



Timer & Counter Elements

Timer/counters are a series of specialized elements that provide you with the ability to count (the number increases each time you tap the '+' icon, and decreases each time you tap the '-' icon), and to time events (the timer stop watch starts timing the first time you tap the timer icon, and stops when you tap it a second time.) In some configurations with multiple timers , when there are a series of things that can be timed, a stop watch begins recording time when you tap it, and stops recording time when you tap a different timer. If you return to a timer, the time continues from where it left off.

Available Timers and Counters

- *The Standard Form* (Fig. 1) which has up to fourteen rows, each with a timer or a counter (there can be a mixture)
 - *The Comparison Form* (Fig. 2) which has two columns of timers and counters (the timers in each column work independently of each other) for making comparisons
- *The Goal Tracking Form* (Fig. 3) which has three columns with the first being a timer, the second being an ideal goal time and the third the difference
- *The Teacher Placement Form* (Fig. 4) which presents a classroom configuration with 9 timers which is used to record how much time the teacher spends in each of the 9 defined classroom areas, engaging or making eye contact, or standing/walking there. You can also optionally count one or two things, and in figure 3, gender interactions are counted.
- The Response Timer Form (Fig. 5) which starts timing when a teacher asks a question and stops when you select an action such as 'the teacher answers', 'a student answers', or 'the teacher gives a prompt'. Each time the action is selected, it is counted incrementally, and the time is also recorded incrementally. The purpose of this particular configuration is to indicate that on the average, the teacher waits xx seconds before giving the students a prompt. This is useful when you want to point out to a teacher that he or she does not give the students a chance to digests a question before giving them clues.
- *The Rubric Form* (Fig. 6) which displays four descriptive rubrics and allows you to accumulate the time the observer dwells/participates on each of the rubrics

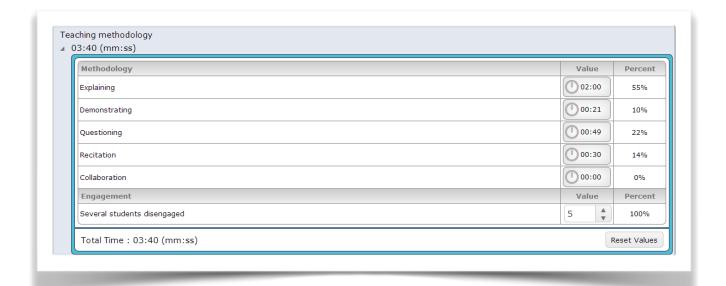


Figure 1 - The Standard Form

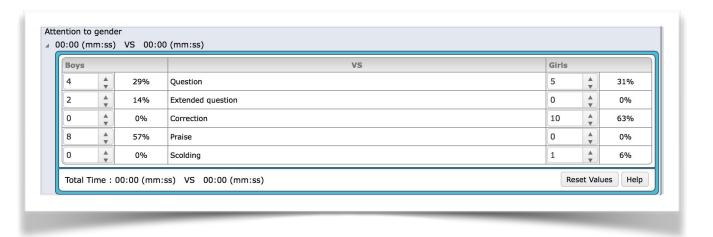


Figure 2 - The Comparison Form

Methodology	Value	Expected	Difference	
Introduction of lesson	00:00	05:00	-05:00	C
Explanation of goals	00:00	02:00	-02:00	C
Delivery of lesson content	00:00	10:00	-10:00	C
Class discussion	00:00	10:00	-10:00	C
assignment of task	00:00	05:00	-05:00	C

Figure 3 - The Goal Tracking Form

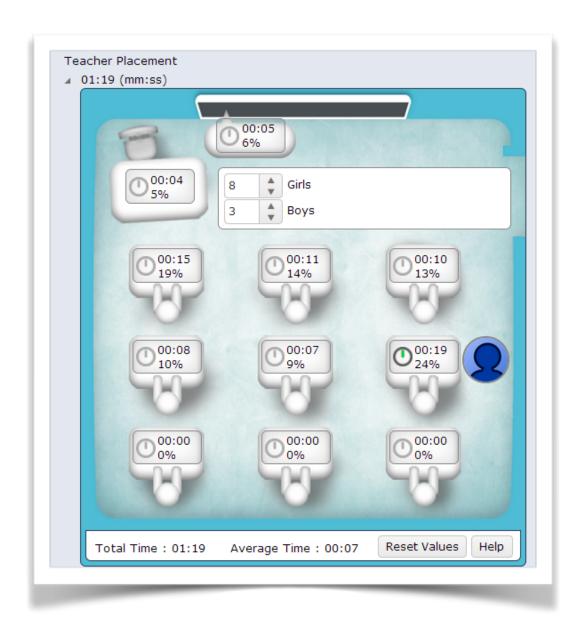


Figure 4 - The Teacher Placement Form

Start New	art New Question Reset Timer 00:0			
	Responder	# Answered	Total Time	Avg Time
Answered	Teacher prompts	2	00:12	00:06
Answered	Student answers	1	00:03	00:03
Answered	Teacher answers	2	00:18	00:09

Figure 5- The Response Timer Form

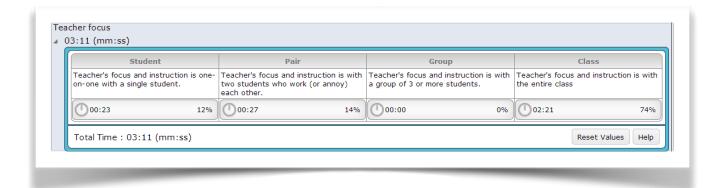


Figure 6 - The Rubric Form

The first step in creating any element is to navigate to the area where elements are created. This is done by selecting 'Build', and then 'Templates' (Fig. 7). The appropriate element lis then created by selecting 'Elements tab', selecting the element from the list of element types, and then selecting 'New'. (Fig. 8)



Figure 7 - The Build Menu

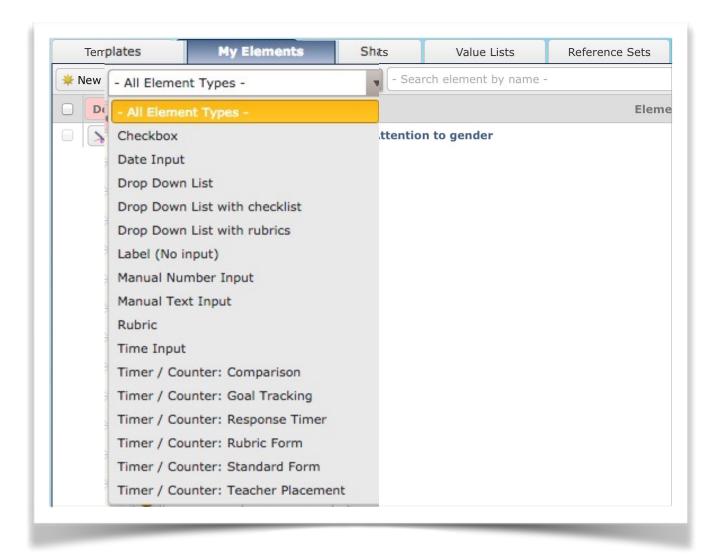


Figure 8 - Selecting an Element type

Building a form to time/count several items simultaneously

The Standard Form allows you to define up to 14 rows of items that you wish to function as a heading, a timer or a counter .

You must have at least one item, there is one by default which is a Label entitled 'Element List' (See Fig. 9). You will need to edit this to remain as a Label (and you would change the description), or you can change the type of item and make it a Timer or a Counter with an appropriate description. The remaining 13 items have the default on $\langle N/A \rangle$, which means they will not be used. You thus use as many rows as you wish, and choose their type and description (See Fig. 10). You can see what your form will look like by selecting the 'Preview' button.

Some devices such as the Palm and Windows Mobile will only display 7 rows and will not scroll to show any additional rows, so be sure you consider the number of rows utilized in the Standard Form if you will be using one of these devices.

You may want to use Labels to act as headers on your form, and you can mix timers and counters on the form. If you have more than one timer, and one of the timers is started, the time accumulates. If you select another timer, the first stops (with the accumulated time saved), and the second timer begins. If you select a timer that already had accumulated time, the time count will resume from where it left off and continue to accumulate.

If you employ a Counter, the number increases each time you tap the ' $^{\prime}$ ' icon, and decreases each time you tap the ' $^{\prime}$ ' icon (See Fig. 11).

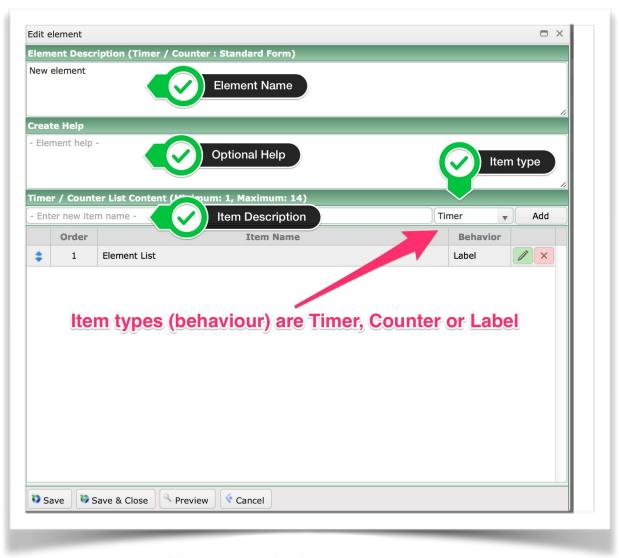


Figure 9 - Building a Standard Form



Figure 10 - A completed Standard Form (The name has not yet been entered)

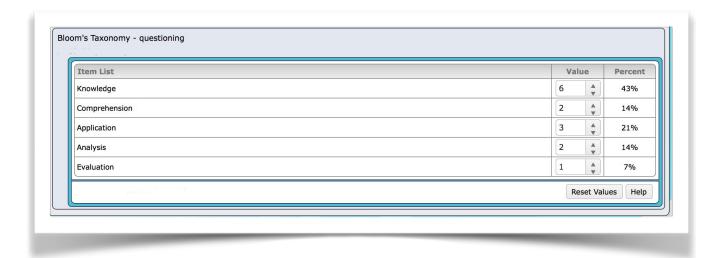


Figure 11- A completed Standard Form in use on the web.

Building a form to compare 2 groups/conditions/activities

The Comparison Form has two columns of timers and/or counters for making comparisons. When you select it, you are able to define the heading for each column, and create the items you wish to compare (Fig. 12). The items can be counted or timed, with the timers in each column working independently of each other. When you create a new element, one item (*Timer 1*) is automatically placed in the list and you should edit it to be your first item.

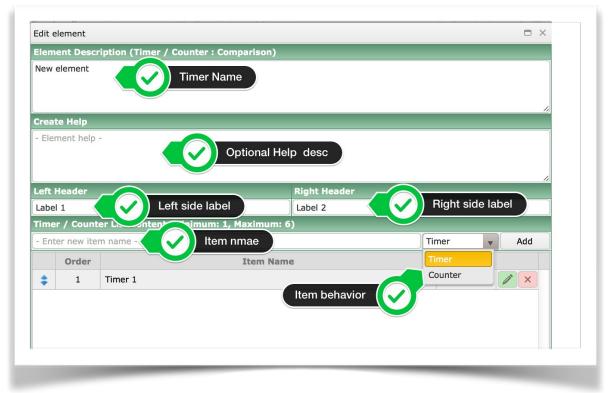


Figure 12 - Building the Comparison Timer/Counter

When you have finished building your element you can preview it, and save it using the buttons at the bottom of the edit window (Fig 13).



Figure 13- Preview and Saving buttons

A completed Comparison Timer is illustrated in Figure 14.

/lale		VS	Female
00:31	30%	Question	00:20 21%
01:11	69%	Extended Question	00:07 7%
00:00	0%	Correction	00:45 48%
00:01	1%	Praise	00:18 19%
00:00	0%	Reprimand	00:04 4%
otal Time : I	01·43 (mm	n:ss) VS 01:34 (mm:ss)	Reset Valu

Figure 14- A timer comparing interactions with males and females

Recording teacher movement or connecting with students

The Teacher Placement Form is designed to let you track teacher movement in the classroom, or which areas of the classroom are ignored, be it lack of eye contact, questioning or engagement.

In addition to tracking the areas of the classroom (the 9 desks represent the left, right, front, back and middle of the classroom - plus the teacher's desk and the chalk board), you can optionally count 1 or 2 items (which are entered for you by default and require either editing the name or deleting entirely - see Fig. 15)). Typically users count if the teacher is engaging a boy or a girl, but it could be any two things that you may wish to count the frequency of. The teacher's desk is often used to time the teacher's administrative activities, the chalk board to time the lesson delivery, and the student desks to track which areas of the room the teacher engages students. As with other counter/timers, you can preview what you have created before saving.

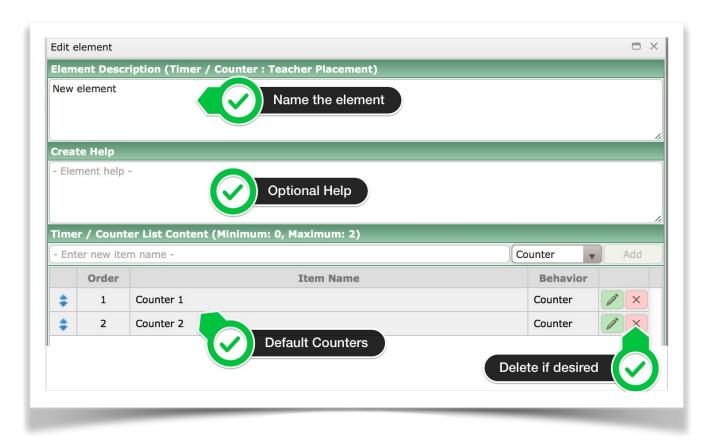


Figure 15- The Teacher Placement editing window.

Timing questions and answers

The Response Timer Form is designed to record what happens first when the teacher asks a question, and to indicate the average time that these things occur (Fig. 16). Typically it is used to show how long a teacher waits before giving students clues or the answers to questions that are posed. If a teacher does not allow a reasonable time for students to digest a question before giving them clues or answers, this instrument will illustrate it. However you can have up to 7 items in your list.

When you create this element, 2 items are automatically entered for you and you need to edit their names and then save the edit (Fig. 16). As with all counter/timers, you can preview what you have created before saving.

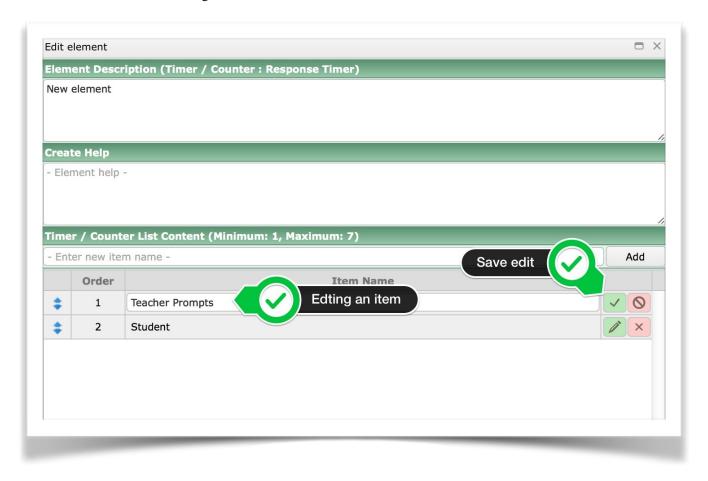


Figure 16- Editing a Response Timer

Timing activities and comparing them to pre-set goals

The Goal Tracking Form is designed to record what happens during an activity and compares it to the goal set for that activity. You can have several items in the list of activities and can edit the column headings for the activity description and the goal. Each activity can be timed or counted. Fig. 17 shows how to edit the goal tracker and Fig 18 shows a completed Goal tracking form with both timers and a counter. Note that the entire form can be reset or each individual activity can be reset.



Figure 17- Editing a Goal Tracking Form

Methodology	Value	Expected	Difference	
Introduction of lesson	00:00	05:00	-05:00	G
Explanation of goals	00:00	02:00	-02:00	C
Delivery of lesson content	00:00	10:00	-10:00	C
Class discussion	00:00	10:00	-10:00	C
assignment of task	00:00	05:00	-05:00	C
Number of resources given	0 4	5	-5	C

Figure 18- A completed Goal Tracking Form