These "Bite-sized" Training Program guides are designed to help Lifelites Volunteers and champions to train and support hospice staff on the use of the magical Lifelites equipment in small bite-sized chunks.

Introduction to the PC Eye Explore - Software

1. **Introduction – checking previous knowledge**

   Begin the session by checking if your trainees have used a PC Eye Explore or any eye tracking system before.

2. **Explain the benefits**
   - The PCEye Explore is an entry level, peripheral eye tracker that opens up the wonderful world of gaze interaction to everyone.
   - It allows users to navigate and control a desktop or laptop computer using only their eyes.
   - The PCEye explore only allows you to move around the screen and left click with the mouse.
   - Its high accuracy, precision and robustness make the PCEye Explore ideal for environments with different users. It can track most individuals, regardless of glasses, contacts lenses or dark or light pupils and supports multiple user profiles.

3. **Basic operation**
   - Show that the PCEye Explore is mounted on a magnetic strip on the PC/laptop/tablet device.
   - Show that that the indentation on the strip matches the centre of the eyegaze unit.
   - Demonstrate that the Eyegaze unit is connected via a cable on the end of the unit to the USB port of the PC/Laptop/tablet device. Explain that the weight of the cable can sometimes cause an issue so it is best that the cable is supported either by it resting over the top of the tablet or over the tablet mount.
   - Open the Gaze point software by clicking on the red eye icon

   Show that once this software is open then the three lights on the front of the Eyegaze unit will illuminate, if they are crosses (X) then the unit has not detected any eyes. The Eyegaze settings screen will open

Figure 5.3. Gaze Point Controller

- Explain the first button enables the Eyegaze to be started or paused. The light blue box enables the mouse cursor to be viewed or hidden, the dark blue box turns on or off the left mouse click function and the grey box is access to the settings page.

- Show the discreet Eye Detection Indicator visual [• •] in the bottom middle of the display showing if the PCEye Explore has detected the user's eyes. Explain that this can be used a very simple position guide. The icon can be altered from a two eye display as above, as a static display [👁] or can be turned off using the drop down list.

  If Eyes are detected then the indicator will show [• •], if no eyes are detected the indicator will show [✕ ✕]. If using a Static display then if eyes are detected the indicator will show [👁], if no eyes are detected the indicator will show [👁]

- Correctly position the screen so it is parallel to the users head (moving the screen rather than the user for comfort). You ideally want the user's eyes in the middle of the screen and parallel to it.

- Demonstrate that from the settings page you can change keyboard shortcuts and dwell time.

4. **Play some games and apps**

Choose a simple application such as Sensory Eye-FX and open the 'no fail' games to illustrate the eye gaze user experience. Choose higher level 'targeting' games to illustrate the experience pre-calibration.
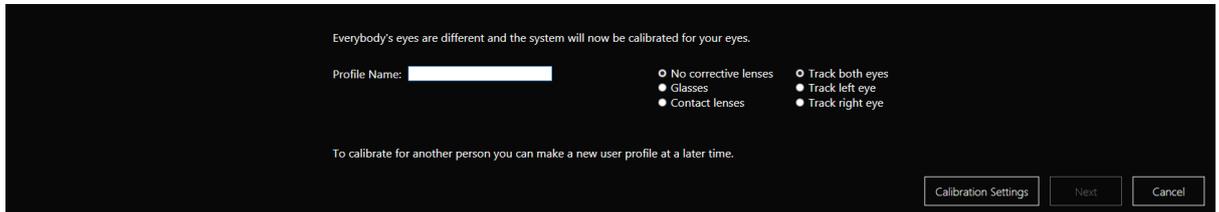
Explain that some common problems with use can be reflections on the screens, reflections from very dark framed glasses or perhaps sequins, light room conditions. Discuss the need for minimal distractions and also the portable nature of the system so it can go to a bedroom or quiet area for use.

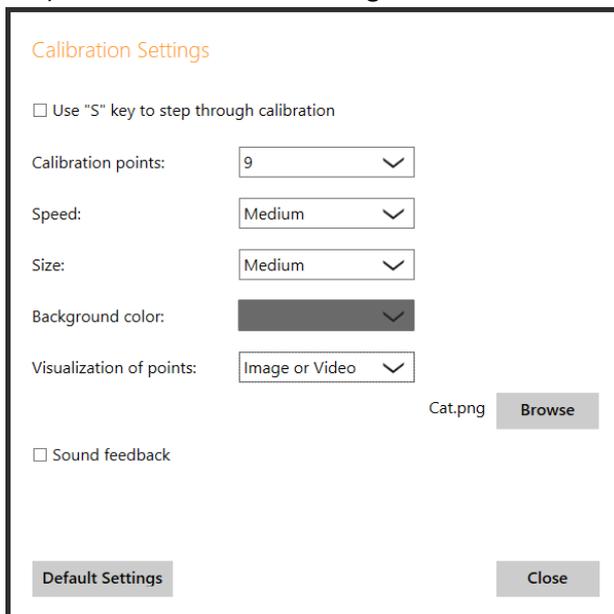5. **Calibration for specific users**
   - Go back to the settings page and go the Eye Tracker page. New users can be added by selecting the Add button [+]. This will open the new Profile dialog will open. You can now

name your profile, indicate if the user has any corrective lenses and if you would like to track one eye (either left or right) or both eyes.

Everybody's eyes are different and the system will now be calibrated for your eyes.

Profile Name: [   ]

○ No corrective lenses   ○ Track both eyes
● Glasses   ● Track left eye
● Contact lenses   ● Track right eye

To calibrate for another person you can make a new user profile at a later time.

[Calibration Settings] [Next] [Cancel]

- Go to 'Calibration Settings'. This will allow you to select how many calibration points you require, the speed of the calibration, size and type of visualisation points (image/video or dot). Click close once all settings have been chosen.

Calibration Settings

☐ Use "S" key to step through calibration

Calibration points: [9   ▼]

Speed: [Medium   ▼]

Size: [Medium   ▼]

Background color: [▼]

Visualization of points: [Image or Video ▼]

                       Cat.png   [Browse]

☐ Sound feedback

[Default Settings]   [Close]

- Click 'Next' to activate the calibration process. If you want to recalibrate an existing profile click 'Test Eye Tracking'. Ensure there are minimal distractions and that other observers are stood back from the screen to prevent reflections or distractions. The software will indicate a successful calibration.

6. **Calibrate a user and play some games**

   Choose a simple application again such as Sensory Eye-FX and open the 'targeting' games to illustrate the eye gaze user experience now they have been calibrated to the system

   Allow other users to calibrate a profile and go through the process.