BNY Mellon Supported RTCs: Two-Year Project Overview

Supported by BNY Mellon through IITM Pravartak, Asha Rural Technology Centers (RTCs) in Thriuvallur and Thoothukudi, empower rural youth with free, high-quality computer science education. Here is a two year summary report of the progress of these four centers.

Project Summary of RTCs supported by BNY Mellon

Asha Rural Technology Centers (RTCs) empower rural youth in Tamil Nadu with free, high-quality computer science education, bridging the digital divide and fostering future tech talent. Established in 2022, RTCs offer basic and advanced courses to class 6 to 12 students, focusing on hands-on learning and practical skills. The initiative began in 2022 with the inauguration of the first center in Thiruvallur. Since then, the program has expanded rapidly to 13 centers across four districts of Tamil Nadu.

Our existing RTCs are located in Kanagammachathram, Seethanjeri, Thomur, Kannigaiper, Periyapalayam, Uthukottai, Thirutani and Thirupachur in Thiruvallur District, Kayathar, Kalugumalai and Nalattinputhur in Thoothukudi District, Kilpennathur in Thiruvannamalai District and Kottur in Thiruvarur District. We hope to add three more RTCs in these districts in the coming year.

The Bank of New York Mellon Corporation, commonly known as BNY or by its prior brand name BNY Mellon, is an American international financial services company headquartered in New York City with major offices also in Pittsburgh, Pennsylvania. Asha receives funding from BNY Mellon through IITM Pravartak.

BNY Mellon has played a vital role in this growth by supporting four of these centers—RTC Kannigaiper, RTC Thomur, and RTC Periyapalayam in Thiruvallur, as well as RTC Kayathar in Thoothukudi.

(https://chennai.ashanet.org/news/2026/06/bny-mellon-supported-rtcs-two-year-project-overview/attachment/0/)

(https://chennai.ashanet.org/news/2026/06/bny-mellon-supported-rtcs-two-year-project-overview/1-19/)

Course Structure

The RTCs offer both basic and advanced coursed-

Course	Description
Digital Literacy	Computer Usage, Internet Usage, Office Products
Basic Programming	Create simple programs using Scratch to create games and stories
Animation with JavaScript	Programming skills using Code.org's AppLab frontend for JavaScript to create animated games and other content
Web Development 1.0	HTML, CSS and Javascript
Physical Computing	Programming physical devices – Adafruit circuit playground express

Media Editing	Editing photos, videos, audio files and putting together a presentation using these.
Robotics	Extends the physical computing course to control motors and other actuators to create functional Robots.
Web Development 2.0	DOM and Ajax on the client side. node, Expressjs and EJS on the server side. mySQL for the database.
Courses in Pipeline –	
Artificial Intelligence	Understand how machine learning works and also use practical AI tools like ChatGPT, Dall-E, Bard etc. to create small solutions.
Robotics 2.0	Extend the Robotics course to add more mechanical sophistication including levers and pulleys, 3D printing etc and also enable them to control multiple robots from a host or a web server.

Enrollment

Most students in government high and higher secondary schools across rural Tamil Nadu lack even the most basic digital skills—not because of a lack of ability, but simply due to lack of exposure. With the establishment of Rural Technology Centers (RTCs), supported by BNY Mellon, this reality has been changing.

- The RTCs typically accommodate about 60 students in single-teacher centers and up to 100 students in two-teacher centers, organized into 4–5 batches. RTC Kannigaiper and RTC Periyapalayam are one teacher RTCs, RTC Kayathar and RTC Thomur are two teacher RTCs.
- RTC teachers visit local high schools for three-hour sessions, either in the morning or afternoon, to introduce students to basic digital literacy and programming. Those who show deeper interest continue their learning at the RTCs after school, from 4:30 pm to 7:30 pm.
- Each academic year is divided into two terms (August–February and February–August), with students working on a final course project for two months reinforcing our “Learn by Doing” philosophy.

Student Enrollment in 2024

RTC Enrollment Feb 24	Kannigaipair	Periyapalayam	Kayathar	Thomur	Total
Digital Literacy	17	48	61	2	128
Programming	10	20	44	36	110
Web Development	15		15	13	43
Animations	5			1	6
Physical Programming	6			4	10
Media Editing Course				13	13
Total	53	68	120	69	310

RTC Enrollment Aug 24	Kannigaipair	Periyapalayam	Kayathar	Thomur	Total
Digital Literacy	32	50	103		185
Programming	2	12	25	50	89
Web Development	5	13	12	7	37
Animations			3		3
Physical Programming	2			7	9
Media Editing Course	10		11	18	39
Total	51	75	154	82	362

Student Enrollment in 2025

In 2025, we introduced new courses like Web Development 2.0 and Robotics.

RTC Enrollment Feb 25	Kannigaipair	Periyapalayam	Kayathar	Thomur	Total
Digital Literacy	10	64	57	0	131
Programming	15	10	26	30	81
Web Development 1.0	3		9	22	34
Animation	8		2		10
Physical Programming	2	3	7	9	21
Media Editing Course	2	8	9	15	34
Web Development 2.0				6	6
	40	85	110	82	317

RTC Enrollment Aug 25	Kannigaipair	Periyapalayam	Kayathar	Thomur	Total
Digital Literacy	30	30	84	21	165
Programming	12	22	49	15	98
Web Development 1.0	3		7	21	31
Animation			3	13	16
Physical Programming	3	5	2	6	16
Media Editing Course	2	12	4	11	29
Web Development 2.0				6	6
Robotics 1.0	7	2			9

	57	71	149	93	370

Assessments and Project Work

Students are evaluated on the basis of attendance, term end assessments and projects submitted.

1. Regular assessments – At the end of every term, students are tested by asking them to write a program or create a presentation, depending on the course. These assessments are conducted primarily on a computer. The assessments have been done at the end of each term in all four RTCs in 2024 and 2025.

Here are the results-

Assessments 2024-25		Feb-24		Aug-24
RTC Name	**Enrolled**	**Completed**	**Enrolled**	**Completed**
Kannigaipair	53	35	51	40

Periyapalayam	68	47	75	58
Kayathar	120	79	154	97
Thomur	69	45	82	54
Total	**310**	**206**	**362**	**249**

Assessments 2025-26		**Feb-25**		**Aug-25**
RTC Name	**Enrolled**	**Completed**	**Enrolled**	**Completed**
Kannigaipair	40	41	57	52
Periyapalayam	85	63	71	64
Kayathar	110	83	149	120
Thomur	82	48	93	73
Total	**317**	**235**	**370**	**309**

There has been a steady, marginal growth in enrollment at the centers for both the terms. ***The overall completion rate rose from 68.8% in August 2024 to a much higher 83.5% in August 2025***.

The Kayathar RTC is located in a larger town and hence gets most number of enrollments. While its enrollment volume dipped slightly in 2025, *the course completion rate jumped significantly from 63% to 80.5%.*

Thomur showed the most consistent growth in enrollment and completion rates also improved from 65% to 78% by the end 2025. The ***Periyapalayma RTC displayed strong performance with a 90% completion rate*** in the most recent August batch. While enrollment is growing slowly, the operational efficiency has improved drastically, particularly in the ***August 2025 cycle, where nearly 83% of all enrolled candidates successfully completed their assessments***.

2. All students are required to **submit projects**. These are done individually or in groups of 2 or 3. The projects are evaluated by computer science professionals and a few projects get selected for a competition called **Asha RTC Impressions.** These are judged by professors from IIT Madras and stalwarts in the computer industry. This provides the students an opportunity to showcase their talents as well as gain experience being on stage and public speaking.

You may read the detailed reports here – RTC Impressions – August 2025 (https://chennai.ashanet.org/news/2025/12/rtc-impressions-august-2025/) RTC Impressions – Feb 2025 (https://chennai.ashanet.org/news/2025/06/rtc-impressions-feb-2025/) RTC Impressions -July2024 (https://chennai.ashanet.org/news/2024/07/rtc-impressions-july2024/)

Projects 2024-25	**Feb-24**		**Aug-24**	
RTC Name	**Project Submitted**	**Projects Selected**	**Project Submitted**	**Projects Selected**
Kannigaipair	18	5	18	6
Periyapalayam	20	4	24	4
Kayathar	34	3	43	4
Thomur	27	8	40	8
Total	**99**	**20**	**125**	**22**

Projects 2025-26	**Feb-25**		**Aug-25**	
RTC Name	**Project Submitted**	**Projects Selected**	**Project Submitted**	**Projects Selected**
Kannigaipair	17	7	19	5
Periyapalayam	27	7	30	4
Kayathar	40	3	60	4
Thomur	42	5	65	6

Total	**126**	**22**	**174**	**19**

Over the years, the team sizes submitting projects has steadily decreased from 5 to 2 or 1 at times. This shift is largely due to the wider availability of laptops and the growing preference among students to work independently. With nearly 400–500 projects submitted across all RTCs, the **projects selected for RTC Impressions must be kept deliberately lower**. This in no way reflects a lack of quality. On the contrary, it highlights the **intensity of competition and the immense dedication and hard work demonstrated by the students**. Students from RTCs supported by BNY Mellon have gone on to win several prizes at the RTC Impressions event.

Key Highlights & Impact

- **Reaching Underserved Communities**: Over 350 students are now coding, designing, and building projects thanks to the RTCs. There has been a steady growth in enrollment of students.
- **Quality Education**: Curriculum designed by experienced Asha teachers in collaboration with IIT Madras has provided students with new and advanced courses like AI and Robotics.
- **Hands-on Learning**: Students have been gaining confidence through practical workshops and project-based learning.
- **Confidence building:** With opportunity of participate in events like RTC Impressions, students have been able to build confidence and improve public speaking.
- **Empowering Rural Youth**: Students are able to now envision careers in technology.

Sustainability & Continuity

- Building on the success of 13 centers, we aim to add 3 more RTCs in 2026, extending reach into underserved districts. Our long term vision is to position RTCs as a statewide model for rural digital empowerment, potentially replicable in other states.

- We are exploring recruitment of local librarians to strengthen RTCs as community hubs and support teachers during evening hours.
- Commitment to scaling the model to ensure long-term impact beyond donor funding.

Acknowledgements

We extend our heartfelt gratitude to **BNY Mellon** for their unwavering support. Thier investment has transformed lives, enabling rural children to step confidently into the digital age. Together, we are building not just skills, but futures.

Testimonials

RTC Periyapalayam – "My name is R. Deepana . I first started coming to the RTC Periyapalayam computer center when I was in the eighth standard. At that time, I didn't know anything about computers. However, I have now successfully completed courses in Digital Literacy, Scratch, Physical Computing, and Media. My achievements include:

Digital Literacy: Won the second prize at IIT.

Physical Computing: Won the first prize.

Scratch: I was selected to go to IIT for my work.

I am currently studying in the tenth standard and am doing a course called Web development 1.0. Now, I am proficient in using computers.

RTC Thomur– "My name is Kanimozhi. I studied at PUPS Thomur for 3.5 years and learnt DL. When I was studying in 7th standard, I joined Thomur RTC. There, I learned Scratch, Physical Computing, Web Development 1.0, and Web Development 2.0.

I am confident in writing programs using the Scratch programming language, which I learned at RTC. In Web Development 1.0, I learned how to design simple websites. When I learned Web Development 2.0, I felt happy creating dynamic web pages. Now, when I see a webpage on the internet, I am able to recognize the different parts used in it.

I did my project on a Library Management System using Web Development 2.0. I was selected to present my project at RTC Impression-8 at IIT Madras. When I entered the campus, I felt excited and happy. Seeing the IIT students there inspired me to study at IIT.

When I presented my project to the judges, I felt grateful for the opportunity. I was inspired by them. I received a gold medal for my project, and I felt overjoyed. I also got an opportunity to learn about other projects and ideas from different courses."

RTC Kannigaiper – "My name is Anish. I am studying in class 8. I have been studying at Kannikaipair RTC for three years. 52 students were studying at Kannikaiper RTC. Six courses were taught here. Now I am learning Robotics course. I am very interested. Initially, my computer knowledge was limited. Now I have completed a total of 5 courses. I have completed Digital literacy, Programming, Web development, Media Editing and Physical computing. Rajaram sir will come to RTC and give valuable comments in our project. That will be useful for me. In the web development course, my friend Yokesh and I won second place. It was very happy. When I first went to IIT Research Park and presented my project, I was scared at first, but after seeing all my friends presenting, I gained new confidence."

RTC Kayathar – "My name is Kishore.M. I have a little and basic knowledge about computer before joining RTC. After join in RTC I have experience many things about computer. I learnt typing laptop, creating folder, and many things on computer after join RTC. While learning Scratch programming I have learnt some basic knowledge on programming. Also animation courses teach me how to animate using the code knowledge. I was selected for Chennai impression for two times. The course web development and animation, it was so nice, the Impression motivated to me to learn more."

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