

Shared sessions in SPARKvue

SPARKvue is Pasco's application for collecting and analysing data from the company's sensors. It is not as powerful as their Capstone software but is free for IOS, Android and Chrome OS. Versions are also available for PC and Mac operating systems, at a cost.

SPARKvue can be downloaded from <https://www.pasco.com/downloads/sparkvue> as well as from the relevant Apple, Google or Chrome App stores.

SPARKvue can also collect and display data from a device's internal sensors, such as the accelerometers and microphones in a phone or tablet.

Sharing your SPARKvue experiment results with learners remotely

This document and two accompanying videos [1] cover sharing data within SPARKvue to other users. This can be done remotely, over the internet, and all users do not need to be connected to the same network: e.g. the teacher can be in their lab, and all learner users can be in their respective homes. This is a powerful sharing tool that is ideal for use in a remote teaching/lockdown situation which can be used to share model data and data collection techniques with your class.

1) Collect some data in SPARKvue (or start collecting more data once the shared session is established).

Once data collection is complete tap **Menu** (three horizontal bars top left of screen) then **Shared Session**, see Figure 1. It is also possible to share the data from some sensors live as it is being recorded.

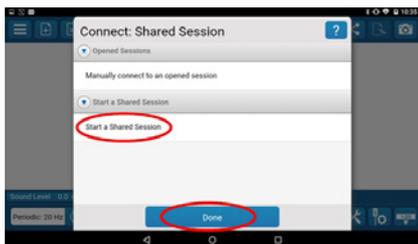


Figure 2

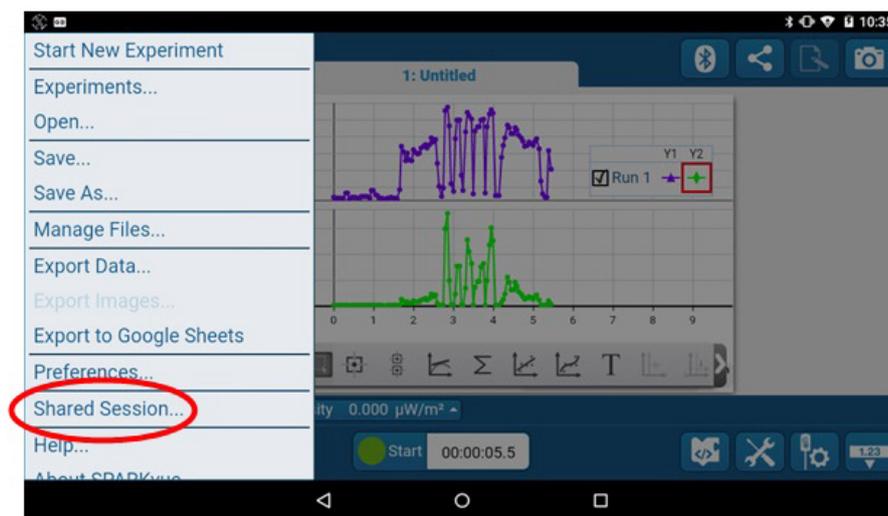


Figure 1 - Tap Shared Session.

This will give you two options: to Manually connect to an opened session, or to Start a Shared Session. The option you select will depend on whether you are the teacher, or a learner user.

This next part assumes you are the teacher and wish to share results that you have collected with your learners.

Click **Start a Shared Session** then **Done**, see Figure 2.

Enter your Name then enter the name you wish to give the session (make sure that this is easy for learners to enter), see Figure 3.

You are asked if you'd like to run a guided session: a guided session is where learners can follow what you're doing on their screens, but all buttons are unresponsive to them. This means that they will not be able to change or edit your work until you switch this mode off. An unguided

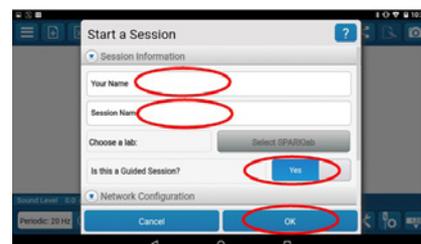


Figure 3

session is where learners can follow what you're doing, and the buttons on their devices remain active. As soon as they tap their screens, they will log out of your shared session and they can continue independently on their own devices.

In this example we will run a guided session, so ensure this option is labelled as **Yes**.

Leave the Server address and the Port numbers at their default values, then tap **OK**. >>

Once your shared session is established, your screen will have a new panel on the right showing connected users. As learner users connect to your session, you will have the option to approve or block using the green and red icons respectively. There is also an option to **Approve All**, see Figure 4.



Figure 4

Once approved, users are moved into the 'Connected Users' area of the screen, see Figure 5.



Figure 5

To end the session, **press the disconnect icon** then **OK** to confirm, see Figure 6.



Figure 6

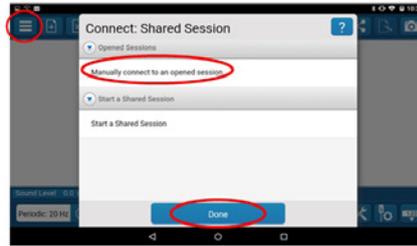


Figure 7

For the learner users, see Figure 7. Instruct them to:

- Open the SPARKvue App.
- Tap the **Menu**.
- Tap **Manually connect to an opened session** then **Done**.

Type their own name into the name field, see Figure 8.

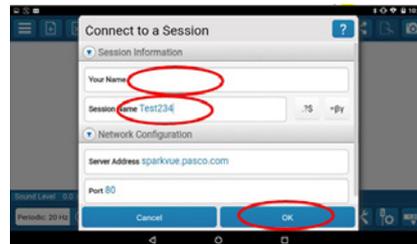


Figure 8

Enter the name of the session, as given by the teacher. In this example, the session name is Test234.

Leave the Server address and the Port numbers at their default values, then tap **OK**.

Whilst awaiting approval to join the session they will see an on-screen notification.

Once you have approved the user they will see a copy of your screen, see Figure 9.



Figure 9

If, at any point, you refer to the graphs it is best to refer to run1, run2 etc. and not to the colour of the trace as the trace colours vary across connected devices.

When the user has been disconnected from the shared session they still have their own copy of the data on screen to analyse, see Figure 10. <<<



Figure 10

References

- [1] We have two how-to videos that accompany this document:
- One from the perspective of the person creating a shared session at <https://www.youtube.com/watch?v=MjQ1-MBPLss>
 - One from the perspective of a learner joining an already created session at <https://www.youtube.com/watch?v=7XV5UlrIjc>