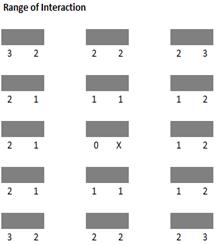
**Lesson Event Recording Instructions**

It is more important to thoroughly record the teacher and just one student than to monitor many students incompletely. The objective is to record whenever someone’s activity changes. Because the events are recorded **by person** rather than **by position**, the observer needs to know who is sitting where. Each student needs a SID which is unique to them within their year group (not class, in case students change classes for different subjects). Teachers just need a sequential number from 1 upwards.

**Notes on classifying activities**

* Must be familiar with activity categories! Left-clicking an activity cell shows more information.
* If the teacher appears to be doing nothing assume (s)he is discreetly o*bserving* (7) the students to see if (s)he should intervene.
* When a student reads ahead that's classified as *working alone* (8).
* Managing class behaviour includes reminding students to take out books as well as telling off/encouraging/exhorting!
* When the teacher is teaching, momentary student participation in that activity (e.g. brief answering, asking) can be recorded by double-clicking.
* If the teacher is involved with an interruption and prevented from dealing with class (that's one option) then the students may all mess about and chat - record this as *socialising in seats* (3/0).
* Understand the 'Range' for chatting/distracting – it’s a sort of 'radius' of disturbance, a measure of how far away and how many students are in-between: 3 means '3 or greater' - see diagram. It is important to apply this consistently – make a note if you think it was not.

**Before the lesson**

* Make sure you have the correct spreadsheet for this class! Turn laptop sound down/off.
* Fill in the Data Collection Notes form (date, class reference, your name, teacher's name etc.) and record any unforeseen situations on it.
* You must have a classroom **seating plan** showing room layout with students numbered and targeted students highlighted. Also mark position of bin and yourself.
* In spreadsheet, enter class reference and year at top-left, then select correct subject from drop-down list.
* To rearrange rows so that students can be grouped for quicker clicking, click the *Show/Hide* button and Shift-drag rows as required. Click the *Show/Hide* button again to create more space on screen.
* **Make sure students are in the seats as listed. If not, change the seat numbers in the spreadsheet. Do this before clicking the Initialize button (as the seat positions are stored on initialization).**
* Set Monitoring flags (select and right-click toggles): A for Absent, Y for being monitored, N for not.
* Press Initialise button to highlight who is being monitored. This will clear any groups already set.
* **If the teacher has preassigned student groups, record these using Grouping instructions below.**
* Press Start Lesson button.
* Start even before the teacher has actually started teaching as this reflects the sort of ‘warm up’ time involved.

**During recording**

* Make a note of unusual or serious situations, e.g. teacher taking student from class to talk privately. When making Notes, record the ClickRef number (in yellow) to help match the note to the event.
* When recording events involving teacher and students, click on students first - the teacher part is often automatic EXCEPT **whole class teaching, which the teacher starts**.
* If the teacher or a monitored student interacts with an unmonitored student, record the unmonitored student activity change as well.
* Wait a few seconds before recording a new activity state - just to make sure it's definite. For example, wait to see if a student's question is 'Can I go to the toilet?' or a relevant comment, quick quip, or the start of a more extended chat.
* **End an interaction before starting a new one**. For example, change student from *individual support* (13) to *working alone* (8) before recording teacher helping another student (13).
* **In an activity column, select one or more students.** You can use the usual MS Excel cell selection methods to select one or more cells (e.g. using Ctrl-click or left-click and drag). You can also use the ‘Fill’ feature, e.g. if you click on top cell, then double-click on the ‘fill’ corner, the column is selected – then you can right-click as normal.
* **To speed up entry, you can include unmonitored students in your selection** - they will be ignored. Try not to include students already in this activity as this can duplicate events.
* **Holding Left-Alt on a selection groups those students for that activity.**
* **Right-click** changes the student’s activity state. Use Right-Click where possible; use Double-Click for momentary activities, e.g. as explained below.
* **Double-click** indicates momentary activity (up to a few seconds – if more, then should be right-click event), for example
* same state: a student is actively participating in a state (e.g. 12, 13, 14 or 15), maybe asks or answers a question or makes a very brief joke
* different state: student is working alone (8) but suddenly shouts across the class (3) or for a few seconds fiddles in bag (4); or the teacher is teaching the class (so all in state 12) but gives a momentary reprimand/praise to student(s) - this could be a double-click on the disciplining/praising (1, 11) for that one student
* but if the student is already being disciplined (so in state 1) then a double-click indicates arguing, resistance etc., i.e. worsening of situation.
* How to **setup** **Groups of students**
  + Highlight names and right-click
* How to **dynamically** **GROUP/PAIR events/students during lesson**
  + select the students’ relevant activity cells, using click & drag to select cells next to each other or Ctrl-click to select separate cells - then release mouse button

Right-click for non-momentary grouping

* + hold the **left** Alt key down and **right click** anywhere in the selected cells - release the Alt key.
  + if this is done for a single individual student this indicates student has been told to do something different to what the teacher is doing with the rest of the class (typically working alone or with a TA)

Double-click for momentary grouping – **must use Alt key to process multiple students**

* + Selecting multiple cells and double-clicking without use of Alt key processes top cell only
  + hold the **left** Alt key down and **left-double-click** on any selected cell(s) - release the Alt key.
  + If a student was part of a group, then received some help (from the teacher or the TA) and they are re-joining that group, **Alt + RIGHT-CLICK** on the student’s activity will re-establish pairings.

Ctrl+Right-click or Ctrl+Alt+Right-click

* + Use this to put student(s) back into their predefined groups.

Shift+Right-click or Shift+Alt+Right-click

* + Use this to put student(s) back into their previous dynamic groups.

Correcting Mistakes

* + If by mistake you leave 1 or more students out of a group event, click the Ignore Last Click button and re-record the event again with all the students.
* If you mess up, explain what happened in the Notes giving a ClickRef reference!
* These are some possible events that may not be obvious to record:
  + If a visitor enters the classroom continue recording as best you can. Put students and teacher into 6 and make a note of interruption.
  + Student responds to teacher’s question: long answer, right-click on 10; short answer, double-click on 10 (10 also used for student ‘micro-teaching’).
  + A student can go into activity 10 whether in own seat or at front of class.
  + If teacher tells class off, put teacher in state 5: then move students into 5 as they start to listen (some may continue whatever they are doing, ignoring the teacher).
  + Student may be in 12 waiting patiently for the teacher – don’t move into 6.
  + If teacher is waiting for class to be settled, put teacher in 5 (students are in whatever state they are and may gradually change to 5)
  + If a student collaborates with others/class by saying something aloud, not to someone in particular, just anyone listening – this is state 9 with no pairing
  + Not distinguishing between student asking for help and teacher asking student if wants help - just activity 13: teacher helping student.
  + Not recording which student is helping the other - just classed as working together, activity 9.
  + Teacher can be in 13 or 14 helping individuals but then look around class while waiting for student’s response – this is now 7 (could double-click if momentary, or right-click if several seconds)
  + If student with teacher in 13 or 14 or with TA in 15 and suddenly looks through bag or gets something, this is not 4 or 6 or 7 – they are looking for something at the request of the teacher or TA – stay in current state.
  + Student being disruptive, state 3: if undirected, just a comment made out loud, leave unpaired; if it is whispered to neighbour then also unpaired; only when a conversation ensues then pair the two.
  + Teacher can remain in state 13 if moves straight from helping one student to next – otherwise move into 7.
  + Student can remain in state 3 if chats with one person after another – otherwise move into 8 (or whatever is appropriate) in between.
  + If students in a group waiting, unable to progress – pair in 6.
  + When student returns after being out (17), record as 6 until something changes. (Teacher similar.)
  + If the class is having a celebration (cake!) or maybe as a reward for something watching a video unrelated to their studies, then record this as 6. But continue recording their behaviour – may spoil the event or participate properly.
  + Make a Note of who you logged partially or stopped logging, or who came late or left early. If a student we wanted to monitor arrives more than 10 minutes late, don't record.
* **Ignore Last Click** button: click once to show that the last event (even if on a group of students) should be ignored. Then enter correct record, if required. All linked events will be deleted later. Click it twice if the last 2 separate events should be ignored. If there is some confusion explain in the Notes.
* **Seat changes**: Seat positions should be numbered on the room plan. If a student changes seat, record the new seat number in their Seat column. If there is a whole class change, double click on **5** (under Managing Class) to flag this event then modify or sketch a quick new seating plan. (The correct seating can be adjusted later – focus on keeping up with events rather.)

**To reset seat numbering, double click on red marker in seat column**.

**The Bin – seat 0**: when students go to the bin (e.g. to sharpen pencil) set the seat number to 0. This is productive, so state is 8. Change their state if student starts chatting or fooling around (state 2) or wasting time by reducing pencil to nothing (state 4).

* If a **student moves around**, as in state 2, you can note the place they went to - use the seating plan numbers - in the extreme right cell (after the 17 column), and record this in the Notes too, with a ClickRef.

**In the event of a technical problem, save the spreadsheet, close it and reopen it.**

**Don’t do any setting up again, just continue capturing events.**

**Recording events from a video recording**

* The only difference here is that the time of the event is not live.
* The event time is adjusted using the time offset (the time of day, not date) entered at the top-right next to ‘Resume’.

**At end of lesson**

* Click the End Lesson button.
* Complete the Data Collection Notes form choosing one of the options to evaluate the data collection success.
* Add any further notes to clarify any event confusions.

**What events and key & mouse actions are recorded**

* Teachers: new activity, right-click or double-click (same activity, click ignored)

Alt, Ctrl, Shift ignored

* Students: Alt+right-click and Alt+double-click, same or different activity

Possible confusion! When students are working with other students in a group, use the left-Alt key to show working with others; if the group is just a name, leave out the Alt key!

* Seating changes

**The Event Log**

* The lesson events are stored in the Data worksheet.
* Activity Code has two extra values used internally:
  + -1 indicates Ignore Last Click
  + -2 is a seating rearrangement event (giving an individual seat number or blank if room layout change too big to record live)
* The lesson events are stored in the Data worksheet. This can be exported in CVS format and fed to the NetLogo visualization program. However, most times this worksheet is extracted by automated data ‘cleaning’ program (another MS Excel spreadsheet with VBA code) to prepare for visualization.