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# LEARNING OUTCOMES: POLICIES, PROGRESS AND CHALLENGES

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**ABSTRACT**

*India has made laudable progress in increasing access to education and building a strong policy and planning framework for education. The systematic assessment of learning outcomes is increasingly recognised as an essential component of a coherent and effective educational system. The next challenge is ensuring a quality education system which produces positive learning outcomes for all children in India. Estimates show that over 3 million children in the country are still out of school, and of those in school, civil society reports show that 53 percent are at least three years behind expected learning levels.*

***Keywords:*** *Learning Outcomes, development, challenges*

## The Idea of Learning Outcomes

One can trace distinctive uses of the term 'learning outcomes' within particular reform initiatives in different countries at different times. However, it is within European VET policy making in the 2000s that these uses were forged into a coherent and generalised strategy: the 'learning outcomes approach'. Learning outcomes' featured in American thinking about educational reform in the 70s (Winterton, 2009). The concept enjoyed a high profile as part of the conceptualisation, design and advocacy associated with the introduction of national vocational qualifications for work-based learning in the UK in the 80s (Jessup, 1991). In the mid-2000s, learning outcomes were likely to be regarded as elements of particular reform projects rather than as a broad strategy in itself. According to Bjornavold and Coles (Bjornavold and Coles, 2006), the learning outcomes project was tied to the conception and implementation of national and transnational qualification frameworks.

Measuring learning outcomes provides useful information for improving educational planning, management, and teaching. Its importance is underscored by initiatives such as Education for All, which requires that countries receiving assistance improve the measurement of learning outcomes and the systems used to regularly monitor education. The measurement of learning outcomes starts in classrooms, where teachers informally evaluate students' knowledge and performance. As students progress through the system, they may be required to take more official tests. These are used to sort students within schools, award certifications, or meet requirements for entering higher levels of education or particular schools. Learning outcomes are also measured at sub national and national levels. Measurements may benchmark where the school or system is, allowing comparisons to similar systems or points in time. The measurements may also be used to make decisions about the allocation of resources or hold officials responsible (Bolger and Kellaghan, 1990).

## A Framework for Understanding the Measurement of Learning Outcomes

The measurement of learning outcomes can be grouped into four categories relating to who or what is being measured and the purpose of the measurement. Low-stakes measurement of individual outcomes is the evaluation of individual students by classroom teachers or others for the purpose of understanding or affirming students' knowledge and abilities and informing teaching

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practice. This category includes what is referred to as continuous assessment. It also includes tests of curricular mastery and diagnostic tests that identify students' entry-level knowledge and skills. The evaluations may be less formal (drawing on verbal questioning by a teacher) or more formal (influenced by written tests for which grades or marks are assigned) (Kirsch and Irwin, 2003). High-stakes measurement of individual outcomes is evaluation with major consequences that relate to individual students' knowledge and performance. This category includes entrance examinations for particular schools or levels of education and tests whose results sort students within schools or tracks. Other high-stakes tests certify the completion of a program or eligibility for the next educational level. Low-stakes measurement of system outcomes is evaluation of students' knowledge and performance as a group (within a school, region, or nation). The purpose is to monitor the group over time or compare or benchmark its performance to similar groups. High-stakes measurement of system outcomes is evaluation of students' knowledge and performance as a group that are used to hold teachers, principals, and education officials accountable. Consequences can include changes in allocated resources or staffing, discontinued operation, or transfers. The consequences are lesser for assessments made for public accountability, such as when school-level results are published in league tables or school report cards (Guimaraes de Castro, Maria Helena. 2001).

The literature on learning outcomes is rich and also includes distinctive approaches, the usefulness of which must be decided by the relevant actors. The research and development involved in producing a worthwhile statement of learning outcomes and levels to form the structure of a useful and durable qualifications framework is an extensive task. Further, as aspects of research are now beginning to tell us more about the brain and how different approaches can optimise the learning process, received wisdom from the traditional approaches to categorising learning outcomes is not necessarily the best guide to meeting future needs.

## Policy Development

Since 2008, when Technical Services Agency (TSA) started its collaboration with National Council of Educational Research and Training (NCERT), government policy on the place of large scale assessments of learning outcomes has developed significantly. The technical expertise provided under the Department for International Development (DFID) funded Technical Cooperation Fund (TCF) has played a significant role in ensuring that momentum in policy development has been maintained.

In addition, Government of India's decision to introduce Continuous Comprehensive Evaluation (CCE) as the mode by which student achievement will be assessed up to Grade VIII is an important policy development which will shift the emphasis from high stake external examinations towards school based assessment for formative and summative purposes.

Significant progress has been made both in raising awareness of the importance of systematic assessment surveys to the policy making process and in improving the technical quality of such studies.

MHRD (Ministry of Human Resource Development) and JRM (Joint Review Mission) have given unequivocal support to the implementation of a continuous, rolling programme of national achievement surveys as an integral part of the education system. The potential for such surveys to provide diagnostic information to policy makers and educational practitioners has been recognised and is now seen as a priority. The model accepted for incorporating data from assessments into a systematic policy making process.

Perhaps most importantly for future developments, JRM has endorsed the recommendation of the NAS (National Achievement Survey) Review and Strategic Planning Committee, chaired by Professor Panchapakesan, that a dedicated National Assessment and Evaluation Centre should be established to take the lead in the design and commissioning of such surveys on behalf of the government.

## Progress

When SSA was first implemented, there were no achievement surveys to speak of in India. Educational testing was almost exclusively geared

to the examinations offered by the national and state Boards, and the statistics of greatest interest were the pass rates in these exams. In the intervening decade the situation has changed dramatically. The sheer volume of assessment evidence now available is testament to the growth of an assessment culture across the country. At the national level, as described elsewhere in this report, three major players have emerged: NCERT in the state sector and Pratham/ ASER and Educational Initiatives in the non government sector. These are making in their different ways and with their own limitations and significant contributions. Indeed, competition between these agencies and their diverse approaches to assessment is fuelling interest in the field of educational assessment – including at the state level where several initiatives are starting to yield results. A major step forward has been NCERT's adoption of Item Response Theory (IRT) and the application of techniques based on IRT in carrying out NAS and reporting the survey's findings. This opens up a number of possibilities including the linking of future results with those of the past thereby allowing trends over time to be monitored. This advance, supported by DFID through the TCF and the work of the TSA, brings NCERT in line with international best practice and allows it to develop analytical and reporting procedures comparable to those used by, for example, Educational Initiatives in its recent surveys. NCERT has significant advantages over non governmental assessment agencies in that it can conduct its surveys, with the approval and support of MHRD, within all approved schools. However, this means that the scale and scope of its work is vast and the logistical challenges daunting. DFID/TCF's support for the introduction of scanning techniques and optical character recognition into the Class VIII NAS has shown that automated systems of data capture can be used to great effect.

**Challenges**

Around the world, international, regional, and national surveys of learner achievement are playing an increasingly important role in educational planning and policy making. The stakes are high and much depends on obtaining relevant and dependable data. Results are used to compare differences in learning outcomes across jurisdictions, between groups, and over time. However, many of these differences are small and liable to be filled by unavoidable measurement errors if a survey does not yield sufficient exactness in its measurements. This may lead to conclusions which are not justified and, on the other hand, genuine differences may not be identified because they are dismissed as being statistically insignificant. 'League tables' of state performances and stark warnings about poor educational standards tend to make good headlines, but are of little use for policy making if they are based on questionable techniques and analysis. As a consequence, one of the challenges facing NCERT and all other agencies involved in educational assessment is that of improving the technical quality of their surveys. The more persistent technical challenges have been described in the earlier sections of this report. They need to develop comprehensive and reliable databases for student enrolment across all grades and for all recognised school types in the government, government aided, and private sectors. Without a good sample frame it is difficult to ensure that the sample drawn is representative and it is impossible to calculate accurate sample weights which are necessary if the findings are to be extrapolated from a particular sample to the level of the state or the nation. They need to develop further the capacity to conduct analysis of student responses using item response theory. IRT (Item response Theory) only provides the assessment agency and it psychometricians with a set of analytical tools. These tools need to be applied intelligently to each new situation and dataset. NCERT's assessment specialists will therefore need to build on their present level of understanding through further professional development and, in particular, extensive practice in applying IRT to existing and new datasets derived from their learner assessment surveys. The need to develop a framework of criteria related achievement levels against which to report learning outcomes. For example, should India adopt the model used in the USA with three positive levels of achievement i.e. Basic, Proficient, and Advanced or should it develop a four level model (Low, Medium, High,

and Advanced) along the lines of that introduced by Educational Initiatives? Once the general framework is in place the challenge will be to develop the draft criteria for each level, for each target grade. The draft criteria are necessary for the preparation of test items which will then be used to validate the level descriptors. This approach will be new for NCERT and its assessment specialists will need to be trained in standards setting procedures comparable to the 'scale anchoring' used by Educational Initiatives.

## Conclusion

This paper suggests that "Learning Outcomes" are best understood as a collection of useful processes and tools that can be applied in diverse ways in different policy, teaching and learning settings. During the period of SSA, significant progress has been made both in raising awareness of the importance of systematic assessment surveys to the policy making process and in improving the technical quality of such studies. Several essential challenges will need to be overcome if a rolling programme of national achievement surveys that are fit for purpose is to be implemented. These include, the construction and maintenance of high quality educational management data systems; the further development of highly specialised technical expertise; and, the building of a consensus as to a national framework of standards, levels of achievement against which outcomes can be measured and reported.

## References

Bjornavold, J. & Coles, M. (2006). Governing education and training; the case of qualifications frameworks, *European Journal of Vocational Training*, 42–43, pp. 203–233.

Bolger, N., & T. Kellaghan. (1990). "Method of Measurement and Gender Differences in Scholastic Achievement." Journal of Educational Measurement 27: 165-174.

Guimarães de Castro, Maria Helena. (2001). Education Assessment and Information Systems in Brazil. Brasilia: National Institute for Educational Studies and Research.

Kirsch, Irwin. (2003). The PISA Framework for Assessing ICT Literacy." Paper prepared for OECD/INES/Network A, April 2003.

Jessup, G. (1991). *Learning Outcomes: NVs and the emerging model of education and training.* London, Falmer Press.

Winterton, J. (2009). Competence across Europe: highest common factor or lowest common denominator?, *Journal of European Industrial Training*, 33, pp. 681–700.