ABCD

USER MANUAL

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THE SOFTWARE

ABCD is a software that can be used to support mostly children with special needs, as well as young children who are struggling with phonology and/or reading, to improve their speech, to enrich their vocabulary, and to develop better language skills. The software works in different languages, runs on Windows, and can be a valuable tool to speech therapists, speech pathologists, parents, primary and nursery schoolteachers, and professionals in special education. The tool is developed by MKSMARTSOL, from Cyprus, in collaboration with a number of professionals and Special Needs Centers in Russia, Bosnia, Romania, Cyprus, Greece, and other European countries.

The objective of the software is to help children and adults improve their speech with articulation, phonology, prosody, and language skills like reading, writing, spelling, syntax, comprehension, and many more. There is an integrated scanning method (switches can be connected), which will meet also the needs of the most severe cases of children with motor skills problems. It includes a big number of graphics, videos, and animations and it is completely mixed-type software which means that users, teachers, and parents can modify and adjust the environment (user interface), the content, and the activities and can configure it to the specific needs of each user.

This flexibility and adaptability provide an excellent opportunity for individualization and adaptation of the system as regards to level, age, interests, and objectives for each user. Moreover, the software records the personal settings (configuration) of each user (the interface and the content but also the configuration of each activity) as well as students' results.

The software provides a big series of activities and exercises under activities. There are already more than 20 activities running. It is important for the users to understand the potentials of the program and of each exercise separately. In reality, each exercise is a set of around 110 or even more configurations, as it provides different combinations for learning. Professionals can configure the software and provide a different way of use to each user. A user can select to have text only, a picture only, sound only, or any combination of those. It is estimated that the number of combinations and options through the activities is more than 2000.

The main idea of the software is to have a central list of records of language segments required for acquiring phonology and reading and from there to build exercises under each activity. Records include seven fields: phoneme, grapheme, word, and sentence in written form, word and sentence in sound

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form as well as a graphic (picture or animation).

Pictures can be selected and replaced or deleted by teachers, sounds can be recorded or rerecorded, text size, text series, text type, and color can change and new lists of content can be created at any moment. Color of the screen, the color of the text background, the color of the scanning are to the personal decision of the user. In this way, teachers-parents will be able to find the learning style and the best learning environment of each student/user. Once the system is configured, the personal configuration of the user will start automatically the next time of use.

What makes the software a powerful tool is that it is developed in a Universal Design of Learning (UDL) providing possibilities to almost all students, with or without disabilities, to use it.

INSTALLATION

Program Specifications:

Languages: Russian, Romanian (system locale must be in the working language, please see page 2 for instructions on how to change this).
Operation System: Windows (8, 10)*
* If the videos in Virtual Mirror don't display correctly, download and install Windows 8 Codec Pack 2.0.3 from the following link: http://www.xmediasoft.net/download/windows-8-codec- pack.aspx

Minimum system requirements:

- Windows 7 or newest Operating System (both 32 bit and 64 bit)
- 2 GB RAM
- 1.7 GhZ speed
- Minimum 1 GB Storage Space
- Good graphics resolution
- Good quality of sound card
- Headphones/speakers, microphone, web camera

Changing the System Locale

VIEW THE SYSTEM LOCALE SETTINGS FOR WINDOWS

1. Click **Start**, then **Control Panel**
2. Click **Clock, Language and Region**
3. Windows 10, Windows 8: Click **Region**
   Windows 7: Click **Region and Language**
   The Region and Language options dialog appears.
4. Click the **Administrative** tab
   Under the **Language for non-Unicode programs** section, click **Change system locale** and select the desired language.
5. Click **OK**
6. Restart the computer to apply the change.

   NOTES

- You must be logged in with an account that has **administrative privileges** in order to change the system locale.
- The appropriate language packs should be installed on the operating system.

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Installation

1. Download ABCD and unzip in a folder. You will see three elements in the folder: a pdf file with Instructions, an exe file **ABCD.exe** and a folder "Import ABCD Content…"
2. Double click on **ABCD.exe** file first. This will install the software.
3. ABCD's setup wizard will begin. Click **Next** on the first step of the wizard, titled "*Welcome to ABCD Setup Wizard*".
4. On the next step, titled "*Select Installation folder*" click **Next** to install ABCD to the default location, which is **C:\Users\ USERNAME \AppData\Local\ABCD\.**
5. Please do not change the default location.
6. A shortcut (**an icon**) for the program will be created on the Desktop.
7. On the next step, titled "*Confirm Installation*" click **Next** for the installation to begin.
8. Wait for the program to finish installing and click **Close** to exit the installation wizard.
9. Go back to the folder and double click on the **Import ABCD Content** file to import exercises in ABCD.
10. Please WAIT, WAIT, WAIT as it takes some time to upload pictures, videos, sounds and other files.
11. You will get a message "ABCD Romanian content has been imported successfully". Click **OK** to finish.
12. You can run the software by double clicking on the icon on the screen (**ABCD**).

Launching the program

- Double click on the **ABCD** icon on the desktop

Exiting the program

- To exit the program, click on the red arrow icon on the top left corner of the screen and then click **Yes** if a "*Confirm Exit*" dialog box appears. Click the red arrow as many times needed until the program closes.

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INTRODUCING THE PROGRAM

Login Screen
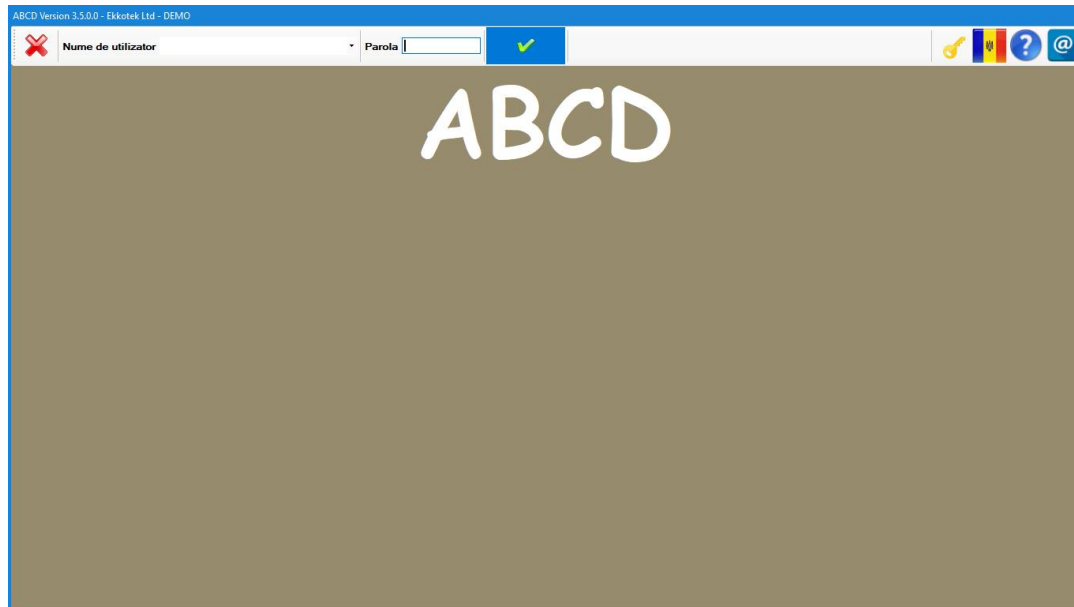
Once ABCD starts, the **Login Screen** is displayed. For each Activity or other screen the **Main Menu** will be on the top and it will have different options. In this screen there is a login menu on the top of the screen (main menu) and the developers' name, logo, and contact details at the bottom of the screen.

Language and manual:

You can change the program's language (English/Romanian or English/Russian) by clicking on the flag icon at the right of the **Main Menu** and access the manual by clicking on the question mark icon (**?**)next to the flag.

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How to sign in:
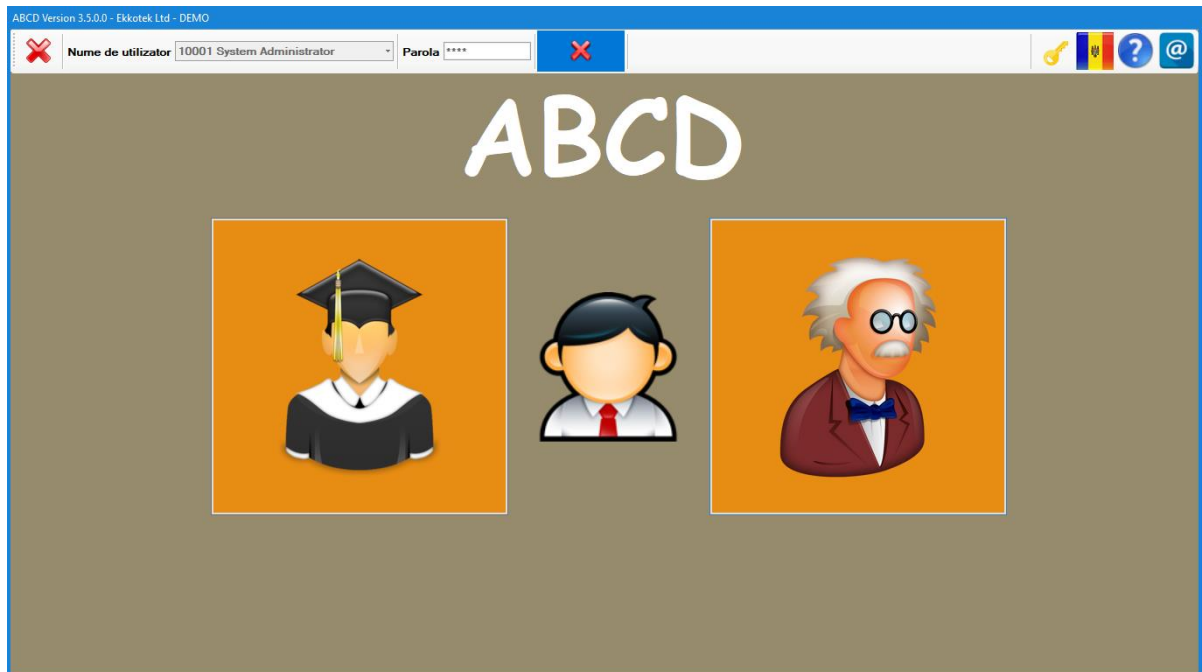
Click on the little arrow next to *Student Login*, select a user's name (students or administrators), enter the password and click on the **Sign In** button (the selected user's personal configuration settings and the desired language will be activated). Students have access to the Activities' Menu, while Administrators have access to the Activities' Menu and the Teacher's Section.

Password: 0000

How to sign out:

To sign out a certain user and sign in using another one, click on the **Sign Out** button on the top of the screen (it will appear only when a user is signed in) and then sign in using another username as previously described.

After logging in, the program navigates to the **Main Screen** which contains the **Main Menu** on the top of the screen and **Activities' Menu/ Teacher's Section** in the middle of the screen.

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Main Menu includes:

- **Exit** button at the left top corner.
- **Student Login** at the left side of the Main Menu (provides details of the signed in user).
- **Sign in/ Sign out buttons** next to the password (signs out the current user and navigates to the previous screen for other users to sign in).
- **Language button** at the top right. Click on the flag to change between Romanian/Russian and English.

- **Help** button at the right top corner. Click on the [?] icon to open ABCD' s manual.

Activities' Menu and **Teacher' Section** buttons are in the middle of the screen.

- **Activities' Menu** button navigates to the *Activities' Menu* and displays all the available activities.

- **Teacher's Section** button navigates to the *Teacher's Section* where the teacher can modify or create content (student records, exercise records) or view students' reports. This is only available when the user is signed in as administrator/teacher.

1. Creați o poză.	2. Găsiți care dintre ele formează sunetul.	3. Cine vorbește?	4. Denumirea A rapidă.	5. Denumirea B rapidă.	6. Selectați pe acel care spune.	7. Faceți click pe o literă
8. Ascultați	9. Apăsați o tastă pe tastatura	10. Ascultați	11. Cine spune. (2)	12. Cine spune. (3)	13. Cine spune. (12)	14. Acesta începe cu?
15. Care dintre ele începe cu?	16. Ele rimează?	17. Care dintre ele nu rimează?	18. Formați cuvântul.	19. Găsiți pronunția corectă.	20. Potriviți cuvântul cu imaginea.	21. Găsiți imaginea.
22. Memorați poziția imaginilor.	23. Priviți imaginea si tastați cuvântul.	24. Care cuvânt creează sunetul lung.	25. Oglindă	26. Găsiți litera care lipsește.	27. Formați propoziția.	IRLEN Test

ABCD Version 3.5.0.0 - Ekkotek Ltd   10001 System Administrator

The **Activities' Menu button** in the previous screen navigates here on the above screen, where all the activities are listed. The user just clicks on the desired activity to launch it. The program contains various activity types and the teacher can create new exercises (under activities) even new activities.

How to work on an activity:

When entering an activity, in most cases the screen will appear blank. To begin:

- Place the cursor on the top of the screen (where the Main Menu should be)

The **Main Menu** will appear (it might be different from the one shown below depending on each activity*****):
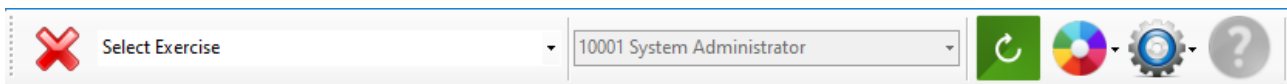
- Click on the arrow to the right of the **Select Exercise box** and
- Select one of the available exercises and follow the audio instructions.

The user has the option to enable/disable all or any of the following: Sound, Picture, Animation, Text, and Scanning by clicking on the appropriate button from the activity's main menu. The functions that might be available in each activity are described below:
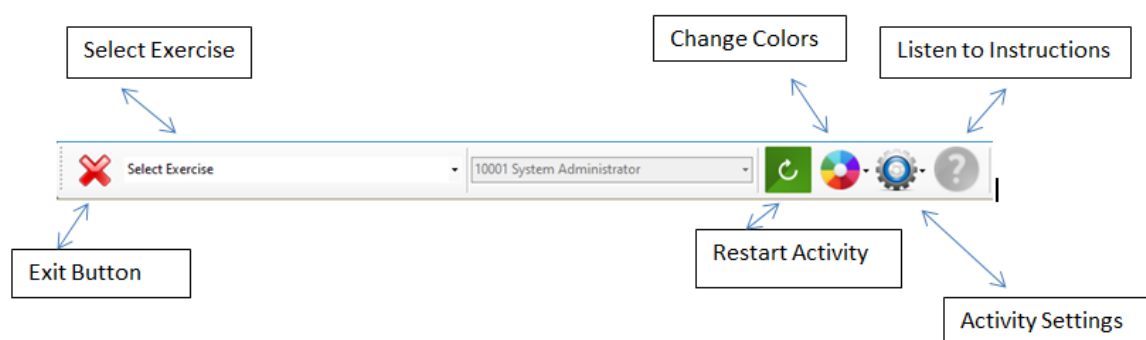
DESCRIPTION OF THE ACTIVITIES:

Remember that to see the Main Menu you have to move your mouse toward the top of the screen. There is feedback and reward on almost all Activities. You can see the score on the right top corner if you move the mouse towards the top of the screen.

Activity 1: Create a picture

This activity promotes language development through dialog. The user creates a scene with various animations, in order to create a story for the scene by just pressing space bar.
The user has to follow three steps:

- Select a background picture. There are more than 80 backgrounds to choose from.
- Add animations.
- Save a scene, for future access.

Step 1: Select a background photo.

- Click on the left or right orange navigation buttons, (they will become visible if you move mouse over them), at the bottom of the screen to navigate through the available background photos.
- The program comes with various background photos, but if you need to add your own photos, just copy/paste images in the installation folder:
  - C:\Users\USERNAME\AppData\Local\ABCD\Backgrounds

Step 2: Add animations.

- Press the space bar and an animation will appear.
- Click on the animation and an edit box will appear around it. Click on the left and right arrows of the edit box to select the desired animation. Click on the top white border of the edit box and drag the animation anywhere on the screen. Place the cursor around the edit box to show the resize arrows and resize accordingly.
- When you finish editing the animation, click on an empty area on the background photo to exit the animation edit box. This will save the current

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animation. To edit an existing animation again, click on it to show the edit box.
- Press the space bar again to add new animations and follow the same procedure.
- If you need to delete all animations (clear the scene), click on the eraser button.

Step 3: Save the current scene.

- Once your scene is completed just click on the save button. A number will be added to the list in the middle, indicating the saved scenes. You can click on each number to load a scene or use the blue navigation buttons to navigate through the list. You can delete a scene also.

Activity 2: Find which one makes the sound.

Four pictures are displayed, and a sound/sound effect is playing. The student has to click on the picture that corresponds to that sound.

Activity 3: Who is talking?

Four pictures of different persons are displayed, and a voice is playing. The student has to click on the person/s who is talking.

Activity 4: Rapid Naming A.

A picture is displayed, the first letter of the picture and audio of that letter (phoneme), then the whole word is displayed and audio for that word and then a sentence is displayed and audio of the sentence. For example, for the word *ball*, first we see the letter *b* and hear its sound, then we see and hear the word *ball* and then we see and hear the sentence *Roll the ball*. Then, the activity advances automatically to the next image.

Activity 5: Rapid Naming B.

This activity is the same as Rapid Naming A, but this time the images don't advance automatically. The student has to press the appropriate navigation buttons which appear at the right or left side of the picture.

Activity 6: Select the one that says? (2)

The user has to select the correct picture.

Activity 7: Which one says? (3)

Three pictures are displayed and the sound for one of them is playing. The user has to select the correct picture.

Activity 8: Does this start with?

This is a true or false exercise. A picture is displayed, and a letter sound is playing. The user has to decide if the picture's name starts with that sound.

Activity 9: Which one starts with?

Three pictures are displayed and the initial sound of one of them is playing. The user has to select the picture starting with the sound he heard.

Activity 10: Do they rhyme?

This is a true or false exercise. Two pictures are displayed, and the user has to decide if they rhyme.

Activity 11: Which one does not rhyme?

1. Four pictures are displayed, three of them rhyme together and one doesn't. The user has to select the one which doesn't rhyme with the rest.
2. Select the one that says…
   A letter sound plays and then letters of the alphabet display in a row. The user has to click on the letter which makes that sound.

3. Build the word
   One picture is displayed and an anagram of its caption, while the user can listen to the word. Then he has to type the letters in the correct order to form the word.

4. Find the correct spelling

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One picture is displayed, and the user can listen to its caption. Below the picture there are four different spellings for the word displayed in the picture and the user has to select the correct one.

5. **Match word and picture**
   Four pictures and four words are displayed. The user has to match each word to the appropriate picture.

6. **Which one says? (12)**
   Twelve pictures are displayed and the sound for one of them is playing. The user has to select the correct picture.

7. **Find the picture**
   The user hears a word and then sees different pictures appearing one by one on the screen. The user has to click on the correct picture.

8. **Match picture with picture**
   Two columns of four pictures in each column are displayed and the user has to match the pictures of the right column to the relevant pictures of the left column.

9. **Memorize the position of the pictures**
   Four pictures are displayed for some seconds and then the pictures disappear and reappear on the screen. The student has to drag the pictures and place them to their original position (same sequence).

10. **Look at the picture and type the word**
    One picture is displayed, and the student can listen to its caption. Then he has to click on the available on-screen keyboard and type the word he has listened to.

11. **Which word makes the long sound?**
    Two pictures are displayed on the screen and their sound is playing. The student has to select the one that has the longer sound.

12. **Mirror**
    A webcam is required for this exercise. The user clicks on the Start Webcam button and presses the play button. One sound is playing and a video of a mouth while saying that sound is displayed. The user has to repeat that sound while viewing himself in the webcam. By placing the mouse on the left of the media player, a list displays were the user can select the video/sound he wants to practice.

13. Find the missing grapheme
One picture is displayed, its sound is playing, and its caption is shown below with one grapheme missing. The user has to select the correct one, between four available graphemes.

14. Learn the alphabet/keyboard
This exercise helps students learn the alphabet. The user clicks on a letter on the available on-screen keyboard and listens to the letter sound, sees a picture starting with that letter with its caption and listens to the word and a sentence containing that word.

15. Listen/watch and find the letter
One picture is displayed. The user can hear sound and view captions for its initial sound, word and sentence and then has to click on the initial letter on the on-screen keyboard.

16. Press a button on the keyboard, listen and watch
This exercise helps students learn the alphabet. The user clicks on a letter on the keyboard and listens to the letter sound, sees a picture starting with that letter with its caption and listens to the word and a sentence containing that word.

17. Listen, watch and find the letter on the keyboard
One picture is displayed. The user can hear sound and view captions for its initial sound, word and sentence and then has to click on the initial letter on the keyboard.

18. IRLEN button
IRLEN is a visual perceptual disorder: neurologically based, not a vision problem, which is not identified by standardized tests. Irlen is affecting equally males and females and it affects 12%-14% of general population. It has been found that Irlen affects almost 46% of those with specific learning disabilities (DYSLEXIA) and reading problems. Symptoms fall into two categories: Distortions-Physical symptoms. Click here to find about IRLEN's symptoms.

The **Teacher Form** in the previous screen navigates here, where the teacher can create records for new users, new content and student reports.

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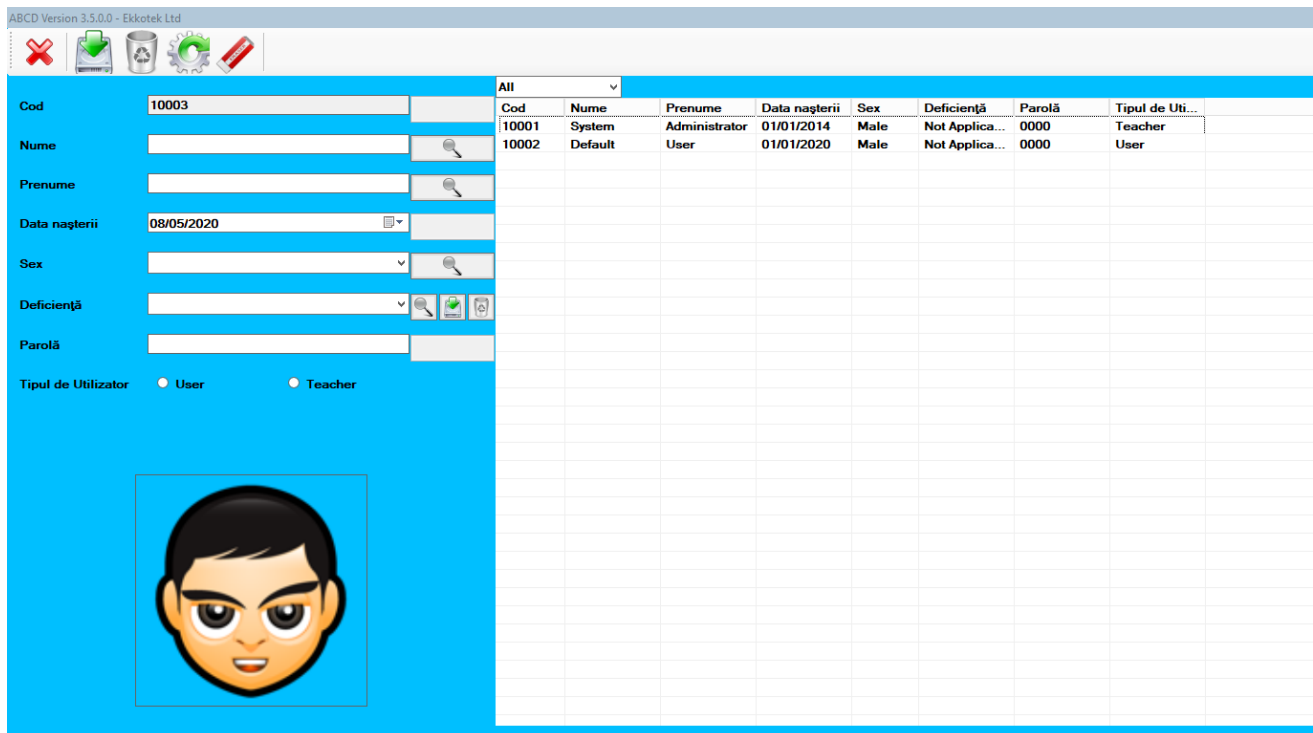
The **Main Menu** consists of four buttons on this screen:

<u>Teacher's Screen:</u>
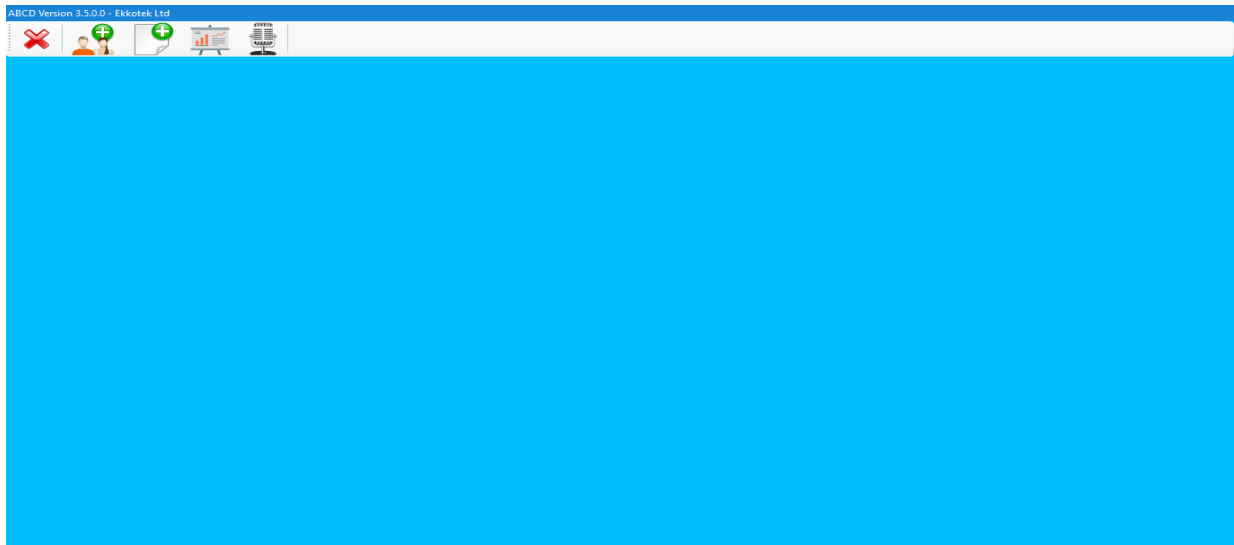
1. **Back:** Goes back to the previous screen.
2. **User registration:** A screen where the teacher/administrator can register new users or edit the existing ones.
3. **Content creation:** The teacher/administrator creates new exercise or edits the existing ones.
4. **Reports:** Shows reports of students' progress.
5. **Record instructions:** The teacher/administrator records new instructions to replace the ones included in the program (each exercise can have its own instruction). In this way many more Activities can be created.

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User Registration:

Here, the teacher/administrator can create new user records (students or teachers/administrators) or view and edit the existing ones.

To add a new user record:

1. When entering User Registration Screen, a new record code will automatically appear in the code field in the **User Registration Form**.
2. Fill in the rest of the form with the new user's details, such as name, surname, date of birth, gender, disability***** and password, click on the avatar to browse for a user photo and click on the appropriate field for teacher or student.
3. When you finish adding all the user details click on the 📷 button to save the user's record.
4. If you need to reset the form, click on the 🧹 button to clear all the fields.

* To **add a new disability**, type its name in the disabilities box and click on the plus button to its right to save it. To **delete a disability**, select it from the list and click the minus button.

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To search for existing users:

1. When entering User Registration screen, all available users appear in the **User List**. The user can select to view **All Users, Only Students or Only Teachers** by clicking on the drop-down arrow on top of the list.
2. You can search a user by name, surname, gender or disability. Type in the appropriate field and click on the search button next it in the User Registration Form.
3. Users who meet the search criteria will appear in the User List.

To edit/delete an existing user:

1. Search for the user first (like described above) and then click on his/her name in the User List. The user's details will appear on the User Registration Form. You can then edit or delete the selected user.
   a. **Edit the user** by changing the appropriate form field(s) and click on the button to save the changes.
   b. **Delete the user** by clicking on the button at the left of the User Registration Form.

In this screen the teacher/administrator can create or edit content (records or exercises).

A **record** contains a unique record code, a letter, a word, a sentence, a letter sound, a word sound, a sentence sound and a picture. To create a new record the user has to complete all the above.

The **Central List** contains all the records of the selected language. The user can sort the list alphabetically by code, letter, word or sentence by clicking on the appropriate field title.

An **exercise** is a list of specific records. The contents of the selected exercise appear in the **Exercise Contents**.

The screen is divided in four sections: Content Form, Central List, Transfer Options and Exercise Contents.

To create a new record (Content Form):

1. When entering Teacher Form Screen a new record code will automatically appear in the code field. *You need to fill in all the fields in the Content Form filled with purple background.*
2. Type in all the fields in the left column.
3. For the fields in the right column you can select sounds and pictures from the program's list or import/record new ones.

a. To **select sound/picture from the list**, click on the corresponding field's box and click on a sound/picture from the drop-down list to preview it. Double click it to add it to the field. You can also preview a sound after you add it in a field by clicking on each field's 🔘 button. Pictures preview is shown automatically to the left of the controls. To remove a sound/picture click on the corresponding 🖊 button.

b. To **import new sounds or pictures**, click on the 📥 button next to the fields *Letter Sound or Picture* to add new sounds or pictures to the lists. Locate the desired file (wav for sounds and gif, png, jpg for pictures) and click **Open.** The new file is now imported into the list.

c. To **record a sound** click on the 🎤 button next to the field *Letter Sound*.

Type in a name for the recording and click on the [ ] button

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in the open dialog box. Speak in the microphone and click on the button when you finish. Click on the button to preview your recording.

d. To **record a sound,** click on the button next to the field *Letter Sound*.

Type in a name for the recording and click on the button in the open dialog box. Speak in the microphone and click on the button when you finish. Click on the button to preview your recording.

Click on the button to close the dialog box. The recording is now imported into the sounds list.

4. Click on the button. The new record is added to the Central List.
5. If you need to reset the form click on the button from the Controls to clear all the fields.

To edit/delete a record from the central list:

1. Select the record you want to update from the central list. The record's fields will be displayed in the form on the top of the screen.
a) To **delete** the record, click the button from the controls.
b) To **edit** the record, change the fields you want and then click the button from the controls.

To print a list of all the records:

1. On the top left of the Central list you can select the **PRINTER** button to export the list contents in an excel spreadsheet and print it.

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To create a new exercise

(The user can create new exercises for each of the activity types included in the Activities Menu):

1. Click on the arrow next to **Activity Type** and select the appropriate activity from the drop-down list (they correspond to the activities shown in the Activities Menu).
2. Click the [icon] button next to the field **Exercises**
3. A dialog box will appear. Type the name of the new exercise in the box and click **OK**.
4. Click on the **Exercises** field and a list will be displayed with all the available exercises. Scroll down and find the newly created exercise and double click on it. The exercise file name will now appear as a title in the **Exercise Contents**.
5. The program will provide additional help in the **Transfer Options**, in the box above the green transfer arrow [icon]. It will indicate any limits in the number of record each activity might have, if records need to be grouped as sets, or if you need to select the correct answer.
6. Select records from the Central list (you can select multiple records by having the Ctrl key on the keyboard pressed) and then click on the [icon] button in the middle of the screen to transfer the selected records into that exercise. You will notice the selected records now appear in the Exercise Contents.
7. If you are creating new exercises for activity types no 10, 11 and 21, you must indicate the correct answers by clicking on the appropriate records in the Exercise Contents and then click on the red box next to the picture field in the Content Form, in order to display a check mark.

To edit/delete contents from an exercise

1. Click on the **Exercises** field and scroll down to find the exercise you wish to edit and double click on it. The exercise file name will now appear as a title in the **Exercise Contents**.
2. To delete a record from that exercise, select it from the Exercise Contents and click the [icon] button on top of the Exercise Contents.

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3. To add a new record, select it from the Central List and click on the green transfer arrow ➡.

To edit/delete a whole exercise:

1. Click on the **Exercises** field and a list will be displayed with all the available exercises. Scroll down and double click on the exercise you wish to edit/delete.
   a) To **edit the exercise,** add or remove records as described in steps 6 and 7 above.
   b) To **delete the exercise**, Click the ▬ button next to the Exercises field and click **Yes** in the following confirmation dialog box.

To clone an exercise

1. Click on the **Exercises** field and a list will be displayed with all the available exercises. Scroll down and double click on the exercise you wish to duplicate.
2. Click on the arrow next to **Activity Type** and select the activity type you want to create from the drop-down list.
3. Click on the 📄 button next to the Exercises field.
4. Enter the name of the new exercise in the dialog box and click **Ok**.
5. The new exercise has been created. Click on the **Exercises** field, scroll down and double click on the exercise you just created to view or edit its contents.

To print the Exercise Contents, or backup/restore an exercise:

1. On the top left of the Exercise Contents you can select the **PRINTER** button to export the Exercise Contents in an excel spreadsheet and print them.
2. On the top right of the Exercise Contents you can select the **IMPORT/EXPORT** buttons to import saved exercises or export (save) an exercise for backup.

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Please note that the records shown in the Exercise Contents are clones of the records in the Central List. If you make any change to a record in the Central List, the record won't change in the existing exercises. You will either have to delete the record and add it again or update it through the Exercise Contents.

To update a record used in an exercise

1. Click on the **Exercises** field and a list will be displayed with all the available exercises. Scroll down and double click on the exercise you wish edit.
2. Select the record you want to edit from the **Exercise Contents**
3. Change the image or sound for that record from the Content Form
4. Click on the ⟳ button on the top of the **Exercise Contents** menu
5. The record has now been updated for the selected exercise only.

Reports Screen:

In this screen the teacher/administrator can create reports for his/her students. The screen is divided in three sections: User Form, Report Section and User List.

To create a new report:

1. Select the user you need to create a report for from the list on the right of the screen (or fill in the User form to search for a user).
2. Go to the Report section and select an exercise type if you need reports for a specific exercise (optional – you can skip this step and search for all the reports for the current student)
3. Click the search button to find reports.
4. Reports will appear in the blank space underneath of the Report section. Select the one you need and click the Print icon to export the report to an excel spreadsheet.

Please note that Report's section is currently under development and it's not working.
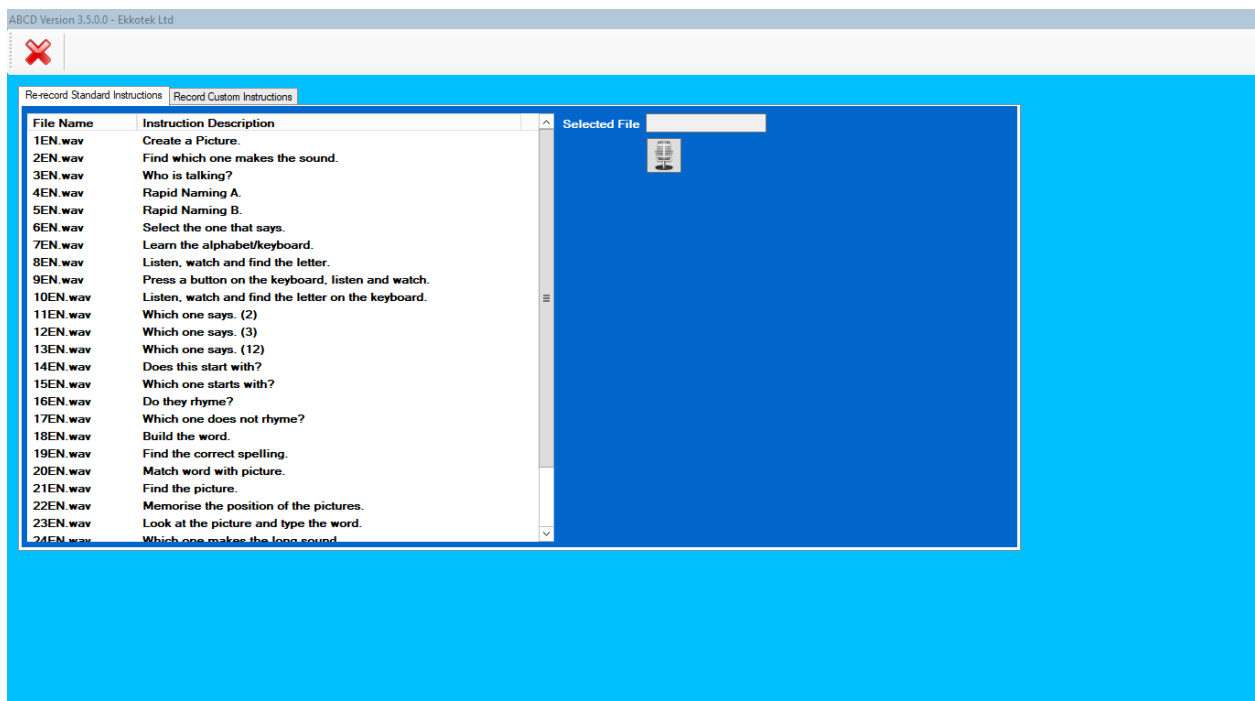
Record Instructions:

This screen is divided in two tabs, **Re-record standard instructions** and **Record Custom Instructions.** The teacher/administrator can record new instructions for each activity type to replace the ones included in the program (1st tab) or record custom instructions for each exercise (2nd tab), so that we can create various exercises (ex. Which word begins with A?, Which word includes an A?, Which word ends with A?, Which word doesn't include an A?, Which word has more than one syllables?, Which word is spelled correctly?, etc.).

To re-record standard instructions:

1. Click on the appropriate tab.
2. Select the instruction you want to replace from the list on the left. By clicking on the files you can preview the instructions. Only instructions of the selected language will be displayed.

3. Click   the button. Speak into the computer's microphone.
4. Click the   button when you finish.
5. Click the   button to preview your recording.
6. The instruction has now been replaced.

* Please note that this procedure deletes the program's default instructions and it cannot be undone. You should keep a backup of the default instructions by creating a copy of the folder C:\Users\USERNAME\AppData\Local\ABCD\Instructions in case you ever need them again.

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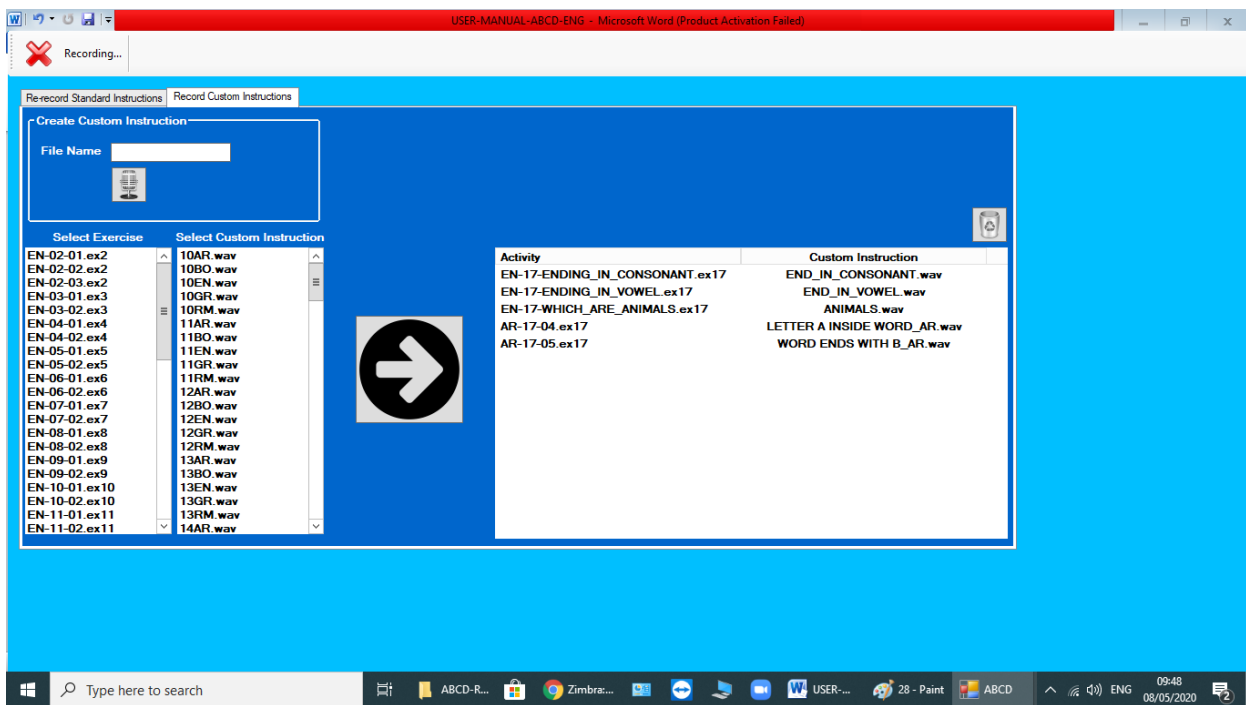
To record custom instructions:

1. Click on the appropriate tab.
2. Record a new instructions if necessary
   a. Type a name for the instruction you want to record.
   b. Click the ![mic] button.
   c. Speak into the computer's microphone.
   d. Click the ![stop] button when you finish.
   e. Click the ![play] button to preview your recording.
   f. The instruction has now been saved in the Custom Instructions list.
3. Select the exercise you want to change its instruction from the first list.
4. Select the instruction you want to add to the exercise from the second list.
5. Click on the green arrow. The exercise will be added to the third list (all the exercises with custom instructions are shown there).

* If you want to change an instruction for an exercise you already added to the third list, first select the exercise and then click on the delete button. Exercises not displayed in that list will play the program's default instructions.

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