

CPS DELIVERY IN A CLASSROOM

Delivery Setting Requirements

The CPS response system is for use in classroom settings only. You must have:

- The CPS response system that accompanied the software. The **CPS response system** has up to 32 response pads and its default roster initially recognizes 32 students, identified as student 1 through student 32.
- One open serial port on the back panel of your system.

Introduction

A **CPS response system** enables students to provide electronic feedback to questions in the classroom. This feedback, sometimes referred to as **performance data**, is then collected in a CPS database and can be accessed later for evaluation purposes. The performance results represent students' answers to questions from the lesson and ad hoc questions asked while the response system is in use.

CPS RESPONSE SYSTEM

The CPS response system consists of response pads and a coordinating receiver unit. With the CPS response system, responses are transmitted from each uniquely numbered pad, recorded by the receiver unit and automatically attributed to the corresponding response pad number listed in the roster.

This section explains:

- CPS Response System Use In The Classroom
- Lesson Delivery Options
- Troubleshooting

Response System Setup

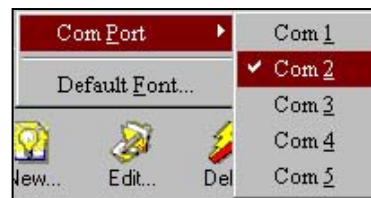
CPS Receiver Unit

The CPS receiver unit is a singular component. It is plugged into one serial (or communication) port on the back of your system. Most computers have 2 serial ports, while some do have more. Occasionally, a mouse or other navigational accessory already occupies one of the ports. If that is the case then use the second port.

1. Remove the receiver unit from the box. One end of the white PC connection cable is permanently attached to the receiver unit and the other is a 9 pin serial connector.
2. You might need a 9 to 25 pin serial adapter to connect the PC cable 9 pin serial connector to the 25 pin com port on the back of your computer.
3. Attach the receiver unit to one of the serial ports on your system.
4. Your PC is now connected to an active receiver unit with response pads ready to communicate with you in a real-time mode.

To change the communication port that your Response System is attached to, follow these steps:

1. Start CPS.
2. Click the **Settings** menu item.
3. Click the **Com Port** command. A drop-down list is activated.
4. From the drop-down list any of the available Com ports. often you will want to choose either Com 1 or Com 2.
5. The first time you deliver a lesson, the Com port and the receiver unit will start communicating, and your receiver unit receiving data.



Most

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If you deliver a lesson and the receiver unit does not seem to be receiving responses from the pads, then see **Troubleshooting Response System** for some ideas.

CPS Response System Use

When you use the CPS response system during a lesson delivery, each student or team of students should be assigned a uniquely numbered CPS response pad. There is a default roster for the CPS response system, which recognizes 32 students, identified as student 1 through student 32. But you can create your own customized roster from Roster tab. Responses transmitted from the response pads are attributed to the student number that coordinates to the numbered CPS response pad in use.

Response Cycle Options

The **response cycle** is the duration of time that students can respond with their pads. The cycle begins when the instructor clicks the **Start** button (or it can autostart if that option is selected; see **Autostart Option** for instructions about autostart) and ends when the Instructor clicks the **End** button. Each of the following response cycle options is available from the Results menu item on the CPS Engage taskbar.

The On-Screen Numbers

As students are responding to the questions, onscreen numbers that coordinate to each response pad in use change colors to indicate when the response pads transmit to the receiver unit. The onscreen numbers that coordinate to pads assigned in the roster are white when the response cycle starts. When a numbered response is transmitted to the receiver unit, the coordinating onscreen number will flash black. Then depending on the status of the Hide/Show option, the coordinating response pad numbers will turn and stay blue, or just flash black.

See **Show Pads that Have Responded Option** for more details and instructions.



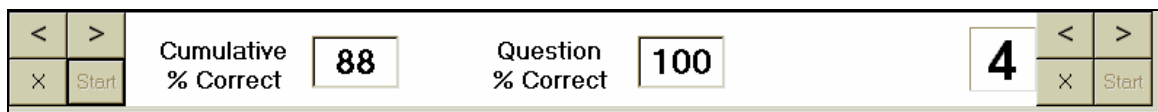
Response Cycle Window During Response Cycle

You can adjust what information appears during and after a response cycle by using the Results menu item from the CPS taskbar.



Show Feedback

When a response cycle is complete and the instructor clicks the End button, immediate feedback of question results are displayed.



Response Cycle Window with Student Feedback Performance Results

But this option can be turned off so that feedback results are not displayed. To disable the student feedback results, do this:

1. Start a CPS lesson delivery.
2. When the CPS taskbar appears, click the **Results** menu item.
3. Select the **Show Feedback** command to remove the check from beside it.
4. Now, feedback results will not appear onscreen when the response cycle ends.
5. To reactivate the feedback option, go to step 3 and select the **Show Feedback** command again so that there is a checkmark beside it.

Show Pads that Have Responded (Hide/Show)

The **Show Pads that Have Responded** option alters the onscreen appearance of the response pad numbers during the response cycle. By default, the option is set to *show* the highlighted numbers during the response cycle. When the

option to *show pads* is on, during the response cycle the coordinating response pad number will flash and then turn blue, and stay highlighted as an indication that the response pad has responded at least once. Also, when the option to *show pads* is on, the Show/Hide button will display Hide Pads.



Response Cycle Window During Response Cycle

If you would rather the coordinating response pad numbers did not remain highlighted during the response cycle then you can *Hide Pads* by clicking the Hide Pad button or by:

1. Start a CPS lesson delivery.
2. When the CPS taskbar appears, click the **Results** menu item.
3. Select the **Show Pads that have responded** command to remove the check from beside it.
4. Now, during a session, the response pads will not stay highlighted after a response from that coordinating pad is received.
5. To reactivate the show pad option, go to step 3 and select the **Show Pads that have responded** command again so that there is a checkmark beside it.

Changing Answers-Checking Answers with On-screen Pad Numbers

The on-screen pad ID numbers that coordinate to the students' remote pad ID numbers will change colors to indicate different status'. Please review what each color means to understand how the CPS software is receiving their answers:

- BLUE:** When a student answers a question with the remote pad, their Pad ID flashes **BLUE**.
- YELLOW:** If a student changes an answer, the coordinating on-screen pad ID number will flash to **YELLOW**. This means that the answer has been changed to represent their secondary choice.
- GREEN:** If a student answers A then presses A again on their remote pad, the coordinating on-screen pad ID number will flash **GREEN** indicating that the answer he/she just selected was already recorded as their answer choice.
- RED X:** If a question is multiple choice A-E but a student presses the F key on the remote pad (or any other key that is outside of the answer choice range of that question), then a **RED** box and large **X** will flash in the on-screen pad ID number.

Autostart

The autostart option is not active by default so you have to change the setting yourself. A session that does have the autostart option active will automatically go to the response cycle and not give the instructor the Start button at all. To change the default setting to autostart, do this:

1. Start a CPS lesson delivery.
2. When the CPS taskbar appears, click the **Results** menu item.
3. Select the **Autostart the Question** command to place a checkmark beside it.
4. Now, during a session, the response cycle will automatically start when a question appears onscreen.
5. To deactivate the autostart option, go to step 3 and select the **Autostart the Question** command again so that there is no longer a checkmark beside it.

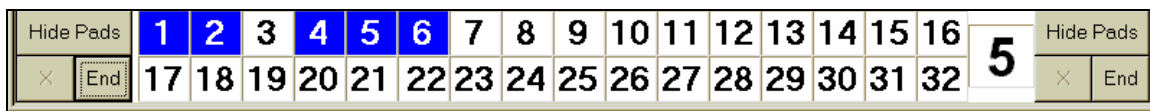
Team Mode

When selected, the Team Mode gives you a new menu item under the **Results** menu. The Team Mode option will figure scores by multiplying the difficulty level of a question times 10.



Show Large Screen

When the Show Large Screen option is on (as a checkmark beside it) and a lesson's question is delivered, you will see the question, the answer options, any images and the response cycle window. If the Show Large Screen option is off, and a lesson's question is delivered, the only thing you will see onscreen is the response cycle window:



This option allows a user to deliver questions verbally or from a non-CPS software application and still record performance feedback.

RESPONSE SYSTEM USE DURING A SESSION

Below are instructions about how to use the response pads in the classroom.

1. Start a lesson delivery session using the **Engage** or **Preview** button from the Lessons tab.
 2. When you get to a question that you want students to answer, click the **Start** button. If you have the autostart option on, each time you go to a new question the response cycle starts automatically.
 3. Notice that the onscreen numbers are black on a white background.
 4. Students or teams press and release the button that represents their desired answer when the onscreen number that corresponds to their pad number flashes, then turns blue. This indicates the **Hide/Show** option is set to *Show* the pad numbers that have answered (the onscreen button will display Hide Pads). If the **Hide/Show** option is set to *Hide* the pads, then when a response is transmitted the coordinating onscreen number will flash black then become white again (the onscreen button will display Show Pads).
 5. If a student or team wants to change their answer, they simply press a different button for the same question and the corresponding onscreen response pad number again flashes black. Only the last response transmitted is associated with the response pad number in the report of results.
- ⚠ **NOTE:** Caution students *not* to press and hold their response pad buttons. If two students or teams respond at exactly the same time, the infrared signals may conflict and consequently disallow both responses. Remind students that the corresponding onscreen response pad number changes color when their response is recorded.
6. The number of responses received by the receiver unit is displayed in the counter box at the bottom of the window.
 7. When you are ready to proceed, click **End**. If there was a **Note** associate with this question, a **Note** button will take the place of the End button. Click the **Note** button to view that now.
 8. If the show feedback option is on, then the results of this questions feedback are displayed as a percentile.
 9. To go on to the next question in the list, use the > button.
 10. To return to a previous question, use the < button.
 11. To quit this delivery session click the **X** button.
 12. Repeat steps 2-7 for each question that you want students or teams to answer.

Lesson delivery Options

Introduction

When you have successfully created your course database, lesson(s), and rosters, you can deliver questions in a classroom with or without the response system. This section guides you through a lesson delivery from start to finish. In this section you will find information and instructions about:

- CPS Taskbar Features
- CPS Session without the Performance Data
- CPS Session with the Performance Data
- CPS Challenge Board with the Performance Data

Start the CPS Software

1. Click the **Start** menu in your Windows taskbar.
2. Click the **Programs** folder.
3. Find the **CPS icon** and click that.

☞ **NOTE:** Each time you start CPS, the software automatically looks for and opens the database you had open when you quit CPS previously. If CPS cannot find that database (it has been moved or renamed), a dialog box will prompt you to Open a database or create a New database. If you get this dialog box click **New** to start a new database, or click **Open** to search for and open a previously created database. Refer to **Creating a New Database** or **Opening an Existing Database** for instructions.

4. This starts CPS. You will see this interface onscreen.



The CPS Interface Displaying a Database with Lessons of Questions

Opening a Database and Lessons

Each time that CPS is started, the database last in use is automatically opened. If the lesson that you want to deliver is in this automatically opened database, then go to step 5.

1. Start CPS.
2. Click the **File** menu item.
3. Click the **Open Database** command.
4. From the **Open CPS Database** dialog box, find and open the database that has the lesson you want to deliver.
5. The lessons in this database are then listed on the **Lessons** tab. From the Lessons tab you can deliver a lesson so that performance data will be saved for later evaluation or not.
 - To find out more about how to deliver a lesson so that the performance data will not be saved go to
 - **CPS Session without Recorded Performance Data.**
 - To find out more about who to deliver a session so that the performance data will be saved for future evaluation, go to **CPS Session with Recorded Performance Data.**
 - To find out about how to deliver a challenge board and record performance data go to **CPS Challenge Boards with the Performance Data.**

CPS Session without Recorded Performance Data (Preview Button)

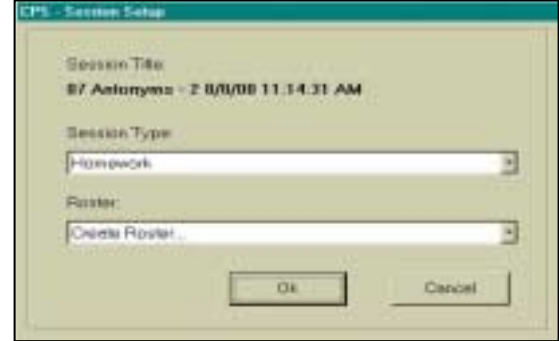
The ability to deliver a lesson to students without performance data being recorded for future evaluation purposes is a great way to introduce students to the system and to class material without any pressure. Once you have started CPS and opened the database that has the lesson you want to deliver, do this:

1. Select the lesson you want to deliver from the Lessons tab.
 2. Click the **Preview** button.
 3. The first question in this lesson appears onscreen automatically.
 4. Click the **Start** button to begin the response cycle.
 - ☞ **NOTE:** If there are graphics in a question that you want to get a better look at (question graphics or answer graphics), you can click once on any image and it will adjust itself to full screen. Click again so that image returns to its original size.
 5. You can adjust the Hide/Show option now so that the coordinating onscreen numbers will or will not stay highlighted.
 6. Allow students time to respond.
 7. Click the **End** button when you are satisfied with the number of responses. If there was a **Note** associate with this question, a **Note** button will take the place of the End button. Click the **Note** button to view that now.
 8. Use the > button to go to the next question.
 9. Use the < button to go to the previous question.
 10. Click the **X** to end the delivery session. The CPS takes you back to the Lessons tab.
 11. Repeat steps 1-10 for as many lessons as you want to deliver this way.
- There is not any performance data recorded and saved for evaluation purposes.

CPS Session with Recorded Performance Data (Engage Button)

The performance data that is generated during a session is valuable information for the instructor. It allows you to see who is and is not comprehending material, who is and is not participating, and provides a grading system for online tests. To deliver a lesson where performance data will be saved, follow these steps:

1. Start CPS.
2. Click the **Lessons** tab.
3. Make sure that the database that has the lesson you want to deliver is open.
4. Select a lesson from the Lessons tab.
5. Click the **Engage** button. The **CPS – Session Setup** dialog box opens.
6. Select the type of session to deliver.

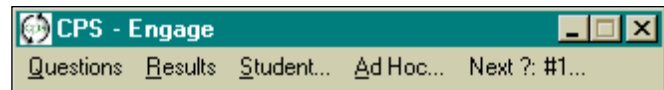


CPS Session Setup Dialog Box

There are 5 session types you can choose from in the first drop-down list:

- **Class participation** - this is integrated with classroom instruction and is designed to engage the students, keeping them on task and identifying problem areas with the instruction.
- **Exam** – use the Exam delivery mode to electronically record previously answered Exam questions.
- **Homework** - designed to grade homework problems that are objective in nature.
- **Pop Quiz** - for assessing preparedness and comprehension of materials you have assigned, yet not necessarily been over in class.
- **Review** - review material you have been over and show comprehension and retention.

7. Select a **Roster** or click the **Create Roster ...** to use the Roster Wizard. Refer to **Roster Wizard** for instruction.
8. Click **OK**.
9. The CPS taskbar appears.



CPS Taskbar Features

The CPS taskbar includes the following menu items:

- **Questions:** Pre-established questions (using the **Creating Lessons** instructions) are available from a drop-down list in sets of 20. See **Use Lesson Questions in a Session** for more information.
- **Results:** Response cycle options like feedback, autostart, hide/show, team mode and show large screen are here. Refer to the coordinating sections in **Response Cycle Options** for information.

The Results menu item also has the **Last Question** command that displays the performance results of the last question asked. This is a convenient function to use when discussing class performance with the class. It displays the student name, the pad ID, and the response of that student.

Student Name	Pad ID	Response
Student 1	1	C
Student 2	2	C
Student 4	4	C
Student 5	5	C
Student 6	6	C

Last Question Performance Results Window

- **Student:** Click on the Student menu item to randomly select a response pad number from your active roster. Then you can call on this student to answer a question verbally in class. This is a great tool to avoid calling on the same people all the time or to keep your students alert to class activity.

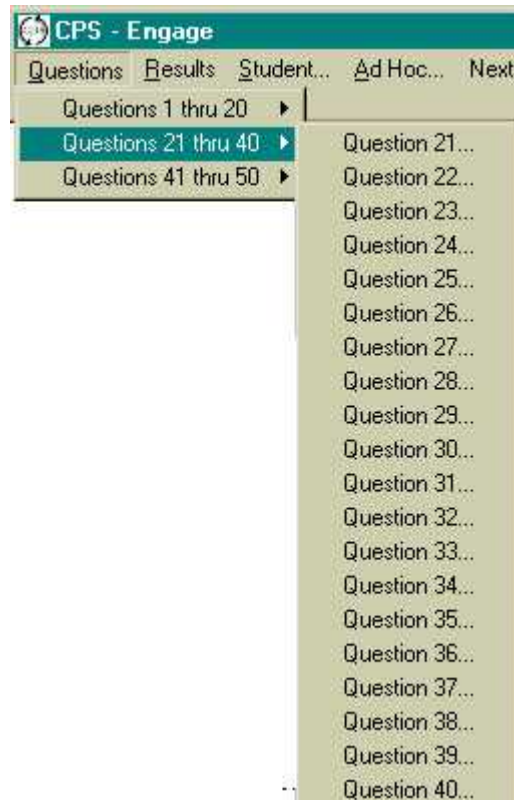
- **Ad Hoc:** You can ask spontaneous questions in class and still record performance data. See **Ask Adhoc Questions** for more information.
- **Next ? #:** This constantly changing menu item indicates which question number is next in chronological order.

Use Lesson Questions in a Session

You can deliver lesson questions from the taskbar to your class or audience using the CPS response system.

1. Click **Questions** menu item on the CPS taskbar.
2. Lesson questions in sets of 20 are listed in a drop-down menu.
3. Select a set and use the arrow to view the individual questions in that set.
4. Select a question. This launches the **Question Delivery** window.
5. If you have the Autostart option selected (from the Results menu item) then question's response cycle will begin immediately.
6. If the Autostart option is not on, then when you are ready to begin the response cycle for this question, click the **Start** button.

NOTE: If there are graphics in a question that you want to get a better look at (question graphics or answer graphics), you can click once on any image and it will adjust itself to full screen. Click again so that image returns to its original size.



7. Notice that the onscreen numbers are white.
8. Students or teams press and release the button that represents their desired answer when the onscreen number that corresponds to their pad number flashes, then turns blue. This indicates the **Hide/Show** option is set to *Show* the pad numbers that have answered (the onscreen button will display Hide Pads). If the **Hide/Show** option is set to *Hide* the pads, then when a response is transmitted the coordinating onscreen number will flash black then become white again (the onscreen button will display Show Pads).
9. If a student or team wants to change their answer, they simply press a different button for the same question and the corresponding onscreen response pad number again flashes black. Only the last response transmitted is associated with the response pad number in the report of results.

NOTE: Caution students *not* to press and hold their response pad buttons. If two students or teams respond at exactly the same time, the infrared signals may conflict and consequently disallow both responses. Remind students that the corresponding onscreen response pad number changes color when their response is recorded.

10. The number of responses received by the receiver unit is displayed in the counter box at the bottom of the window.
11. When you are ready to proceed, click **End**. If there was a **Note** associate with this question, a **Note** button will take the place of the End button. Click the **Note** button to view that now.
12. If the show feedback option is on, then the results of this questions feedback are displayed in a percentile.
13. To go on to the next question in the list, use the > button.
14. To return to a previous question, use the < button.
15. To quit this delivery session click the **X** button.
16. Repeat steps 3-11 for each question that you want students or teams to answer.

Ask Adhoc Questions

You can use the adhoc feature in the same session as pre-established questions or you can conduct a session entirely of adhoc questions.

1. Click the **Ad Hoc** menu item on the CPS taskbar.
 2. An Ad Hoc Question Type dialog box opens.
 3. Choose **Multiple Choice, Yes/No** or **True/False**.
 4. Click **OK**. The Question Delivery window opens.
 5. If you have the Autostart option selected (from the Results menu item) then question's response cycle will begin immediately.
 6. Type in your answer and answer choices (if applicable).
 7. If the Autostart option is not on, then when you are ready to begin the response cycle for this question, click the **Start** button.
 8. Notice that the onscreen numbers are white.
 9. Students or teams press and release the button that represents their desired answer when the onscreen number that corresponds to their pad number flashes, then turns blue. This indicates the **Hide/Show** option is set to *Show* the pad numbers that have answered (the onscreen button will display Hide Pads). If the **Hide/Show** option is set to *Hide* the pads, then when a response is transmitted the coordinating onscreen number will flash black then become white again (the onscreen button will display Show Pads).
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11. The number of responses received by the receiver unit is displayed in the counter box at the bottom of the window.
 12. When you are ready to proceed, click **End**.
 13. The Correct Answer window opens.
 14. Select which answer choice, if any, is correct. The question could be subjective and not have a correct answer.
 15. Click the **OK** button.
 16. If the show feedback option is on, then the results of this questions feedback are displayed in a percentile.
 17. To quit this delivery session click the **X** button.
 18. Repeat steps 3-17 for each ad hoc question that you want students or teams to answer.