Using i>Clicker Integrate at the University of Oregon  
(Notes dated 18 Nov 2010, by JQ Johnson)

Many UO instructors use the i>Clicker classroom response systems. If you record responses from your students for grading purposes, then you need to synchronize clicker numbers with your class roster and probably want to upload your i>Grader grading information to your Blackboard Grade Center. This is sometimes a tedious task, but the i>Clicker Integrate add-on makes it much simpler. The attached vendor-provided document describes Integrate in more detail, but this cover note contains some UO-specific errata.

Note that i>Clicker Integrate is optional during Winter 2011, but will be required starting Spring 2011. To allow backwards compatibility with older iClicker software we have had to make a few temporary local adjustments. If you do not plan to use i>Clicker Integrate, see the old Blackboard 9 instructions at [http://libweb.uoregon.edu/scis/clickers](http://libweb.uoregon.edu/scis/clickers).

p. 5: If the "CMS Integrate Wizard" is not already part of your iClicker folder you can download the UO-customized files from the UO Library website at [http://libweb.uoregon.edu/scis/clickers](http://libweb.uoregon.edu/scis/clickers) (in the i>Clicker Integrate section). Place the files in the same folder as your i>clicker and i>grader applications.

p. 7: When you update your data in the Registration/Export tab of i>clicker you need to specify the correct Blackboard version for each course you teach using i>Clicker. We are running Blackboard 9.1. You must also specify a Web Registration Security Code. For Winter 2011, that security code is:

```
Security Code: SQLhttp://libweb.uoregon.edu/dc/blackboard/iclicker?c=
```

We expect this code to change in Spring 2011.

pp. 9-11: Send e-mail to blackboard@ithelp.uoregon.edu requesting that we add a registration form to your coursesite, and specify the course number. For Winter 2011, please ignore the instructions given on pages 10 and 11 in the following. Instead, your coursesite will contain a form that looks like:
Instructor’s Guide

i>clicker integrate for Blackboard

Merging data from i>clicker (version 5.4.x) with Blackboard (versions 6.3, 7.1, 7.3, 8, 9)
Contents

Getting Started 3
Overview 3
Guide Objectives 4
System Requirements 4

Step-By-Step Instructions 5
Step 1: Copy Your CMS integrate Wizard Files 5
Step 2: Set Up i>clicker to Work with integrate 6
Step 3: Enable Student Registration 9
Step 4: Synchronize Your Blackboard Roster 12
Step 5: Upload Your i>clicker Polling Data 15
Step 6: Review Your i>clicker Scores 18

Troubleshooting 20
Getting Started

Overview

i>clicker® integrate is a new course management wizard that allows for a more seamless integration of data between your campus Blackboard course management system and i>clicker/i>grader. i>clicker integrate:

- Enables students to register their i>clicker remotes directly within Blackboard.
- Allows you to link your class roster and registrations to i>grader in just one click.
- Transfers your i>grader polling data back into Blackboard in just one click.

i>clicker integrate requires some set up and authentication work from your Blackboard administrator prior to your use of the application. By the time you are reading this guide, your Blackboard administrator has likely already:

- Added a link in Blackboard that your students can use to register their i>clicker remotes; you’ll need to get instructions on how to enable this link within your own courses from your administrator.
- Provided you with a series of program files (comprising i>clicker integrate) that allow you to integrate your i>clicker data with your Blackboard courses.
Guide Objectives

This guide will show you how to:

- Copy the required integrate files into your iclicker Win or iclicker Mac folders.
- Specify your campus Blackboard version within iclicker so your polling data correctly uploads into Blackboard.
- Direct students to register their iclicker remotes directly within Blackboard.
- Import a Blackboard student roster (complete with registration data) into iclicker so scores can be credited to students.
- Synchronize your Blackboard student roster and registrations into i-grader so your roster is updated within i-grader (especially after the add/drop period).
- Export polling scores from i-grader to your Blackboard gradebook quickly.

System Requirements

Windows:

- Windows 7, Windows Vista, or Windows XP operating system with Service Pack 2 or higher
- Microsoft .NET 2.0 framework*
- Screen resolution of 1024 x 768

Macintosh:

- Mac OS X version 10.4.1 or higher
- Screen resolution of 1024 x 768

* The .NET framework is a free download from Microsoft at:
Step-By-Step Instructions

Step 1: Copy Your CMS integrate Wizard Files

You should have received the following authenticated files (for your campus) from your campus Blackboard administrator:

<table>
<thead>
<tr>
<th>Windows</th>
<th>Macintosh</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS Integrate Wizard.exe</td>
<td>CMS Integrate Wizard</td>
</tr>
<tr>
<td>CMS_Wizard.xml</td>
<td>CMS_Wizard.xml</td>
</tr>
<tr>
<td>CMS Integrate Wizard.exe.config</td>
<td></td>
</tr>
</tbody>
</table>

Copy these files into your iclicker Win or iclicker Mac folder. Sample folders are shown here:

TIP: Your Blackboard administrator may have provided you with pre-configured iclicker Win (Windows) or iclicker Mac (Macintosh) folders that already contain all of the necessary files (customized for your campus). In that case, you won’t need to copy the integrate files into your course folders because this step has already been taken for you!
Step 2: Set Up i>clicker to Work with *integrate*

Before using i>clicker *integrate*, you must specify the version of Blackboard you are using on campus. You only need to do this once for each i>clicker course folder (e.g. Psychology 101, Psychology 201).

**To specify your Blackboard version in i>clicker:**

1. Double-click the i>clicker icon within your iclicker Win or i>clicker Mac folder to start the i>clicker application.

![i>clicker icon]

2. When you open i>clicker, you will see the Welcome Screen with no courses listed. Click the Add Course button to add your course.

   **NOTE:** If you already see your course in the course list, go to step 5.

3. An Add Course window appears. Enter your Course Name, Course Number, and Section Number. This combined information will serve as the unique identifier for your course.

4. Click the Create button. i>clicker automatically creates a new course folder in your iclicker Win\Classes or i>clicker Mac:Classes folder. The Add Course window closes and you are returned to the Welcome screen with your course name in the list of courses.

5. Select your course name from the course list and click Choose.

6. The Main Menu screen appears. Select the Your Settings and Preferences option.
7 Click the **Registration/Export** tab near the top of the new window.

8 Under the **Registration/Export** tab in the **Course Management System** section, select the version of **Blackboard** you use.

*TIP:* If you are not sure which version of Blackboard you use, you can either ask your Blackboard administrator for help or locate the information on your Blackboard home page (see sample below).
9 Click **Set for Course**.

10 If you have not yet used the **Import Roster** feature in i>clicker *integrate*, the following message appears. Click **OK**.
Step 3: Enable Student Registration

To receive credit for their i>clicker responses, students must register their i>clicker remotes (i.e., tie their clicker ID to their student ID). Registered i>clicker remote IDs are automatically associated with student names in your Blackboard gradebook and in the i>grader application.

To give credit to your students for class participation and/or performance:

1. Locate and set up the Register Your i>clicker Remote ID tool in your Blackboard courses. Your Blackboard administrator has installed a plug-in that creates a link in your Blackboard courses for student i>clicker registration. This link may be located in Announcements, Course Documents, or Tools, so you will want to ask your Blackboard administrator for the location of the link and instructions for enabling it.

   NOTE: If i>clicker is widely used on your campus your Blackboard administrator may have enabled the i>clicker registration link in all courses (so you don’t have to enable the link at all). Check with your Blackboard administrator for details.

2. Decide on your grading policies (and pre-set point values and rules in Settings and Preferences).

   TIP: Research studies show (Caldwell, J.E. “Clickers in the large classroom: Current research and best-practice tips.” Life Sciences Education, 6(1), 9-20, 2007.) that students participate and vote using clickers more consistently when clicker points are worth at least 10% of their overall grade. When clickers are worth 5% or less of the total course grade, students take voting less seriously and participate less frequently.

3. Provide your students with instructions for registering their i>clicker remotes. (See the next section for details.)

4. Synchronize student registrations from Blackboard with your i>clicker gradebook.
Once you’ve enabled the registration link within your Blackboard courses, direct your students to register their i>clicker remotes.

**Directions for STUDENTS to register their i>clicker remotes:**

1. Log into Blackboard and select your course.
2. Locate and select **Course Tools** in the left navigation panel (Courses Home Page > Tools > Course Tools).

![Course Tools in Blackboard](image)

*NOTE:* As noted above in **Enable Student Registration**, the Register Your i>clicker Remote link may be located in Announcements or Course Documents.

3. Click the **Register your i>clicker Remote ID** link.
4 Enter the i>clicker remote ID, found on the back of each remote. (The i>clicker remote ID is a series of 8 numbers and letters located on the back of each remote, just below the i>clicker instructions.)

5 Click Register. The system associates the remote ID with the student’s name and Blackboard ID. The screen changes to show the remote ID and date registered.

Other relevant facts for students about registration:

- Even if a student is using i>clicker for more than one course, s/he only needs to register his/her clicker in one course and his/her registration data will automatically be applied to all of his/her other Blackboard courses using i>clicker.
- Students can share clickers with a friend/roommate as long as they are not using i>clicker in the same courses.
- Students can register more than one clicker in Blackboard. If, for example, a student loses or breaks his/her clicker, s/he can register additional clickers through the same tool and all of his/her registered clickers (and their votes) will be tied to his/her Blackboard ID.
Step 4: Synchronize Your Blackboard Roster

Once your students have registered their i>clicker remotes within Blackboard, you can use integrate to import your Blackboard student roster (complete with registration data) into i>clicker/i>grader so polling data can be credited to your students.

To import your Blackboard class roster into i>clicker/i>grader using integrate:

1. Open your iclicker Win or iclicker Mac folder and double-click the i>grader icon to start the i>grader application.

2. Select your course name from the course list and click Open i>grader.

3. If you have not yet used the Import Roster feature in i>clicker integrate, the following message appears. Click Yes to download your Blackboard course roster.

4. The Log in to your Course Management System window appears. Your Blackboard version should be pre-populated, as should your campus Blackboard URL.

5. Enter your Blackboard user name and password. Click Login.

TIP: To save time in future sessions, check both Save Password and Auto Login next time. You can always reset these later if needed, but selecting both will save you time as you use integrate going forward.
NOTE: If your campus is transitioning to a new version of Blackboard, your Blackboard administrator may have set up integrate to enable both versions. In this case, select the Blackboard version you are currently using from the System/Version drop-down box. This is atypical, but ask your administrator if you are not sure.

6 The Transfer Roster/Scores dialog box will appear. Select the course or section for which you wish to import your Blackboard roster from the drop-down list, and click Import Student Roster from CMS.

7 A confirmation message will appear, indicating that the file was successfully written into your i>clicker course folder. Click OK.

NOTE: If a copy of your Blackboard roster already exists in the course folder, you will first be given the option to replace it or cancel the import via integrate. If you are updating your class roster (or registrations), click Yes to overwrite the existing roster file.

8 Your Blackboard roster (including student registrations) is now successfully housed in i>grader. Click Exit.
To view your newly imported roster, launch i>grader. The i>grader window appears with the names of students in your class. In i>grader, registered students appear in blue, while unregistered students and unregistered clickers (if any) appear in red. If you have not conducted a polling session, all student names will appear in gray. The student names will change to blue or red after the students have answered at least one polling question in class.

Repeat steps 1-8 for each of your courses.

To update your i>clicker roster with new registration information (either to account for your add/drop period or to better reflect late registrations):

- Click the Synchronize Student Web Registrations button from within i>grader. A dialogue box will appear asking if you want to use integrate to synchronize your roster.
- A confirmation message will appear, asking if you want to synchronize your campus CMS roster with registration data from i>grader. Click Yes and integrate will automatically launch. Repeat steps 4-9 above to download the latest version of your Blackboard roster.

NOTE: As noted above, you will be given the option to replace your Blackboard roster or cancel the import via integrate. Since you are updating your class roster (or registrations), click Yes to overwrite the existing roster file.
Step 5: Upload Your i>clicker Polling Data

After you’ve polled your students in class, your polling data will appear in i>grader, the i>clicker gradebook application. i>grader gives you access to all student polling information collected by i>clicker. With it, you can view students’ points, adjust scores, delete questions, synchronize late registrations (via integrate), and export/upload your polling data back into your Blackboard gradebook.

To export i>clicker scores back into your Blackboard gradebook:

1. Open your i>clicker course folder, locate and launch i>grader.

   ![i>grader icon]

2. The i>grader main window will appear, and will display your students and their scores.

   **TIP:** Make sure the correct version of Blackboard is listed in the Output formatted for section. You can amend your Blackboard version/CMS selection in i>clicker’s Settings/Preferences.

3. Select the check boxes next to the session(s) you want to export and click Export Selected Session(s) as a csv (Excel) file. You may also click Export All Session(s) as a csv (Excel) file to upload all of your i>clicker data to Blackboard.

   ![i>grader interface]

integrate with Blackboard  Step-By-Step Instructions  15
**TIP:** You may re-export grades for the same session(s) into your Blackboard gradebook with little risk. The new scores will simply replace the older scores you imported UNLESS you manually made changes to individual student scores within Blackboard. Most manual changes you made (to individual students) within Blackboard will not be changed by new data uploads from i>clicker/integrate. See the Troubleshooting section below for information on how i>clicker integrate handles conflicting scores for the same session(s).

4 A message will appear, indicating that i>grader successfully exported the data into a file named **UploadFile.csv** in your course folder. Click **OK**.

5 The i>clicker integrate window will open automatically. If you already selected **Auto Login**, you will be automatically connected to your Blackboard account. If you did not select **Auto Login**, you will be prompted to enter your Blackboard user name and password (if **Save Password** was not selected).

6 Once you’ve been successfully logged into Blackboard, a new **Transfer Roster/Scores** window will appear. Select the relevant course from the drop-down list and click **Export i>clicker Scores to CMS**.
7 Your i>clicker polling scores will then upload directly into your Blackboard course. The scores will be uploaded into your Blackboard Gradebook as numeric quiz grades in the i>clicker polling data category. You will be able to edit individual student i>clicker scores within Blackboard after you’ve uploaded the data. You will receive a confirmation message when the upload is complete. Click OK.

8 Click Exit to close i>clicker integrate. You may also close i>grader.

9 Repeat steps 1-8 for every course for which you are using i>clicker.
Step 6: Review Your i>clicker Scores

Once you have uploaded your i>clicker polling data to your CMS course, you can review the scores within Blackboard.

To view uploaded i>clicker scores in your Blackboard Gradebook:

1. Log into Blackboard and select the course for which you wish to view your updated gradebook.

2. Select Control Panel in the left navigation.

3. In the Courses tab, locate the Assessment section and select the Grade Center link.
4. The **Grade Center** will appear and will include your newly imported i>clicker scores. The scores will appear as numeric scores and may be edited like any other scores within Blackboard.
In general, when you upload your i>clicker polling data back into Blackboard, the experience will be seamless and won’t require further work. Although rare, there are a few possible discrepancies or errors that could occur with this process. The following scenarios describe situations that will result in an integrate discrepancy.

**Your student is not in your Blackboard roster but is in your i>grader roster.**

This will be a very rare occurrence. In order for this error to appear, you would have manually added a student to your roster file in your i>clicker course folder. The best way to avoid this error is to simply rely on your Blackboard roster as the most up-to-date resource for your most current roster file.

**The uploaded scores (from i>clicker) are lower than those previously recorded in Blackboard for an individual student or students.**

This does not generally require any work by you—it is simply an alert. For example, you may want to give Jane Doe a higher i>clicker score for a session on 9/12/2008 because she helped you facilitate a demonstration in class. i>grader currently does not allow you to change scores for individual students. Instead, you can make the individual change manually within Blackboard. If you later re-upload (intentionally or accidentally) the 9/12/2008 i>clicker scores back into Blackboard and the score for Jane Doe is lower in i>grader than in Blackboard, our application won’t override your manual adjustment. The report will simply let you know the discrepancy exists. If you wish to change an individual score to overwrite the Blackboard score (i.e. lower Jane Doe’s score again), you will need to make this change within Blackboard, not i>grader. Note that while lower i>grader scores will not override adjustments you made in your Blackboard gradebook, higher i>grader scores will overwrite lower Blackboard grades without a discrepancy notice.
You are exporting i>clicker scores for a student who has registered, voted in class, but then subsequently dropped the course (and is therefore no longer in Blackboard).

Again, the best way to avoid this error is to rely on your Blackboard roster as the most up-to-date resource for your most current roster file. When you synchronize the most current version of your Blackboard roster with i>grader, you may be left with voting logs from a Remote ID that are not associated with a student (if that student came to class, voted, then dropped the class). In this case, you may delete the voting logs for that Remote ID from within i>grader by clicking on the Remote ID and selecting the “remove” option. Please see the i>grader documentation for additional details.

**TIP:** You can save the Transmission Report in Excel (.xls), Plain Text (.txt), or comma separated (.csv) format for later review. You can also view any previous Transmission Reports for the same course. Click the **Export Options** menu at the top of the report and select your desired file format. A confirmation message appears stating that the file was written to your course folder. Click **OK** to close the message window.