

Annexure 2

National Test Scheme for admission into Tertiary Education in India

Underlying Philosophy and Principles

Prepared by

T Ramasami

**Committee for Designing National Test Scheme
and**

**Secretary Department of Science and Technology
Government of India**

As a Document for Public Consultation

April 2011

Background

It is needless to state that provision of equal access to higher learning for all regions of the country and all sections of population is both a social and economic necessity.

Right to education is an enunciated public policy of the Government of India. It is a commitment of the nation to her citizens. It is not just a lofty principle nor is it merely a legal provision.

To realise this underpinning philosophy, there is a need for an ecosystem that connects the talent of the youth with equitable opportunity for tertiary education.

The document is prepared and placed in the public domain for making clear to the citizens of the country the spirit and objective of designing and establishing a National Testing System for selecting students for admission to tertiary education.

The current system based on multiples of competitive examination has no parallel in other parts of the world. Most nations employ just one test for assessment of scholastic aptitude instead of a plethora of evaluation tests.

The current selection systems have, no doubt, resulted in visible benefits. But, the future of Indian youth might need a paradigm shift that ensures opportunity for larger sections of the society.

The extreme level of competitiveness in the screening processes employed for deciding access to professional education is not without its psychological or sociological implications for the society. They do influence the mindset and behavioural changes among the youth.

“Unity in diversity” is the Indian brand value. Unification, while retaining the diversity of educational systems in the country is the underlying strategy of the proposed National Test Scheme. It is motivated by the principle of inclusion for a collaborative excellence rather than exclusion through competitive excellence.

Recognising and respecting the realities of the current situation

The present system of multiple competitive examinations has emerged because the demand-supply gap in access to tertiary is large and levels of excellence in education centre are uneven.

It must be recognised that some competitive examinations, such as for example, joint entrance examination conducted by the IITs have proved their process integrity and gained global acclaim. IIT-JEE is a proven system that works. Any alternative proposed should match its process integrity and robustness.

When millions of talented youngsters compete for less than 10,000 slots, the use of high band filters may, perhaps, seem essential.

Nevertheless, even while it must be recognised that most high performers in such competitive examinations are extremely talented, it is not clear as to whether IIT-JEE type examinations are not missing a section of talent base, which should not be missed.

Psychological and sociological dimensions of such testing and evaluation systems that focus on extremely narrow-width high band-filters are not unimportant. The unintended consequences of asymmetries in the types of clientele and challenges of social behaviour mooted by such extremes cannot be discounted.

Vast majority of youth living in smaller towns and far flung places as well as economically weaker segments of society are not able to join the competitive stream today. For the youth, the future seems to be decided just by success or otherwise in one competitive examination or other. The present system seems to be unwittingly promoting a societal behaviour and a mind set towards differentiation rather than integration.

What are the requirements for alternative models? What should a national test scheme aim at?

A National Test Scheme should ideally

1. evaluate the ability of the learners rather than their preparedness
2. reveal in a transparent, the latent potentials of the learners to match the emerging opportunities in tertiary education sector and the economy
3. aim to provide for more proportional representation of various regions and parent income levels
4. bridge the rural-urban divides
5. reduce the burden of education administration on faculty to ensure their higher participation in research and academic roles
6. match the rigour and process integration of be best among the available national test systems globally.

The process for the development of the national test scheme

Considering that education is a too important and a highly critical social endeavour for any one to overlook the consequences of inadvertent errors in decision making, it is necessary to engage as many stakeholders as possible in designing the system.

One can also not ignore that in the federal set up of the country the concurrent responsibilities of the States and the Centre are respected and taken on board.

There are many state school boards which conduct their own examination for assessing their students for issuing certificates. Shear diversity of these examinations pose challenges of normalization and deciding eligibility to admission in national centres of excellence.

The multiplicity of competitive examinations leading to duplicity of efforts may be a direct result of diversities and complexities involved in the evaluation of inter-comparison of scoring systems of various school boards. As a result, most elite institutions disregard the performance in school examinations. They develop their own competitive test methods and depend too heavily on ranks and scores. Consistency of performance in different examinations is not considered necessary. Performance in single examination starts to influence the entire career opportunities leading to social implications.

National Test Scheme should find innovative ways of retaining the diversity of many school boards and yet derive value from the test scores for making decisions by educational institutions. Such an innovation seems possible and realistic. This would however call for coordination and cooperation of many players. Hence consultation and enrolment of many players are essential.

Consultation

A Six-stage consultation is planned. The planned process of consultation includes those with

1. Public through opinion poll
2. States and school boards
3. Faculty and Professional Experts
4. Alumni for participation in path selection
5. Global experts in Evidence-based criteria selection and
6. Statistical experts for a Modeling Study for reconstruction of past Scenario

Research

Past data on school boards and several competitive examinations would be sourced and analyzed for construction of past scenario. Evidence based and objective criteria for assessing the inter-operability of test scores of various school boards would be

examined by accessing global expertise. Various statistical models would be constructed and investigated for reliability and ease of implementation. A transparent system of evaluation based on technology tools would be examined. The design process envisages also research study involving a pilot test among a select group of students and evaluation of various test models for minimizing number of examinations but not rigor and challenge.

Sensitive Reporting of Results

It is proposed to consult experts in social sciences in devising a system of reporting test results which ensures sufficient inputs to institutions for decision making and selection of the candidates but not lead to negative psychological and sociological outcomes on the youth.

Public Participation in Opinion Survey

It is proposed to seek public opinion on best models for National Test Schemes. On-line opinion survey among the people of India is planned and survey would largely seek public opinions on

- For multi parametric grading system as against single test models and
- Screening out as against selection strategies

Of current competitive examination systems.

The survey would seek information on responder profiles and opinion polls on various models. It would also seek suggestions for alternative national test systems and on risk mitigation strategies for implementation.

As a pragmatic approach, the survey time slot will remain open for specified periods of time and the survey results would be made available to public after statistical analysis.

Consultation and Cooperation with School Boards

Two stage consultations with school boards are planned. The first stage consultation would seek data access and gathering, board enrolment, learning the concerns of states and school boards and building social trust among the partners for

undertaking research on innovations for meeting the diversity challenges of school board results for deriving inputs for national test scheme.

Second stage consultation would focus on Testing concepts, gaining ownership of school boards, addressing the stated and unstated concerns of states, earning the will of different school boards and ensuring process integrity.

Consultation with faculty of Elite Institutions and Opinion Leaders in Academic Bodies

Consultation with faculty of some elite institutions and opinion leaders in academic bodies is considered a necessary step in the development of a successful National Test Scheme. This consultation process should take place at all stages but should focus on a) learning about their concerns, b) gathering experience, c) debating alternatives and d) building trust. The faculty should form an integral part of selection of various approaches and lead to enrolment of the faculty as share holders.

At later stages the consultation should lead to a) addressing the concerns, b) testing of hypothesis, c) convincing of antagonists, d) finalization of selected approaches and e) enrolment of faculty in implementation work.

This step could be involved and complex. Without sufficient number of champions for the National Test Scheme among the faculty of elite institutions and opinion leaders, the scheme is not likely to succeed in an environment already there are several competing examinations which have gained social trust and credibility. This step is vital to the future success of the National Test Scheme.

Consultation with Alumni in selection of alternative paths for National Test Scheme

It is widely believed in market force economy, brand building is all about building consumer confidence through value propositions. Some of the elite schools in engineering in the country have built their brand value through their alumni base. Strength of Alumni base for some elite institutions is large. They also form strong opinion builders in the modern society. Brand building involves projection of value proposition to users differentiated from other products. Alumni of Elite institutions in

the country have effectively marketed their educational background through their own differentiated performance. Is it necessary to establish linkages with new National Test Scheme with informed alumni if the new system should survive in the market place.

A select group of alumni base of elite institutions in the country will be selected for on-line consultation based on quality of responses during survey of public opinion. Such an alumnus base will be used as sounding board for testing out various models and suggestions at various stages but using IT enabled tools without the need for direct face to face contact. At the stage of finalization, some select and quality responders to the study will be invited for a consultation with the committee.

Research methodologies planned

Selection of evidence-based and objective criteria is critical to the acceptance of the National Test Scheme by the stake holders and share holders. This would call for application of rigorous research methodologies and open minded researchers. A research team of experts would be assembled to work on a time bound manner and provide evidence based criteria for development of National Testing Scheme. It should be possible also to learn from the global experience of other countries in designing and developing test schemes for admission into tertiary education.

What should the National Test Scheme deliver?

The National Test Scheme should deliver for the country a) well and carefully designed testing systems, b) relative weightings of different inputs based on research data, c) a transparent Implementation strategies, d) assessment of risk factors complete with risk mitigation protocols and e) ability to gain social trust in the new approach in limited number of years of implementation.

Delivery of desired goals is not possible without an acceptable level of stake holder enrolment to the alternative models.

Concluding Remarks

We are extremely conscious of the dimensionality of the challenge of “trying to fix something that society trusts to work”. It is a non-formidable challenge. Developing a transparent testing system with water tight process integrity matching at the least IIT-JEE level is not impossible, but is not likely to be easy. There is pluralistic perception of the society perception. Such a diversity of perception could be bridged through concrete scientific evidence and logic based decision support system, in our opinion.

It is true that this is not the first time in which a National Test Scheme had been proposed. There have been similar attempts earlier without success. Some times societal preferences travel backwards like lobster to take into account and advantage of new opportunities which become available with development of tools and technologies. This attempt is one such honest effort to “reduce the burden of competitive examinations on the youth of India”. Psychological and sociological impact of current systems of enrollment into tertiary education may demand a change, if all the benefits of a system that works could be imbibed without sacrifice of rigor and integrity. Let is attempt to address the challenge with an open mind. India’s future needs such the combined wisdom of millions and not many individuals.