

## Shopner Pathshala: E-learning Management System for Special Children

*Shopner Pathshala now provides a professionally designed online education system for the children with special needs.*

**January 10, 2022 - Dhaka, Bangladesh** - Children with special needs and their guardians will now have access to an online educational platform which will shape their learning process with systematically designed courses and elaborative progress tracking reports. This platform provides an interactive interface for the autistic children, their parents, therapists, teachers and caregivers. As the pandemic portrayed how difficult it is for the autistic children to pursue their education like regular children of their age, this system came into existence.

Learning disability is divided into four main categories: mild, moderate, severe and profound [0]. This variety of learning disability disrupts the development of one specific category (such as speaking/writing/image recognition etc.) for which maximum output of doing online courses can't be received most of the time. Even if the category of a course/game is defined (speaking/memory testing), the difficulty level isn't defined. Moreover, the number of courses focusing on recognizing Bengali letters and forming meaningful Bengali sentences is very less. Our system ensures division of the courses according to diverse categories in autistic children and includes Bengali learning courses as well. In contrast to most of the websites, our website tracks a child's personal progress and also compares the progress of a group of children using spider graphs [1] which is more helpful in assigning courses and providing therapy. It also provides an automated appointment-booking system for the guardians.

There are five categories of courses/games for the autistic children in our system :

- 1. Speaking :** We have introduced a virtual AI assistant in our system which is more focused on engaging the children in long-time conversation, than to teach them how to speak. The virtual assistant teaches easy-medium-hard word pronunciations through friendly conversations.
- 2. Writing :** There are games and courses on letter/number matching (*easy*), pronunciation of letters (*easy*), puzzles (*easy*), making new words by collecting letters (*medium*) and making a meaningful sentence through word tapping on screen devices (*hard*).
- 3. Image/pattern/colour recognition :** The guardians can upload photographs of their relatives so that their children can recognise their family members. Also they can upload pictures of their children's favourite things, their same coloured/shaped toys so that they can relate to their used stuff with the colour/image/shape we are trying to teach.
- 4. Math :** Research shows some autistic children are keen on solving simple mathematical problems. As a result, we added simple addition/subtraction problems(*easy*), simulations of equational calculations (*medium+hard*) in order to improve their logical skills.
- 5. Memory and practical life skills :** Autistic children follow a daily routine very strictly, some of them can remember a specific date/incident. So we added some documentaries of historical events and games on identifying important dates to sharpen up their memory. Also we included some illustrations on practical life skills such as brushing the teeth or crossing the road etc.

There are features of displaying skillwise line charts, bar charts, spider graphs on overall assessment scores. Different colours are used to denote different expertise levels (such as yellow for beginner, blue for intermediate, red for expert) in the children's profile so that the guardians can easily track their progress. Teachers have customization facilities over the course contents so that they can create/select/update/delete those courses according to the progress of their children.

Nazia Shehnaz Joynab, the leader of the team behind **Shopner Pathshala** said, *"Our first priority was to introduce a system in which the teachers, therapists, caregivers and guardians can cooperate with each other to organize the courses in a structured way. When we first started the project, we had several discussions to find the most appropriate solution possible. The time and effort that our team gave to this project made it possible to transform our dream into reality."*

We designed this application for the improvement of the learning system of special children. The guardian will register with his/her necessary information and will be able to register one or more children under this programme. After completing the registration, easy categorized courses will be assigned automatically. The system will record the progress on the basis of test results which will be shown in graphical and tabular form. Analysing the result, the teachers will assign courses of six categories to the students. Guardians will also be able to consult with the doctors about the child's health issues.

A valued user of our website said, *"The COVID-19 pandemic has changed the education system. The institute where my child is currently enrolled has started taking online sessions but those are not interactive enough. I got to know about this website from one of my friends. The user-friendly interface is very convenient for me to use. Now my child can enjoy it while learning. I can keep track of his progress after every assessment. Specialised doctors, teachers and caregivers are always available. The monthly session between doctors and guardians enlightens us more about the care of our children. In short, I get all the services to help his growth and development in one place."*

Please visit our website for more information: <https://shopnerpathshala.com/>

## FAQs:

### 1. How do I find this? How do I get started?

- You can find the website on our facebook pages or you can email us asking about our facilities:

**Facebook page link :** <https://www.facebook.com/ShopnerPathshala2022/>

**Email :** shopnerpathshala22@gmail.com

### 2. How can I get help, if I have a problem?

- You can visit the "Contact Us" section on our website or can contact us through facebook.

### 3. Are there things I need to manage or keep track?

- The user as guardian needs to keep track of the progress of his/her child. And should also be in touch with the teacher so that the learning process gets easier for the child.

### 4. How will you use the information you're asking me to provide?

- We require information about guardians which include name ,address ,email address and contact number. We will use the information of the guardians to create a guardian account and to keep them informed with our services and updates. We also require broad information about the children which will guide our teachers and therapists to take appropriate courses and therapies for them.

### 5. Does this cost money? If so, how much does it cost and how will I be billed?

- Our website offers a free subscription. Initially children are enrolled in our system without any cost. But with the advancement of courses they will need to pay a certain amount for some courses. But to take therapies and extra care from doctors and nurses, users will need to pay according to the demand of the respective doctors and nurses.

### 6. Is this something I can share with my friends?

- This website is specially designed for helping the learning process of special children. So if you share this with any of your friends or relatives who may know such children they will be highly benefited.

### 7. What if I change my mind and no longer want to use this?

- If a registered user doesn't use the application for more than 6 months he/she will be automatically removed from our system. If the user wants to remove the information provided in our site can contact the admin and can ask to remove the information.

### 8. Where can I learn more about how to use this?

- In our website there is an About Us section where all the information and instructions on how to use the application is written precisely. Also there is an animated video on how to use this.

### 9. Who do I contact if I have a problem?

- If a guardian faces any problem regarding his/her child's health issue he/she can consult with the doctor on our website. If he has other queries or concerns he can ask help in the comment section. Other than these if he has any problem or queries about our website can contact with us through Contact Us section.

### 10. If there are changes to how it works, how will I find out?

- Our website collects the contact numbers and email address of the user through the registration process. Any kind of update and changes in work will be informed through mobile messages and email individually. Moreover every little change and updates will be posted on our facebook page.

## Appendix A: [Sources]

[0]: Medical guidance for DLA decision makers (child cases): staff guide, page 432

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1019126/a-z-child-medical-conditions.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1019126/a-z-child-medical-conditions.pdf)

[1]: A Brief Introduction of the Spider Chart, <https://www.edrawsoft.com/chart/when-to-use-spider-chart.html>

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