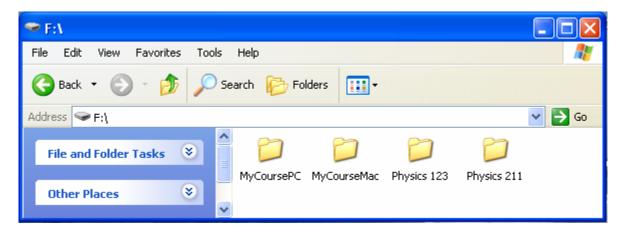
# i>clicker (Windows/PC Application) User Guide

Congratulations on your adoption of **i-clicker**, the easiest-to-use classroom response system available! The following guide will enable you to quickly start using **i-clicker**'s fundamental applications, as well as options to use some of the more advanced software tools.

### 1. Using i>clicker: How to Poll Your Students in Class

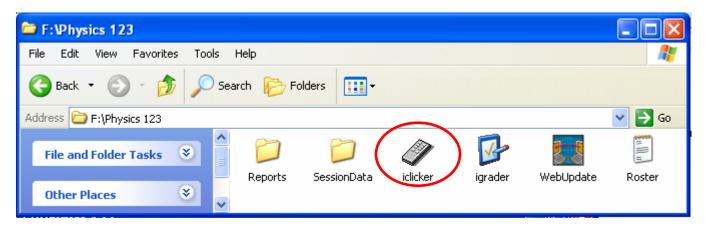
- 1. Connect the **i-clicker** receiver to your computer through the USB port. Your computer will tell you that it has recognized new hardware and inform you when it is ready to use it (this takes a few seconds).
- 2. Place your **i-clicker** flash drive (a.k.a. memory stick or thumb drive) in the USB slot on the back of the receiver. (Your flash drive should arrive with your shipment of the **i-clicker** receiver. If not, contact us at <a href="mailto:support@iclicker.com">support@iclicker.com</a> to request a flash drive.)
- 3. Go to "My Computer." Locate and double-click on the flash drive (often E, F, or H; sometimes called a Removable Disk).
- 4. The flash drive will contain folders called **MyCoursePC and MyCourseMac**. These folders contain course templates and application software for PC and Mac users respectively. You will need to make a **copy** of the appropriate MyCourse folder for each class or section for which you are using **i-clicker** and rename each new folder with the name (or section) of the course. To copy, simply right click either the PC or Mac folder as many times as necessary for the number of courses you are teaching and using **i-clicker**. If you were teaching two sections of Physics, for example, the contents of your flash drive might look like this:



<u>Tip</u>: **i-clicker** software can be copied to another computer (or computers) rather than residing only on your flash drive. For example, many institutions are placing **i-clicker** on the college network drive (or H drive) and a number of individual professors are placing the **i-clicker** software on their laptop computers. However, you must have easy access to wherever your **i-clicker** software resides in lecture so that you are able to fully utilize all of **i-clicker**'s functions when you start polling in class.

**Warning!** You should **not** delete, rename, or modify the **MyCoursePC** or **MyCourseMac** folders – these are templates that you will need if/when you create more courses.

5. Double-click on the folder for the course/section in which you are about to use **i-clicker** and you will see the following:



<u>Tip</u>: You can easily check for new updates to **i-clicker** and **i-grader**. These updates will not override your current course data but will provide you with key functional enhancements to the polling/grading software. We highly recommend you double-click the WebUpdate icon regularly to check for revisions and updates to the software.

6. Double-click the **iclicker** icon to start the **i-clicker** classroom application.

When you open the **i-clicker** application, you will see the following welcome screen (though the version number displayed at the top may be different):

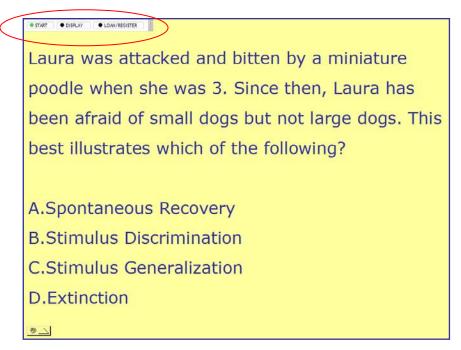


7. Click on **Start Session** in the center of the welcome screen. The welcome screen will disappear and you will see the following floating menu bar appear in the top left corner of your computer desktop. You can move the menu bar anywhere you choose on your desk top.



This menu bar indicates that **i-clicker** is active and running. It allows you to operate **i-clicker** with your presentation application(s). For example, if you use PowerPoint, open a presentation and select "View Slide Show." Both your PowerPoint presentation and the **i-clicker** menu bar will be activated (example below).

<u>Tip:</u> In order to record your question screen shots into **i-grader**, you will need to select a presentation application in addition to **i-clicker**. The screen shot below shows **i-clicker** floating above a PowerPoint slide. It would similarly float above any other application, such as Word, Excel, Mathematica, etc., for example. If you are not worried about capturing the question for later review and points assignment, then you don't need to worry about displaying the question on your screen.



8. Select the **START** button on the menu bar when you are ready to ask students to vote on a question.

On the left, a green timer will appear on the menu bar and timing will start. This indicates polling is now active.



On the right, a counter will display how many students have voted thus far.

<u>Tip:</u> You can easily enable the major functions of **i-clicker** without having to stand near your computer by using the instructor's remote feature. This makes it easy to move around the room and lecture while still using **i-clicker**. See page 26 for instructions on enabling this function.

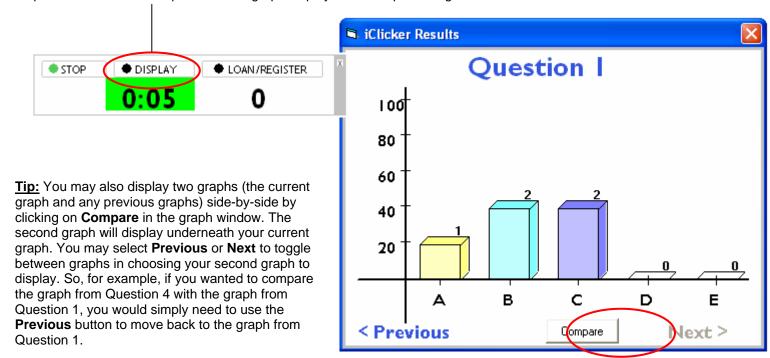
<u>Tip:</u> Students can turn on their **i-clickers** and vote any time while a question is active (i.e. as long as you've selected **Start** to begin polling) by pressing the On/Off button on the remote. We recommend students keep their remotes on during the lecture. (This is particularly important if a sub-frequency other than the default AA is in use. More details regarding this on page 25.) There is an auto shut off feature that turns off their remotes after 90 minutes of inactivity to save battery power.

9. Click on the **STOP** button on the menu bar when you feel that enough time has elapsed. You will see the following change to the menu bar:

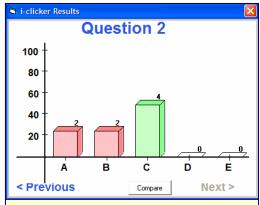


**Note: i-clicker** will only begin collecting your students' votes after you've clicked **Start** and will stop collecting votes after you've clicked **Stop**. If you have not selected Start, no votes will be accepted or recorded by the **i-clicker** base. Once Start is selected, the Vote Status light on their remotes will flash and remain green for about ½ second, indicating that their vote is successfully recorded. After you've selected Stop, votes for each question will no longer be accepted. If your students vote before you've clicked Start (or after you've clicked Stop), the Vote Status light on their remotes will flash red three times, indicating their votes were not received.

10. You can click on the **DISPLAY** button at any time on the **i-clicker** menu bar to see a graph (or histogram) of student responses for the current question. The graph displays both the percentage and number of votes for each choice.



<u>Tip:</u> You may also designate one answer in the graph as correct by simply pointing your mouse to and clicking on the bar of your choice. This will change your selected bar (i.e. the answer you've designated as correct) to green and the remaining bars to red to clearly delineate the question's 'correct' answer. See the example below. Similarly, clicking to the left of the axes will clear the correct answer selection and the display will return to the default mode.



To stop displaying the graph, simply click on the **Display** button on the menu bar (which now says **Hide**) to minimize the graph.

◆ START ◆ HIDE ◆ LOAN/REGISTER

The same information (for the current question only) is also displayed on the LCD screen of the **i-clicker** base (see below), which is a useful tool to monitor student voting progress and choices without displaying the graph to the whole class. Information is updated every second, and includes the timer (on the left), the total vote count (on the right), and the distribution (by percentage) of votes across the 5 choices.



10. Repeat steps 8 and 9 (and 10 if you want to display the results) for each question you ask in class. When your class is over, simply click on the small ☑ at the top right corner of the menu bar to exit the **i-clicker** application. You will be asked if you really want to quit **i-clicker** and, if so, click on **Yes**.

**That's all there is to it!** Each student's response to each question will be saved in the class folder on your flash drive. Put the flash drive in your pocket and leave your class with confidence. The rest of this manual will tell you how to assign grades based on the responses of your students as well as outlining the many other useful features and options available to you.

**Tip:** We suggest you store any files associated with your lectures (your PowerPoint slides, for example) in the course folder on your flash drive – it's a great way to keep everything organized.

### 2. Registering Your Students: How To Give Your Students Credit

The **i-clicker** system may be used as a simple tool to give you instant, anonymous feedback in class, in which case nothing else needs to be done. However, if you (like most instructors) want to go a bit further and give credit to your students for class participation and/or performance, you will need to:

- 1. Associate each student's ID or name with the unique serial number on their **i-clicker** remote (i.e. **Registration**).
- 2. Decide on the grading details for each session of your class (see section on i-grader).

**Note: Students do not need to be registered in order for i-clicker to collect votes.** For unregistered students, responses will be stored and assigned to their unique remote serial ID number. After students register, all their previously recorded responses will be retroactively assigned to them.

<u>Tip:</u> You can elect to use **i-clicker** as a completely anonymous system, but you may have a difficult time with student compliance if you don't assign even a few points for participation. We've found that making **i-clicker** an option but not tying it to any points/grading results in very few students using **i-clicker** in class.

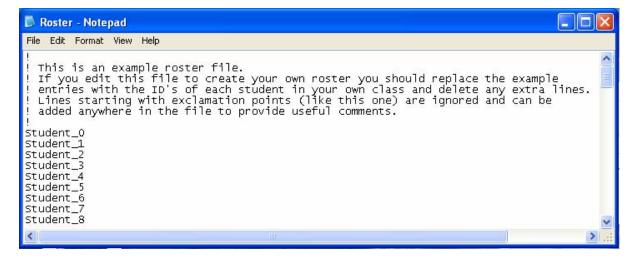
Course Management Systems (CMS): To learn how to fully integrate i-clicker and i-grader functionality with existing course management systems such as WebCT, Blackboard, and ANGEL, please see the related documentation regarding importing/exporting your data into the course management systems. Below is an overview of how to use i-clicker and i-grader as a stand-alone system. This generic approach is very simple. Since exporting data to specific course management systems can always be done later (even at the end of the semester), you can begin by exploring the stand-alone approach first and then, if you wish, export grading data into your CMS later (details in the related documentation).

### Registration:

The association (or registration) of a student's ID or name with the serial number on the back of each **i-clicker** remote is required before a student can receive individual credit for voting in class. Before this can occur, you need to create a text file called **Roster.txt** in your class folder. This file should have one line for each student in your class, with each line containing the student's ID or name (or any other easily readable text string that is guaranteed to be unique for each student). We recommend that you use whatever naming convention you currently use (or that is required by your institution) to record your students' other grades so that you can easily import **i-grader** data into your course grade book.

**Roster.txt:** The Microsoft Notepad application (or any other plain text editor) can be used to easily create this file. To create a txt file using Notepad, go to "Start" and select "Accessories." Open Notepad from the list of Microsoft Accessories. Copy and paste your student IDs (or names) from your roster (in Excel or any other format) and paste them into Notepad. Save this as "Roster.txt" within the folder you've renamed for your course. You will need to do this for each section or course in which you are using **i-clicker.** 

An example **Roster.txt** file (shown below) is provided in your class folder. You may wish to simply edit this file rather than creating a new one.



**i-clicker** offers you two straightforward registration options: an in-class, "roll call" option and an "on-line" option. Minimal information is required of your students and both registration options are tied to your class roster. There are no site license or registration fees for **i-clicker** software.

<u>Tip:</u> Roll call and online registration are not mutually exclusive, and both can be used to register students in one class. For a small class, roll call is recommended, while a combination (or online exclusively) is recommended for larger classes.

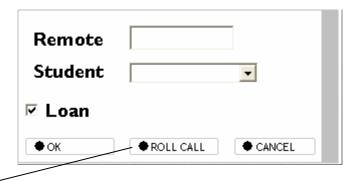
### In Class (or "Roll Call") Registration:

To use Roll Call, your computer screen needs to be projected so all students can easily see it.

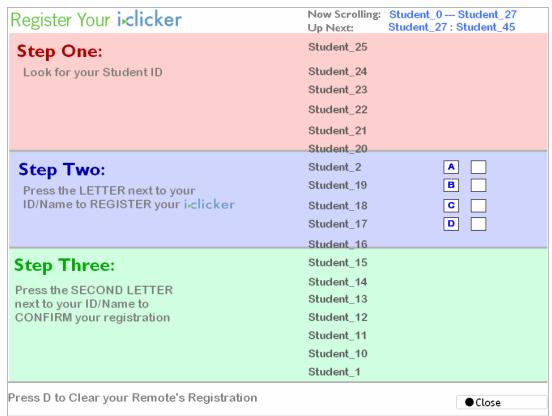
To begin, click on the LOAN/REGISTER button on the i-clicker floating menu bar:



The following menu box will appear:



Select **ROLL CALL** to enable this registration feature. Your class roster (as long as you've created a Roster.txt file and placed it into your course folder) will begin scrolling as shown below:



### The instructions for students to register are outlined on the screen and are easy to follow.

- 1. Step One: The student looks for his/her student ID or name (as read from the Roster.txt file).
- 2. **Step Two:** Once located, the student must wait until his/her ID or name has scrolled down into the central blue region of the Step Two screen. A letter will then appear to the right of his/her ID or name. The student must press the displayed letter on their keypad, at which point a second (different) letter appears to the right of his/her name.
- 3. **Step Three:** The student should press the second letter on their keypad to complete the registration process. This is the final step in tying each individual student to his/her unique remote.

Once the second letter is selected, the boxes to the right of the name disappear and the student is registered for the duration of the course. His/her name will no longer appear on the scrolling roster list.

In the example shown below, Student\_31 has just pushed the first button and is being prompted to push the second one (in this case **D**). Once Student 31 has pressed "D," his/her student ID and her **i-clicker** serial number will be tied together for the rest of the course.

Register Your iclicker	Now Scrolling: Student_27 Student_45 Up Next: Student_45 : Student_64
Step One: Look for your Student ID	Student_39 Student_38 Student_37 Student_36 Student_35 Student_34
Step Two:  Press the LETTER next to your ID/Name to REGISTER your iclicker	Student_33  Student_32  EF0FE = Student_31  Student_30  Student_3
Step Three:  Press the SECOND LETTER next to your ID/Name to CONFIRM your registration	Student_29 Student_28 Student_27 Student_45 Student_44 Student_43 Student_42
Press D to Clear your Remote's Registration	<b>●</b> Close

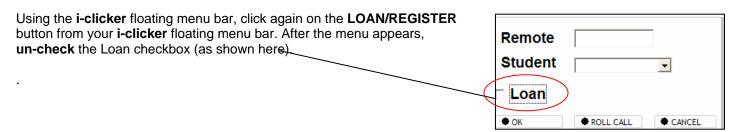
If a student's name scrolls off the screen before completing Steps 2 or 3, s/he should simply wait for his/her name to appear again.

<u>Tip:</u> If a student accidentally registers his/her clicker to the wrong name, s/he should push the **D** button on his/her **i-clicker** remote twice to clear the incorrect registration and restart the registration process.

Roster names are organized alphabetically in groups of about twenty; the number of such groups depends on the class size. Only one group scrolls on the Roll Call registration page at any given time, and the group being displayed changes automatically every few minutes to allow others to register. Names will continue to scroll on the screen until you click on the **Close** button (on the bottom right screen) or until all students have registered.

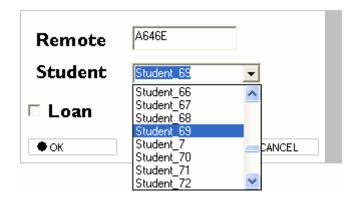
### In Class "Individual" Registration:

If only a few students need to register (for example, a new student joins your class after you've completed Roll Call registration), an individual registration option is available.



Now enter the student's Remote ID (the number on the back of their **i-clicker**). This can be done by just typing it into the Remote field or by instructing the student to hold the On/Off button on his/her remote until the blue light starts flashing (around two seconds) and then telling the student to push the **A** button on his/her remote twice. This will send the clicker ID to the computer and the Remote ID will appear in the **Remote** field as though you had typed it.

The next step is to select the student's ID from the pull-down menu labeled **Student**. If the student's ID does not appear in the list (i.e. her name is not yet in the Roster.txt file), type the student's ID into the box. Click **OK**. The student's ID will be associated with the corresponding **i-clicker** remote ID. An example is shown below.



The procedure described above <u>permanently</u> assigns the remote to the student. In the example, Remote ID **A646E** is permanently assigned to the student with ID **Student\_69**.

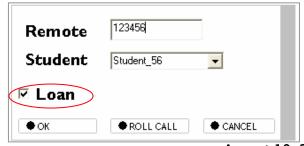
**Note:** Only one student at a time can register via this option.

#### Loaning a clicker

If a student forgets his/her **i-clicker** remote, you can loan one for a single lecture. To associate the loaned clicker with a student for one lecture only, you should perform a temporary (or loaner) registration.

To do this, follow the exact same steps as outlined above for an individual registration, BUT make sure the **Loan** checkbox is selected (as shown here).

If the **Loan** box is checked, the assignment of the **i-clicker** remote ID is tied to *that* student for *one* lecture only. This temporarily overrides any permanent registration. The student will receive credit for any votes during that lecture and these will



be synchronized with existing scores. In subsequent classes, the student can resume using his/her regular clicker.

### **Web Registration**

Your students can also register through a simple Web registration process. To do this, send your students to the following website: **www.iclicker.com/registration**. Your school will be listed from a drop down menu on the page. If your school is not listed, please contact <a href="mailto:support@iclicker.com">support@iclicker.com</a> to request that it be added.

Once your students have arrived at the site and selected the school, each student must:

- 1. Enter her student ID (the same one that is in your Roster.txt file and generally the ID that you use to record and report grades to your institution).
- 2. Enter her **i-clicker** remote ID (this is the unique set of numbers and letters located on the bottom of the back of their remote).
- 3. Click "Submit."
- 4. A pop-up window will appear and ask students for a username and password. The username is "iclicker" and the password is "register" and is the same for all students. (Both the user name and password are displayed on the **i-clicker** web registration page below the "Submit" button.) Once the student has entered iclicker/register, she must click "Submit" again.
- 5. After a student's information is saved on the server, she will receive a notice that registration was successful. The student's ID is now tied to his/her unique **i-clicker** remote ID.

As a final step in Web registration, you will need to synchronize the relevant information from the Web server with your **i-grader** application. This enables you to update the student registration information in your class folder. This is one of the functions built into the **i-grader** application, which is described in the next section.

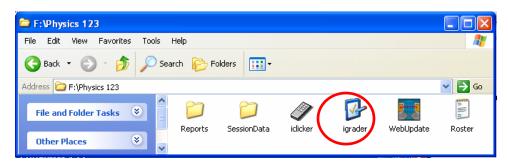
**Note:** If a student has not voted with their **i-clicker** remote, the online registration will not synchronize with your **i-grader** application. The student must vote at least once in class. As such, we recommend you ask at least one clicker question (for example, an attendance polling question) on the first day of class to capture remote id's before requiring your students to register.

<u>Tip:</u> Since the **i-clicker** registration process is tied to individual faculty rosters AND the student's votes, students can use one **i-clicker** remote for multiple classes and only need to register on the web once.

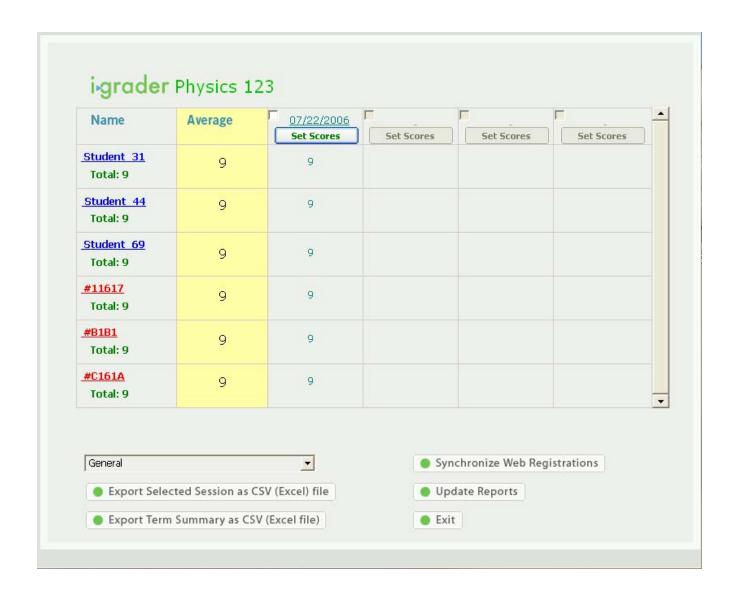


### 3. Using i-grader after class: Assigning Credit for Sessions and Questions

First, make sure you have exited the **i-clicker** application. In the appropriate class folder on your flash drive (or computer), double-click the **i-grader** icon.



The **i-grader** application will start and you will see a screen similar to this one:

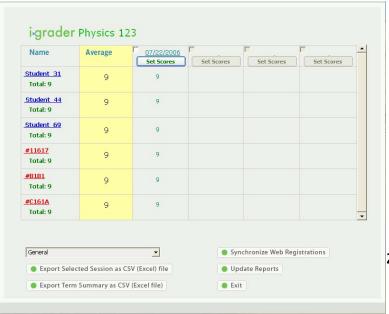


A list of class participants (i.e. your students who have voted to date) will display in the left-most column, and a list of lectures will display in the top row. Registered student IDs will appear as they appear in your Roster.txt file, and each Lecture (by default) is labeled with the date of the session. If some of your students have not yet registered, their recorded votes will be stored with their **i-clicker** remote serial ID. Once registered, they will appear with the Student's ID. The example screen shown indicates that clickers were used in just one lecture to date (on July 22, 2006) and that six students participated. Of these, Student\_31, Student\_44, and Student\_69 have registered their clickers while the other three students (the ones with remote serial IDs 11617, B1B1, C161A) have not.

<u>Tip:</u> To help you determine registered versus unregistered clickers, registered students will appear in blue type while unregistered clickers appear in red.

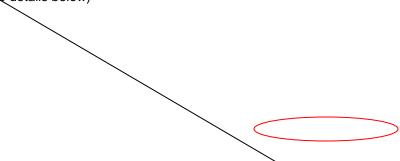
### **Synchronizing Web Registrations**

Let's suppose you encouraged the students that did not register in class to use Web registration, and that all students complied. You may now update your local **i-grader** database using the **Synchronize Web Registrations** feature.



Simply click on the button labeled **Synchronize Web Registrations** from the main **i-grader** page. Before using this feature you will need to confirm that:

- a. Your class roster is in your course folder (see the earlier "Registration" section)
- b. You are connected to the Internet.
- c. You have a school security code (more details below)



A pop-up window will appear, and you will be prompted to enter a **School Code** (for security purposes). Contact your sales representative or **i-clicker** techsupport at support@iclicker.com if you have not yet received a school security code.



After you enter the school security code and click on OK, your list of registered students is updated using the information from the Web server. A software feature will alert you to any discrepancies between your roster and the web registrations.

Possible discrepancies include students entering an incorrect student ID or having a student vote in your class without being in your roster (e.g. if they just added the course). In these cases, the system will notify you of the discrepancy. If **i-grader** needs your input for any reason, you will see a window like the one below. There are three ways to resolve any discrepancy:

- 1. Accept the Registration, which allows the student ID to be included in i-grader (by clicking "Accept").
- 2. **Reset the Registration**, which allows you to check the student ID registered on the Web against your roster (from a drop down menu with your course student ID numbers), look for a similar student ID, and correct the discrepancy manually (by clicking "Reset").
- 3. **Ignore the Registration,** which forbids the student ID/registration to be included in **i-grader** (by clicking "Ignore").

### Example 1:

In the screen below, a student tried to register his/her **i-clicker** online (remote ID C161A) with his/her student ID (Studnet\_13) which was not in your Roster.txt file. You realize that the student likely mistyped his/her student ID by typing "Studnet" rather than "Student." As a result, you use the "Reset This Registration" option to select "Student\_13" from the drop-down roster menu to correct the error and associate "Student\_13" with **i-clicker** remote ID C161A.



**Example 2:** Another student (Student 13) with the **i-clicker** remote ID "11617," has been voting and participating regularly, and has just registered her clicker remote online. She added your course after you had created your Roster.txt file and you have not yet had a chance to update your Roster.txt file with her student ID. You can use the **Accept Registration** option to correlate remote ID "11617" to "Student 13"

At this point **i-grader** will finish synchronizing the information from this student and any others that registered online. A box similar to the one below will appear:



This example tells you that 3 students in your class have registered (associating their Student ID with their Clicker ID). It also tells you that a total of 14 students from your University have used the web registration to date (some may be from other courses at your institution also using **i-clicker**).

The **i-grader** window is now updated with the new registration information, as shown below:

Name	Average	07/22/2006 Set Scores	Set Scores	Set Scores	Set Scores
Student 0 Total: 9	9	9			
Student 1 Total: 9	9	9			
Student 13 Total: 9	9	9			
Student 31 Total: 9	9	9			
Student 44 Total: 9	9	9			
Student 69 Total: 9	9	9			
General		•	Syr	ichronize Web Reg	istrations
'	cted Session as CS	V (Excel) file		date Reports	

If any unassociated clicker ID's remain after this step (i.e. if you continue to see any red clicker ID numbers in the left column), confirm with your students that they have registered online or will do so in the near future. If you have outstanding unassociated IDs, synchronize again. If necessary, you can also run the Roll Call registration. You can repeat these steps as often as necessary.

<u>Tip:</u> If a student registers online and there are problems synchronizing, you can allow them to register in class.

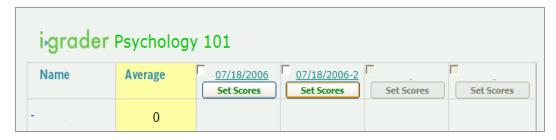
<u>Tip:</u> We suggest setting a deadline (however loose or long) for registration. This will allow you to confirm all students are registered and promotes better classroom and clicker management.

### i-grader Functions

I-Grader's three main editing functions available from the opening screen are:



<u>Tip:</u> If you started two sessions in the same day (for the same course), those two sessions will be reported as two separate sessions on this main **i-grader** screen, So, for example, if you began a polling session on 7/18/2006, closed **i-clicker** and began a second polling session on that same day (for the same course), your **i-grader** screen would display those two sessions as such: 7/18/2006 and 7/18/2006-2 (as displayed below).



<u>Tip:</u> If you unintentionally closed **i-clicker** in the middle of a lecture/voting session, simply choose **Resume Last Session** from the Welcome Screen and your additional polling data will be included in the previous session (thereby eliminating the second session 7/18/2006-2 in our example).

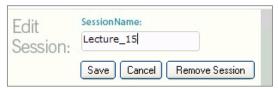
### **Editing a Student**

This feature allows you to edit a student ID/remote ID or to delete students, if necessary. Locate and click on the underlined student ID. An **Edit Student** pop-up window will appear. At this point, you may edit the student ID, the clicker ID, or remove a student entirely from your **i-grader** database.



#### **Editing a Session:**

This feature allows you to edit session titles or delete sessions. Locate and click on the underlined session title. An Edit Session pop-up window will appear.



As a default, sessions are titled by date (e.g. 7/05/2006). If you want to change the default name, simply type in the new session name in the Edit Session text box. Click Save to complete the process. In the example above, the session title is changed to "Lecture 15."

**Note:** There is a 15-character limit for displaying session titles. If you choose to assign a longer session name, the complete name will appear in your session log/data files, but will be limited to the 15-character maximum on the **i-grader** screen.

**Setting Session Scores** 

To assign credit and establish the points for any given polling session, locate the relevant lecture session and click on the **Set Scores** button under the name of the session. That session's information will appear and be available for editing. For the "7/22/2006" example you would see:

This screen allows you to award Participation/Attendance Points and Performance Points for this lecture.

In the above example, detailed information is displayed for the session held on 7/22/2006. "Question 1 of 4" indicates that four questions were asked during the 7/22/2006 lecture. The percentage field displays the percentage of students who chose a particular answer (33% chose A), while the numbers field displays the actual number of students (2 students chose A).

Participation/Attendance Points are used to credit students for attending class and for participating in the voting/polling activities. Here, you can determine the number of questions your students must answer in order to receive participation points. You also determine the total number of participation points possible for that session.

Participation points are **not** given for answering the question correctly; they are given for participating in class polling. They are therefore are <u>awarded by session</u>, not by question.

<u>Tip:</u> We strongly encourage you to utilize the participation/attendance feature. This objective of **i-clicker** is to promote student engagement and teacher-student interaction.

#### Performance Points are awarded to

students by question for a specific answer or set of answers. Many professors use performance points to reward "correct" answers. You must assign performance points for each question. You are able to add point values in any of the five boxes (A, B, C, D, E). A detailed example is shown here.

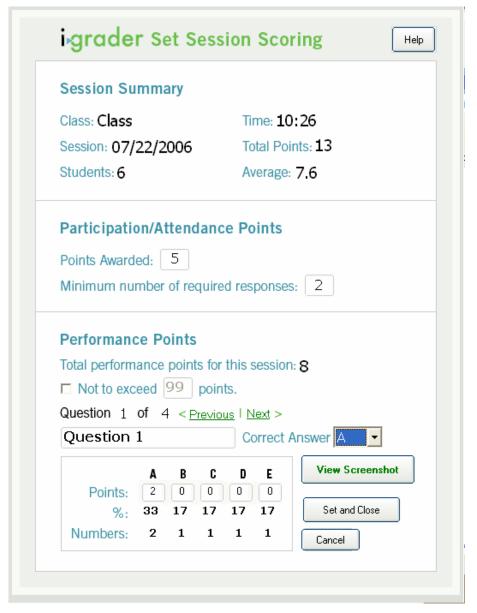
**<u>Tip:</u>** You may also assign credit or partial performance credit for multiple answers to the same question.

<u>Note:</u> Students can earn performance points without earning participation points (or vice versa), depending on your preference and settings.

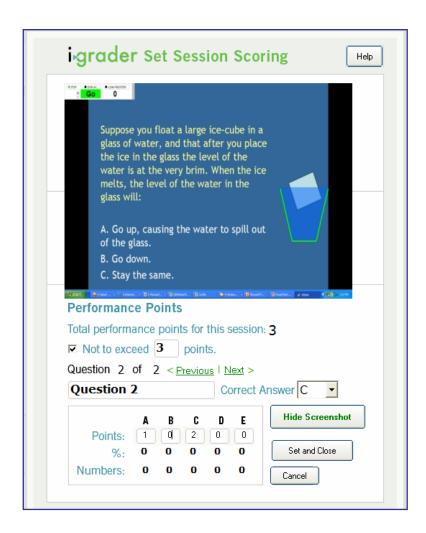
Tip: Students can earn partial or full credit for performance points, while participation points are "all or nothing."

To scroll through the questions, click on "Previous" or "Next." Once you have assigned points values for each question, locate and select **Set and Close** and all points allocations will be saved.

<u>Tip:</u> i-grader automatically assigns default point values to each question but you can easily change these defaults by using the Settings/Preferences option in i-clicker. To learn more about adjustments available in the Settings/Preferences screens, see page 23 of this manual.



Since you may not remember the details of each question you asked in lecture, you can select **View Screenshot** in the **i-grader** Set Scoring Session field. The screen shot function captures your screen every time you click Start (in **i-clicker**) to begin polling, so you can ask on-the-fly questions easily. In other words, the screen capture/question information for each question you ask using **i-clicker** will be recorded in **i-grader** automatically.

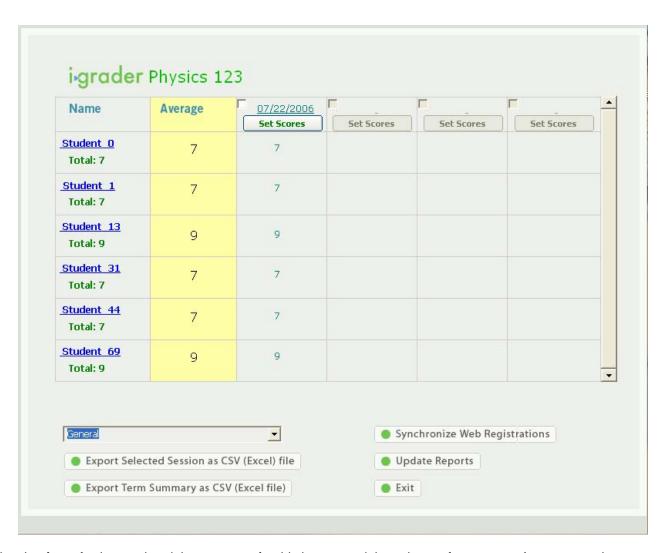


In example above, a quick review will reveal that C is the correct answer. By entering 2 in the "C" box, the program will automatically credit those students who correctly answered the question with 2 points. Likewise, since partial credit can be given, you can also enter 1 in "A" to credit students who voted for A.

<u>Tip:</u> The "Correct Answer" drop-down menu can also be used to set which answer is correct. When this is used, the default number of performance points (as set in the Settings and Preferences menu in **i-clicker**) is assigned to the selected answer.

Once you have finished assigning **Participation/Attendance Points** and **Performance Points**, click **Set and Close** to record your settings and return to the main **i-grader** window.

You will now see the following adjusted scores:



Notice that **i-grader** has updated the summary for this lecture and the column of averages. As more sessions are recorded, the columns to the right of the one labeled 7/22/2006 will be populated, and you are able to assign grades for these sessions as well.

<u>Tip:</u> You are able to change the grading assignments/point values for any session at any time.

### Reporting

The **Update Reports** feature creates summary information in an easily readable and printable HTML format. After selecting this, a report titled **Term\_Summary.html** will be in your main course folder. You can open this with your favorite web browser and view the following:

## Term Summary Report: Physics 123

Total Number of Sessions: 3 Total Number of Students in Class: 6 Total Number of Points for Term: 37 Class Average 23			<u>View Student Scores</u>		
	Report Links	Number of Students in Session	Total Number of Questions Asked	Total Points Available	Class Average
Session 1 07/22/2006	Session Summary Student Responses	6	4	13	58.9%
Session 2 07/22/2006	Session Summary Student Responses	6	4	13	64.1%
Session 3 07/22/2006	Session Summary Student Responses	6	3	11	63.6%

<u>Tip</u>: If you would like to make these reports available to your students, you can copy and paste the html link into your website and assign it a password.

The **Summary** page contains links to detailed information for each question as well as for each student.

For example, clicking on the **View Student Scores** option will create the Report shown to the right.

### **Student Term Report: Physics 123**

Total Number of Sessions: 3 Total Number of Students in Class: 6 Total Number of Points for Term: 37 Class Average 23							
Average: Lecture 1 Lecture 2 Lecture 3							
Student_0 Total: 23	62 %	7	7	9			
Student_1 Total: 25	68 %	7	11	7			
Student_13 Total: 21	57 %	9	5	7			
Student_31 Total: 23	62 %	7	9	7			
Student_44 Total: 21	57 %	7	7	7			
Student_69 Total: 25	68 %	9	11	5			

To view more detailed session information, locate and select **Session Summary** from the Term Summary report on the main reports page. You will see the following:

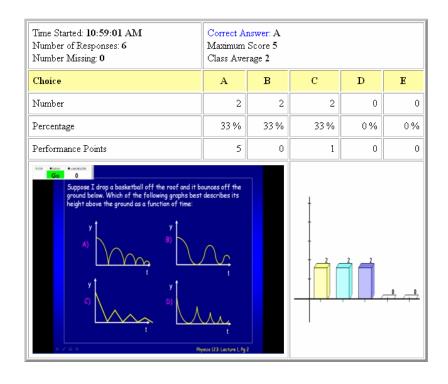
# Session Lecture 1 Summary Report: Physics 123

Date 07/22/2006 Number of Students: 6 Number of Questions Asked: 4 Class Average 7.67			Participation Points Available: 5 Performance Points Available: 8 Total Points Available: 13		
	Time Started	Time Stopped	Number of Responses	Maximum Score	Average Score
Question 1	10:26:07 AM	10:26:33 AM	6	2	0.67
Question 2	10:26:37 AM	10:26:46 AM	6	2	0.67
Question 3	10:26:48 AM	10:26:55 AM	6	2	0.67
Question 4	10:26:59 AM	10:27:06 AM	6	2	0.67

The Session Summary data is followed by information about individual questions, an example of which is shown at the right.

Note: The report entry Correct
Answer: A shown at the right is the result of setting the correct answer field in the "Set Session Scoring" tool as described in the previous section.

<u>Tip:</u> You can use Update Reports function as often as you need to – the old reports are simply over-written. If you want to retain older reports, simply rename them and save them in another folder.

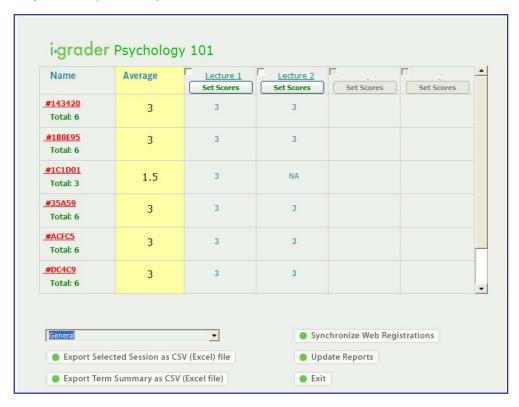


### **Exporting Grade Data**

Student grade data can be exported in several formats (General/Excel, Web CT, Blackboard and ANGEL). The General (i.e. simple generic) format is discussed below. F or details on specific course management systems, please see the related course management system documentation.

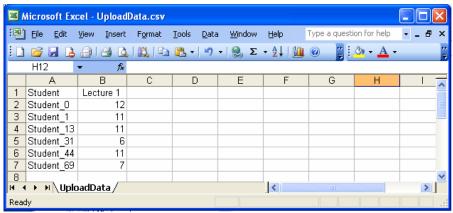
There are two **i-grader** buttons available for exporting grades:

- 1. Export a Selected Session as CSV (Excel file)
- 2. Export Term Summary as CSV (Excel file)



### **Export Selected Session:**

This function allows you to select a specific lecture to export. In the above example, Lecture 1 has been selected by checking the box to the left of that lecture's name. This creates a file (named **UploadData.csv**) in the **Reports** folder (located in your course folder). The file can be opened with any database. In the example below, it is open with Microsoft Excel and reveals the following information:

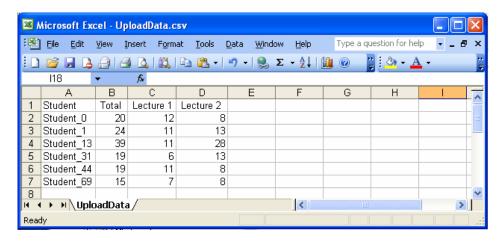


#### **Export Term Summary:**

This option creates a different file, also named **UploadData.csv**, in the **Reports** folder.

<u>Tip:</u> Each time a Summary Reports is created, the same filename (UploadData.csv) is used, overwriting any existing file the same name in your Reports folder. If you wish to keep more than one version of this file, simply rename the first one something different before creating another. This will avoid the second report overwriting the first.

While similar to the **Session Report**, the **Term Summary Report** includes an additional column for every lecture and column totals, as shown below:



If you choose to open the file with a simple text editor (in this case, Microsoft Notepad), you will see the format is a simple comma separated variable text file (hence the file extension **csv**):

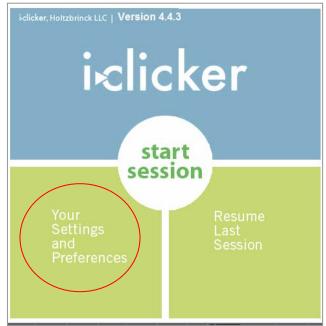
<u>Note</u>: Please see the course management documentation for detailed instructions on integrating **i-clicker** and **i-grader** with course management systems such as WebCT, Blackboard, and Angel.

### 4. Assigning Preferences and Settings: Customizing i-clicker and i-grader

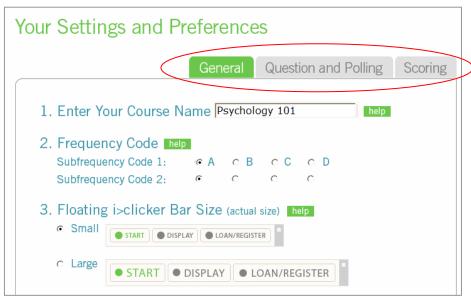
There are a number of default settings for both the **i-clicker** and **i-grader** software applications (such as timer settings, graph display settings, and points values). These defaults are chosen defaults to make **i-clicker/i-grader** the easiest classroom response system to learn and quickly use.

However, we also recognize the need for additional functionality and a way to easily customize **i-clicker** for each professor using our system. In light of this need, you may adapt **i-clicker/i-grader** defaults to better meet your individual needs.

To customize our system, locate and select **Your Settings** and **Preferences from the main i-clicker Welcome Screen.** 



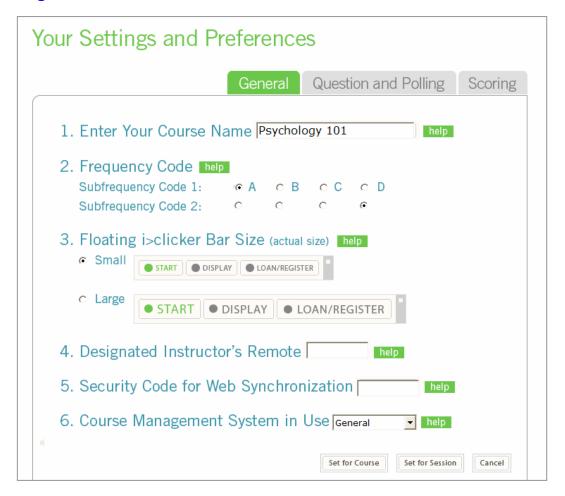
From there, you will be taken to the main Settings and Preferences screen, for which there are three settings tabs: General Settings, Question and Polling, and Scoring.



<u>Tip:</u> You may set your preferences by individual session (so your settings are saved for one polling session) or for the entire course (so your settings are saved for the entire term).

Below is an overview of each subsection and choices for each tab in Your Settings and Preferences.

### **General Settings/Preferences**

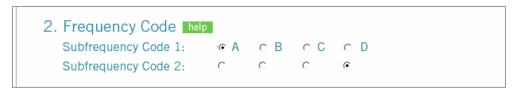


1. Enter Your Course Name: The course name entered is used with i-grader's reporting function and does not have to match the name of your i-clicker course folder. You may assign a course name here that i-grader will use in formatting your summary reports. (Note: this is not the same as creating new i-clicker folders for each course or section. Remember that you will need to copy a separate folder for each section or course for which you are using i-clicker.)

1. Enter Your Course Name Psychology 101
--

**2. Setting a Frequency Code:** The i-clicker 2-way radio frequency student response system operates on one of 16 channels in the 915 MHz frequency range.

The default frequency channel for both the base and the **i-clicker** remotes is AA. If you are the only professor using **i-clicker** at a given time you don't need to worry about setting your receiver to a different frequency. However, if someone else is using **i-clicker** in close proximity, you (or they) will want to use a different sub-channel (such as AD, as in the example below). **i-clicker** has sixteen different frequencies available (AA, AB, AC, AD, BA, BB, BC, BD, CA, CB, CC, CD, DA, DB, DC, and DD).



<u>Tip:</u> If you know you will be using **i-clicker** near another professor using **i-clicker** for the entire semester/term, we recommend you set your default frequency *for the entire term*. You may also need/want to coordinate default frequencies (if **i-clicker** is in use campus-wide) with your instructional technology division.

To ask your students to change their i-clicker remote frequency, an alert will appear when you begin polling that will instruct your students to:

- A. Press the On/Off (power) button on their clicker until the blue Power light begins flashing.
- B. Press the new two-letter code (that you've designated in your Settings/Preferences). In the example below, that new code is BB. A green **Vote Status** light will indicate your students have successfully reset their remote frequency.



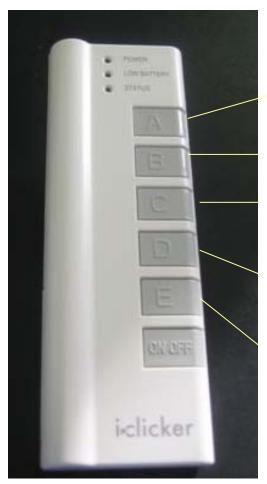
This code will remain in place for the duration of the lecture/session (as long as the remote is on). Students will need to repeat this procedure for every session, which is why setting one code for the entire term will be easier to administer and communicate.

**Note:** The receiver must be plugged in and the **i-clicker** application must be running to enable students to perform this procedure.

3. Floating i-clicker Bar Size: This allows you to choose the size of the floating menu bar that will sit on top of your presentation materials. The default size of the floating menu bar is small as it is the least obtrusive/distracting when projected on screen. However, if you have a very large lecture hall (auditorium), the larger menu bar projects the timer and vote count more easily.



**4. Designated Instructor's Remote:** You may program one of your remotes (any **i-clicker** remote will do) for your own use in class. Known as the *Instructor's Remote*, this function enables you to control polling, as well as your presentation, without having to stand near your computer. Rather than interpreting the five choices (A, B, C, D, E,) as student votes, your voting options become control commands and will control certain pieces of the **i-clicker** polling software. The image below illustrates what each selection's functionality is as the *Instructor's Remote*.



A = Start/Stop Polling

B = Hide/Display graph

C = Advance slide (most effective when using PowerPoint or a similar presentation application)

D = Back up slide (most effective when using PowerPoint or a similar application)

E = Denote correct answer. Using "E," you can toggle between your five choices on the graph. The choice upon which you remain will be highlighted as green and the other choices will become red. Note that you must display the graph in order to enable the "E" functionality.

<u>Tip:</u> Your *Instructor's Adopter Kit* included the base, flash drive with software, USB cable, and two blue remotes. We recommend you designate one of the blue remotes in your *Instructor's Adopter Kit* as your *Instructor's Remote*. If you are an adopter of **i-clicker** and did not receive a blue remote, contact your instructional technology administrator (if your school adopted **i-clicker** campus wide) or <a href="mailto:support@iclicker.com">support@iclicker.com</a> to request one. There are no technical differences between a blue "instructor's remote" and a white student remote. The color is designed to make it easier for you to keep track of your individual and loaner remotes.

**To activate the Instructor's Remote**, you must enter the clicker's serial ID (located on the bottom of the back of your **i-clicker**) in the Designated *Instructor's Remote* field (below) in General Settings and Preferences. Remember, your earlier entry (Set for Course or Set for Session) determines the length of time your clicker will function as the *Instructor's Remote*. If you plan to use the Instructor's Remote regularly, we recommend you set the code for the entire course (or term).

4. Designated Instructor's Remote help
--

<u>Tip:</u> In this mode, **i-clicker** is never the "active" application on your PC – it can still float above your presentation software or remain in the background (hidden). However, to ensure that your presentation software (such as PowerPoint) is the active program, you will need to click once on your PowerPoint (or other) screen to ensure that **i-clicker** is not the active application.

**5. Security Code for Web Synchronization:** To synchronize your student web registrations with your course roster, you will need a **school security code**. This settings option saves your school security code in **i-grader** so that your code is automatically populated in the Web Synchronization pop-up window each time you need to synchronize your student web registrations. (See Section 2 for more details on Web Synchronization.) Having this default set is for convenience only and is not necessary.

<u>Note:</u> Your school security code will not change semester-to-semester or term-to-term. If you have not received your school security code, email techsupport at <a href="mailto:support@iclicker.com">support@iclicker.com</a> to request your code.

5. Security Code for Web Synchronization help	
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**6. Course Management System in Use:** If you are using a course management system to record/report grades, you will want to select the system here. 80% of college campuses have a license with a course management system. The two most widely used systems are WebCT and Blackboard, although use of ANGEL is increasing.

When using **i-grader**, you may export your session or term data into an easily readable CSV file. This data can be opened in Excel or uploaded to your course management system. However, each course management system requires a slightly different CSV format in order to seamlessly upload student data. By selecting the course management system in use here, you are enabling **i-grader** to format the CSV files appropriately for integration with your system.

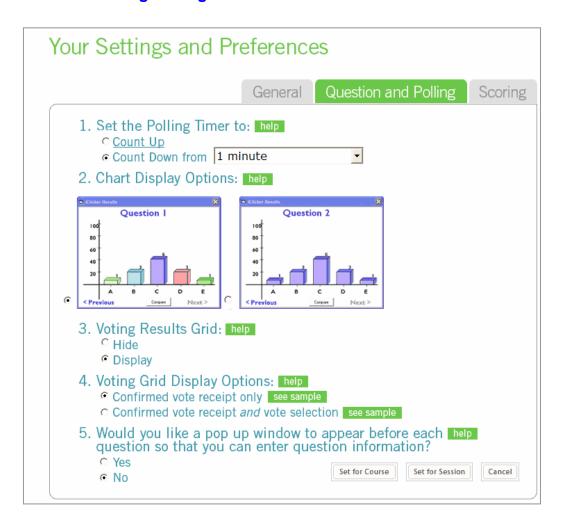
If you are not using one (or are using i-clicker's generic program), select General.



For more help and information, refer to the course management system documentation or contact <a href="mailto:support@iclicker.com">support@iclicker.com</a>.

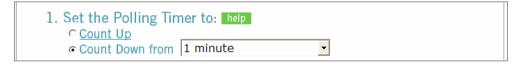
<u>Tip:</u> While we recommend setting your course management system default for the entire term through this General Settings and Preferences Option, you will also have the opportunity to select your course management system in use (and therefore format the CSV files appropriately) from the main page of the **i-grader** screen.

### **Questions and Polling Settings and Preferences**



1. Polling Timer Defaults: When you pose a question in i-clicker (i.e. when you click Start), the software automatically starts a timer (which remains active while you are polling). The default i-clicker setting counts upwards, beginning with zero. In the default setting, you must select "Stop" to end the polling period.

Through Settings/Preferences, you may choose instead to enter a pre-set amount of time, in increments of 30 seconds. The **i-clicker** timer will then count down and automatically stop at zero (which also ends the polling period).



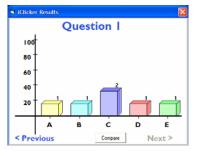
<u>Tip:</u> In the count down mode, the "+" and "-" buttons to the left of the timer allow you to add or subtract 20 seconds as needed. You can still stop polling (even if you selected the "count down" option) by pressing STOP on the floating menu bar.

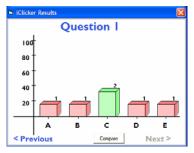


2. **Chart Display Options**: The "Display" button on the **i-clicker** floating menu bar will reveal the voting results in a graph. The results can be displayed as *multi-color* (as in the left example below) or *monochrome* (as in the right example).

<u>Tip:</u> For either display option, you can also designate one answer in the graph as "correct" by rolling your mouse over and left-clicking the bar of your choice. This will change your selected bar (i.e. the answer you've designated as correct) to green and the remaining bars to red. See the example below (the left example is the multi-colored version *without* a correct answer designated; the right example is the same multi-colored version *with* a correct

answer designed):





Clicking to the left of the axes will clear the correct answer selection and the graph will return to the default mode.

3. **Voting Results Grid:** You have an opportunity to display (or hide) a grid of your students' voting entries each time you ask a question. By displaying the voting results grid you can give students another opportunity to confirm their votes were received. Note that the green "Vote Status" light on their clickers indicates to students that their votes were both sent and received by the **i-clicker** base, so the voting grid is really not necessary.

**Tip:** While this is a comfort to students, the voting results grid can be distracting from lecture if used extensively. We recommend you use this only in the beginning of the term to reassure students that their votes were indeed confirmed. You may also minimize the voting results grid during a polling session by simply clicking on the ⊠ on the top right corner of the grid.

```
3. Voting Results Grid: help
C Hide
Display
```

4. Voting Grid Display Options: There are two ways to display the voting results grid. Confirmed Vote Receipt Only allows students to see their vote was received but doesn't indicate their choice, while Confirmed Vote Receipt and Vote Selection allows students to see both their vote receipt and last received response on the screen.

Confirmed Vote Receipt Only (shown below) displays the ID of each participating clicker. The color

Your Results White = No Response Green/Blue = Vote Recorded							
68482	51015	12345670	10EBFB	1B647F	FFFF0		
87A72	A9A90	5EEEB	110110	D212C	8A1A9		
94049	A666C						
< Previo	ous		1 / 1		Next >		

automatically changes from blue to green each time a vote is changed. So, for example, remote ID 51015 has voted but has also changed his/her vote, while remote ID 68482 has voted once. The color white indicates that the student has not voted.

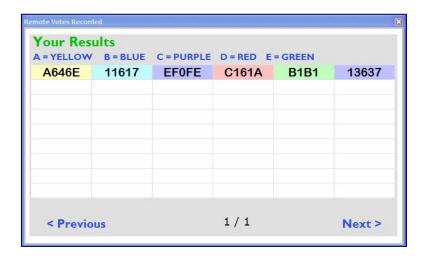
In order for an ID to appear, the student **must** respond. The first time the voting grid displays in a polling session, all of the remote ID responses will be either blue or green. (The student's first response is colored blue, the second is colored green, and any subsequent responses to that same question toggle between these color.) For subsequent

questions in the same lecture, however, the grid will display all remote IDs. When those remotes (displayed in white) have voted in response to the question, the color will change to blue. If they do not vote during a particular

question, the remote IDs will remain on screen but stay white. For example, remote ID FFFF0 has voted in the session but has not yet voted for this question.

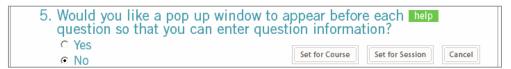
**Note:** To help a student find their response, their ID will always be in the exact same location *for that lecture only.* While the placement will change for subsequent lectures, they will always be in the exact same location each lecture.

**Confirmed Receipt and Vote Selection** displays both the students **i-clicker** remote ID as well as the color of the corresponding choice of their last received response. To illustrate, A is yellow, B is Blue, C is purple, D is red, and E is green.

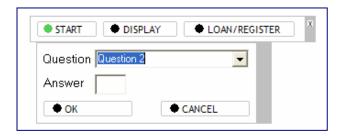


<u>Tip:</u> During polling, your students can freely change their votes at any time until you select **STOP** (their last vote is recorded). If students quickly identify that "A" is the most popular answer because of the color coding on the Confirmed Vote Receipt and Vote Selection grid, they may change their vote in response to the most popular choice. This behavior could both skew your question data and also impact your participation points assignments. If you are assigning participation points for a correct answer in your sessions, you may not want to choose the Confirmed Vote Receipt and Vote Selection option.

**5. Question Pop-Up Default Option**. If you select "Yes" in answer to the question below, a pop-up window will appear each time you initiate a question in **i-clicker** and will allow you to title the question (the default is Question 1, 2, etcetera) and assign a correct answer. The correct answer will not display in the "Answer" field; rather, the students will only see an asterisk (\*) regardless of the letter choice you enter.

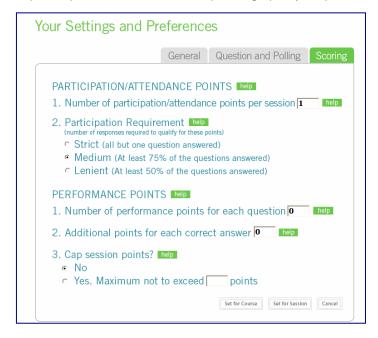


The benefit to the pop-up question window: it allows you to assign a title to each question and designate the correct answer (invisible to students). The drawback: some instructors find it distracting in lecture.



### **Scoring Settings and Preferences**

In this section, you are able to establish the point values for **Participation/Attendance** and **Performance**. **Participation/Attendance** points are earned for attending and actively participating in class with **i-clicker**. **Performance** points are earned for answering a specific question or questions. Students can earn performance points without earning participation points, or vice versa, depending upon your preference.



#### PARTICIPATION/ATTENDANCE

Participation points are awarded to students who attend and vote during lecture (encouraging student engagement). Participation points are awarded by overall session activity, not by individual guestion.

- 1. **Number of Participation/Attendance Points per session:** This field allows you to enter the number of points students earn in any given session for meeting the participation requirement, as defined in the **Participation Requirement** field below.
  - 1. Number of participation/attendance points per session 1 help
- 2. **Participation Requirement:** To earn the point value established above, students must respond to a certain percentage of questions in a session. **i-clicker** determines this via three levels: Lenient, Medium, and Strict. Depending upon the total number of questions, **i-clicker** will automatically calculate the minimum number of responses needed.
  - 2. Participation Requirement help (number of responses required to qualify for these points)

    Strict (all but one question answered)

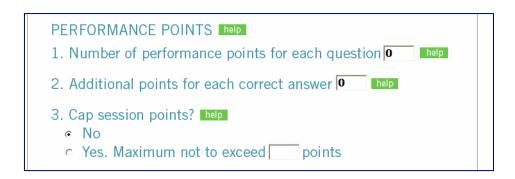
    Medium (At least 75% of the questions answered)

    Lenient (At least 50% of the questions answered)

**Example:** If you enter "10" points in **Number of Participation/Attendance Points per session** and there are 10 questions, a student must respond to 9 of the 10 questions in the Strict level to earn the 10 points. In the Lenient level, the student must respond to a minimum of 5 questions to earn 10 points.

#### **PERFORMANCE**

Performance points are awarded to students by <u>question</u> for a specific answer or set of answers. Students can earn performance points without earning participation points, depending on your preference.



- 1. Number of performance points for each question: This field allows you to enter the default number of points students are awarded for any answer. These are different from participation points in that they reward students for performance by question, whereas participation points reward students for participation by session.
- 2. Additional points for each correct answer: This field allows you to reward students for choosing the <u>correct answer</u> for each question, in addition to any performance points you award in for simply answering the question. In the above example, students are given one point simply for answering the question (even if their answer is not correct), plus an additional 4 points for getting the answer right.
- **3. Cap Session Points?** Here, you can cap the number of total performance points a student can earn in a single session. **Example:** Your maximum is capped at five points. Even if a student answers 6 questions (each worth one point) in a session, the most s/he can earn is still 5 points.

You may choose to set these preferences for the entire term (course) or session. Your choices and selections on the Scoring Options page will appear in the i-grader Set Session Scoring window for subsequent lecture(s).

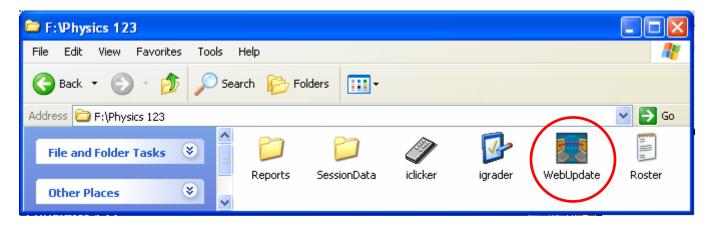
### 5. Resuming Your Last Session

In addition to "Your Settings and Preferences" on the main welcome screen, there is also the option to "Resume Last Session." This allows you to resume a lecture, rather than starting a new one. This option is useful if you accidentally exit the **i-clicker** application, had a computer crash, or if you would like all of your records stored as a single session.

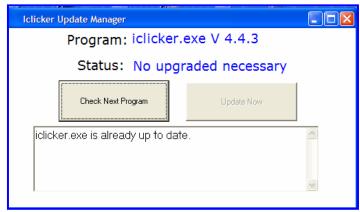


### 6. Updating the i-clicker and i-grader software

From time to time there will be improvements made to the PC applications **i-clicker** and **i-grader**. These updated versions can be downloaded free of charge using the **WebUpdate** application which you will find in each of your class folders (see below).



Simply double-click on the **WebUpdate** icon in your class folder, making sure the computer you are using has access to the internet. The **WebUpdate** application checks the **i-clicker** website for the version numbers of the latest available **i-clicker** and **i-grader** applications and compares these to what is found in the class folder you are currently in. If either or both of your applications are not the latest available you will be given information about the newer version(s) and the opportunity to update:



You will be asked about **i-clicker** and **i-grader** separately. Simply click on the "Upgrade Now" button to update your software.

<u>Note</u>: WebUpdate only updates the **i-clicker** and **i-grader** applications that are in the same class folder as the WebUpdate application. If you are teaching more than one class you will need to run the **WebUpdate** application in each of your class folders to confirm all of your applications are updated.

### 1. Pre-Assigning Question Titles and Correct Answers: **Questionlist.csv**

If you'd like to assign titles to your questions (and the correct answer) before your lecture (instead of the default Q1, Q2 assignments given by i-clicker), you will need to create a new file named questionlist.csv and save it in your course folder. If you are teaching multiple sections or courses, you will need to include a guestionlist, csy file in each course folder.

Note: i-clicker can only identify and utilize one questionlist.csv file at a time. If you want to create multiple question files (i.e. one for each lecture), simply save the questionlist.csv as a different file name (e.g. questionlist0716.csv). Do not save these files within your i-clicker folder. When you are ready to use the appropriate file for the lecture, rename it as "questionlist.csv" within your i-clicker folder. I-clicker will then recognize and utilize the application.

Microsoft Excel - Book1

Α

Action Potential

Neurogenesis

Broca's Area

Cerebellum

Edit View Insert

Format

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Α

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С

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В

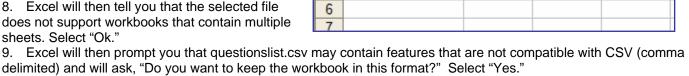
Tools

C

D

### Creating a questionlist.csv in Microsoft Excel

- 1. Open Microsoft Excel.
- 2. In column A, enter the title of each question.
- 3. In column B, enter the corresponding correct answer.
- 4. Go to File, locate/select "Save As" and name your document questionlist in the File Name field.
- 5. In the "Save As Type" field, locate "CSV" or comma delimited as the file type from the dropdown menu and select that option.
- 6. Before clicking "Save," make sure you are saving the questionlist file in your course folder (i.e. the folder in which your i-clicker and i-grader applications reside).
- 7. If a previous questionlist file exists, you will be asked if you wish to replace it. Select "Yes."
- 8. Excel will then tell you that the selected file does not support workbooks that contain multiple sheets. Select "Ok."



F4

Neuron

1

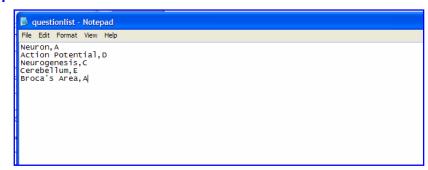
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Tip: Do not name your questionlist as questionlist.csv in the File Name field. If you do this and save the file as a CSV file, it will not work properly with your i-clicker application.

#### Creating a questionlist.csv in Microsoft Notepad

- 1. From the Accessories option on your PC. locate and open Notepad.
- 2. Enter the title of the question followed by a comma and then the correct answer. Do not add a space between the comma and the correct answer.
- 3. Select "Save As" and name the file "questionlist.csv."
- 4. Under "File Type," select "All Files."
- 5. Click Save.



For both options, you must save it within the i-clicker course folder so the software is able to recognize it and apply the values you defined in the file to i-grader.

**Tip:** Because of the ease-of-use, we recommend using the Notepad option.