# Evaluation in Education : *A Proposition by NTS*

NTS, a new initiative of the MHRD, Govt. of India, intends to cater to the evaluation requirements of the country for *academic auditing* and *maintenance of quality* in education. This initiative involves the development of *materials* and *methodologies.* Materials here refer to all the academic resources comprising the *instruments* of evaluation which include both *tools* and *scales. Tools* are meant for *providing* and *collecting* the required information or data. *Scales* are meant for *quantifying* and *measuring* the collected data (in terms of numerical values) for *interpretation* and *determination* of the merits and demerits of the data collected. This serves as a prelude for making a *value judgement* on the basis of which the entire *evaluation* is centered around.

Now the question arises as *what to* evaluate in education. As we know, education is a cyclic process and is formulated by a number of *factors*, referred to here as *components* comprising needs, policies, goals, curricula, syllabi, text books, teaching (teacher), learning (learner), testing and evaluation. Each of these components is expected to be evaluated not only at the time of its formulation but also during the course of the implementation. Thus, the *number* of tools and scales required to be developed for meeting the requirements of evaluation of the entire educational process would be innumerable.

Obviously, the *type of tools* used for collecting information pertaining to *one component* of education cannot be the same as that for the *another component*. Therefore, different types of tools are needed for collecting information from different components. At the same time, the tools are to be built up with certain *contents* which are invariably drawn from the *object* taken up for evaluation. In the present context, the *objects* are nothing but the *components* that constitute the concept of education. Accordingly, *textbook* becomes the *object* in *text book evaluation; teacher* becomes the *object* in *teacher evaluation*. Thus, the *content details* required for developing tools meant for *textbook evaluation* will have to be drawn from the *text book* itself and that of the teacher evaluation from the *teacher* herself/himself.

In the same way, the type (nature) of *scales* used for measuring *one dimension* of an object is different from that of *another* object. It may be noted that the scale used for measuring the *length* of an object cannot be used for measuring the *weight* of that object. Similarly, the scale used for measuring the *quality* of a 'text book' cannot be the same for that of a 'human being'. Therefore, the *(nature) of scales* required to be developed for quantifying & measuring the data pertaining to one object varies from that of the other. Also, the *tools* sometimes serve as *scales*. For example, a 'bucket' when used to fetch water serves as a 'tool', but if the same 'bucket' (tool) is moulded with 'litre' marking, it could serve as a scale also. Therefore, many a time, it is possible that a *tool* itself would also serve as a *scale*.

In view of this, the types of instruments that are expected to be developed to meet the evaluation requirements of the country, which is pluralistic in character, are many. Considering the number of *components* that constitute the concept of education, the courses of study that are imparted under various systems of education, and their *application* at all the *7 levels* of general education, the job is stupendous in nature. It is in this context the NTS has taken up the task of developing a variety of instruments of evaluation.

*(to be continued)*

- Editor

## CONTENTS

## Visit of Director (L), MHRD, Govt. of India, New Delhi

20th August 2009



*Clockwise: Prof. Pon Subbiah, explaining his points while Dr. R.Senkuttuvan, Prof. Rajesh Sachdeva ,*
*Mr. R.P.Sisodia , Mr. T.V.A.Ram and Dr. S.N.Barman look on*

Mr. R.P.Sisodia, Director (Languages) and  Mr. T.V.A.Ram (Under Secretary, IFD) MHRD, Govt. of India, New Delhi, visited NTS on 20th Aug '09. Mr. R.P.Sisodia was here for the first time after assuming charge as the Director, Language Bureau in the Ministry. The purpose of his visit was to acquaint himself with the activities that are taken up by the CIIL and its major projects/schemes. They were given a briefing about the objectives of NTS and activities undertaken by it through a power point presentation by Prof. Pon Subbiah (Head, NTS-India). The rationale behind the opening of the Regional Field Units, financial support extended under NTS-GIA sub scheme, the award of Fellowships, etc., were also  briefed by the Head. He expressed the difficulties faced by NTS due to the shortage of manpower and the non availability of adequate expertise in this specialised area to represent the 3 Indian languages (Hindi, Tamil, and Urdu) which have been taken up for NTS operations at the first instance. The clarifications sought by Mr. Sisodia were provided by the Head. At the end of the meeting, the Director (L) expressed that it was a daunting task and once the desired target was achieved then it would be a great service to the nation. Prof. Rajesh Sachdeva (Director i/c, CIIL) and a few senior officers of the institute and NTS were also present.

# Research and Development (R&D)

● To undertake in-depth analysis of the concepts of measurement & evaluation in the context of education ● To identify the content inputs & consequential effects of teaching, and learning ● To interrelate the outcome with the objectives of education and the actual needs of the country ● To develop appropriate methodology to meet all the evaluation needs.

### Current Activities

## CCGS : Follow up workshop on 'Societal Needs'

26th to 31st August 2009

A tentative distribution of dimensional factors for societal needs was prepared in the earlier workshop conducted during the 1st week of August. The objectives of this workshop was to work further on these aspects and  also to identify the sub components of societal needs to be distributed across the seven levels of general education in the Concept based Continuum of Graded Syllabi (CCGS). This workshop was conducted at the NTS H.Qrs., CIIL, Mysore.

Prof. P.Ratnasabapathy (Counsellor, TIERA, Chennai), Prof. T.Sethupandian (Academic Coordinator, DDE, MKU, Madurai), Dr. N.Nadaraja Pillai (Former Controller of Examination, CIIL, Mysore), Prof. C.Arthanareeswaran (Dept. of Tamil, University of Madras, Chennai), and Dr. G.Periannan (Director, TIERA, Chennai) participated in this programme.

After a thorough deliberation of general education, the experts identified the sub components of societal needs (i.e., 4X7=28) and distributed them across the seven levels. Dr. M.Balakumar (RRO, CT&E) coordinated the workshop under the overall guidance of Prof. Pon Subbiah (Head, NTS).

②

R & D Workshop



*From L-R: Dr. M.Balakumar, Prof.  C.Arthanareeswaran, Dr.  N.Nadaraja Pillai, Prof. Pon Subbiah, Prof.  T.Sethupandian,*
*Prof.  P.Ratnasabapathy and Dr. G.Periannan during the workshop*

# Survey and Documentation (S&D)

● Collecting, consolidating, and creating a grid of resources pertaining to : Contents, methods, and purposes of evaluation ● Contact particulars of individuals and institutions involved in preparing and using different types of tests ● Syllabi of various courses and corresponding question papers  at  different levels of education.

## Current Activities

### Documentation

The details being documented are as follows: • Vision statements of various organisational entities of the country (to make use of them as content inputs for instruments of evaluation required for assessing the fulfillment of societal needs) • Mission being set by them in the above context • Type of operational requirements such as assessment, accreditation, examination, evaluation, etc. • Tools, scales, source materials, and graded tests that are being used now at various levels of education • Products duly marked with norms, standards and benchmarks available with different organisations of the country • Technical devices such as computer hardwares, softwares used for test administration, imparting training, etc • Details pertaining to the scholars such as academic background with specialisation, institutional affiliation and contact particulars such as postal addresses, e-mail, telephone, mobile phone, etc.

# Consultancy and Training (C&T)

● Evolving a mechanism for periodical training ● Preparing teaching cum training modules ● Producing documentary films ● Creating trained manpower in various branches of  evaluation ● Extending consultancy on matters related to testing and evaluation.

## Current Activities

### Documentary Film on Proficiency Test

3$^{rd}$ & 4$^{th}$ August 2009

The draft version of the documentary film (produced by Ms. Usha Rajeswari of Chennai) was viewed by the Head and the staff of NTS. Feedback was given to her to make necessary changes in the footages to enrich the existing version. She also interacted with Dr. N.Nadaraja Pillai (who formerly was in charge of Basha Mandakini Scheme, CIIL) and Dr. M.Yesudass (RP, NTS). At the end of the



*From L-R: Dr.  N.Nadaraja Pillai, Dr. M.Yesudass,*
*Mr. N.Murali Mohana (NTS staff) and Ms. Usha Rajeshwari*

③

## Documentary Film on Proficiency Test

3rd & 4th August 2009

The draft version of the documentary film (produced by Ms. Usha Rajeswari of Chennai) was viewed by the Head and the staff of NTS. Feedback was given to her to make necessary changes in the footages to enrich the existing version. She also interacted with Dr. N.Nadaraja Pillai (who formerly was in charge of Basha Mandakini Scheme, CIIL) and Dr. M.Yesudass (RP, NTS). At the end of the discussion, all required details including the background information and reference materials were given to the documentary producer  for incorporating the same

# Regional Field Units (RFUs)

● To disseminate the R & D outcome  at the grass root levels  ● To ensure wider participation for building up national consensus on materials and methodologies ● To identify scholars and undertake the process of item preparation, test construction, field administration, data collection, and standardisation (of tests) for establishing  norms.

## Current Activities

### Orientation programme at Alagappa University, Karaikudi, TN

14th August 2009



*Head, NTS addressing the staff associated with the RFU at  Alagappa University*

NTS Regional Field Unit [No.TN 9B] of the Tamil speaking areas meant for higher education, was established in the campus of Alagappa University, Karaikudi, Tamil Nadu. It was formally visited and preliminary orientation given to the teaching staff of the college on 14th Aug '09 by Prof. Pon Subbiah (Head, NTS). The objectives of the NTS and the activities that are expected to be carried out by its Regional Fields Units established in different parts of the country were explained to them by the Head, NTS. Prof. R.Natarajan (HOD of Mathematics), Prof. C.Ganesha Moorthy (Department of Mathematics) and Prof. K.Krishnaraj & Dr. K.Krishna Moorthy (Department of Education) were also present. Prior to this, the NTS team called on Prof. P.Ramasamy, Vice Chancellor of the University and apprised him of the objectives and activities of NTS. He assured all kinds of support and cooperation to implement this scheme of national importance. At the end of the orientation programme, the Head, NTS answered all the queries raised by the participants. Prof. M.Pandi (HOD of Tamil & Local Coordinator of the RFU) proposed the vote of thanks. The NTS team included Dr. Biresh Kumar (RP), Dr. T.Janaki, and Dr. G.Sandhya Nayak (JRPs).  This Field Unit has the jurisdiction of Sivagangai, Ramanathapuram, and Virudunagar districts of Tamil Nadu.

### Intermediary visit to the RFU at the  National College, Tiruchy, TN

15th August 2009

An Intermediary visit was undertaken for extending guidance to the coordinator and other staff associated with this RFU, on 15th Aug '09 by Prof. Pon Subbiah (Head, NTS) along with Dr. Biresh Kumar (RP), Dr. T.Janaki, and Dr. G.Sandhya Nayak (JRPs). The team interacted with Dr. K.Anbarasu (Principal), Prof. A.Krishnamoorthy (Vice-Principal) and Prof. K.Rajarathinam (HOD of Tamil and the Local coordinator of the RFU).  This visit enabled the team to assess the infrastructure facilities available at the RFU to hold seminars, workshops, training programmes, etc.



*From L-R:Dr. Biresh Kumar, Prof. Pon Subbiah, Dr. K.Anbarasu, Prof. A.Krishnamoorthy and Prof. K.Rajarathinam*

## Intermediary visit to RFU at the Geethaanjali All India Sec. School, Thindal, Erode, TN

22nd August 2009



*From L-R: Dr. M.Yesudass, Prof. Pon Subbiah,*
*Mrs. V.Subbalakshmi and Mr. P.M.Gopalan*

An Intermediary visit was undertaken for extending guidance to the coordinator and other staff associated with this RFU, on 22nd Aug '09 by Prof. Pon Subbiah (Head, NTS) along with Mr. M.Saravana (SRP) and Dr. M.Yesudass (RP). The team interacted with Mr. P.M.Gopalan (Chairman) and Mrs.V. Subbalakshmi (Principal).  This visit enabled the team to assess the infrastructure facilities available at the RFU   to hold seminars, workshops, training programmes, etc.

## Intermediary visit to RFU at the Vivekananda College of Arts and Science for Women, Tiruchengode, Namakkal, TN

22nd August 2009

An Intermediary visit was undertaken for extending guidance to the coordinator and other staff associated with this RFU, on 22nd Aug '09 by Prof. Pon Subbiah (Head, NTS) along with Mr. M.Saravana (SRP) and Dr. M.Yesudass (RP). The team interacted with Mr. S.Meganathan (CEO). The visit also facilitated the inspection of the RFU to ascertain the availability of infrastructure to hold the academic programmes like orientation, item writing and training on testing and evaluation which are required for the RFU.



*From L-R :  Mr. M. Saravana, Dr. M. Yesudass,*
*Prof. Pon Subbiah, and Mr. S.Meganathan*

## What do they mean?

**Quotient** (as used in Education) an indication in a single numerical index of relative position of a pupil on two related age scales; usually obtained by dividing one such age by another.

**Source :** *Dictionary of Education (3rd edn.), McGraw-Hill, 1973*

**Achievement Quotient** (*AQ*) is the quotient obtained by dividing the achievement age by chronological age, usually expressed as a multiple of 100. The achievement quotient of a 10-year old pupil whose achievement age equals that of 15-year old pupils is 1.5 or 150. It is, sometimes, regarded as *Accomplishment Quotient.*

**Educational Quotient** (*EQ*) is intended to represent the learner's relative progress in school. It is obtained by dividing the *achievement age* (educational age) of a learner by his/her chronological age and multiplying the result by 100. For example, the EQ of a learner whose achievement age is 12 years and the chronological age 10 years, is computed as $\dfrac{12}{10}$ X 100 = 120

**Intelligence Quotient** (*IQ*) is a measure of intelligence. It is computed as the ratio of the individual's mental age to his chronological age.

The formula for computing the IQ is, IQ = $\dfrac{\text{Mental Age}}{\text{Chronological Age}}$ X 100

The IQ of a 10-year old boy/girl whose mental age is 12 years, is computed as $\dfrac{12}{10}$ X 100 = 120

**Non-Scholastic Quotient** (*NSQ*) according to Natarajan and Kulshreshta (1983), indicates whether a learner's non-scholastic behavior is commensurate with his/her chronological age, or whether it is above or below the level to be expected for his/her age. The formula for computation of this quotient is $\dfrac{\text{NSL}}{\text{CA}}$ X 100 = 120 where

NSL = Non-scholastic age level and CA  = Chronological age.

**Source :** *An Introduction to Evaluation Terminology, CIIL, Mysore, 2008*

# Grant-in-Aid

- In order to encourage the individuals and institutions working in the area of testing and evaluation, NTS is extending financial support through its GIA sub scheme. Those identified for this purpose during 2008-09 were already paid the I installment of the grant. The II installment of the same was released during August 2009 for the following grantee :

| Sl.No. | Name & Address of the Grantee | II Installment Released | Activities for which the Grant is given |
|---|---|---|---|
| 1. | Dr. K.S.M.Yunus Manager, Eram Intermediate College C-Block, Indira Nagar Lucknow-226016, Uttar Pradesh | Rs. 25,000/- | Programme on " *A Symposium and Literary meet with reference to Urdu on Testing & Evaluation"* |

- 53 proposals have been received for the year 2009-10. Out of them 26 proposals were from North-East Region comprising the states of Assam and Meghalaya. Remaining are from Delhi, Karnataka, Pondichery, Tamil Nadu and Uttar Pradesh.  A Screening Committee is being constituted to scrutinise these proposals. After scrutinising the proposals NTS will invite the selected applicants to NTS H.Qrs. for a workshop to have a detailed discussion of their proposals.

# Fellowships

- To encourage young researchers to focus their attention in the area of testing & evaluation and to create a band of specialised expertise across the country, NTS is awarding doctoral and post doctoral fellowships. The details of fellowships and contingent grants released during the month of August 2009 are as follows:

| Sl. No. | Name & Address of the Awardee | Research Topic | Months | Amount Released |
|---|---|---|---|---|
| *Doctoral Fellowships :* | | | | |
| 1. | Mr. Abdul Quddus Maulana Azad National Urdu University Hyderabad-500032, Andhra Pradesh | Hindustan Mein Urdu Novel - A study (1980-2005) | June | Rs. 10,000/- |
| 2. | Mr. K. Kamaraj Bharathiar University Coimbatore-641046, Tamil Nadu | Palankudi Manavarkalukkana Tamilmozhi padanul- madhipeettaayvu (An evaluation of Tamil text book for tribal children) | June | Rs. 10,000/- |
| 3. | Mr. A. Muthamizh Selvan Bharathiar University Coimbatore-641046, Tamil Nadu | Design and Development of the speech recognition methodology for Tamil | April, May, & June | Rs. 30,000/- |

- The following are the details of applications received (language wise) up to 31st Aug '09 for doctoral and post doctoral fellowships meant for the year 2009-10 in response to the press advertisements.

| Sl. No. | Language / Region | Doctoral Fellowship | Post Doctoral Fellowship | Total Number of Applications | Remarks |
|---|---|---|---|---|---|
| 1. | Hindi | 38 | 3 | 41 | To be short-listed by a committee of experts constituted for this purpose representing Hindi, Tamil, Urdu, and North - East Region |
| 2. | Tamil | 121 | 8 | 129 | |
| 3. | Urdu | 27 | 3 | 30 | |
| 4. | North - East Region | 6 | 1 | 7 | |
| 5. | Others | 7 | 0 | 7 | |
| | | Total | 214 | | |

## From the Visitors' Diary:

*"Excellent piece of contribution to ever changing challenges of Higher Education. MILES and NTS deserve appreciation and also support from all of us. With my best wishes"*

*-Prof. H.A.Ranganath, Director, NAAC, Bangalore.*

# News & Events



*A view of presentation of Prof. Pon Subbiah. Prof. Rajesh Sachdeva, Dr. I. S. Borkar, Dr. Saratchandran Nair and others look on*

## A special meeting of NTS

☞  A special meeting of the NTS took place with Director i/c and AD(A) i/c, CIIL, Mysore on 04th Aug '09 to apprise them of the progress made by NTS towards achieving its stated goals & objectives.

The Head, NTS gave a briefing about the objectives and the activities of NTS. This was organised as required by the above officials for acquainting themselves with the activities of NTS, as a prelude to the visit of the officials of the ministry during the later part of this month.

## Interaction with Service Providers

☞  A preliminary discussion for creating video conferencing facility to interlink all the RFUs of NTS, was held at the NTS H.Qrs. on 26th Aug '09. The technical team of NTS and the representatives of HCL Info systems (Ltd), Bangalore participated in the discussion. One of the points emerged was to implement this facility in 2 to 3 phases. The NTS team was invited to Bangalore to workout further details.

# Forthcoming

- The opening of a RFU at the University of Madras, Chennai is scheduled for 3rd Sep '09 in the presence of Vice Chancellor, Registrar, Dean (Academics), and Director (USAB) of that University.
- An interim visit to Jaya College of Education, Thiruvallur District, TN, is scheduled for 4th Sep '09.
- A three day training cum workshop on item writing for teachers of two RFUs (6A & 6B) located at Erode and Tiruchengode, is scheduled to be held at NTS H.Qrs., CIIL, Mysore from 8th to 10th Sep '09.
- A team of NTS is expected to inspect one of the applicant institutions viz., DHM Senior Secondary School, New Delhi on 10th Sep '09.
- An introductory meeting with the faculty members and officials of University of Delhi, New Delhi will take place on 12th Sep '09.
- A preliminary orientation to the staff of the RFU located at the +2 Purvanchal High School, Darbhanga, Bihar is scheduled to be held on 15th Sep '09 and that of the Government Women's Polytechnic, Patna, Bihar on 16th Sep '09.
- Workshop for short-listing the applications for the award of doctoral and post doctoral fellowships is scheduled to be held on 23rd & 24th of Sep '09.
- A three day training programme for item writers is scheduled to be held from 30th Sep to 2nd Oct '09 at the RFU located in the National College, Tiruchy, TN.

## Luminary, who commented on NTS:

*"NTS is trying to evolve certain concepts and standardization of certain methodologies; I am sure that these initiatives would certainly be helpful to all the organisations that are engaged in recruitment and assessment and IBPS ensures its cooperation with all the initiatives of National Testing Service-India"*          *-Mr. M.Balachandran, Director, IBPS, Mumbai.*
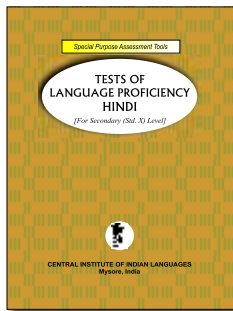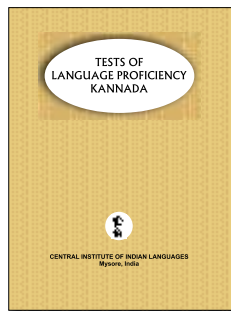
# What do they contain?

## Tests of Language Proficiency

*Secondary (Std. X) Level*

These volumes in Hindi, Kannada, and Kashmiri consist of innovatively cultivated *item resources* on a variety of content areas applicable for secondary (Std. X) level of general education. They are presented under seven broad categories of which the following five have been provided with examples. *Reading Comprehension* (main idea, direct information, sequence, cause and effect, inference, and vocabulary), *Lexical Skills* (lexical meaning, contextual meaning, synonyms, and antonyms), *Structure* (sequence completion, error detection, sentence comprehension, transformation, and formal grammar), *Writing and Composition* (spelling, idioms and proverbs, precis writing, text organization, letter writing and composition). Specifications needed for the remaining categories viz., *Listening Comprehension*, *Speaking* and *General Language* related Information, have been left to the decision of item writers in view of their familiarity with those details. Tests of required length and time can be constructed from these resources to *assess language proficiency* for such purposes as job *selection*, and *training*. *Teachers, learners* and *evaluators* of language education will find these volumes very useful. These volumes can be procured by placing orders to Sales Executive (Publication), CIIL, Mysore-570006, Karnataka, e-mail : chandrasekhar@ciil.stpmy.soft.net, Ph: 0821-2345040.
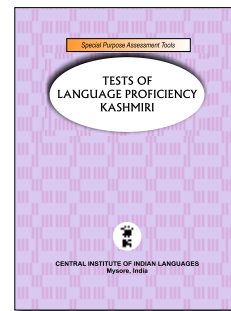


**HINDI**
ISBN : 81-7342-133-1
6.5" X 9.5", xii + 353
2005, Rs.200/-

*Series Editing*
Pon Subbiah
*Assistance*
M. Balakumar



**KANNADA**
ISBN : 81-7342-051-3
6.5" X 9.5", ix + 262
2003, Rs.250/-

*Series Editing*
Pon Subbiah
*Assistance*
M. Balakumar



**KASHMIRI**
ISBN : 81-7342-083-1
6.5" X 9.5", x + 358
2000, Rs.220/-

*Series Editing*
Pon Subbiah
*Assistance*
M. Balakumar

# Reader's View

## We must have a Comprehensive National Standard for Evaluation



I am a regular reader of your newsletters and I am delighted to know the various contributions made by NTS towards improving the quality of education in the country. Evolving a mechanism for standardisation of education in the teaching methods, programme module, infrastructure, delivery mechanism, etc., will go a long way towards achieving this goal. Evaluation system plays an important and critical role in improving the quality of education.

I feel, there is a lot more to be done in the area of evaluation in both the school and higher education systems in our country. If we wish India to be globally competitive, we must have a Comprehensive National Standard for evaluation in higher education. For this purpose, we need to work on knowledge management by way of systemised transfer of knowledge & learning by application of standardised tools, building upon our past experience and work for narrowing the existing gaps between knowledge and its application aspect. I am glad to know that your centre is working towards achieving this goal.

*Prof. E. Balagurusamy*
*Member, Union Public Service Commission, New Delhi.*

**NATIONAL TESTING SERVICE-INDIA**
CENTRE FOR TESTING AND EVALUATION
Central Institute of Indian Languages
(Ministry of HRD, Dept. of Higher Education, Govt. of India)
Manasagangotri, Mysore - 570006
KARNATAKA, INDIA.

Reader's views may be e-mailed to the editor subbiah@ciil.stpmy.soft.net

FAX: 0821-2411414 (NTS-India), 0821-2515032 (CIIL)

For online NTS Newsletter log on : www.ciil-miles.net
Ph: 91 821-2345011 / 2345113 / 2345334