy-makers.

Improved quality education reflects improved learning outcomes which essentially depend on the quality of teaching learning process i.e. transaction of the curriculum. To do so, a multi pronged approach involving child centred curriculum, learning environment, teaching learning processes, the curricular material that enable a child to learn and develop her physical and mental potentialities to develop fully. In order to map the progress in learning and development, some criterion is needed for which the curriculum needs to lay down certain parameters that specify a set of knowledge, skills and dispositions to be acquired by each child. The large scale assessments, mostly, are performance based that include achievement of students in different curricular areas measured in scores through tests measuring quality in education only quantitatively. In spite of the fact that qualitative aspect of learning/assessment is crucial to quality education as it strongly affects what students learn, how well they learn and to what extent it helped them, however, it is undeniable that the quantitative measures supplement the qualitative aspects.

2. LEARNING OUTCOMES: THE BACKGROUND

Achievement of the desired learning outcomes representing appropriate skills, dispositions besides the requisite cognitive knowledge is an indicator of progress to keep pace with the world in an era of globalisation. Highlighting it as a national issue on our policy agenda, the recent Joint Review Mission Reports mention that the accountability of the performance of individual schools, school system and the functionaries needs evaluation against well designed criteria. The extent of students' learning progress can help decide that, and this requires the reflection/reporting of their actual learning in a manner that it does not distort the curriculum, its transaction and assessment. A careful understanding of the curricular expectations/learning outcomes and learning indicators is needed as they play a crucial role in it.

In India, an attempt to draw such criteria across all stages up to elementary level was made in India about two decades ago at the national level. The learning outcomes were first drawn out for all children at the primary stage during late seventies. Further, to address quality issues in education in the light of the National Policy on Education 1986, the Minimum levels of Learning (MLLs) were developed class-wise and subject-wise for primary stage in 1992 in the form of competencies by the NCERT. The MLLs took learning outcomes as the minimum required educational standards to be acquired by all children irrespective of their class, caste, gender, religion, region which do not fit today's scenario especially post 2005 and to understand this shift in educational discourse since last decade one needs to look into the factors that governed and guided their development.

3. WHY LEARNING OUTCOMES

The learning outcomes were meant to help the system in many ways.

3.1 MLL and Learning Outcomes

As per the MLL document of the committee set up by the MHRD, GOI, the MLLs were expected to;

3.1.1 Address Inequities

In order to help each child acquire an education of a comparable standard, bridging the gaps between education among privileged/ unprivileged, rural/urban, public/private, formal/non formal sectors and addressing other inequities of caste, creed, gender, religion, culture and geography, the need for well defined standards came up. The effort was to combine issues of quality and equity to provide opportunities of developmentally appropriate structured learning to children of a particular stage.



3.1.2 Providing some minimum learning all to be functional in Society

Realising the harsh reality that children from the underprivileged sections, especially from the government schools, could not read even after five years of schooling, the MLLs were thought to ensure a minimum level of learning at the primary stage for them. Such deprived and disadvantaged sections of children, vulnerable to be pushed out beyond primary stage or were unlikely to avail the opportunity of further education, the MLLs expected them to acquire this minimum level of learning to enable them understand their world better and be functional among others in the society. Taking an integrated view of primary level education in the country, the specified MLLs were applicable to both the formal and the non-formal sectors of primary level education.

3.1.3 Understanding Health of the Education System

In addition to this, the MLLs were expected to help understand the health of the education system and its working, using these as tools to assess the quality of a school and its learning environment. Measuring quality of schools based on the output i.e. students' achievement and using it to decide the need and extent of the inputs i.e. infrastructure and qualified teachers was one of the key objectives of introducing MLLs. Measurement of performance capabilities of students against expected standards to be achieved by all children as a reflection of quality was sought to identify good schools and provide selective inputs for those which needed them most.

3.1.4 Setting Accountability Measures for the teachers

In the absence of clearly defined criteria, the teachers found it difficult to assess the learning progress of students. The MLLs provided teachers with the goals to weave their teaching learning around them so as to avoid drifting away from the purpose. In a way, these were seen as accountability measures for teachers by setting performance goals for them to help them direct their efforts towards the identified criteria and organise their teaching learning to enable children acquire the desired competencies at the completion of each stage i.e. accomplish these goals within the stipulated time. In other words, these non negotiable prerequisites i.e. the MLLs were also seen as indicators of effectiveness of the education system as these were expected to help infuse accountability in the system to facilitate all children to achieve MLLs at a given stage.

3.2 Learning Outcomes vs. Competencies - The Shift from MLL

A paradigm shift came a decade ago when the National Curriculum Framework (NCF)-2005 portrayed children as a natural learners and knowledge as an outcome of their engagement with the world around when they explore, respond, invent, and make meaning out of that. It envisaged conceptual understanding as a continuous process i.e. the process of deepening and enriching connections acquiring more layers of dispositions, emotions as an integral component of cognitive development, making meaning and developing the capacity of abstract thinking, reflection, and work.

Although, overall development of a child through education, enacted now as a fundamental right under the Right to Free and Compulsory Education Act 2009, had earlier also been a priority of almost all policy documents since Kothari Commission (1964), and even the Minimum levels of Learning at Primary Stage (1991) too recognised this yet it considered difficult to deal with the non cognitive areas. The document states, "The committee recognized that consideration of non-cognitive aspects of learning is a wide area and may not deal with the psychomotor domain and even in the affective domain." The reasons for doing so were mentioned as; difficulty to assess affective qualities with precision and through paper-pencil tests as they are intangible and subjective, influenced by personal preferences and prejudices. It also states that it may coerce children to behave against their will and conviction. It further states that non-cognitive outcomes can at no stage be considered as fully developed and, therefore, they cannot be referred to as terminal outcomes at any point. It considers them to be a part of process of development and change in the students' personality rather than being the final product of specific inputs and processes. Based on these, the document is apprehensive of discerning the qualities and drawing inferences related to non cognitive outcomes. In cognitive area also, the MLLs, identified as some minimum prerequisites in



terms of terminal competencies, free of irrelevant and excessive learning load were expected to ensure the acquisition and mastery of some basic competencies and skills by one and all to move towards functional primary education.

Understanding learning outcomes as broadly the curricular expectations/abilities that students need to acquire over a period of time which may or may not be quantifiable, the National Curriculum Framework (NCF-2005) and the syllabi based on it across different curricular areas spell out stage-wise learning outcomes/ curricular expectations. The MLL document mentions these as competencies defining them at each class up to primary level.

Knowing the fact that children do not learn in a linear manner as the learning needs to be seen as a continuum in which new experiences are provided building on the previous knowledge as per the need and style of the learners to allow them to progress at their pace and doing efforts to bring them at par with others, the MLL document failed to recognize and appreciate this fact.

Taking example from MLLs in Environmental Studies, Chapter 5, page 41, out of the ten major competencies identified under Environmental Studies which aim at the cognitive, affective and psychomotor domains of development together with the content elements associated with them, if we carefully observe, some appear to have very broad perspective such as - acquires awareness about one's well being in the context of social and natural environment, explores aspects of socio economic environment, analyses observable socio-economic problems and seeks possible solutions, understands relationship between man and his environment, whereas others seem to be very narrow aimed such as-knows about people at work, observes common characteristics of non living things, observes phenomena of earth and sky and so much product oriented and terminal in nature i.e. to be developed in each child at the end of a class with little flexibility for even the inherent individual variation among learners. It completely ignored the fact that like Personal social Qualities (PSQs) the cognitive development too is a continuous process of development with no terminal point/class/stage/ boundary. Also taking cognizance of individual variations among children due to various factors it required reinterpreting equity aspects envisaged under MLLs for their suitable addressal.

Even the competency of the teachers due to contextual variations can significantly affect their accomplishment. These class-wise competencies identified under MLL in the context of evaluation were targeted to help the teacher anchor their teaching around these and assist others in conducting competency based evaluation. However, the scope to enrich learning got restricted as the focus became achievement of the identified product oriented competencies only, ignoring the intended curriculum and learning. These rubrics reduced and restricted the curriculum to accomplish only the specific objectives presented as the minimum essential levels instead of the intended curriculum resonating with the aims/objectives of education as envisaged under the National Policy and the National Curricular Framework of education. This led to detrimental and reductionist effect on the curriculum especially on the type and content of learning in the classroom and restricted the MLLs to outcome and achievement oriented in contrast to promoting experimental/critical thinking and focusing on overall development of children.

In order to overcome this and promote children's holistic development, the NCF-2005, recommended curricular expectations/ learning outcomes to be laid out stage wise as the abilities, skills, dispositions and, are essentially expected to be accomplished by all children over a period of time.

Moreover, there is a conscious attempt to drift away from rote memorisation of the content with a concerted focus on the processes of learning. The complexity of the learning outcomes increases from one stage to another.

For example,



- Awareness about immediate surroundings from lived experiences from themes related to daily life during early years (up to class III) to understanding the relationships between natural and social environment through various activities within and beyond classroom towards class V.
- Valuing the immediate resources (water, food, paper, fuel etc.) using as per need (up to class III) to protection and conservation of natural resources towards class V and beyond
- Enhanced curiosity and creativity w.r.t. the immediate environment (in early grades) and towards the extended environment towards class V and beyond.
- Appreciate diversity in immediate surroundings (social and cultural variations in family, immediate neighbourhood) during early stages to diversity in distant environment (in the district, state, country) as children approach later stages
- develop sensitivity towards elderly/old, differently abled, and disadvantaged (at early primary stages) however towards class V, also reflects Awareness of rights of self (Right to education, right to food, against child labour etc.).

It also needs to be seen that accomplishment of these learning outcomes does not mark a sharp boundary at the end of any particular class/stage but is hazy with overlaps across stages accommodating all children with varied abilities and backgrounds to address equity issues.

3.3 Learning Indicators vs. Sub Competencies: The Shift from MLL

In order to foster the overall development of a child, and assess the health of an education system it requires a fair idea to be obtained of the extent of children's learning progress. The MLL document has given for each competency in a class a rubric of sub competencies.

A careful look at these sub competencies reveals that, these limit assessment to terminal behaviour oriented observables that could be measured with precision. For example,

- identifies the main parts of the body
- stays in queue and waits for his turn
- · interprets important road symbols
- practices personal hygiene including toilet habits
- observes important rules of road.

It cannot be denied that these competencies are highly product oriented having little scope and flexibility to accommodate all learners with different abilities especially those with learning disabilities and even due to contextual variations e.g. a rural/tribal child may not have an access to the desired toilet facility and even road safety symbols. Further, the MLL document spells out sub-competencies as testable constructs in rubric form, concrete in terms of their ease and reliability of use but a sense of reductionism to the intended curriculum cannot be ignored. For example in each class assessment based on the five sub competencies for the competency 1 in EVS (The pupil acquires awareness about one's well being in the context of social and natural environment), will limit the curriculum transaction up to these five sub competencies each in classes I and II and three sub competencies in classes III and IV and only two sub competencies in class V only. Moreover, it too includes some competencies such as- practices personal cleanliness including toilet habits (class I), appreciates that house is essential (class II), sees relationship between unclean food and water and diseases (class II) which are difficult to be restricted to one particular stage. Also, the neglect of some curricular expectations/learning outcomes especially with respect to the personal social qualities which cannot be easily measured creates a disjuncture between the expected, intended and assessed curriculum leading to curriculum distortion making it unusable.

On the other hand to overcome these issues and bridge the gaps in expected, intended and assessed curriculum as envisioned under the RTE Act, learning indicators can help to map the learning and developmental progress of learners. These indicators are, basically, process based reference points which can be used to tap children's



progress of their holistic development on their learning and development continuum and not just as end products in terms of measured achievement or competencies, based on which different stakeholders can arrive at some decisions and decide their further actions.

For example, in Environmental Studies, the indicators like; Observation and Recording (reporting, narrating, making/reading pictures, tables and maps etc.), Discussion (listening, expressing opinions, finding out from others), Expression (Drawing, gestures, creative writing, sculpting, etc.), Explanation (Reasoning, making logical connections), Classification (categorising, grouping, contrasting and comparing), Questioning (Expressing curiosity, critical thinking, developing good questions), Analysis (Predicting, making hypotheses and inferences) Experimentation (Improvisation, making things and doing experiments), Concern for Justice and Equality (Sensitivity towards all living beings i.e. all animal and plant life especially for the disadvantaged, differently-abled and old), Cooperation (taking responsibility and initiative, sharing and working together) can not only be used by teachers to assess the gaps in curricular expectation, transaction and attainment and plug them timely using suitable strategies under Continuous and Comprehensive Evaluation (CCE) but can also help the system assess its effectiveness by analysing children's learning progress. The indicators help a teacher or a system to move further or improve learning outcomes/ curricular expectations.

Indicator	Class III	Class IV	Class V
Observation	Observes and explores environmental objects/plants/animals/local transport in the immediate surroundings. e.g., 'identifies names of objects, local plants, animals, transport, and shelters, etc in their own language.'	Observes and explores environmental objects, plants, animals, shelters simple phenomenon in the surroundings. e.g., "identifies variations in plants (leaves, flowers), animals (bird's beak, claws, feather, and nests) modes of transport, and variation in seasons, give examples of each".	Observes and explores the natural and social environment, gradually moving from immediate to the wider environment. e.g., 'identifies objects, events phenomenon in natural & social environment, locate states on the map'.

In order to achieve these learning outcomes, appropriate pedagogical processes need to be employed. As EVS learning is process-oriented its content has to be derived from child's real life experiences, as per the need and context.

These indicators help the teachers keep track of children's learning progress and eventually the accomplishment of the curricular expectations. However, in view of the nature of the curricular expectations i.e. abilities, skills, and dispositions it is obvious that, it is will be short sighted attempt to evaluate the health of an education system by mapping the learning outcomes in a short span of time such as annual or even lesser. But a continuous monitoring by the teachers during teaching learning through CCE helps can help to tap the processes of learning without affecting the curriculum intention and transaction, prevent any wash back effect and accomplish the curricular expectations/learning outcomes. Further, the in-built flexibility to adapt these as per the abilities of a learner and compare the progress with his/her previous progress, can further help us to achieve the goal of equity to a great extent.

REFERENCES

- (2013) Joint Review Missions, Reports, MHRD, Govt. of India, New Delhi, www.teindia.nic.in/jrm.aspx



- (2013-14): Teaching and Learning: Achieving Quality for All, Education For All Global Monitoring Report, UNESCO, http://unesdoc.unesco.org/images/0022/002256/225660e.pdf
- (2011): International Workshop on Assessment standards, Final Report, David Scott et. al. Research and Developments Project: Curriculum Standards, Ministry of Education, Mexico
- (1991), Minimum Levels of Learning at Primary Stage, Report of the Committee Set up by MHRD, Dept. of Education, GOI), NCERT, http://www.teindia.nic.in/mhrd
- (2012) Programme for International Student Assessment (PISA), OECD Secretariat, www.oecd.org
- (2012): Annual Status of Education Report(ASER), http://img.asercentre.org
- (2009, August): The Right of Children to Free and Compulsory Education Act, MHRD, Govt. of India, mhrd.gov.in/rte.
- (2014): Curricular Expectations and Learning Indicators at the Elementary Stage, NCERT, New Delhihttp://www.ncert.nic.in/departments/nie/dee/publication/pdf/EVS.pdf
- (2013): A package on CCE at the Elementary level, NCERT, New Delhi,
 http://www.ncert.nic.in/departments/nie/dee/publication/pdf/CCE_Primary.pdf
- (2007-08): Seventh All India Education Survey of NCERT, National Council of Educational Research and Training National Informatics Centre and Ministry of Information Technology, Government of India, New Delhi.
- (2005): National Curriculum Framework, NCERT, New Delhi; http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf
- (1992): Programme of Action, MHRD, Govt. of India, New Delhi. mhrd.gov.in, http://www.ncert.nic.in/oth_anoun/npe86.pdf
- (1986) National Policy on Education). MHRD, Govt. of India, New Delhi. mhrd.gov.in, http://www.ncert.nic.in/oth_anoun/Policy_1986_eng.pdf
- (1964-66): Indian Education Commission(Kothari Commission), http://www.indg.in/primary-education/policiesandschemes/principal_recommendations_of_the_education_commission.pdf