

Action Plan for Starting Computer Literacy program

Ver. 02.10.2020

Computer Shiksha (CS) helps provide computer literacy for the under-served at schools where students are already regularly attending classes. We don't just provide computers, but deliver a complete package including video course-ware, training, monitoring, evaluation, support and certification. And, all of our services come **free** as a pay back to society which has already given us a lot!

A very important point to keep in mind is, we get computers as donations from Corporate and re-distribute them to schools in the waiting list with us. It can be as early as 3 months or as late as 12 months, when we are able to allocate computers to the waiting schools.

Another very important point to note for all who approach Computer Shiksha for starting CS computer literacy course is that currently CS is not in a position to provide computer hardware to Govt. schools, learning centers (after school, before school etc.), tuition centers and any kind of vocational training centers.

Instead CS can help these entities by providing training to their teacher, access to Course Videos and Teachers Help-Manuals, Assessment Services and Certification.

Hence all the points mentioned in this document regarding repair and maintenance of computers will not be valid for these entities.

Some Basic Explanations

What is the difference between Computer Education and Computer Literacy?

Computer Education can include all kinds of courses like Computer Engineering, Software programming etc. etc. For this the right time to do these is post 12th standard and after one has decided to take up Bachelors in Electronics or Computer Science etc. Otherwise, except in rare cases, these efforts won't help children anyway in their careers. All low end jobs are going to be done using AI without human involvement. And, just as a reminder, only 14% of engineering bachelors are currently getting jobs.

Computer Literacy denotes knowing how to use computers for day to day work at home or at the office. Like how to write letters, compose documents, do planning using worksheets, financial planning, for creating presentations, making drawings etc. Computer Literacy is becoming as essential as Mathematics, English, Hindi, Science, etc. Just like these subjects, knowing them won't get one any job, but not knowing computer literacy will exclude one from all kinds of jobs. Hence, it is becoming a must that children undergo computer literacy program at all costs, and it is up to schools to provide that.

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What is the difference between 'Smart Classes' and Computer Shiksha classes?

'Smart Classes' essentially means that computers are being used to teach various subjects like Science, Languages (English Grammar, literature etc.), Maths etc.

Computer Shiksha focusses on teaching the actual use of computers to do things like writing letters, using Paint to draw pictures, compose documents, do planning using worksheets, financial planning, for creating presentations, using internet, emailing etc.

For recognized schools, the education Board may require a school to have a computer course, which we have found to be mostly theoretical. There is no relationship between that course and CS computer literacy course (designed by industry experts) and Computer Shiksha classes will need to be run over & above that course and in parallel.

What will Children gain after doing this Course?

CS computer literacy course has multiple levels

Basic Course consisting of modules

Paint 1
Writer 1

Students can complete each module and earn certificates for Paint 1 and then Writer 1 after written exams by CS

Similarly, children can earn multiple certificates at '**Basic Plus**' and '**Advanced level**' courses.

These certificates increase the value of students in the marketplace and also enhance the prestige of schools, as school's name too appears in the certificate.

What is the difference in a New Computer and Refurbished computer?

A new computer may have newer chipset or CPU or more speed or more power. But for the computer literacy programs for children, none of this speed or power is required. They need to learn MS Paint, MS Office (equivalent), Internet and email and for that even a 10-year-old computer would be sufficient.

Most corporates replace their computers every 3 to 5 years, and CS has been seeking donation of these computers from the corporate. We bring those to our refurbishment center at Gurgaon, that has the capacity to process 600 to 750 computers a month.

In the refurbishment process, each computer is tested thoroughly, all defective parts are replaced with new ones, O/S is loaded, CS videos and all relevant software required for Computer Literacy are loaded, tested once again and the shipped to schools.

Whether a computer is new or refurbished, during transportation, sometimes, they may stop working because of parts becoming loose, and then CS will help your school to set them right with help of your school teacher who would be trained at CS training center for 8 days to handle CS videos as well as learning how to repair computers.

How long will a refurbished computer last?

After a computer has been refurbished, there is no difference in the lifetime of a new computer or a refurbished computer. Hence it should last for at least 5 to 7 years.

What are the recommended hours for computer classes every day?

The number of computers that we are allocating to schools assumes that computer classes are running for 5 hours daily for 6 days a week. Hence, please allocate a dedicated teacher to get trained by us, when we invite one for the same.

This will make sure that the required number of children in the school get covered under the computer literacy course.

In case, you would like one more teacher to be trained by CS to share the teaching load, CS will try to provide this after 6 months of successful running of classes in the school, and at least 1 certification of students should have been achieved.

Teacher's training and What happens, if teacher trained by CS leaves the school?

For this program, it is a must that school provides a dedicated teacher for CS computer literacy course who will be required to teach this course for at least 5 hours daily, six days a week.

The school teacher can be a 12th standard pass and may never have seen a computer in life. He/she will undergo 8 days' intensive course with CS at a designated CS training center.

The school teacher is trained for delivering world class computer literacy classes as well as first level of repair of hardware and software.

This training is one of the most important step before allocation of computers can start for a school.

And if, in future a CS trained teacher leaves, please contact CS Helpline Number : 92051 76400 for training a new teacher and CS will provide the training in the next batch whenever scheduled.

How are computers at schools repaired and maintained for their whole lives

CS will help the NGOs/Schools to maintain the computers free of cost. Reps of NGOs/Schools who will come for training will be trained in First level hardware and O/S maintenance and repair. For more serious issues, the reps, who have been trained by CS, will be guided over WhatsApp /phone/CCTV/Skype as to how to address the problem. Our experience for last 2 years is, that we are able to resolve 95% of the problems this way. For any issue that schools may face, please contact **CS helpline 92051 76400** immediately and CRC (Complaints Resolution Cell) will take over and help resolve all problems within 7 days of logging in of the complaint. Please retain the Complaints logging in number, once allotted. CS will send you this number through WhatsApp/email the same day or the next day morning, if call logged in the latter part of the day.

Schools should support these trained teachers by providing them time to attend to this repair activity as and when needed for the welfare of children and schools and to ensure that students do not miss any classes.

CS will make sure that either the part is repaired with help of your school teacher (who has undergone training with CS) using WhatsApp video or CS will ship a new part and replace the old part.

What happens, if a part or a computer becomes defective and has to be couriered back to Computer Shiksha Repair & Refurbishment center in Gurgaon?

If the fault cannot be repaired after local school teacher trained by CS and CS representative on CS Helpline have tried their best, then school is requested to courier/ship the defective computer part or computer to CS refurbishment center in Gurgaon with information emailed to CS Helpline at connect@computershiksha.org or WhatsApp to CS Helpline number. This step should be taken after CS **confirms** the requirement of couriering the part/CPU/TFT whatever may have gone bad. **The Courier docket/receipt number is required by CS to enable CS to ship any replacement part, if need be.**

Most of the time, CS will ship the working part/CPU/TFT after verifying the problem using WhatsApp Video even before school's courier is received. The Courier docket/receipt number from school is required by CS to enable this step.

Please ensure to pack the material properly before sending to CS center so that it is not damaged during shipment.

Regarding Packing material, please note that If Computer Shiksha has provided you the computers, please be very careful to store the packing material for sending computers back for repairs, when required. If there is space constraint, store the Foam at any cost.

If a full system goes bad, after a prolonged use, CS will replace the computer with another refurbished computer.

School needs to make sure to ship all defective parts/systems (after clearance from CS) to CS, so that we can repair / replace and when these become useless, CS can meet strict E-Waste norms of Govt. of India

Sometimes it may happen that school doesn't have access to a courier or courier is far away or it doesn't have money to pay for the courier or it has no idea about packing the defective computer, for all these challenges, please contact our helpline and we will make arrangements to solve these challenges. CS has a tie up with an All India Logistics and Courier partner.

The CS address where material is to be sent, after getting clearance and an OKAY from CS Helpline for the same, is

**Computer Shiksha, G 576, Sushant Lok II, Sector 57, Gurgaon 122011, Opposite Main Gate of Scottish High School; landline No. 0124-4112926
Contact Person: Mr. Anjaana, Mobile Nos. 95555 64545, 99689 91988**

Always, for any query write to connect@computershiksha.org, or speak at CS Helpline : 92051 76400 (can WhatsApp also) or Skype at Computer.Shiksha

Pre-launch Stage planning

For Schools/ NGOs in NCR

NGO/School Reps should visit Computer Shiksha (CS) supported schools in Gurgaon or other locations, to get a feel of the CS mode of computer literacy program. One can pick the location from our website www.computershiksha.org or call 92051 76400 to help choose a location near their place.

One could also take a look at videos which show Model II of delivery at various schools:

<https://youtu.be/8SHFqsWBm5I>

<https://youtu.be/WF3BUgUTqGo>

<https://www.youtube.com/watch?v=EB20zqEAxgl>

<https://www.youtube.com/watch?v=PdGTWBB9X7g&t=4s>

<https://youtu.be/IguC2MTkTJ4>

You can also take a look at the photo gallery <http://www.computershiksha.org/home/GalleryCategory> which shows photos of many schools running Computer Shiksha form of Computer literacy program.

For Schools/ NGOs in other parts of India, in case we do not have a nearby school where our classes can be seen, you could request for a live WhatsApp Video of a school running CS classes. For this, one will need to book a time slot after contacting 92051 76400 and at the prescribed day and time, one can see a running class at a school.

1. General Points to know for pre-launch planning

Following points should be kept in mind by the NGO/school that wants to start computer literacy program in their institutions

- a. Is stable electricity connection available? If not, a power back up may become essential.
- b. Are there benches for children? Computer literacy program cannot happen if children sit on the floor.
- c. Does the school already have some computers, (even defectives will do), please count them and let us know the details. After teacher's training is over, CS will help you repair those if possible.
- d. Would the school be able to arrange a secure separate room, where electrical connections can be provided and computers can be installed, once arranged?
- e. Does the school have a LCD projector or a large TV?

School Owners/Trustees/Principals Seminar (an absolute Must)

- It is absolutely important and critical that leadership of any school that wants to be adopted by Computer Shiksha for starting computer literacy classes for its children, attends this seminar which will be organized by CS at its own costs. One can ask any query and seek any clarification in this seminar to clarify anything regarding the CS program. Without this step, the program will not move forward and CS will wait until this step is completed by a school before proceeding ahead.

Training of Trainer/teacher (again, an absolute must)

- Team NGO/School to identify 1 trainer per site, who will be trained for 8 days in Gurgaon or any other location decided, to handle hardware, software, and course administration. These trainers can be of even 10th to 12th standard pass background. And after 8 days of training, they will become capable of imparting computer literacy program of high quality using our Course Videos and manuals, in addition to resolving 95% of hardware and O/S problems with our help using WhatsApp Video calls.
- This trainer should be dedicated for computer course only as he/she will need to take 5 hours of computer classes 6 days a week to really train the students well and earn a name for the school.
- CS will hand over Self Learning Videos to the trainers for loading in the teacher allocated computer on site. CS will also hand over Open Office. The self-learning videos can also be downloaded from <https://www.youtube.com/c/ComputerShiksha>.

- CS will also hand over Manuals (English/Hindi) to each Trainer for teaching as well as hardware repair and software installation. The Teacher's manuals can be downloaded from our website www.computershiksha.org , Online Learning section.
- Each NGO/School Site to have LCD projector or a Large TV (suitable only for a batch of up to 25-30) for delivering computer literacy program, where the Self Learning Videos will be run.
- Each period or session would be for 45 minutes to 1 hour. **It has to be kept in mind that each student has to undergo 2 sessions on subsequent days compulsorily. The course design is such. So a student must be taught at least twice a week. Or 4 times a week or 6 times a week. If the first class is held on Monday, then the 2nd class has to be on Tuesday.**

How to identify the number of computers you need?

Normally, the top two to three classes of a school are chosen to introduce computer literacy program, e.g. if a school has from class 1 to class 12, then class 10, 11 and class 12 would be normally chosen to start the computer literacy program. And, if it is already year ending, then class 9, 10 and class 11 would be chosen for this course and class 12 should be dropped from this plan. In case, the computer classes are starting from the year beginning or even if there are 6 months left, then do include class 12 and only cover Basic Course. If a school is from Nursery to class V, then the same logic applies for Class V, as above.

The course would take from 18 to 36 months (with enough revisions depending on the level) which will take a student to the expert level.

Now, one can know how many children are there to be considered for computer course and from there, one needs to calculate the number of computers needed for the course and then the shortage, if any. Let us say, if you have 8 working computers, which means, leaving 1 computer for teacher, you have 7 for students.

Assuming a 45 minutes' class, and with 7 computers, 7 students at a time can attend the computer class, and let us say, in a day (Monday) you have 5 sessions of 45 minutes; that means in a day, 35 students can undergo this class.

As same students need to repeat the class next day for practice, so same set of 35 students undergo the computer class next day i.e Tuesday.

Now another set of 35 students can do computer class, let us say, on Wednesday and Thursday.

Similarly, another set of 35 students on Friday and Saturday.

Thus, in a week, with 7 computers and 5 sessions per day, you can cover $35 \times 3 = 105$ students.

In case, you need to deliver computer literacy program to a larger set of students, the only two ways available are: **increase the number of computers** or **increase the number of sessions** per day.

Another way to do this calculation is as follows

If say class 9, 10 and 11 have 105 kids to be taught CS course. Then we can first make 3 groups ($105 / 3 = 35$) of 35 kids each who will be given two classes per group per week. Thus Group A does CS on Monday and Tuesday; Group B on Wednesday and Thursday and Group C on Friday and Saturday. Now if you are going to take 5 one-hourly classes every day then for each group ($35 / 5 = 7$) you will form Batches of 7

students in each. This way, for 105 students you will need 7 computers for the students plus 1 for the teacher.

Our Computer Literacy program (*basic 12 weeks* + basic plus 19 weeks* + advance 24 weeks**) spread over 55 **weeks** (assuming 2 classes a week) covers the following:

- Learning Uses and Parts of a computer
- Computer Start Up and Shut Down
- Using the Keyboard
- Using the mouse / touch pad
- Using Paint to draw
- Naming and organizing files
- Text processing & formatting
- Using spreadsheets as database and calculator
- Presentation Skills
- Internet applications for browsing & searching
- E-mails

** Usually schools take longer than this depending on the level of classes being taught and basic course can even take up to 62 weeks, same is case of advanced course, it too can take up to 48 weeks. This doesn't include exam time.*

- This is to be noted that Children up to 8th standard should undergo Basic and Basic Plus course and students above that should complete the advanced course too. Though we have seen in some schools, even younger children go on to Advanced course.
- After completion of each module, tests will be administered and absorption of concepts tested. And after that, appropriate Certificates would be issued to students.
- In case the trainer of the local NGO/School leaves, then a new trainer can be trained by CS.

During the training

Since our training packs lot of material in a short time, two things are just not acceptable from trainers. One: they cannot miss a day due to any reason during the training; second: they must be on time (rather 5 minutes before time) every day.

In case any divergence from the above mentioned behavior is observed, the Master trainer from Computer Shiksha will inform CS chief coordinator appointed for that particular training, same day and chief coordinator will inform Pradeep or any other patron who brought that particular NGO also the same day. Pradeep /patron are supposed to get in touch with the NGO authorities and inform about this situation and also warn that we may not allow the trainer to attend the balance training, if this situation recurs.

Impact of the program

At Computer Shiksha, which is led by leading professionals from IT and management and who have run global organizations, we were absolutely clear that Computer education as an employability tool is no more valid. There are no jobs of data entry anywhere in the world, and whatever may be still available will soon vanish due to AI.

On the contrary, computer education is just as essential as English, Hindi and Maths, because without this knowledge one just won't be able to fit in the society, nor get any job in future, because computer education like maths need to be inherently known to perform any job.

In addition, all Govt. schemes are available mostly online, which people from under-served communities are just unable to access due to obvious reasons.

So computer education shifts from an employability tool to an essential skill just to survive in the society.

CS delivers computer education right from Nursery students to M.Com students.



In our work on the ground, we have been reported the following

1. Whichever school, we started our courses in, the no. of admission requests to that school increased dramatically, as word spread around about computer education available there
2. On the days, computer literacy is provided, the attendance improves compared to the days, when it is not the turn of computer course
3. The sheer confidence that children gain once they start computer education is awesome to watch

We have interviewed many students of various schools, and their testimonials have been recorded and are available on the first page of our website www.computershiksha.org under the heading Testimonials. These not only convey what students feel about computer education that they are being provided, but also are heartwarming stories, as they share their dreams and aspirations

Post Launch of classes

You or your staff may require help on hardware problems / teaching aids / software issues / arranging tests for children / sending and receiving information from Computer Shiksha (CS) or any other matter related to course, classes, etc.

For all these queries/needs, please send an email to connect@computershiksha.org only. This email goes to all the key stakeholders at Computer Shiksha (CS) and multiple hierarchies, so each of your issue will be addressed in the best possible manner.

You can also contact CS on telephone number 92501 76400, by either calling the number or sending a WhatsApp message or through Skype.

You can connect through Skype: Computer.Shiksha

Before the classes begin, the school must send the list of students who will under-go computer literacy program, class wise, in the **format given at the end of this document**. This needs to be done only one time, while starting the computer course. Later, CS will pick up the students data from the examination answer sheets and use that data for certification purpose.

You can email this sheet to connect@computershiksha.org , In case, you can't email, then please send it by WhatsApp on mobile no. 92051 76400.

- The NGO/School has to be careful to inform CS, when the students reach 10th class of any module, at connect@computershiksha.org so that CS team can start preparing a question paper to test the students. Also let us know the number of students who will undergo the test, so that we can bring along/send appropriate number of question papers.
- For out of Gurgaon schools, we also have online testing possibility. Where internet is not available, we will send you test paper by post/courier/email/WhatsApp, which school needs to ask for through telephone no. 92051 76400. You need to let us know the module that you are finishing and the number of students appearing for test. You would need to send us the results for fulfilling our requirement for certification. We can also **email** you the question paper with the answer key and you could print as per your need.
- As each module is of 12 classes, so in the 13th class, one needs to conduct a written test and evaluate and also submit the results back to CS. **At many a places, Trainers are taking the paper along with the answer key from Computer Shiksha through email, administering the test, and sending the results to CS. For quality control, a random number of checked papers are re-checked by CS using WhatsApp video facility.**
- Our first training to trainers trains him/her for 3 modules i.e. 18 weeks course, After Module 3 is finished, trainers of the NGO/School will need to be trained by CS in Module 4 which will take 2 days. NGO/School to fix these dates with CS so that module 4 can start. This can be done on Skype/WhatsApp and trainers need not travel for this purpose. This process will be continued for all remaining modules and for the Advanced Course also.
- Our Donors who provide us with Funds and computers have fixed norms for measurement and these are as follows and for these **we would need an undertaking from you on the school/NGO letterhead**

We also confirm that we will implement the following process and do the needful without fail

- We will coordinate with CS Helpline for conducting tests of students after completion of every module*
 - We will not move these computers to any other location without prior approval from CS.*
 - We will ensure that the teacher trained by CS will be a dedicated resource for conducting CS courses.*
 - We will ensure that the number of students as declared in Students Information sheet will be provided CS computer literacy program without fail.*
 - We confirm that once these computers become irreparable, we will dispose these off in environmental friendly manner as per e-waste regulations of Govt. of India, and in case we face any difficulty in this process, we will seek help from connect@computershiksha.org*
 - We also understand that in case of any dispute, Gurgaon (Haryana) courts will have the jurisdiction.*
- After students finish a module, and they have passed the written test, they will be provided a certificate by CS for that particular module. Thus a student can earn multiple certificates as per the modules learnt. **Certificates can only be issued, if CS has been provided the photos/videos of the test process.**

We have noticed that children are really enthused by learning and getting these certificates, so CS started issuing module wise certificates. This not only motivates the children but even their parents and schools too, earn a name in the area as a better school that provides real computer literacy.

- CS expects that, once a full cycle of 10 modules has been completed, NGO/ School would have complete set of manuals, training and maturity to do this course effectively in future.

Shut Down Process

Our experience with earlier schools has been that lot of desktops/laptops stop functioning due to a very common mistake that students make in the class, and is not noticed or checked by teachers/facilitators. This necessitates a very heavy support from Computer Shiksha (CS) which we find unnecessary.

Children do not shut down systems properly at the end of class, which leads to windows corruption and unnecessary interruption in classes and unnecessary burden on CS which can be avoided.

We are listing down the procedure here again (this is explained in the training program too)

While ending a session, before proceeding to shutdown, FIRST make sure all files that user had opened are closed

After the shutdown button has been pressed, don't power off (i.e. Don't press power button) until system shuts down on its own

Once system has shut down and only then, you should take the power chord out, if that is to be done.

PLEASE INFORM YOUR FACILITATORS that they should take care of this. Even if they are given brand new laptops/desktops, even then this issue will keep coming, unless they follow the above procedure.

It has been noticed that pen drives containing songs, movies etc. are used with computers. Please prohibit that. This is the major cause of viruses and subsequent windows corruption and system failure. You should be very strict about this.

It has also been noticed that sometimes pen drive (loaded with software and videos) that we give you gets corrupted due to misuse. THE FIRST STEP, when you go back to your institution is to take back up of this pen drive in at least 2 computers at your school/institution. THIS MUST BE DONE WITHOUT FAIL.

- **Please note that the NGOs/Schools that have availed hardware from Computer Shiksha are liable for an audit of utilization of these computers during their working hours. NGOs/Schools will be informed about it beforehand.**

COURSE DESIGN OF SELF-LEARNING CLASSES

Basic Course (2 modules)

Module Name	No. of classes per week	Duration of classes	No. of Weeks
Paint I	2	45 mins to 1 hour	6 to 12 weeks
Writer I (equivalent of MS Word)	2	45 mins to 1 hour	6 to 12 weeks

Total Duration Basic Course (doesn't include exam time)

12 to 24 weeks

** Usually schools take longer than this depending on the level of classes being taught*

Basic Plus Course (4 modules)

Module Name	No. of classes per week	Duration of classes	No. of Weeks
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