Macintosh User's 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.

Want to learn more about i-clicker software through live training? Visit us at http://iclicker.webex.com to sign up for a training session, where we review the software in its entirety. Or email us at sales@iclicker.com to schedule a session.

Have a specific technical question and need help? Email us at support@iclicker.com or call us (toll free) at 866-209-5698.

Based on user feedback and reviews, we have made a number of changes to i>clicker and i>grader that are designed to make your experience more robust and more intuitive. The software upgrade:
- Is not required. If you prefer to use the classic/original software, you can find that software still on the web site.
- Impacts both the PC and Macintosh
- Is heavily focused on user interface and course management support
- Won't affect the data in the MyCourse folders

We've highlighted and included all of the upgrade features in this User Guide. You may also consult the "Software Upgrade Conversion Guide" (on our web site and on the flash drive) for more information.

# i>clicker User Guide (Macintosh Application) (08/08)

Table of Contents

Section One-Using i>clicker: How to Poll Your Students in Class

1. Connect the **i-clicker** receiver (or base) to your computer through the USB port. The LCD screen on the receiver will light up. If it doesn't, be sure to plug the receiver directly into the computer (and not through the keyboard or a non-powered USB hub). Your computer should 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.)
3. Locate the flash drive on the Desktop, and double-click on it (often called SanDisk256). The flash drive will contain folders called MyCoursePC and MyCourseMac. These folders contain course templates and application software for PC and Mac users respectively.

Note: You can also download the software from the downloads section of the i-clicker web site. If you use both Windows and Mac computers, you will need to download the zipped files MyCoursePC and MyCourseMac from the Web site. To download the software, click the Mac Software link and save the file to your hard drive in an easy-to-remember location. The files will be compressed, in an archive (.ZIP) format. Double click the icon to un-archive the files. When this process is complete, the uncompressed files will be displayed with a folder icon like the one shown below, on the right. This folder can be dragged or copied to the flash drive or to the location where you will run the **i-clicker** program (see Step 5 and Tip below).
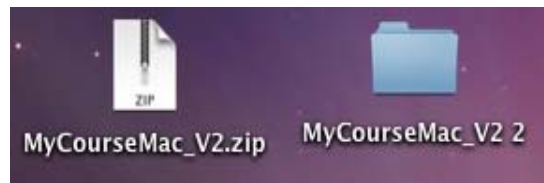
4. The "MyCourse" folders contain course templates and application software for PC and Mac users respectively. You will need to make a **copy** of the MyCourseMac folder for each class or section for which you are using **i-clicker** and rename each new folder with the name (or section) of the course. Do not delete, rename, or modify the MyCoursePC or MyCourseMac folders – these are templates that you will need when you create more courses.

5. To copy the folders, control-click on the MyCourseMac folder and select Duplicate (or highlight the MyCourseMac folder, hold down the Apple key and press D). This will make a copy of the MyCourseMac folder ("MyCourseMac Copy"). Rename the folder with your course/section name. If you were teaching two sections of an Introductory Course, for example, your flash drive might look like this:

4
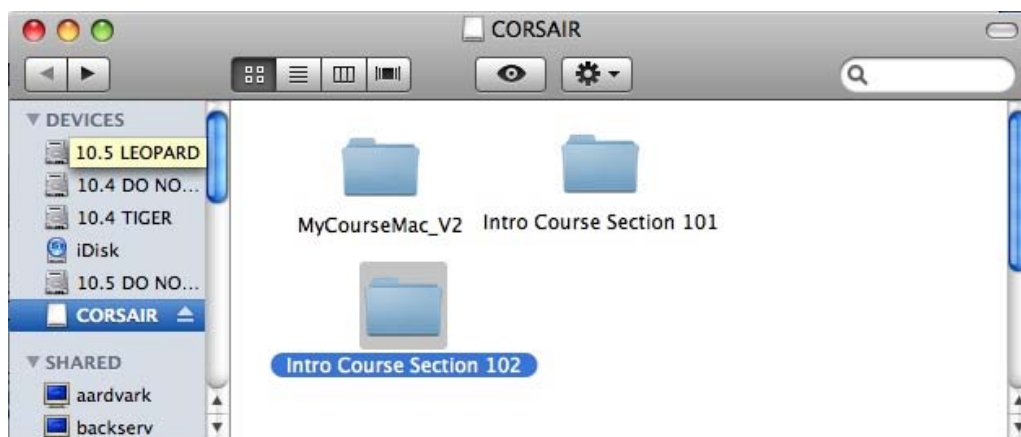
Tip: i-clicker software can be copied to another computer (or computers) rather than residing only on your flash drive. For example, many institutions are placing **i-clicker** on the college network drive (or H drive) and a number of individual professors are placing the **i-clicker** software on their laptop computers.

The benefit of the flash drive is that the i-clicker software is fully portable; just insert the flash drive into any computer to access your course folder. 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. However, you may copy the course folder to any location as long as you have easy access to that location during your lectures**. You must be able to access the same i-clicker course folder from this location, each time you start polling in class, in order to track your class's voting data.**

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:
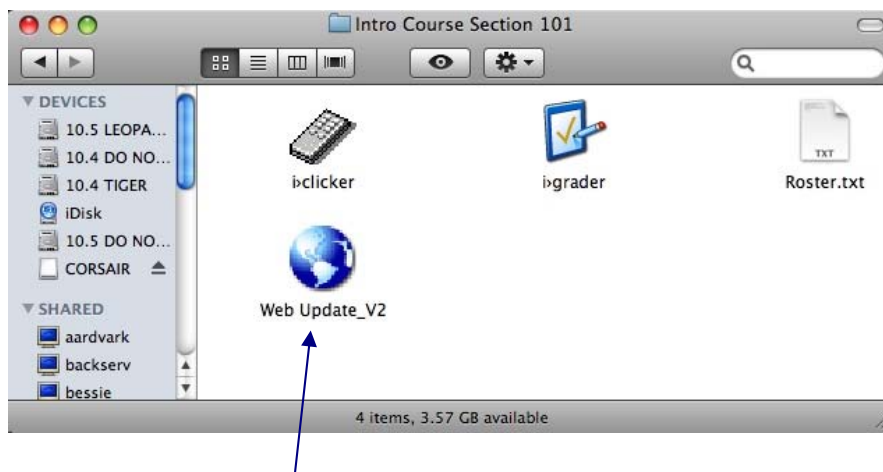
Tip: You can easily check for new updates to **i-clicker** and **i-grader via the WebUpdate tool**. These updates will not override your current course data but will provide you with key functional enhancements to the polling/grading software. We highly recommend you check for revisions and updates to the software on a regular basis. For more about using WebUpdate, please see Section 6 on page 45.

6. Double-click the **i-clicker icon** in your course folder 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).

   New upgrade! i-clicker can now include your course name (and section number, if you so choose) on the opening welcome screen. You may title your course through Settings and Preferences (see pages 34-35 for detailed instructions). You may also manually loan **i-clicker** remotes right from the welcome screen (before launching the **i-clicker** program).

5

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 desktop.

Start/Stop
Polling

Close

Minimize

Display/Hide
Results Graph

New Options Tool
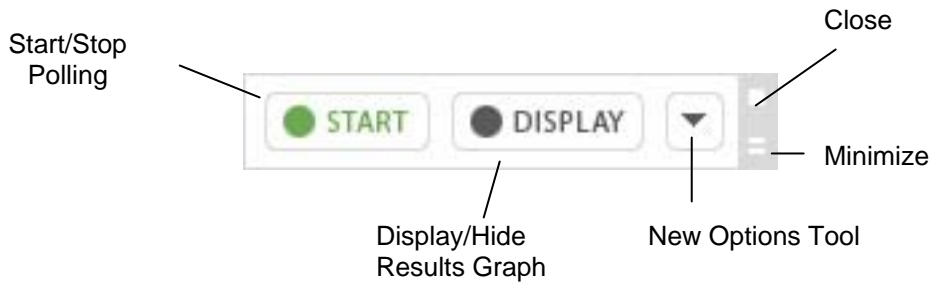
New upgrade! The overall menu bar is smaller and also has a minimize option. It has also been revised and has three functions: start/stop, hide/display, and "options" (marked with an arrow so the toolbar is smaller).

This floating 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).

Tip: A screen shot is captured each time you poll your students. These screen captures are saved and are accessible from **i-grader.** If you select a presentation application and display each question at the time you begin polling, your questions will be saved for review along with scoring and polling information. The screen shot below shows **i-clicker** floating above a PowerPoint slide. It would similarly float above any other application, such as Keynote, Word, Adobe, Mathematica, etc. 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.
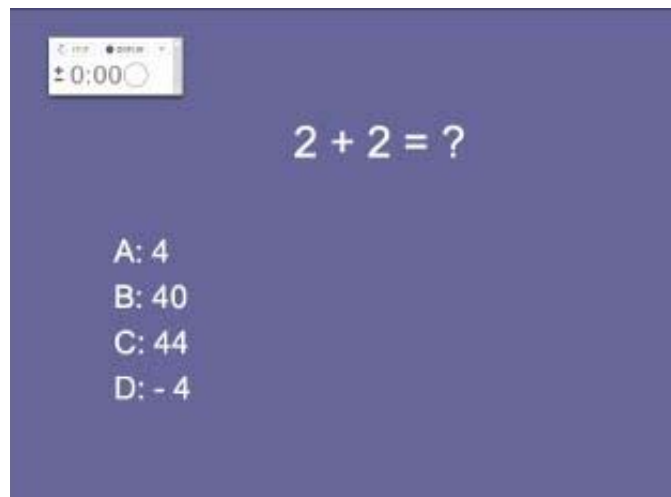
Tip for Keynote users: In order for the **i-clicker menu bar** to float over your presentation, be sure Keynote is set to allow other programs to share the screen. In the Keynote Preferences menu, please follow the below steps:
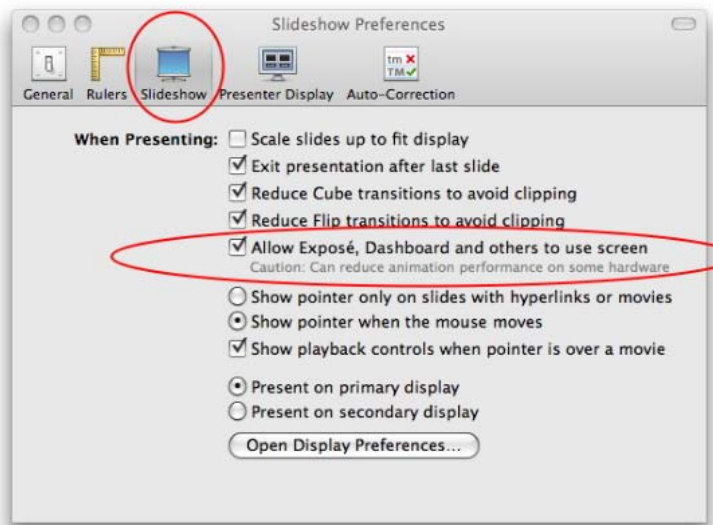
New upgrade! By default, the **i-clicker** floating menu bar appears in the top left hand corner of your screen. However, if you move the bar, the system will now remember its placement and retain the new location until you change it again—for the rest of the session and from session-to-session. This new feature gives you more flexibility to organize and design your questions (or slides) so that the floating menu bar never obstructs your question text or images.

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 timer will appear on the menu bar and timing will start. This indicates polling is now active.
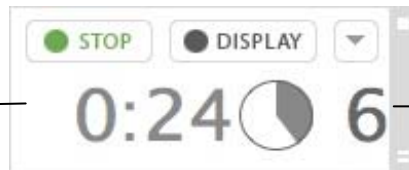
On the right, a counter will display how many students have voted thus far.

Tip: 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 37 for instructions on enabling this function.

Tip: Students can turn on their **i-clicker**s 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 frequency other than the default AA is in use. More details regarding this on page 34.) The remotes will automatically shut off 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.

New upgrade! The floating menu bar will be restored to the smaller size after polling has stopped. The counter and timer will disappear so the floating menu bar will become less obtrusive.

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, the **i-clicker** will not accept or record any votes.

Once you select Start from the floating menu bar, students may vote. A green Vote Status light on your students' remotes indicates their vote has been 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.
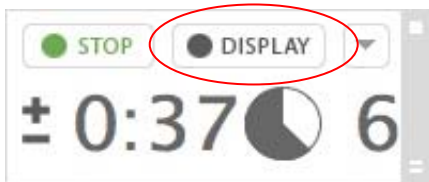
New upgrades!
- The graph is now resizable. To resize the graph, simply drag the bottom right corner of the graph.
- The graph also displays the both the exact count and percentage of the votes.
- If you move the graph, the system remembers its placement and retains that location until you change it again.
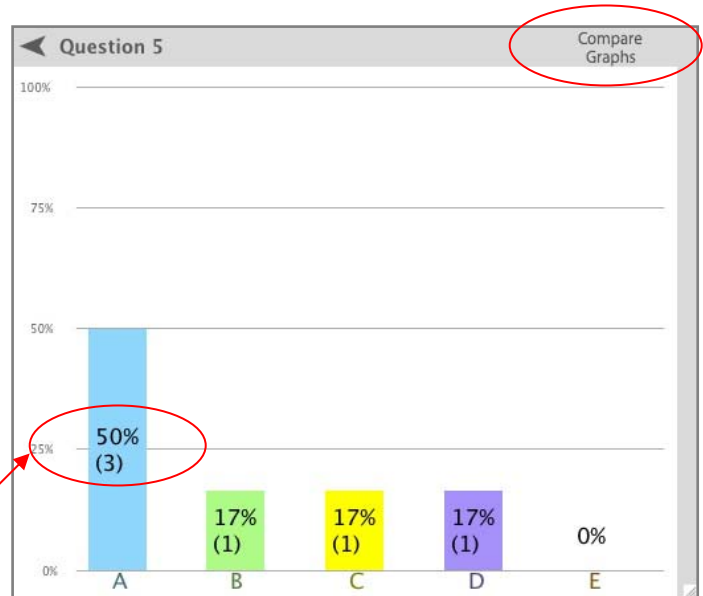
Tip: You may also display two graphs (the current graph and any previous graphs) side-by-side by clicking on **Compare Graphs** in the graph window. The second graph will display underneath your current graph. You may select **Previous** or **Next** to toggle between graphs in choosing your second graph to display. So, for example, if you wanted to compare the graph from Question 4 with the graph from Question 1, you would simply need to use the **Previous** button to move back to the graph from Question 1. To close the comparison graph, click on the Compare Graphs link again.

8

Tip: You may designate one answer in the graph as correct by simply pointing your mouse to and clicking on the correct letter that appears when you mouse-over the graph. 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 the "?" on the far left will clear the correct answer selection and the display will return to the default mode. ALSO, you can designate a correct answer by cycling through the choices with the "E" button on the Instructor's Remote.

Your designated correct answer will then be saved into **i-grader** (and all points adjusted accordingly, if you have chosen to award students points for answering questions 'correctly.')

Tip: You can also designate a correct answer by cycling through the choices with the "E" button on the instructor's remote.
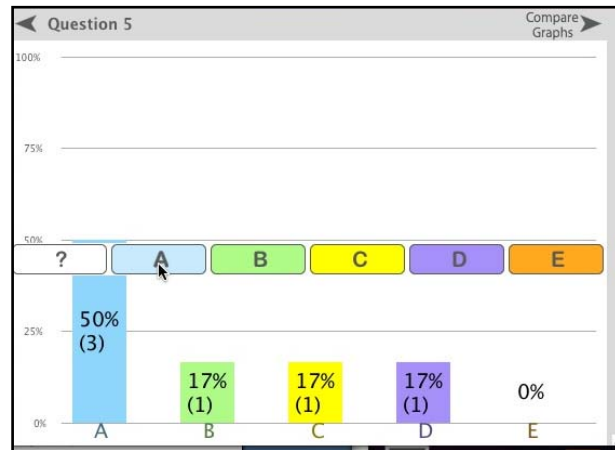
New upgrade! You can designate a correct answer now for *any* letter, even if no student selected that choice. The letter and percentage will become green and all other choices will turn red. So, even if none of your students voted for the correct answer, you can still designate the correct choice on the graph (and it will be recorded in **i-grader**).

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

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 upper left), the total vote count (on the upper right), and the distribution (by percentage) of votes across the 5 choices is displayed across the bottom.

11. Repeat steps 9 and 10 (and 11 if you want to display the results) for each question you ask in class.

The floating menu bar now is revised to have three functions: start/stop, hide/display, and **OPTIONS** (marked with ⤓). Roll your mouse over and select the ⤓ to review and use the menu bar OPTIONS. ***Currently, there are three options you may access:***
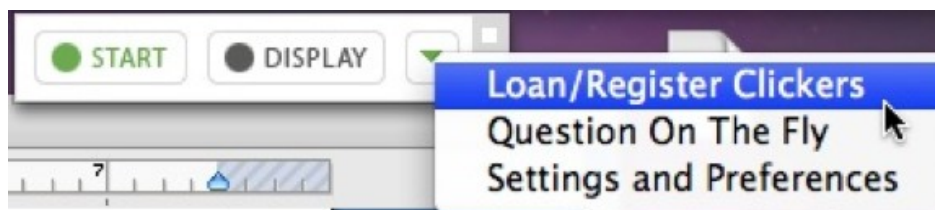
1. By selecting **Loan/Register Clickers**, you can manually register an individual clicker (permanently or for just one session) or start In-Class/Roll-Call registration. For more information on in-class and manual registration options, see pages 11-16 of this Guide.

2. By selecting **"Question On the Fly,"** you can ask a question spontaneously ("on the fly") and have it recorded in a screen capture, without closing out of your presentation application. For example, you could be using PowerPoint in slide show mode, decide to ask an unplanned question mid-lecture, and ask it using the "On the Fly" option without ever having to exit or close your PowerPoint slide show.

To use this feature, hit the ⤓ key from the floating menu bar, select **Question On The Fly** and a textbox will appear. Type in a question title in the "Question Title" field, your question in the "Question" field, and if so desired, the "correct" answer in the "Answer" field. Select "Start" from either the floating menu bar or using your instructor's remote.

A screenshot will be taken when polling begins and will be saved in **i-grader,** along with the question title and the correct answer (if you chose to designate one). Hit the "Close" button at the bottom of the textbox to close the question.
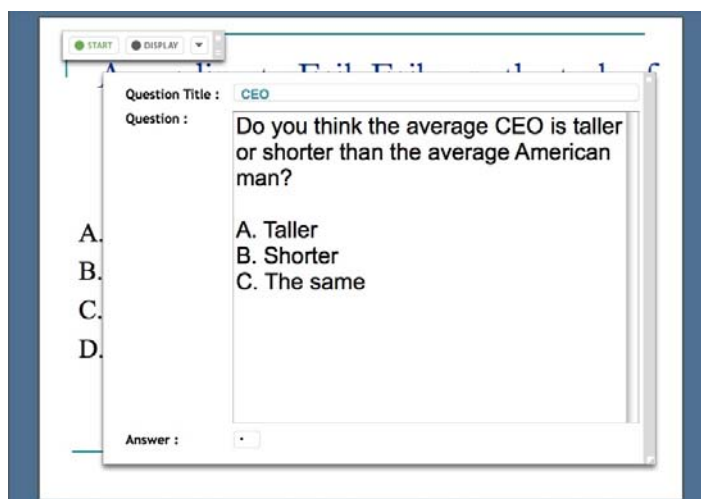
3. By selecting **Settings and Preferences**, you may return to the program's Settings/Preferences screens so you can edit your preferences directly from **i-clicker**. For more information about these options, see pages 34-45 of this Guide.

When your class is over, click on the small white square at the top right corner of the menu bar to exit i-clicker. You will be asked if you really want to quit **i-clicker** and, if so, click on OK. Each student's response to each question will be saved in your course folder. **Remember: You must run the i-clicker program from the same folder each time in order to keep a complete record of your students' responses.**

Tip: The next time you begin i-clicker, click the "Start New Session" button to begin a new session. If you want the data for two sessions to be stored together, or if you accidentally close the program, use "Resume Last Session" instead.

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 features and options available to you.

Section Two - 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 no registration is necessary. 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 of your students with the unique serial number on their **i-clicker** remotes (i.e. **Registration**).
2. Decide on the grading details for each session of your class (see Section 3 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 in your course folder and associated with the unique serial ID number on the student's remote. After students register, all their previously recorded responses will be retroactively assigned to them.

Tip: 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.

IMPORTANT: Course Management Systems (CMS) Integration
If you wish to integrate i-clicker voting data with your CMS system, such as Blackboard or ANGEL, you will not use a Roster.txt file. You may need to perform some additional steps not outlined in this document. The exact steps will vary depending on the version of your CMS. Please read and follow the directions located in the documentation for your course management system (available on www.iclicker.com). This will eliminate potential future confusion and ensure your registration data is consistent with your course management system.

Registration:

Each student remote has a unique serial number printed on the back. This number is referred to as the remote ID. The association (or registration) of a student with the remote ID is *required* before a student can receive individual credit for voting in class. To register your students, you must first create a file containing student information in your course folder. If you are not planning to integrate voting data with your course management system (CMS), you will need to create a text file named **Roster.txt**. Please note that various Course Management systems require different file names and types. Please refer to the CMS documentation on www.iclicker.com for more information.

The Roster file must have one line for each student in your class, with each line containing the student's Last Name, First Name, and Student ID, separated by commas. The Student ID may be a college ID number, email alias, or any other easily readable text string—as long as it is guaranteed to be unique for each student. We recommend that you use an ID number or naming convention that you currently use (personally or as required by your institution) to record your students' other grades, for easiest import of **i-grader** data into your course grade book.

The TextEdit.app application (or any other plain text editor) can be used to easily create the Roster.txt file. To create a txt file using TextEdit:

1. Go to the "Applications" folder and open"TextEdit."
2. Enter the student information, or Copy and Paste it from an existing roster file into TextEdit. Note: If you copy/paste the file, you may still need to modify the contents so that each line contains student information in the correct format.
3. Save this as "Roster.txt" within your course folder.

You will need to do this for each section or course in which you are using **i-clicker**. A sample Roster.txt file is provided in your class folder. You may wish to simply edit this file rather than creating a new one.

Tip: The most common registration mistake involves students entering the wrong student ID (as many institutions have 1-3 different IDs). To avoid this mistake, please consider the following steps:

- Add i-clicker instructions to your syllabus so your students follow the proper registration protocol (and will understand why they are purchasing the clickers). We have provided sample text below.
- Decide upon a policy for students who cannot or do not register their clickers successfully. Do you want them to find you after class? In your office hours? Email you their remote ID and student ID for manual registration? Inevitably, a small percentage of students will struggle with the registration process; to save yourself aggravation, you may want to include some directions in your syllabus to anticipate this problem and avoid a lot of manual work on your end.

Sample Syllabus Inserts:

FOR ROLL CALL/in-class REGISTRATION:
"You are required to purchase an i>clicker remote for in-class participation. i>clicker is a response system that allows you to respond to questions I pose during class; you will be graded on that feedback and/or participation. In order to receive this credit, you will need to register your i>clicker remote in class. I will project a Registration screen with 3 steps to follow (look for your [student ID], which will alphabetically scroll down the screen). Once your remote is registered, your [student ID] will no longer appear on that scrolling list and you are registered for the entire semester. If for some reason, you can't follow these steps, I will need to register you by [alternative policy] by [date]. i>clicker will be used every day in class, and you are responsible for bringing your remote daily." (Note to the instructor: [student ID] = the type of student ID that you have chosen to use, as noted in the instructions in step #10.)

FOR WEB REGISTRATION:
"You are required to purchase an i>clicker remote for in-class participation. i>Clicker is a response system that allows you to respond to questions I pose during class, and you will be graded on that feedback and/or participation. In order to receive this credit, you will need to register your i>clicker remote online within the first [amount of time set by instructor] of class. You must have come to class at least once and voted on at least one question, in order to complete this registration properly. Once you have voted on a question in my class, go to www.iclicker.com/registration. Complete the fields with your first name, last name, student ID, and remote ID. Your student ID should be [student ID]. The remote ID is the series of numbers and sometimes letters found on the bottom of the back of your i>clicker remote. The i>clicker response system will be used every day in class, and you are responsible for bringing your remote daily." (Note to the instructor: [student ID] = the type of student ID that you have chosen to use, as noted in step #10.)

i-clicker offers you three straightforward registration options: an in-class option (for your entire class), a manual option (for individual students), and an "online/web" option. Minimal information is required of your students and all registration options are tied to your class roster. There are no site license or registration fees for **i-clicker** software.

Tip: In-class and online registrations 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 on-line exclusively) is recommended for larger classes.

Option One -In Class (or "Roll Call") Registration:

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

Open **i-clicker** by double-clicking the iclicker application icon in your course folder and selecting "start session" from the Welcome Screen. From your floating menu bar, click on the down arrow to open the Options menu and select "**Loan/Register Clickers**."
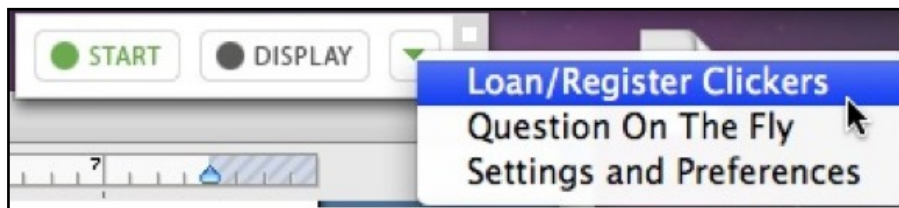
From the **Loan/Register Clickers** window, select **Roll Call.**

The **ROLL CALL** screen will appear as below. Your student's information (from the Roster.txt file you have placed 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.
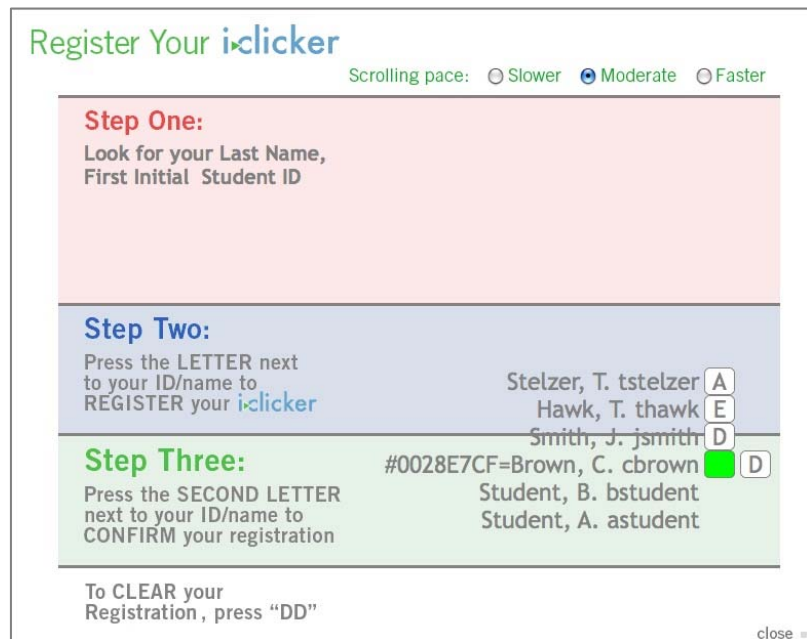
1. **Step One**: The student locates his/her name or ID as read from the Roster.txt file.

2. **Step Two:** The student must wait until his/her ID 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 his/her i-clicker remote, at which point a second (different) letter appears to the right of his/her name or ID.

Register Your i‑clicker

Scrolling pace: ○ Slower ● Moderate ○ Faster

Step One:
Look for your Last Name,
First Initial Student ID

Stelzer, T. tstelzer
Hawk, T. thawk
Smith, J. jsmith
Brown, C. cbrown
Student, B. bstudent
Student, A. astudent

Step Two:
Press the LETTER next
to your ID/name to
REGISTER your i‑clicker

Step Three:
Press the SECOND LETTER
next to your ID/name to
CONFIRM your registration

To CLEAR your
Registration, press "DD"

close ▪

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 here, the student C Brown has pushed the first button and is now being prompted to push the second button (letter D.) Once the student has pressed "D," her student ID and her i-clicker remote ID/serial number (#0028ECF, shown to the left of her name) will be tied together for the rest of the course.

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. 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.

Register Your i‑clicker

Scrolling pace: ○ Slower ● Moderate ○ Faster

Step One:
Look for your Last Name,
First Initial Student ID

Step Two:
Press the LETTER next
to your ID/name to
REGISTER your i‑clicker

Stelzer, T. tstelzer [A]
Hawk, T. thawk [E]
Smith, J. jsmith [D]

Step Three:
Press the SECOND LETTER
next to your ID/name to
CONFIRM your registration

#0028E7CF=Brown, C. cbrown [ ] [D]
Student, B. bstudent
Student, A. astudent

To CLEAR your
Registration, press "DD"

close ▪

15

Tip: 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.

Option Two -Web Registration:

Your students can also register through a simple Web registration process. To do this, send your students to the following web site: **www.iclicker.com/registration**.

Once your students have arrived at the site, each student must:
1. Enter his/her First Name and Last Name in the appropriate fields.
2. Enter his/her student ID (the same one that is in your Roster.txt file)
3. **Tip:** When using Web registration, the key to success is deciding what student ID will be used and sharing those directions with students before they register their clickers online. You may want to add registration ID instructions to your syllabus so your students follow the proper registration protocol.
4. Enter his/ her **i-clicker** remote ID (this is the unique set of numbers and letters located on the bottom of the back of their remote).
5. Enter the security/verification code that appears on the screen. This verification image will appear as a slightly distorted series of numbers and/or letters (and is used to keep spam bots from submitting the form).
6. Click "Enter." The student will see an on-screen message confirming that registration was successful. The student's ID is now tied to his/her unique **i-clicker** remote ID.

Once your students have registered online, you will need to synchronize the relevant information from the Web server with your **i-grader** application. This updates the student registration information in your class folder. This is one of the functions built into **i-grader**, 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 IDs before requiring your students to register.

Tip: Students can use one **i-clicker** remote for multiple classes, and only need to register on the web once. If the student makes a mistake they can simply register a second time.

Tip: i>clicker offers institutions the option to host their own registration site or use their own LDAP authentication with our national database; we can provide the requisite scripts and administration support. If your institution has standardized on **i-clicker**, your registration may already be hosted locally. Check with your administrator for more information. If you think locally hosted registration or authentication would be of interest to your campus or department, contact us at sales@iclicker.com for details.

Option Three -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.

1. From the **i-clicker** floating menu bar, click on the down arrow to open the Options ⤓ menu and select "Loan/Register Clickers." Be sure that "For the Term (Permanent)" is selected from the "Register" drop down menu
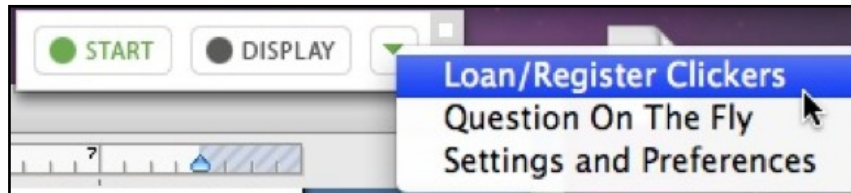
2. Now enter the student's Remote ID (the number on the back of their **i-clicker**). This can be done by just typing it into the Remote field, or by having the student hold the On/Off button on his/her remote until the blue light starts flashing (around two seconds) and pushing the **A** button twice. This will send the clicker ID to the computer and the Remote ID will appear in the **Remote** field as if you had typed it.

3. Select the student's ID from the drop down menu labeled **Student**. The names in this list are taken from your Roster.txt file. Click **OK.** The student's ID will be associated with the corresponding **i-clicker** remote ID.


The procedure described above permanently assigns the remote to the student. In the example above, Remote ID 0028E7CF is permanently assigned to Jane Smith with ID jsmith.

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

Loaning a clicker (Temporary Registration)

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 to select the "For one Session (Loan)" option from the Register drop down menu (as shown here).
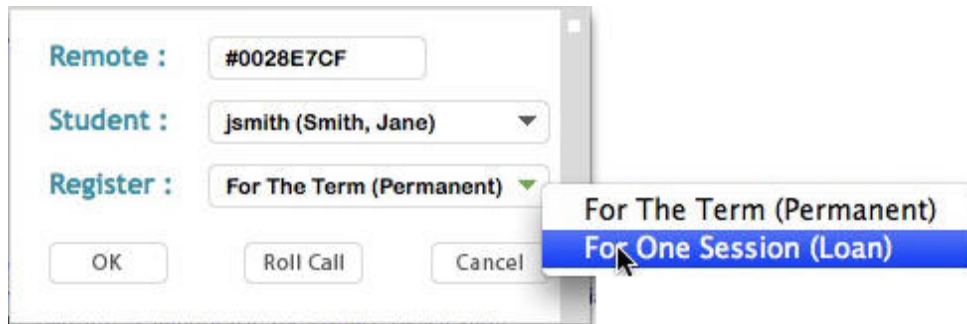
If this option is used, the assignment of the **i-clicker remote ID** is tied to *that* student for *one* lecture only. This temporarily overrides any permanent registration. The student will receive credit for any votes during that lecture and these will be synchronized with existing scores. In subsequent classes, the student can resume using his/her regular clicker.

Section Three -Using i>grader After Class: Assigning Credit for Sessions and Questions

Note: You may want to take the time right before starting **i-grader** to check for updates to the software. This process is quick and free of charge, and can be done by using the WebUpdate application in your course folder. Please see Section Six of this guide for more information on Web Update.

Before opening **i-grader**, always make sure to exit the **i-clicker** application. Then open the course folder on your flash drive or computer, and 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 students will display in the left-most column, and a list of voting sessions you have held will display in the top row. You will see all students as listed in your Roster.txt file (or other CMS file if you have chosen to use **i-clicker** with your course management system). You may view the students by Student ID or by last name, by clicking on the arrow on the heading of the column of students.

Registered students will appear in blue type and unregistered student names or IDs appear in red. The recorded votes of your students who have not yet registered are stored under their **i-clicker** remote ID. The remote ID numbers appear in red at the end of the student list.

Each lecture (by default) is labeled with the date of the session. If you start two sessions on the same day (in the same course), those two sessions will be shown separately on the main **i-grader** screen. The example screen shown above indicates that clickers were used in just one lecture to date (on May 6, 2008) and two sessions were held during this lecture. Of the student names appearing on the screen, three have registered their clickers while the other two have not. Note that the students who have not registered have no grades attached to their names—the grades are tied to the remote IDs at the end of the list and will be attached to the student names once they have registered. The remote serial ID #11A03A8B at the bottom of the list belongs to one of the unregistered students who participated in the sessions.

19

Tip: If you choose **Resume Last Session** from the Welcome Screen, your additional polling data will be included in the previous session (thereby eliminating the second session in our example).


Synchronizing Web Registrations

Let's suppose you have chosen to have your students register through the Web site registration option. Once your students have submitted the registration form and you have held at least one **i-clicker** session, you may now update your course registration information using the **Synchronize Web Registrations** feature.

NOTE: You will need to be connected to the Internet to synchronize web registrations.

Simply click on the button labeled **Synchronize Web Registrations** from the main **i-grader** page.
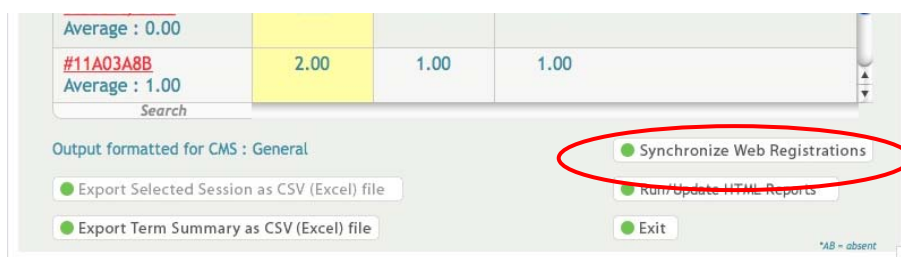
A pop-up window will appear, and you will be prompted to click **Continue** to pull down clicker registrations from the server. Click the **Continue** button.
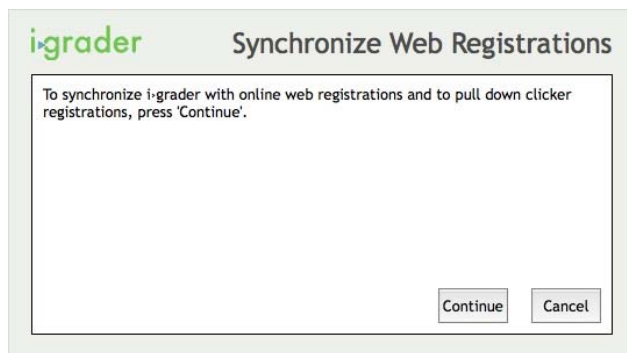

After you click on **Continue**, your list of registered students is updated using the information from the Web server. A software feature will alert you to any discrepancies between your roster and the web registrations.

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. **Ignore the Registration**, which does not associate any registration information for that particular student.
2. **Accept the Registration**, which allows the student ID to be included in i-grader, and associates the student with the correct clicker remote ID.
3. **Cancel the Registration**, which exits the registration process and leaves i-grader as it was originally.

20

Example: In the screen below, a student tried to register his i-clicker online (remote ID 11AA6BD0) with a student ID (bstudent001) which was not in your Roster.txt file. You realize that the student likely mistyped some information. As a result, you select the correct student from the list of students in the roster (on the right), and click the "Accept" button to associate "bstudent" with i-clicker remote ID 11AA6BD0.
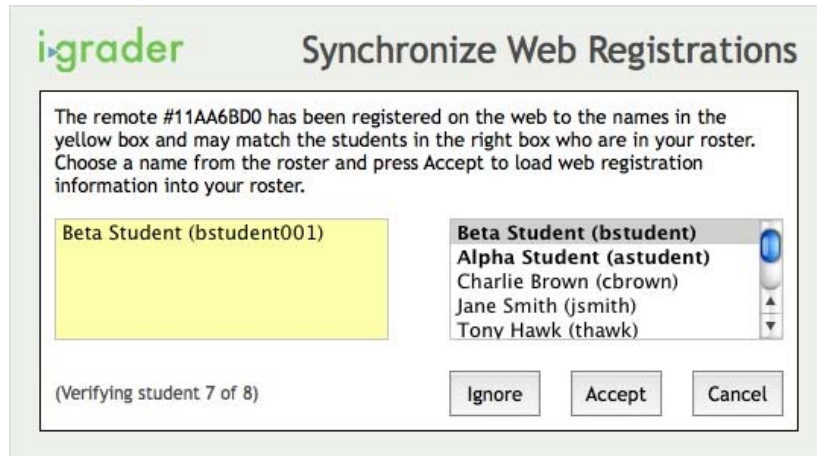

Tip: Students can register multiple times without affecting the web synchronization process. If you are not sure if a web registration matches the student information in your roster, you can always ignore the registration, ask your student to register online again, and run another Web Sync process at a later time.

New upgrade! In response to user feedback, we've applied the following rules to web synchronization (when your students are registering their clickers either via www.iclicker.com/registration or through your locally hosted registration). Both of these changes will improve your web synchronization experience (and will result in fewer prompts to accept or ignore a registration):

• If the clicker is not registered to any student in your roster with the same last name or same student ID, the software will ignore the registration (instead of manually prompting you to ignore the registration).
• If the clicker ID is exactly matched to a student last name and student ID, the system will automatically accept the registration (the system currently prompts you to decide).

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:
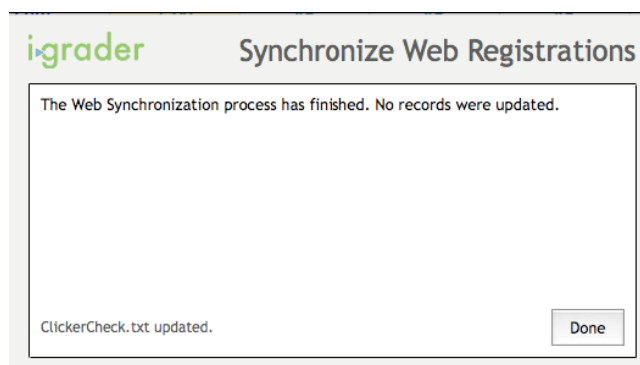
If any unassociated clicker ID's remain after this step (i.e. if you continue to see any red clicker ID numbers in the left column), they likely belong to students who have not yet registered online. Check with your students and synchronize again later. If there are problems synchronizing only one or two students who have registered online, you can also run a Roll Call registration or register these students manually. You can repeat these steps as often as necessary.

Tip: We suggest setting a deadline (however loose or long) for Web registration. This will allow you to confirm all students are registered and assist you with classroom and **i-clicker** management.

New upgrade! New **i-grader** tools allow you to search for and delete batches of unregistered clicker records, and to generate reports of unregistered students.

To use these tools, click on the eyeglasses icon next to the dropdown menu at the top of the column of students:

You will see the following window appear. You will have the option to toggle between two screens: **View and Select Unregistered Clickers**, and **View and Export Unregistered Students**.

Questions? Contact us at support@iclicker.com or call toll-free at 1-866-209-5698.
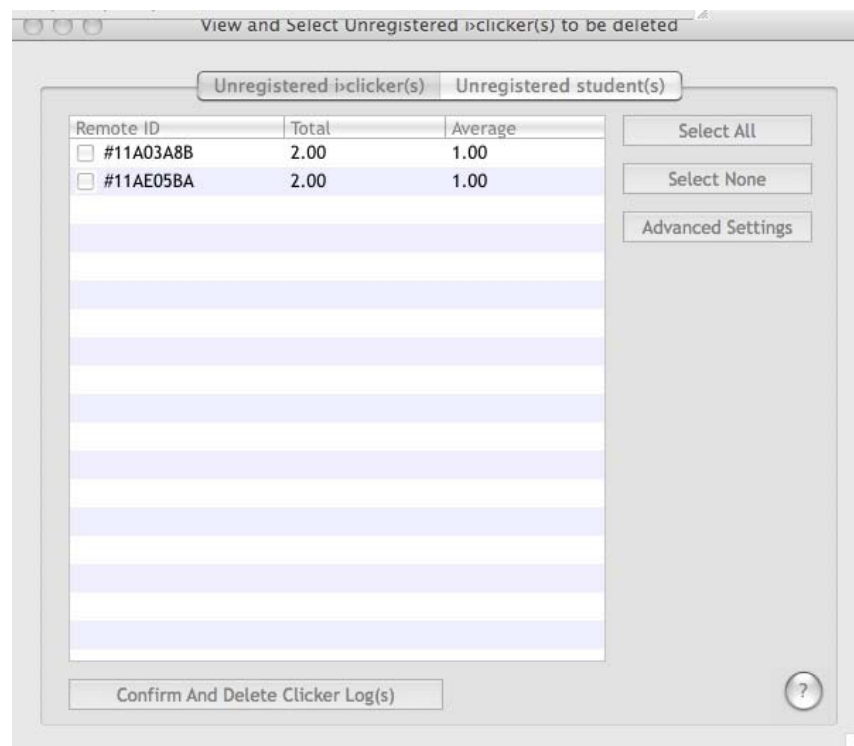
The **View and Select Unregistered Clickers** screen allows you to quickly see votes from only those clickers that have not been registered to any student in your roster. You may see votes from unregistered clickers if students have not yet registered successfully, if students accidentally brought a friend or roommate's **i-clicker** remote to class with them, or if students voted in only a few sessions and then dropped the class.

Tip: If you have a very large class or if your class deadline for registration has not yet passed, you may have a large number of unregistered clickers in **i-grader**. To help you manage your course information, use the Advanced Settings option to filter the results list. The advanced settings screen is shown below:

The **Advanced Settings search features** allow you to select unregistered remote IDs meeting specific criteria. For example, let's say that several students voted only once or twice before dropping your class, and never registered. You can use the Advanced Settings options to search for unregistered remotes with averages or total points in a very low range (such as between 0 and 10 total points). When you click "Select," the Advanced Settings window will disappear and all remotes matching your criteria will have a check in the "Select" column to the right of the ID number.

To use another example, a student may email you and tell you that the remote ID number on the back of his **i-clicker** remote has partially rubbed off and as a result he can't complete the web registration. You can search for the remote ID using the "Remote ID containing" filter and find it in your records.

The **View and Export Unregistered Students** tool allows you to export a list of students who have not yet registered.

From this screen, you have the option to export the list of unregistered students in several formats: Comma-Separated (.csv), Text (.txt), or Excel (.xls). Choosing any of these options will create a file named "Un Registered Student List" in your course folder.

Note While you can create three separate files using this tool, exporting the same type of file more than once will overwrite your data. For example, if you have previously exported this list to Excel, then clicking Export to Excel will overwrite the existing file, but clicking Export to Text will not.
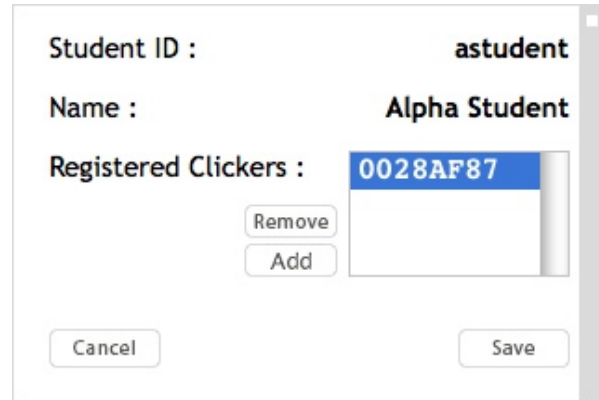

23

i-grader Functions

From the main screen of **i-grader,** you can edit student registrations as well as session and scoring information.

Editing a Student
This feature allows you to modify which remote IDs are associated with a particular student/student ID.

1. Locate and click on the student ID or name that you wish to modify. You will see the pop up dialog shown here.

2. To remove the association of a particular clicker to that student, highlight the clicker remote ID in the pop up, and then click Remove. (This will remove the student/remote ID association, but the remote ID and its data, will stay in i-grader)

3. To associate a new remote ID with this student, click Add. You will see an additional pop up prompt to add a new remote ID. Enter the new remote ID and click "OK." The ID will then appear in the list of Registered Clickers tied to that student. Highlight the new clicker ID and click Add.

4. Click Save and then OK on the final confirmation message.

Setting Session Scores

i-grader scoring tools allow you to designate correct answers and set scoring options for each individual session. However, you can save time by setting default scoring settings for all sessions in your course using the **i-clicker** Settings and Preferences, described in Section Four. If you do not modify these settings, **i-grader** will automatically assign point values based on the default settings in **i-clicker**. You can still make adjustments to individual settings using the **i-grader** tools described on the following page.

To assign credit and establish the points for any given polling session, locate the session and click on the session title. That session's information will appear and be available for editing.

The screen to your right allows you to delete and modify question data and award **Participation/Attendance Points** and **Performance Points** for this lecture.

New upgrade!

- The Set Scores screen has been redesigned and is larger and easier to use.
- The Help text now provides more explanation of the different point categories and guidance on assigning points values.
- Individual questions can now be deleted from sessions. You can easily restore the question if you change your mind, and participation and attendance points will be recalculated to match your most current session information.

In the example shown here, detailed information is displayed for a question in the session held on 5/6/2008. The

Session Summary on the top part of the screen gives the course name, date and time of the session, and indicates that five students participated and six questions were asked during the lecture. From here, you also have the ability to edit your Session Name. There is a 10 character limit on session names.

If questions are deleted from the session, the Number of Questions value will change, but you can still view the deleted questions by using the Previous/Next controls on the bottom right of the screen (below the thumbnail image). The Deleted questions will be marked as deleted on the thumbnail image, and the "Delete this question" box will be checked.

Participation/Attendance Points are used to credit students for attending class and for participating in the voting activities. Participation points are not given for answering the questions correctly; the student only needs to place a vote for least the minimum number of questions to receive these points. **These points are awarded by session, not by question**—the student either answers the minimum number of questions and receives all participation points, or does not and receives zero participation points.

In the Settings and Preferences area of the **i-clicker** program (explained below) you can set a participation requirement by percentage of questions answered. The minimum number of responses will be automatically calculated for you. From the Set Scores screen shown here, you can modify the minimum 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. The minimum number of questions required will be adjusted each time you delete and restore questions from your session.

Tip: 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 specific answers. Many professors use performance points to reward "correct" answers. Performance points (if any) are assigned to each question individually. If you have already set a point value for correct answers in **i-clicker** Settings and Preferences, you may simply designate the correct answer in the Performance Points area and that answer choice will automatically be awarded the correct number of points. You may also assign credit or partial credit for multiple answers by manually adding point values in any of the five boxes above the answer choices (A, B, C, D, E). A detailed example is shown here.

Note: Since you may not remember the details of each question you asked in lecture, **i-clicker** takes a screen capture for you every time you begin polling. To bring up the screen capture in **i-grader**, click on **View Screenshot.** Click the button again (it will now say **Hide Screenshot**). The screen shot function allows you to ask on-the-fly questions easily by providing you with an automatic record of your lecture questions.

In the above example, Total Performance points currently appears as zero, because no correct answers have been designated yet. The correct answer is D. To give partial credit for another answer, you can enter 2 points in the box for D and 1 point in the box for answer A. The "Correct Answer" field can also be used to assign the default number of performance points (as set in the Settings and Preferences menu in **i-clicker**) to the selected answer. To scroll through the questions, click on "Previous" or "Next." Once you have assigned points values for each question, use the **Set and Close** button in the bottom right corner. All points allocations will be saved and you will 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.

Deleting a Question:

To delete a question, open the session (by clicking the session name or date) containing the questions you wish to delete. Use the Previous and Next arrows to review your questions/screen shots. When you've located the question you wish to delete, select "Yes" in answer to the question "Delete this Question?" under the question title. The question will no longer be calculated in your participation requirements and student scores for the session. It will remain visible in the scoring screen. At any time, you may restore the deleted question by returning to the session, finding the question in this screen, and changing the "Delete this Question?" option to No.

i>grader Reporting: HTML Reporting Tools

The **Run/Update HTML Reports** feature (located from the main **i-grader** screen) creates summary information in an easily readable and printable HTML format. Clicking the Run/Update HMTL reports button generates the HTML reports listed below:

The **Term/Session Summary and Review** report provides a breakdown of polling data, both for your term to date and for individual sessions. No individual student scores or votes are included in this report, making it ideal to share with your class as a post-lecture study guide. The linked Summary Review reports contain individual question statistics, the screenshots taken when you began polling (which should contain each individual question), and the voting results graphs for each session.

The **Student Voting Data** report contains grades for your individual students, by session and by question. From here you can also access a report of **Cumulative Scores**, which provides you with a review of each student's performance for each **i-clicker** session.

When you select the **Run/Update HTML Reports button**, you will see a Report Summary window appear with links to these three reports.

The reports are accessible from the links shown here. They can be opened and printed using any web browser.

The **Term/Session Summary and Review** report and the **Student Voting Data report** are both placed directly in your main course folder. You may access and open them from that location at any time. All other reports (Summary and Question Data for single sessions, and Student Score reports) are linked from one of these two reports, or accessible from the Reports folder within the main course folder.

Report Summary

You have now generated (or updated, if you have used this function before) two HTML reports containing your class polling data. These are easily printable, readable and can also be posted to a course web site or your campus course management system (such as Blackboard). You may access these reports from your MyCoursePC folder:

1. Term Session Summary and Review details both your cumulative and individual session polling data. No individual student scores or votes are included. For each session, we provide individual question statistics, your question (via the screenshot taken when you began polling), and the graph with voting results. This report is a great study and review tool for students.

2. Student Voting Data. This report contains your individual students' polling statistics, by session and by question. This report also links to your students' **Cumulative Scores**, which provide you with an easily printable overview of your students' entire performance with i>clicker. This is a great resource for you, especially for struggling students.

Close

Tip: You can Update Reports as often as you need to – the old reports are simply over-written with your most recent data.

Your **Term/Session Summary and Review** report will contain general information about each session as shown below.

Term/Session Summary and Review Report

Course Name : Intro Course 101

Total Number of Sessions: **2**
Total Number of Students in Class: **7**
Total Number of Points for Term: **8**

Session Average = Average calculation based only on students who voted in the session.

Session Date/Title	Report Links	Number of Students in Session	Total Number of Questions Asked	Total Points Available (per student)	Session Average
Session 1 5/6/08	Session Summary and Question Data	5	5	7	66%
Session 2 5/6/08	Session Summary and Question Data	6	3	1	0%

To view more detailed session information, click on **Session Summary and Question Data** for any session, to display the Session Summary report.

Session 5/6/08 Summary Report : Intro Course 101

Date **5/6/08**
Number of Students: **5**
Number of Questions Asked: **5**
Session Average **4.60**

Participation Points Available: **1**
Performance Points Available: **6**
Total Points Available: **7**

Session Average = Average calculation based only on students who voted in this session.
Average Score per Question: Average calculation based only on students who responded to this question.

Question Title	Time Started	Time Stopped	Number of Responses	Maximum Score	Average Score
Question 1	9:29:08 PM	9:29:12 PM	0	0	0
Question 2	9:29:19 PM	9:29:45 PM	5	0	0.00
Question 3	9:29:59 PM	9:30:27 PM	5	2	1.20
Question 4	9:30:36 PM	9:30:51 PM	5	2	1.20
Question 6	9:31:14 PM	9:31:31 PM	5	2	1.20

The Session Summary data is displayed at the top of this report, followed by information about individual questions. Scroll down, or click a question title, to jump to the question information (including the question screen shot and histogram of your students' results).

Question 4

Time Started: **9:30:36 PM**
Number of Responses: **5**
Number Missing: **0**

Correct Answer: **B**
Maximum Score **2**
Class Average **1.20**

Choice	A	B	C	D	E
Number	2	3	0	0	0
Percentage	40%	60%	0%	0%	0%
Performance Points	0	2	0	0	0

Question 4

Two closed, pyramid-shaped beakers containing clearly identical amounts of a liquid are suddenly judged by a child to hold different amounts after one of the beakers is inverted. The child apparently lacks a:

A. sense of object permanence.
B. concept of conservation.
C. capacity for habituation.
D. secure attachment.

Click on your Course Title to return to the main Term Summary report.

Tip: The **Session Summary reports** are ideal to share with your students after class. The HTML file can be uploaded to a course web site and then viewed by your students. These reports can be found in the Reports folder within your **i-clicker** course folder. They will be titled "SessionSummary_X," where X is the number of the session you want to share with your students. Or, if you don't want to search through the Reports folder, you can simply use the File > Save As command from your web browser to save a copy of the Session Summary report.

29

Please note that when you copy or upload a report to a new location using this method, the links to other report pages will no longer work. You will need to be sure that any data you wish to share is on the report page you are viewing.

Your **Student Voting Data** report will be very similar to the **Term Summary Report.** Instead of links to individual Session Summary reports, you will now see links to a detailed report of student responses for each session. These Student Reports provide you with an easily printable overview of your students' entire performance with i>clicker, and are particularly helpful for struggling students.

Student Voting Data Report

Course Name : Intro Course 101

Total Number of Sessions: **2**
Total Number of Students in Class: **7**
Total Number of Points for Term: **8**
View cumulative student scores

AB = Absent (no votes collected)
Session Average = Calculation based only on students who voted in that session.

Title/Session Date	Report Links	Number of Students in Session	Total Number of Questions Asked	Total Points Available	Session Average
Session 1 5/6/08	Student Responses	5	5	7	65.71%
Session 2 5/6/08	Student Responses	6	3	1	0.00%

New upgrade! Before creating your HTML reports, the system will now ask you what student information you'd like to include in the Student Reports. You may include your students' last name, first name, student ID in any combination. Your customizations will affect how individual student data will be displayed in the Student Voting Data and Cumulative Student Score reports.

The Cumulative Student Scores link will bring you to the Student Term Report, shown here.

Here you will see the students listed with the total number of points they have earned for the term. You will also see the student's term average and the number of points received for each individual session.

Tip: Clicking on any of the Session Titles (in this example, these are titled "5/6/08" and "5/6/08-2") will bring you to the same report as the "Student Reponses" link for that session in the Student Data report.

In this example, to view student responses for the first session held, you would click the "Student Responses" link from the Student Voting Data report, or the session title at the top of the session column in the Cumulative Student Scores report.

Student Term Report : Intro Course 101

Total Number of Sessions: **2**
Total Number of Students in Class: **7**
Total Number of Points for Term: **8**

AB = Absent (no votes collected)
Session Average = Calculation based only on students who voted in the session.

Student	Total:	5/6/08	5/6/08-2
Alpha Student Average: 25%	2	2	0
Beta Student Average: 0%	0	AB	AB
Charlie Brown Average: 88%	7	7	0
Jane Smith Average: 38%	3	3	0
Tony Hawk Average: 50%	4	4	0
Tim Stelzer Average: 88%	7	7	0
#11AA6BD0 Average: 0%	0	AB	0

Tip: If you are using Internet Explorer to view the HTML reports, you can right-click (control click) on any blank space within the table in your report and select "Export to Microsoft Excel" (provided Excel is installed on your machine). This will open an Excel worksheet containing information from the table you selected. To export information from more than one table in the report, click on a blank space outside of the report itself and you will be prompted to select tables to export to Excel.

The table shown here would appear, listing each student's answer to each question. Clicking the Question titles in this report will show you the relevant information from the Session Summary and Question Data report described above.

Student Session Report : Intro Course 101

Date **5/6/08**
Number of Students: **5**
Number of Questions Asked: **5**
Session Average **4.60**

Participation Points Available: **1**
Performance Points Available: **6**
Total Points Available: **7**

AB = Absent (no votes collected)
Session Average = Calculation based only on students who voted in *this* session.

Student ID/Average	Total	Question 1	Question 2	Question 3	Question 4	Question 6
Alpha Student Average: 29%	2	AB	D	A	A	C
Charlie Brown Average: 100%	7	AB	A	D	B	B
Jane Smith Average: 43%	3	AB	A	B	B	C
Tony Hawk Average: 57%	4	AB	B	A	A	B
Tim Stelzer Average: 100%	7	AB	C	D	B	B

New upgrade! If you have designated a correct answer for any of the questions, they will appear in this report in GREEN and incorrect answers will appear in RED. If you did not designate a correct answer, the voting choices will appear in black.

Exporting i>grader Polling Data

You can export student grade data, for the term to date or for selected sessions, in .CSV files. .CSV (comma separated value) is a simple file type that can be read by nearly all text editors, spreadsheet and database programs, including Microsoft Excel. You can choose to export the file in a simple "General" format or in a format that is ready to upload into your course management system. The General format is discussed below. **For details on specific course management systems' exports please see the related course management system documentation.**

There are two **i-grader** buttons available for exporting grades, available at the bottom left of the main i-grader screen:
1. **Export Selected Session as CSV (Excel) file**
2. **Export Term Summary as CSV (Excel) file**

Export Selected Session(s):

This function allows you to select specific sessions to export. In the below example, Lecture 1 has been selected by checking the box to the left of that session's name.

Tip: Remember that session names can be edited from the top of the Set Scores screen for each session in **i-grader.**

You may select just one session or multiple sessions.

New feature! When you export sessions, you will be prompted to select the student information that you would like to include along with the scores. **Please note that this option only applies if your selected CMS is set to General and you are using a Roster.txt file. Files exported for use with specific Course Management Systems must be exported in a format specific to the CMS**.

When you click the **Export Selected Session(s)** button, you will see a message that the scores have been saved to a file. The Export feature creates a file, named **UploadFile.csv**, in your course folder. Below is a sample file, opened with Microsoft Excel:

32

Note that you can include additional student information or your file may be saved/named slightly differently if you are using **i-clicker** with your campus course management system (and have followed the steps required to enable **i-clicker** files to be formatted for your particular course management system).

Tip: Each time a file is exported, the same filename (UploadFile.csv) is used. **This will overwrite any existing files of the same name from previous exports.** If you wish to keep more than one file, simply rename the first one something different, or move the file out of your course folder, before using the Export option again. This will avoid the second report overwriting the first.

Export Term Summary (All Sessions)

This option also creates a file named **UploadFile.csv,** in the course folder.

While similar to **Exporting Selected Sessions**, **Export Term Summary** includes a column for every session you have held to date and a column for each student's total number of points earned to date.

Note: Please see the course management documentation for detailed instructions on integrating i-clicker and i-grader with Blackboard, Blackboard Enterprise System (formerly WebCT), ANGEL, Moodle, Desire2Learn and Sakai.

Section Four -Assigning Preferences and Settings: Customizing i-clicker and i-grader

---

Questions? Contact us at support@iclicker.com or call toll-free at 1-866-209-5698.

To customize our system to meet your specific teaching goals/needs, locate and select **Your Settings and Preferences** from the main **i-clicker Welcome Screen**.

The default settings for both the **i-clicker** and **i-grader** applications are chosen to make this classroom response system easy to learn and use.

However, you may alter the default timer settings, graph display, point values, and many other features to best meet your individual needs.

Tip: You have the option to save your Preferences for only one polling session or for the entire term. You may save some preferences for the duration of the course and others for only a single session.
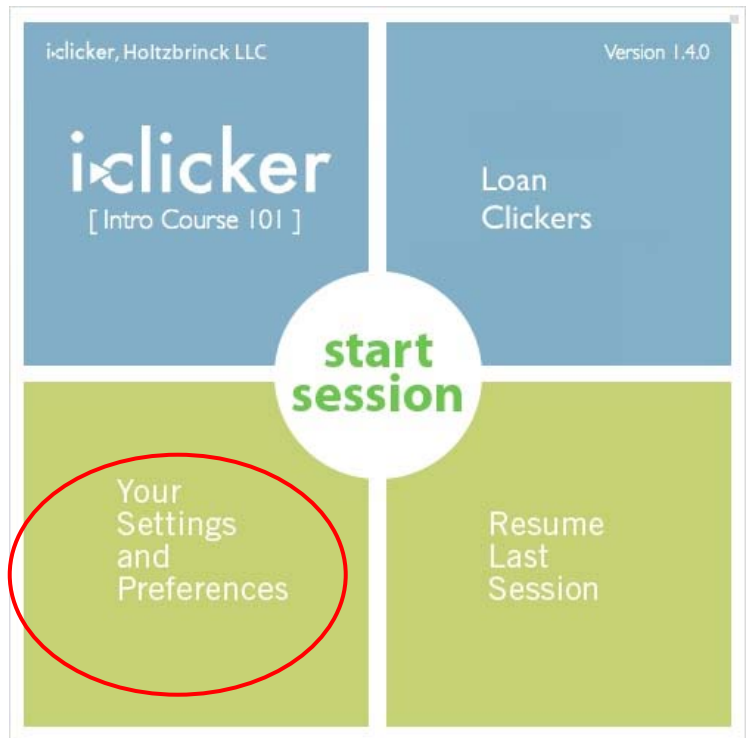
New upgrade! The Settings and Preferences screen is now available from the **i-clicker** floating menu bar as well. This is useful if you have started or are about to start a session and realize that you need to make a last-minute change to your settings.

To open the Settings and Preferences menu from the **i-clicker** menu bar, click on the "Options" or down arrow button on the menu bar, then from the drop down select Settings and Preferences.
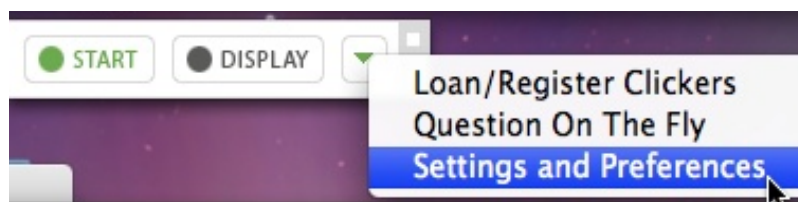
After you select Settings and Preferences from the Welcome Screen or menu bar, you will be taken to the Settings and Preferences screen. This screen has four settings tabs: General, Registration/Export, Question and Polling, and Scoring. Below is an overview of each subsection for each tab in **Your Settings and Preferences**.

General Settings/Preferences

1. Enter Your Course Name:
The course name you enter here is used in **i-grader, HTML** reports and on the Welcome Screen of the **i-clicker** program. It does not have to match the name of your **i-clicker** course folder. (**Note:** Entering a new course name is not the same as creating new **i-clicker** folders for each course or section. Remember that you will need a separate copy of the "MyCoursePC" folder for each section or course for which you are using **i-clicker.**)

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 student remotes is AA. If you are the only professor using **i-clicker** at a given time you should not modify this frequency. However, if someone else is using **i-clicker** in close proximity, one of you will want to use a different 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).

Tip: If you know you will be using **i-clicker** near another professor using **i-clicker** for the entire term, we recommend you set your default frequency *for the entire term*. If **i-clicker** is in use across your institution,

Questions? Contact us at support@iclicker.com or call toll-free at 1-866-209-5698.

you may also need to coordinate frequencies with your IT administrator. They may have already assigned channels to each classroom.

If you change your frequency from the default, your students will need to change their remote frequency at the beginning of each session. When you begin polling, an alert will appear with instructions for your students. They will need to:

A. Press and hold the On/Off (power) button on their **i-clicker** until the blue Power light begins flashing.

B. Press the new two-letter code (that you've designated in your Settings/Preferences). In our example, that new code is AD. A green **Vote Status** light will indicate your students have successfully reset their remote frequency.
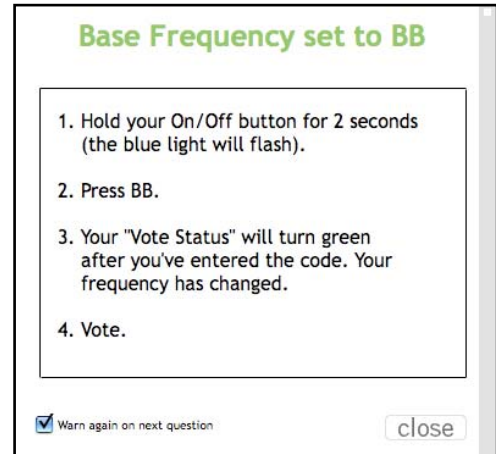
This remote frequency will be set for as long as the remote is on. Students will need to repeat this procedure for every session. If the remote is accidentally shut off during the session the student will need to repeat the process when the remote is turned on again.

3. New upgrade! Controlling the Frequency Change Display Options. You may alter the length of time that this warning appears on your screen, or you may choose to disable the warning/change alert completely (so that it never displays).
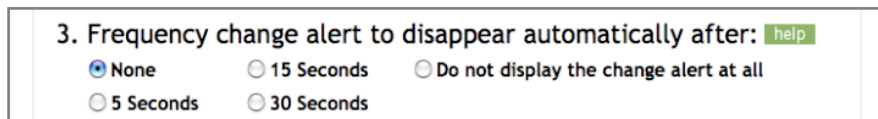
If you prefer that the warning remain on the screen until you click the **Close** button at the lower right corner of the alert, simply choose the option to "Close Manually." If you do not want to see the warning appear before each question in the session (but do want the alert to appear the very first time you ask a question), wait for the pop-up alert to appear and then un-check the option "Warn again on next question" below the frequency instructions.

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

4. 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. The actual size of the bar with each option selected is shown in the Settings and Preferences screen.

5. Designated Instructor's Remote: You may designate one remote (any **i-clicker** remote will do) as the Instructor's Remote, for your own use in class. The instructor's remote controls polling and

moves between slides in your presentation software, allowing you freedom to move around the room while conducting **i-clicker** polling sessions. Rather than counting the five choices (A, B, C, D, E,) as student votes, the buttons control certain functions of the **i-clicker** polling software. The image below illustrates each selection's functionality on an *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.

Tip/Upgrade! Your *Instructor's Adopter Kit* included the base, flash drive with software, USB cable, and two blue remotes. **It now includes an Instructor's Remote sticker (and explanatory handout) as well for your convenience.** You can affix the sticker to one of your instructor's remotes (blue remotes) and it will serve as a reminder for each of the instructor functions listed above.

We recommend you designate one of the blue remotes in your *Instructor's Adopter Kit* as your *Instructor's Remote*. 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, 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. If you plan to use the Instructor's Remote regularly, we recommend you set the code for the entire course (or term).

Tip: To use the C and D functions on the instructor's remote (advance/back up slides in your presentation software), your presentation software (such as PowerPoint) must be the "active" application on your PC. **i-clicker** will still float above your presentation software. However, if **i-clicker** becomes the "active" program (for example, if you click on an **i-clicker** program window such as the voting graphs), you will need to click once on your PowerPoint (or other) screen to make it the active application again and use the C/D buttons on the instructor's remote.

Registration/Export: Settings and Preferences

1. Roll Call / In Class Registration: This setting modifies the way that student names appear on the Roll Call screen for in class registration. This option does not modify the format of your roster or Gradebook file. For more information about the Roll Call feature please see pages 14-15.

2. Roster/Export – Course Management System in Use: If you plan to record/report **i-clicker** grades using your school's course management system, select the system here. This will modify the format of the exported CSV files from **i-grader** so that they can be imported into your CMS. If you are not planning to integrate **i-clicker** with a CMS, leave the default option "None (General)" selected.

Note: WebCT has been acquired by Blackboard, and WebCT systems have been re-named nationally to "Blackboard Learning Systems." However, these course management systems are still powered by the WebCT architecture, and for **i-clicker** purposes "WebCT" is still used in Settings/Preferences.

New upgrade! **i-clicker** now includes support for Moodle, Desire2Learn, Sakai, Blackboard 8, as well as new versions of WebCT and ANGEL. For a brief description of the files needed for integrating each CMS with **i-clicker**, hover your mouse over the name of your CMS to see additional help text. For more help, contact support@iclicker.com.

If you are using i-clicker with your CMS, it is important to read and follow the directions located in the course management system documentation (available on www.iclicker.com). This will eliminate potential future confusion and ensure your registration data is consistent with your course management system.
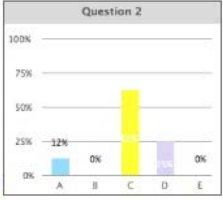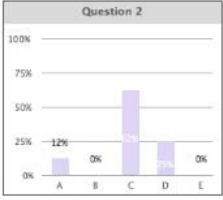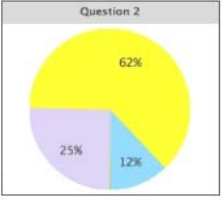
3. Web Registration: Earlier versions of **i-clicker** required instructors to request and enter a code specific to their institution. This requirement has been phased out of the software. If your students are registering in class or on www.iclicker.com, leave this space blank. **The security code is only needed if your students are registering via a locally hosted web site that is set up specifically for students at your institution.** In this case, you will be given a security code or URL by your campus IT. If you are interested in campus hosted registration for **i-clicker**, please contact support@iclicker.com to learn more.

Questions and Polling: Settings and Preferences

1. Set Polling Timer: 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 15 seconds, for the **i-clicker** timer to count down. The timer will automatically stop at zero and end the polling period.

New upgrade! The timer now allows you to select countdown time in 15 second increments, for any length of time from 15 seconds to 4 minutes.

Tip: In the countdown 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: During polling, a graph is generated showing the results of each question in your session. The graphs can be displayed by clicking the "Display" button on the **i-clicker** floating menu bar or by using B on the Instructor's Remote. This setting allows you to select whether the graph should be displayed as *multi-color*, *monochrome*, or a pie chart.

Tip: For any display option, if you designate a correct answer choice and display the graph, the bar will appear in green and the remaining bars will turn red. See the example below (the left example is the pie chart *without* a correct answer designated; the right example is the same chart *with* a correct answer of C):
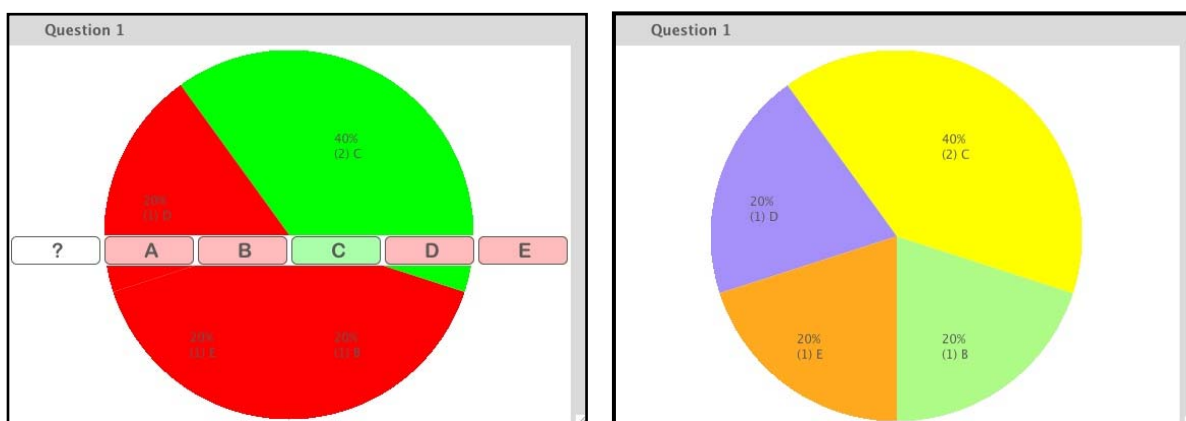
To return the graph to the default multicolored mode, mouse over the graph so that the answer choices appear and select the ?, or if you are using the Instructor's Remote function to toggle a correct answer, toggle through all options until the graph returns to multicolored.
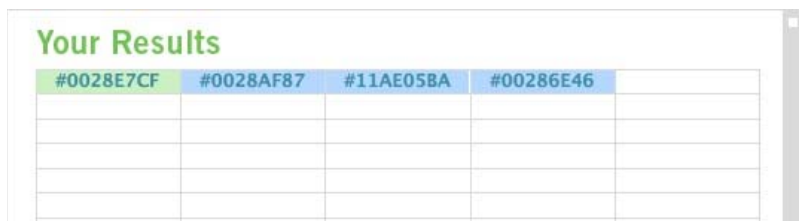
3. Voting Results Grid: This option allows you to display (or hide) a grid of your students' voting entries each time you ask a question. The voting results grid gives students an additional opportunity to confirm their votes were received. (Note that the "Vote Status" light on each clicker flashes green each time a vote is received by the **i-clicker** base, so your students can confirm that their votes were recorded without displaying this grid.)

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 if students need reassurance that their votes are being collected. You may also minimize the voting results grid during a polling session by clicking on the ☒ on the top right corner of the grid.

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.
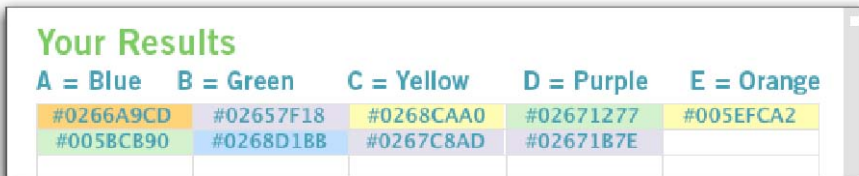
40

Confirmed Vote Receipt Only (shown below) displays the ID of each participating clicker.
The color automatically changes from blue to green each time a vote is changed. So, in the example below, remote ID 0028E7CF has voted but has also changed his/her vote, while remote ID 11AE05BA has voted once.
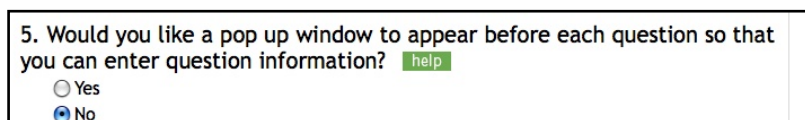

Confirmed Receipt and Vote Selection displays both the students **i-clicker** remote ID and a different color depending on their last received response. As in the example below, a key will appear at the top of the grid to let you know which colors correspond to which answer choices. The student with remote ID 02671277 answered "B" for this question, while students with remotes 0268CAA0 and 005EFCA2 answered "C."

Tip: During polling, your students can freely change their votes at any time until you select **STOP** (their last vote is recorded). Students may use the color coding in this Vote Selection grid to quickly identify the most popular answer and change their vote in response. This behavior could both skew your question data and also impact your performance points assignments. If you are assigning performance 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: If you select "Yes" here, a pop-up window will appear each time you initiate a

question in **i-clicker,** allowing you to title the question (the default titles are Question 1, Question 2, etc) and assign a correct answer. The correct answer will not display in the "Answer" field; your students will only see an asterisk (*) regardless of the letter choice you enter.

Tip: If you have selected this option, you may type in the titles and answers during the session or you may assign titles and correct answers to your questions ahead of time by setting up a file and adding it to your course folder. For instructions on how to set up this file, please see Section 7 on page 48.

Scoring Settings and Preferences

In this section, you can to establish the point values students can earn for actively participating in class and for answering questions correctly. **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).**

Tip: Setting points values here, prior to using i-clicker in class will save you significant time in post-lecture work and grading.

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 question.

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. For more about different types of points, please see page 23.

Participation/Attendance Points

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 #2. **Participation Requirement,** below.

2. Participation Requirement: To earn the point value established above, students must respond to a certain percentage of questions in a session.

New upgrade! Two new levels have been added to the Participation Requirement; you may now choose levels of Very Lenient (one question answered) and Very Strict (all questions answered). Depending upon the total number of questions, **i-clicker** will automatically calculate the minimum number of responses needed.

Example: If you enter "10" points in **Number of Participation/Attendance Points per session** and there are 10 questions in a session, 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 Points

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 correct answer for each question, in addition to any performance points you award in for simply answering the question. In this 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:** If your maximum is capped at ten points, and you hold a 15 question session with each question worth one point, even if a student answers all 15 questions correctly, the most she can earn for that session is 10 performance points.

Section Five -Resuming Your Last Session

In addition to "Your Settings and Preferences" on the main Welcome Screen, you also have 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 or your computer crashed.

Questions? Contact us at support@iclicker.com or call toll-free at 1-866-209-5698.

Section Six –WebUpdater: Updating Your Software

Occasionally, we will make improvements made to the Macintosh software. These updated versions can be downloaded free of charge using the WebUpdate application which you will find in each of your course folders (see below).
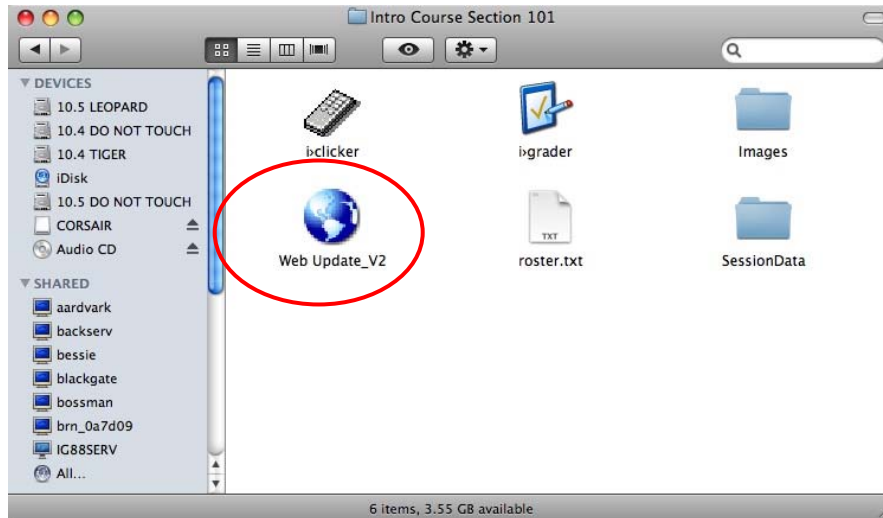
Simply double-click on the **WebUpdate_V2** icon in your class folder, making sure the computer you are using has access to the internet. This application checks the **i-clicker** website for the version numbers of the latest available **i-clicker** and **i-grader** applications and compares these to what is found in your course folder(s). If either or both of your applications are not the latest available you will be given the opportunity to update. Click the **View Report** button to view details about the upgrade:
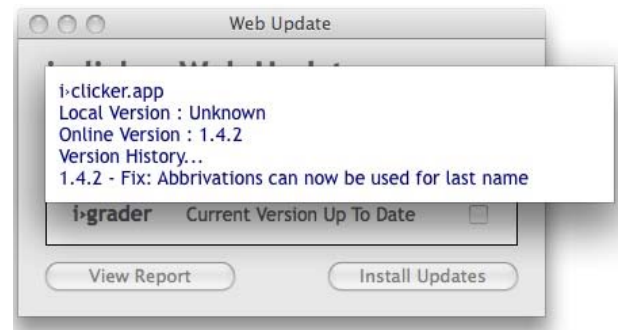
Note: **WebUpdate** only updates the **i-clicker** and **i-grader** applications that are in the same class folder as the **WebUpdate** application. If you are teaching more than one class you will need to run the **WebUpdate** application in each of your class folders to confirm all of your applications are updated.

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 check for revisions and updates to the software on a regular basis.

Questions? Contact us at support@iclicker.com or call toll-free at 1-866-209-5698.

Section Seven -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 may create a Questionlist file and save it in your course folder. If you are teaching multiple sections or courses, you will need to include a questionlist.csv file in each course folder.
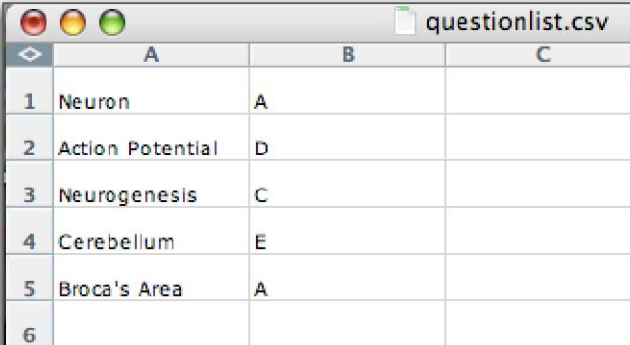
Tip: i-clicker can only identify and utilize one questionlist.csv file at a time. If you want to create multiple files at once (i.e. one for each lecture), or if you want to save these files for later use, create the files and save them using different file names that provide you with more information (e.g. questionlist0716.csv, or Week 1 Lecture.csv). Do not save these files within your **i-clicker** folder. When you are ready to use a file for your lecture, copy the file to your **i-clicker** course folder and rename it to questionlist.csv. When you are finished with the lecture you can delete the copy in your course folder.

The file must be in the format "question title, answer" with one question on each line. In the example below, the questions are titled Question 1, Question 2, and Question 3, and the correct answers are A, B, and B:

> Question 1, A
> Question 2, B
> Question 3, B

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 Save As:" field.
5. In the "Format:" field/pull-down, locate "CSV" or comma delimited as the file type from the drop-down menu and select that option.

	A	B	C
1	Neuron	A	
2	Action Potential	D	
3	Neurogenesis	C	
4	Cerebellum	E	
5	Broca's Area	A	
6			

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 "Replace."

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 TextEdit

1. From the Applications folder, locate and open TextEdit.
2. Enter the title of the question followed by a comma and then the correct answer.
3. Select "Save As" and name the file "questionlist.csv."
4. Under "File Type," select "All Files" and click Save.
5. If you are not able to save the file in CSV format, cancel the Save and go to the Format menu. Select the option "Make Plain Text."

```
questionlist.csv

Neuron,A
Action Potential,D
Neurogenesis,C
Cerebellum,E
Broca's Area,A
```
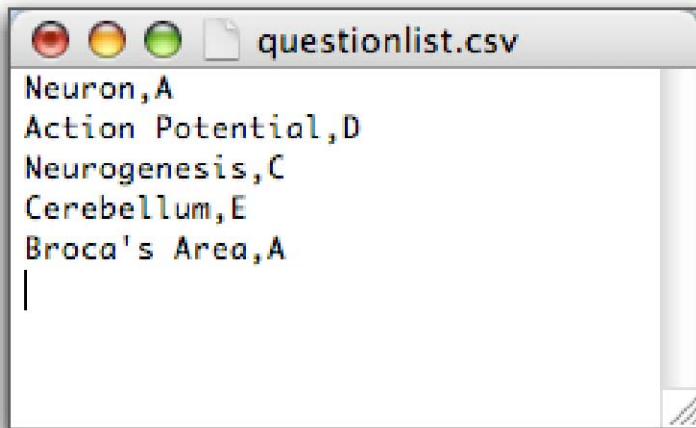
For both options, you must save the file within the i-clicker course folder so the software is able to recognize it and apply the values you defined in the file to i-grader.