SDG Knowledge Forum

Proceedings of Improving School Learning Outcomes

By

Sustainable Development Goals Coordination Centre (SDGCC), TN
Planning and Development Department
Govt of Tamil Nadu

Executive Summary

Tamil Nadu leads in key SDG education indicators, ranking first in Gross Enrolment Ratio (GER) for higher education (18-23 years), percentage of schools with access to basic infrastructure, percentage of trained teachers, and pupil-teacher ratio at the secondary level, while securing the third position in reducing the annual dropout rate at the secondary level. However, The performance of Tamil Nadu is much to be desired as per learning outcome surveys carried out by public and private organizations. These findings underscore the necessity to deliberate strategies to bridge gaps and improve educational outcomes for all.

In this context The Sustainable Development Goals Coordination Centre (SDGCC), UNDP organized a Policy Round Table on "*Improving School Learning Outcomes*" in collaboration with UNICEF on 5th December 2024. Tmt. Madhumathi, IAS, Secretary to Government of Tamil Nadu, School Education Department chaired the Policy Round Table.

The policy round table deliberated three major topics namely (1) "What works in Curriculum, pedagogy and assessment for improved learning outcomes" (2) "Optimizing Teaching-Learning Process: Use of Digital Technology and AI" and (3) "Innovations and New Niche Areas for Making Schooling Effective". Experts from both private and public sector invited across the country for the specific theme presented their experience with evidence of impactful learning outcome models and best practices that may be considered for adoption in Tamil Nadu.

The deliberations from speakers and key outcomes as outlined by the respective chairs of the theme discussion are elaborated in the detailed note of the Round Table discussions. Secretary, School education Department, Government of Tamil Nadu Tmt. S. Madhumathi, IAS concluded with a recommendation to create a **Task Force** on 'Transformation of Teachers' with an aim to create strategies and action plans for empowering teachers and their wellbeing that creates a conducive environment for teachers to adopt best practices in content, pedagogy, holistic development, use of technology and innovations to improve school learning outcomes. The task force will also pave the way for a transformed SCERT in Tamil Nadu.

1. Background

Tamil Nadu is a pioneer in promoting "education for all" and improving the learnings of children to make them potential workforce in the present and future. Education in Tamil Nadu is the epitome of" social justice", "equality" and a mode to access "Power". The School Education Department, Govt of Tamil Nadu is implementing several schemes to bring out quality learning among school students and enable them to be useful human resources. Tamil Nadu leads in key education indicators, ranking first in Gross Enrolment Ratio (GER) for higher education (18-23 years), percentage of schools with access to basic infrastructure, percentage of trained teachers, and pupil-teacher ratio at the secondary level, while securing the third position in reducing the annual dropout rate at the secondary level. However, The performance of Tamil Nadu is much to be desired as per learning outcome surveys carried out by public and private organisations. These findings underscore the necessity to deliberate strategies to bridge gaps and improve educational outcomes for all.

2. Policy Round Table "Improving School Learning Outcomes"

The Sustainable Development Goals Coordination Centre (SDGCC), TN set up by the Planning and Development Department with the support of UNDP organised a Policy Round Table on "*Improving School Learning Outcomes*" in collaboration with UNICEF on 5th December 2024. Tmt. Madhumathi, IAS, Secretary to Government of Tamil Nadu, School Education Department chaired the Policy Round Table.

Professionals from UNDP-SDGCC, TN namely Mr Balasubramanian Munuswamy, Chief Development Goals Specialist (i/c) convened the Policy Round Table and Mr K L Rao, Chief of Social Policy, Tamil Nadu and Kerala, and Dr Ramachandra Begur, Education Specialist, and Ms Akhila Radhakrishnan, Education Specialist, from UNICEF, facilitated the Round Table. Delegates representing government departments, private sector and development organizations in the field of education shared their experiences and good practices in the school education sectors.

2.1. Pre-Panel Discussion

1. Mr. K. L. Rao, Chief of Social Policy, Tamil Nadu and Kerala, UNICEF
2. Ms. S. Madumathi, IAS, Secretary to Government, School Education Department;
3. Dr. Ramachandra Begur, Educational Specialist, UNICEF
4. Mr. Balasubramanian Munuswamy; Development Goals Specialist, UNDP-SDGCC.

2.2. Welcome Address from Mr. K.L. Rao, Chief of Social Policy, Tamil Nadu and Kerala, UNICEF

Mr. K.L. Rao in his welcome address pointed out that learning is continuous process and must evolve to adapt to the changing landscape of curriculum, pedagogy, digital tools and innovations. Therefore, adapting to the ever evolving teaching and learning landscape, enable teachers and student to overcome the various challenges.

2.3. Tamil Nadu educational landscape & recent initiatives: Theme address from Tmt S. Madhumathi, IAS, Secretary, School Education Department

The learning method is continuous. Teachers have the challenges of adapting to the various evolving teaching-learning methods especially smart and digital technologies. However, given the dynamics of fast-evolving smart and digital infrastructure in education, teachers have to make themselves need to be acquainted with them and ways to engage every child. Also, I hope to hear from the experts gathered for this round table, the good practices that may be integrated with the TN school education system to improve the competency and learning outcomes of students.

2.4. Overview of improving learning outcomes: Policy and strategies– Important points to ponder from Mr Ramachandra Begur, Education Specialist, UNICEF

UNICEF is working towards ensuring that no child is left behind, and it is very much applicable to education to all. As the school system is becoming more pluralistic due to children with various socio-economic backgrounds, the one-size-fits-all model may not address the differential needs of pupils. Hence, a model that can be pluralistic needs to be evolved and put in place for use. Further, also education system design should be flexible to accommodate the various needs of students and the learning process. Similarly, robust data is needed to make evidence-based decisions for improved learning among students. E.g. The district-wise report card of the National Achievement Survey (NAS) is available that will help the District Administrator make decisions to provide interventions in the education system about his/her district. Also, adapting competency-based assessments can help empower children in terms of their learning and comprehension. Thus, it is high time that school systems must embrace changes that result in the overall well-being of students.

2.5. Tamil Nadu's Performance in SDG 4: Quality Education: Mr. Balasubramanian Munuswamy, Development Goals Specialist, UNDP-SDGCC

Mr Balasubramanian Munuswamy, Development Goals Specialist, UNDP-SDGCC, TN gave an overview of Tamil Nadu performance on SDG India Index – 4.0, especially with respect to Goal – 4: Quality Education. He highlighted Tamil Nadu's exceptional performance with respect to input indicators such as creation of infrastructure, Gross Enrollment Ratio (GER), and Net Enrollment ratio etc., However, the learning outcomes of students in Tamil Nadu is not as expected. Hence, appropriate policy measures and interventions that might emerge from this Policy Round Table can pave the way for improved school learning outcomes. The Delegates of the Round Table will deliberate on best practices and interventions on the three major themes namely (i) What works in curriculum, pedagogy and assessment for improved learning outcomes; (ii) Optimising teaching learning process: Use of digital technology / AI and (iii) Innovations and New Niche Areas for making Schooling Effective.

3. The Outcomes from Theme - 1

"What works in Curriculum, pedagogy and assessment for improved learning outcomes"

Panel Chair:

Dr M Vijayabhaskar, Additional Full Time Member, State Planning Commission moderated the session.

Panelists:

1. Dr S Kannappan, Director, Department of School Education;
2. Mr Marmar Mukhopadhyay, Chairman, Educational Technology and Management Academy, Haryana;
3. Ms Merlia Shaukath, Founder, Madhi Foundation;
4. Mr Anustup Nayak, Project Director, Central Square Foundation;
5. Dr Sarah Richardson, Executive Director, University of Melbourne, Victoria, Australia
6. Mr Milind Brahme, Professor, IIT, Madras

All of them shared their experiences and deliberated good practices.

3.1. Message from Moderator: Dr M Vijayabhaskar, Additional Full Time Member, State Planning Commission

What changes that the education system must embrace to improve the learning outcomes of students have to be evolved constantly. At this juncture, the delegates will deliberate on the various models that worked well in curriculum, pedagogy and assessment. This will provide insight for the policymakers to develop frameworks that reflect the improved learning.

3.2. Present policy scenario on curriculum and pedagogy in Tamil Nadu– Insights from Dr S Kannappan, Director, Department of School Education

It is reiterated that the Tamil Nadu government is adopting Active Learning to enable students to engage themselves in the teaching-learning process. For this, the school education department has undertaken many

Schools are encouraged to closely work with NGOs in the field of education. This will facilitate them adopt good practices and integrate better models in pedagogy teaching

interventions right from providing a Workbook to other active learning materials to students. Also, the State Council of Educational Research and Training (SCERT), Tamil Nadu is providing regular training to Teachers on modern education methodologies and other evolving good educational practices. This helps teachers to learn new teaching-learning methods and impart new generation skills among students. Also, SCERT

facilitates schools to closely engage with NGOs which are working in Education and help adopt good practices that lead to improved learning among students.

3.3. Author speaks: Insights and perspectives "World of learning, lessons from 52 countries – Experience of Mr Marmar Mukhopadhyay, Chairman, Educational Technology and Management Academy, Haryana

Globally education system is mended to make it more viable and adaptable to the ever-changing technology. There are a variety of proven education models that worked well across the globe. Some of them are Compulsory Free Pre-School Education Systems i.e. 3-year-free schooling system. This will enable children to acquire total competency in learning; adopt flexible subjects in the school system. Assessment should be based on standard/competency (Australian school system); Expert – Teacher Blended model for learning; Group Learning; adopt ICT tools in learning; integrating periodic quality assessment; initiating State Achievement Survey; Mentor Teacher Schools adopted by Delhi Government; Happy school models are a few to name may make difference in learning outcomes in Tamil Nadu.

> *It is high time that school education system to adopt a cadre of teacher support system to help them overcome challenges faced by them. This will result in improved learning outcomes.*

3.4. Classroom observation for quality improvement– Experience of Ms Merila Shaukath, Founder, Madhi Foundation

Of the many interventions, a few proven practices may hold well for the Tamil Nadu School Education System. Teacher Support Visit should be a part of the School Education System. This is the time that the emphasis should be given to the mental well-being of the teachers alongside students. Four types of teaching are followed in school education starting from (i) Expert Teacher (Works on a contractual basis); (ii) Mentors are expert (practice authority); (iii) Mentors are neither experts nor teachers and (iv) Mentors without expertise. The fourth type mostly exists in Tamil Nadu. Hence, it is imperative to adopt one that helps improve school learning. In addition to this, the adoption of norming on quality outcomes, linking process incentives with improved learning outcomes and promoting a *group of teacher support cadre* is essential. A good teacher support system can result in improving the teaching-learning environment and thereby enhancing desired learning outcomes.

> *It is high time that school education system to adopt a cadre of teacher support system to help them overcome challenges faced by them. This will result in improved learning outcomes.*

3.5. System-led sustainable approaches for Foundational Learning and Numeracy – Embarking on the Journey of Anustup Nayak, Project Director, Central Square Foundation

Most school systems are dependent on theory-heavy training and one-way discourse of lecturing. Scientific ways of teaching are not available coupled with the non-availability of the standard toolkit is a challenge to desired learning outcomes. There is a need to make a pool of master trainers for the school education system. Moreover, students require both higher and lower-order skills. Therefore, imparting both skills to pupils requires the Right Techniques, the Right Tools and the Right Training. Hence, every school must have the right technique, tool and training modules to achieve learning outcomes.

To enable children to acquire total competency in learning, it is important to introduce compulsory free pre-school education and suitable pedagogy for them.

3.6. Assessment & learning outcome - Learning from Dr Sarah Richardson, Executive Director, University of Melbourne, Victoria, Australia

Right assessment is central to the improved learning outcomes. What is valued is often assessed. Mostly formal assessments, school assessments, classroom assessments, pedagogy and student learning assessments are in practice. However, transitioning away from the formal sets of assessments is essential to make learning competitive and improve outcomes. Therefore, the assessment needs to be applied to novel scenarios; reasoning based on the complex context; providing real-world stimuli to students; multidisciplinary towards virtual reality problems; and so on. Also, imparting competency to students in developing problem-solving aptitude; kindling curiosity; and adopting purposeful IT in the Education system are required. Therefore, this revised approach is required, to improve school learning outcomes.

Make school assessment that are applied to novel scenarios; reasoning based on the complex context; providing real-world stimuli to students; multidisciplinary towards virtual reality problems

3.7. What is most essential for teaching and learning – an experience of Mr Milind Brahme, IIT, Madras

In the course of the no-punishment (no fail policy till 8th std) in approach, students' tendency towards learning is

To enable students learn better, pedagogy needs to have reward and punishment approach

slowly diminishing. Therefore, re-introducing reward and punishment into the school education system is essential along with pragmatic approaches that suit the pupils belonging to various socioeconomic classes.

3.8. Major Policy Insights: What Works in Curriculum, Pedagogy and Assessment for Improved Learning Outcomes

1. Train teachers regularly on modern education technologies including digital tools and AI-assisted education tools.
2. Compulsory preschool education may be introduced with a more robust Anganwadi system to ensure holistic learning among children.
3. Ensure a good teacher support system.
4. Develop a standard teaching-learning tool kit with the right techniques, the right tools and the right training methods.
5. The revised assessment should be integrated with the school learning system and should be based on application to novel scenarios; reasoning based on the complex context; and providing real-world stimuli to students.

4. The Outcomes of Theme - 2

"Optimising Teaching-Learning Process: Use of Digital Technology and AI"

Panel Chair:

Dr M Suresh Babu, Director, of Madras Institute of Development Studies (MIDS) moderated the session.

The following are the Panellists

1. Mr Anwar Sadath, CEO, of Kerala Infrastructure and Technology for Education (KITE);
2. Mr Prem Kumar, Founder and CEO, Kalvi – 40;
3. Mr Balaji Sampath, Founder and CEO, Aha Guru;
4. Ms Shubhra Mittal, Head, Govt partnership and State Operations, Khan Academy;
5. Mr Ritesh Agarwal, Vice President, Educational Initiatives Group;
6. Mr Varun Garg, Head, EK Step Foundation.

All of them shared their experiences with good practices that worked well with different schools across the country.

4.1. Moderator Message: Dr M Suresh Babu, Director, Madras Institute of Development Studies

In the era of increasing digital technology and the use of Artificial Intelligence (AI) in different sectors, the question of affordability, accessibility and scalability needs to be answered. Also, as the use of digital technologies in education is becoming a norm, the ability of teachers to adapt to the new age technologies must be enhanced with adequate training and regular skill imparting programmes.

Also, how these technologies can be used for social inclusion and cohesion may be strategized.

4.2. Technology modernization for learning outcomes: Experience of Mr Anawar Sadath, CEO, Kerala Infrastructure and Technology for Education (KITE)

Adoption of IT tools in education is no more an option, but it is mandatory to pace with the changing tech world. To embrace this change, KITE adopted IT tools to support students' learning better and with all comprehension. KITE has developed e-based textbooks, learning materials, e-

Digitizing the entire learning materials with activity, game based interactive models help students learn effectively and apply them in the real life situation

learning entertainment tools, etc. KITE has Free Open-Source Software (FOSS) in education. Also, the use of innovative open Hardware and Robotic kits for high school

learning helped KITE to reach out to many students and enable them to learn better. KITE developed Little KITE IT clubs for students in collaboration with UNICEF, found to be one of the largest ICT networks of students for learning. Another prominent tool kit of KITE includes Sampoorna – a school management software. These various IT tools are critical to the improvement of the education system and also in the mission to improve learning competency among students.

4.3. Social equity Models for school education: Experience sharing of Mr Prem Kumar, Founder and CEO of Kalvi – 40

Kalvi – 40 is working with students of Aadi Dravider in Tamil Nadu and its education model is founded on the social equity and beneficiary-focused approach. Kalvi–40 creates a pool of small video clips running for 3 minutes aligning with the present curriculum of the school system. This video-based learning enables the students

Three minutes video based learning capsule aligning with state curriculum is proven to have improved the learning outcomes of beneficiary students, in particular students in Aadi Dravider Schools wherein the model is practiced

to learn it with more comprehension and enables them to remember for a long time. Kalvi – 40 enters into a 3-year project agreement with schools that they engage. In the initial first year, it creates digital infrastructure, training teachers to adapt to digital ecosystems of the teaching-learning process etc. In the second year, it evaluates the various projects in terms of working on digital infra, teachers learning and teaching skills using digital tools. And, in the final year (3rd year), it hands over all of them to the school management system to own it and Kalvi-40 exits thereafter.

4.4. Strategies for application-oriented learning: Mr Balaji Sampath, Founder and CEO, Aha Guru

Setting a learning goal for each topic is found to be an important connecting point between school education and desired learning outcomes.

Goal setting is a must for improving learning outcomes and syllabus must be based on the connecting things, should not be standalone.

Most schools have no clear goal setting for improving school learning outcomes. The important goal setting must answer the following three questions, namely How, What and Why. To improve the school learning outcomes or the competency of students in terms of correct responses to the learning outcomes, the policymakers must embark on systemic changes e.g. syllabus must be framed following the nature of the subject matter that the end of one subject leading into unfolding other. The standalone subject may not bring the desired result in terms of correct responses from pupils.

4.5. AI led student and teacher tools: Ms Shubhra Mittal, Head Government Partnership and State Operations, Khan Academy

Any development activity should be customized and tailor-made to the needs and aspirations of the beneficiaries. Taking a cue from this, Khan Academy developed a custom-made digital tool Khanmigo to meet the needs of teachers and the demands of students. Khanmigo creates a list of learning activities that complement the teaching and learning process. It also addresses the learning gap by being a personal tutor to each student who uses it. Khanmigo never provides answers directly to the students when asked to, on the other hand, it provides methods and approaches for students to arrive at answers themselves. This makes Khanmigo a unique learning digital tool that expands the learning outcomes of students.

Khanmigo – a personalized digital learning tool for every child and addresses learning gaps by addressing the differential learning needs of every student.

4.6. Technology-based personalized adaptive learning for children– Experience of Mr Ritesh Agarwal, Vice President, Educational Initiatives Group.

Educational Initiatives Group developed Ei Minds Spark digital tool to support students learn math in a better way. Many students have challenges in learning math, especially decimals. Knowing the challenge well, Education Initiatives Group help improve the maths learning ability of students with Ei Minds Spark.

Ei Mind Spark is initiated to improve the math learning ability of school children.

4.7. Flexi.org – a free digital tool for learning: Experience of Mr Varun Garg: Head, Ekstep

EK Step developed a Flexi.org that helps students. Learn various subjects with ease. It provides assistance for students to learn maths, science and social science. It is available for different grade and school systems.

Flexi.org digital tool provides assistance for students to learn maths, science and social science with more interactive way

4.8. Major Policy Insights: Optimising Teaching-Learning Process: Use of Digital Technology/AI

1. Ensure that digital technology in education is affordable, accessible and scalable.
2. Make available video or interactive learning materials for all grades and all students including one with special needs.
3. A three-minute video educational byte is proven to be effective in improving learning outcomes.
4. Many digital tools are available to help students learn comprehensively, like Khanmigo, Ei Minds Spark, flexi.org, Free Open Source Software (FOSS), etc.,
5. Ditial tools are customized to each student's learning needs, Teachers teaching needs keeping pace with their ability, thus helping them acquire learning outcomes effectively.
6. The school education system, Govt of Tamil Nadu may adopt the above mentioned digital education tools as appropriate to the teaching- learning process.

5. The Outcomes of Theme - 3

"Innovations and New Niche Areas for Making Schooling Effective"

Panel Chair:

Mr Vidyasagar Ramamurthy, Education Specialist, Ex-UNICEF, moderated the session.

Following are the Panellists:

1. Mr R Ambalavana, IAAS; Director, EDII-TN School Innovation Development;
2. Dr Kalpana Sankar, Managing Trustee, Hand in Hand in India;
3. Mr Sriram, Founder, Nalandway Foundation;
4. Mr Prasanna Sampath, Founder Director Aramporul;
5. Ms I Venniala, Head, Government Model School, Saidapett

All of them deliberated on the various innovations adopted in the school systems.

5.1. Message from Moderator: Mr Vidyasagar Ramamurthy, Specialist, Ex-UNICEF

Mr Vidyasagar Ramamurthy provided an overview with his remarks pointing out that the lack of teachers and limited extracurricular activities demand innovations that would help the schooling system provide better outcomes despite the challenges.

5.2. Learning from School Innovation Development Project (SIDP) – Mr Ambalavanan, IAS, EDII-TN, School Innovation Development Project.

Inculcating entrepreneurship skills in school students is felt among policymakers across the globe. To make this happen, the Tamil Nadu government kick-started

Innovation and entrepreneurship should be a part of the school curriculum to foster design thinking among students

School Innovation Development Project to foster innovation and entrepreneurship among government and aided schools across Tamil Nadu in 2022. It aims at imparting skills among teachers and pupils about various entrepreneurship and innovations that can help solve emerging social challenges. This project helped students to learn and innovate models that help address social problems and align with Sustainable Development Goals (SDGs). E.g. innovations such as smart signal boards for ambulances, accident prevention, high-tech farming vehicles, garbage alerts, automatic bridge lifts for flooded conditions etc., are contributing to the achievement of various SDGs. Therefore, innovation and entrepreneurship should be a part of the school curriculum to foster design thinking among students. This will also address the unemployment rate.

5.3. Special strategies for mainstreaming girls and boys out of school - Good practices of Hand in Hand India shared by Dr Kalpana Sankar, Managing Trustee, Hand in Hand India

Education is for all. Policy goes well with everyone. However, many migrant families in India and Tamil Nadu in particular do not have the opportunity to go to school and many of them are

The transit school system is a must for those students and enables them to get a secondary passing certificate

not in schools. Therefore, a special focused approach is essential to bring them to school and help them learn along with other students. Further, most underprivileged secondary dropout students do not appear for exams again. Therefore, the transit school system, an inclusion innovation concept pioneered by Hand in Hand is a must for those students to enable them to get to school and to achieve the desired learning outcome.

5.4. Emotional wellbeing & Happiness Curriculum: Mr Sriram, Founder, Nalandaway Foundation.

Emotional well-being must be made a part of the curriculum as it is no longer an isolated subject. The emotional well–being of teachers and students goes hand in hand. There are innovative approaches to ensuring emotional well-being. The rising challenges

Emotional well being of teachers and students is a must in school education system.

such as addictions, bullying, peer pressure behaviour, substance abuse, adolescent challenges, and porn addictions must be addressed. Musical therapy, card games, interactive game-based activities, videos etc., can help overcome the above challenges. Nalandaway through its various projects have proven that more creative activities result in improved learning among students.

5.5. Teachers Resource Development (ToT/Master Trainers) – Experience of Mr Prasanna Sampath, Founder Director, Aram Porul.

To make learning effective, the focus on teachers well-being and skill sets are more important. Therefore, it is high time that the Human Capital approach should be adopted. Presently, the school teaching system faces a deficit approach with limited scope and an ineffective cascade effect. A

Introducing regular training programmes for teachers beyond syllabus and content is critical to teachers' well-being.

cadre of efficient and resourceful master teachers needs to be developed, and they must remain available to train every teacher regularly. Also, regular training for teachers beyond syllabus and

content is critical to their well-being. And, there is a need for leveraging technology and various platforms to improve human resources in the school education system.

5.6. Model school innovation in Tamil Nadu– Experience of Ms. I. Vennila, Head, Govt Model School, Saidapett.

Model schools in Tamil Nadu are evolving now in Tamil Nadu. Model schools have an all-inclusive infrastructure with top-trained teachers. Career guidance is a part of this model schools and learners are encouraged to use Tamil Nadu School Education Department's innovative school learning app "Manakeni". With encouraging results coming from such model schools, GoTN is aiming to adopt best practices from model schools to all government schools thereby making all government schools model schools.

5.7. Major Policy Insights: Innovations and New Niche Areas for Making Schooling Effective

1. Innovation and entrepreneurship should be integrated with a syllabus of school systems to instil a culture of entrepreneurial attitudes among school students.
2. The emotional well-being of teachers and students should be part of the school management system.
3. Human capital approach, training of teachers, creating a cadre of master teachers and training teachers on their mental well-being should be part of the school education system.
4. The teaching system should focus on adopting innovative approaches for the benefit of slow learners and children who are only dependent on government schools.

6. Summary and Conclusion

6.1 Important takeaways from the Policy Round Table

- Θ Competency-based and integrated curriculum
- Θ Holistic learning approach – Not only focusing on quantitative measurement but also qualitative measurement
- Θ Both teachers and students well being are critical to the learning outcomes.
- Θ Data-driven decision making, beginning State Level Achievement Survey (SLAS) is the key.
- Θ Interdepartmental and organizational collaborations within Education Department
- Θ Train teachers regularly on modern education technologies including digital tools and AI-assisted education tools.
- Θ Compulsory preschool education may be introduced with a more robust Anganwadi system to ensure holistic learning among children.
- Θ Ensure a good teacher support system.
- Θ Develop a standard teaching-learning tool kit with the right techniques, the right tools and the right training methods.
- Θ The revised assessment should be integrated with the school learning system and should be based on application to novel scenarios; reasoning based on the complex context; and providing real-world stimuli to students.
- Θ Ensure that digital technology in education is affordable, accessible and scalable.
- Θ Make available video or interactive learning materials for all grades and all students including one with special needs.
- Θ Many digital tools are available to help students learn comprehensively, like Khanmigo, Ei Minds Spark, flexi.org, Free Open Source Software (FOSS), etc.,
- Θ Ditial tools are customizable to each student's learning needs, Teachers teaching needs keeping pace with their ability, thus helping them acquire learning outcomes effectively.
- Θ Human capital approach, training of teachers, creating a cadre of master teachers and training teachers on their mental well-being should be part of the school education system.

6.2 Concluding Policy Directions from Tmt. S. Madhumathi, Secretary, School Education Department

Tmt. S. Madhumathi, Secretary School Education Department in her concluding remarks said that School Education Department, Government of Tamil Nadu will create a *Task Force* on 'Transformation of Teachers' with an aim to create strategies and action plans for empowering teachers and their wellbeing with exp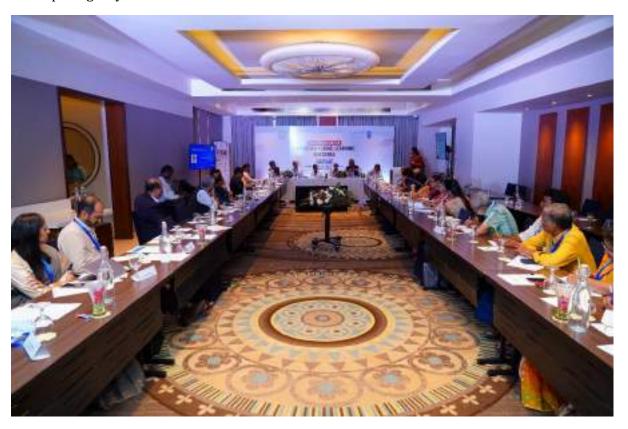erts in the field of education. This Task Force will come out with action plans (Short, Medium and Long term) to support teachers in the following manner:

- Θ Support to emotional and mental wellbeing of teachers.
- Θ Teachers' relationships with pupils towards improved school learning systems.
- Θ To adopt & use new-age technologies and digital tools for teachers to make the fullest use of technology
- Θ Tools to focus on slow learners and children who are only dependent on Government schools.
- Θ To foster design thinking among them and students.

Θ Teacher led systemic changes in content, curriculum, pedagogy and assessments paving way for a transformed SCERT in Tamil Nadu.

6.3 Next step

UNDP and UNICEF will assist the School Education Department to create a Task Force consisting of experts.

To start with, the experts like

- ➢ Merlia Shaukath, Founder, Madhi Foundation, Chennai
- ➢ Balaji Sampath, Founder & CEO, Aha Guru
- ➢ Prasanna Sampath, Founder Director, Aramporul
- ➢ Sriram, Founder, Nalandaway Foundation
- ➢ Representative from Planning Commission
- ➢ Representative from UNICEF
- ➢ Representative from UNDP-SDGCC

Other experts will be added in consultation with the Secretary, Dept of School Education. Further, UNDP and UNICEF will agree with Dept of School Education on a ToR for the Task Force.

6.4 Conclusion

Mr Balasubramanian Munuswamy, UNDP-SDGCC thanked all the stakeholders for their help and assistance in making this Round Table possible.

The Task Force, if it achieves its set objectives will create a conducive environment for teachers to adopt best practices in content, pedagogy, holistic development, use of technology and innovations to improve school learning outcomes.

Annexure

POLICY ROUND TABLE ON
IMPROVING SCHOOL LEARNING OUTCOMES

Closed door- invite only knowledge sharing Discussion

Date: 5th December 2024   **Time:** 12:30 to 17:30

Venue: Chamiers hall, The Rain Tree, St Mary's Road, Alwarpet Chennai, 600018

Programme Schedule

Time	Agenda	Speakers
12:30 – 13.30	Registration and networking lunch	
13.30 – 13.35	Welcome Address	**Mr. K.L. Rao** Chief of Social Policy, Tamil Nadu and Kerala, UNICEF
13.35 – 13.40	Theme address *Tamil Nadu educational landscape & recent initiatives*	**Ms. S. Madumathi, IAS** Secretary to Government, School Education Department
13.40 – 13.45	Special address	**Dr. J. Jeyaranjan** Vice Chairman, State Planning Commission
13.45 – 13.55	Overview *Improving learning outcomes: Policy and strategies*	**Dr. Ramachandra Begur** Educational Specialist, UNICEF
13.55 – 14.00	Overview, *Tamil Nadu's Performance in SDG 4: Quality Education*	**Mr. Balasubramanian Munuswamy** Development Goals Specialist, UNDP-SDGCC

Session – I. What works in Curriculum, Pedagogy and Assessment for Improved Learning Outcomes

Expected Outcomes: Recommendations for Improving learning outcomes through application-oriented curriculum and customized pedagogy for different Grades.

Time	Agenda	Speakers
14.00 – 14.05	Context Setting/Moderator	**Dr. M. Vijayabhaskar** Additional Full Time Member, State Planning Commission
14.05 – 14.15	Present policy scenario on curriculum and pedagogy in Tamil Nadu	**Dr. S. Kannappan** Director, Dept of School Education
14.15 – 14.25	Author speaks: Insights and perspectives "World of learning, lessons from 52 countries"	**Mr. Marmar Mukhopadhyay** Chairman, Educational Technology and Management Academy, Haryana
14.25 – 14.35	Classroom observation for quality improvement	**Ms. Merlia Shaukath** Founder, Madhi Foundation, Chennai
14.35 – 14.45	System-led sustainable approaches for Foundational Learning and Numeracy	**Mr. Anustup Nayak** Project Director, Central Square Foundation
14.45 – 14.55	Assessment & learning outcome	**Dr. Sarah Richardson** Executive Director, University of Melbourne, Victoria, Australia
14.55 – 15.00	Concluding remarks	**Dr. M Vijayabhaskar** Additional Full Time Member, State Planning Commission
	Summary of discussion	**Ms. Akhila Radhakrishnan** Educational Specialist, UNICEF

Session – II. Optimizing Teaching -Learning Process: Use of Digital Technology/AI

Expected Outcomes: Recommendations on use of specific technology tools in Improving learning outcomes in Government schools in all Grades bridging rural-urban, district disparities and ensuring social equity among various social groups (OC, OBC, SC and ST).

Time	Agenda	Speakers
15.00 - 15.05	Context Setting and Moderator	**Dr. M. Suresh Babu** Director, Madras Institute of Development Studies (MIDS)
15.05 – 15.15	Technology modernization for learning outcomes	**Mr. Anwar Sadath** CEO, Kerala Infrastructure and Technology for Education (KITE)
15.15 – 15.25	Social equity Models for school education	**Mr. Prem Kumar** Founder and CEO, Kalvi 40
15.25 - 15.35	Strategies for application-oriented learning	**Mr. Balaji Sampath** Founder & CEO, Aha Guru
15.35 – 15.45	AI led student and teacher tools	**Ms. Shubhra Mittal** Head Govt Partnerships and State Operations, Khan Academy
15.45- 15.55	Technology-based personalized adaptive learning for children	**Mr. Ritesh Agarwal** Vice President, Educational Initiatives Group
15.55 - 16.00	Concluding Remarks	**Dr. M. Suresh Babu** Director, Madras Institute of Development Studies (MIDS)
	Summary of discussion	**Ms. Akhila Radhakrishnan** Educational Specialist, UNICEF

Session – III. Innovations and New Niche Areas for Making Schooling Effective

Expected Outcomes: Recommendations for Improving learning outcomes through application-oriented innovations tested in various schools/education systems

Time	Agenda	Speakers
16.00 – 16.05	Context Setting/Moderator	**Mr. Vidyasagar Ramamurthy** Specialist, Ex- UNICEF
16.05 – 16.15	Learning from School Innovation Development Project (SIDP)	**Mr. R. Ambalavanan, IAAS** Director, EDII-TN – School Innovation Development Project (SIDP)
16.15 – 16.25	Special strategies for mainstreaming girls and boys out of school	**Dr. Kalpana Sankar** Managing Trustee, Hand in Hand India
16.25 – 16.35	Emotional wellbeing & Happiness Curriculum	**Mr. Sriram** Founder, NalandaWay Foundation
16.35 – 16.45	Teachers Resource Development (ToT/Master Trainers)	**Mr. Prasanna Sampath** Founder Director, Aram Porul
16.45 - 16.55	Model school innovation in Tamil Nadu	**Ms. I Vennila** Head, Govt Model School, Saidapett
16.55 – 17.00	Concluding remarks	**Mr. Vidyasagar Ramamurthy** Specialist, Ex- UNICEF
	Summary of discussion	**Ms. Akhila Radhakrishnan** Educational Specialist, UNICEF
17.00 – 17.10	Summary of 3 panel discussions	**Dr. Ramachandra Begur** Educational Specialist, UNICEF
17.10 – 17.25	Way forward	**Tmt. S. Madumathi, IAS** Secretary to Government, School Education Department
17.25 – 17.30	Vote of Thanks	**Mr. Jeya Chandran** Regional Head – Southern India, UNDP