Using Academy Technologies' Excel Macro for

CUSTOM SURVEYS

Before running this macro, you should have done the following:

1. Installed USB drivers on your PC.
2. Connected the BubbleScan.
3. Installed the Scan2xls software on your PC.

The three steps in using the macro for custom surveys are:

1. Configure the standard Excel macro file.
2. Capture survey data.
3. Create a custom report.

Configure the standard Excel macro file.

1. Open our Excel file: "Scan2xls Macro 002x for Custom Surveys.xls"

2. If you are not already on the Import worksheet, click on the green tab labeled "Map" at the bottom of the screen.

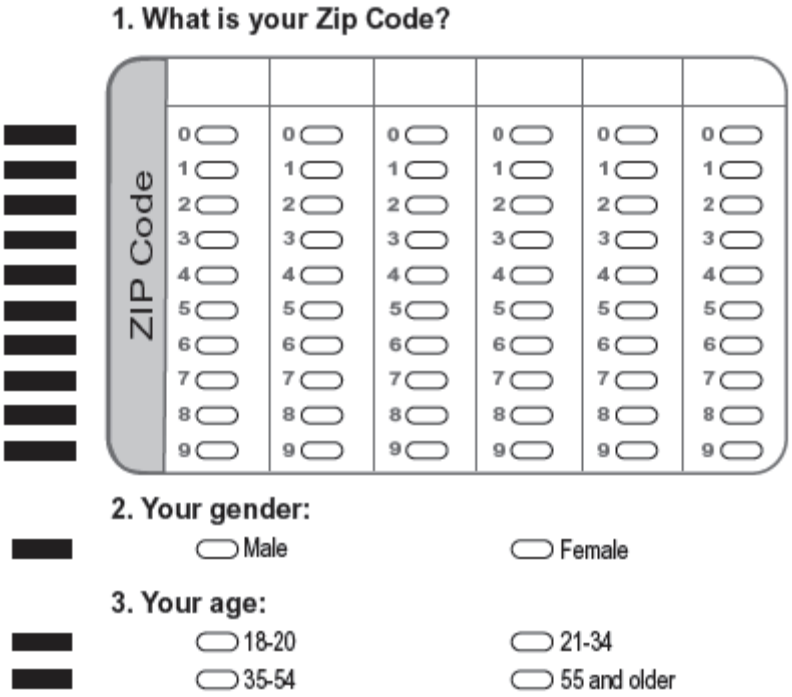
3. For each page of your survey (max. 4 pages) enter the **Number of Lines** on each page, the **Field** labels, the **Answer (Bubble) labels**, and a field **Type**.
   - Field labels can be descriptive (such as "Relevance") or simply the number of the questions or a combination (i.e. "3 – Relevance").
     Do not use "ID" in the first field of the map. Excel has problems reading .csv files (in case you later export/save your data) that start with "ID". If the first field is an ID, you may want to call it "Number", "No", "Student ID", or similar.
   - Answer (Bubble) labels must be numeric and must be placed in the column that represents the position of the bubble on the form. (In the 1st example below you can see that the 'Male' bubble is in the 1st bubble position, while the 'Female' bubble position is in the 4th bubble position. 'Male' should be reported as '1' while female should be reported as '2'. There are six bubble positions per line.)
   - The type can be:

     a. NV – Number Vertical – for numeric fields where the individual values for each digit are in a vertical format. See example below.

     b. NH – Number Horizontal – for numeric fields where the individual values for each digit are in a horizontal format. See example below.

     c. R – Response – for all other fields.

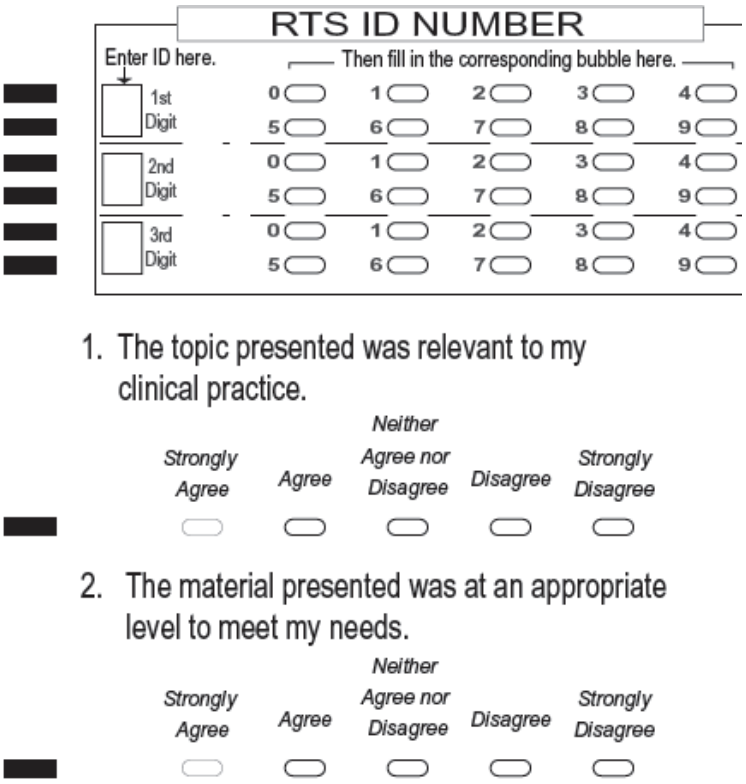
Sample with vertical number (NV):



The Excel macro file would be configured as follows:

	A	B	C	D	E	F	G	H	I	J
1	**Enter the Answer (Bubble) Labels, Field Numbers**									
2				**Page 1**						
3		Number of Lines on Page 1:		**13**						
4				Answer (Bubble) Labels						
5		Line	***Field***	1	2	3	4	5	6	Type
6		1	***ZIP***	0	0	0	0	0	0	NV
7		2		1	1	1	1	1	1	NV
8		3		2	2	2	2	2	2	NV
9		4		3	3	3	3	3	3	NV
10		5		4	4	4	4	4	4	NV
11		6		5	5	5	5	5	5	NV
12		7		6	6	6	6	6	6	NV
13		8		7	7	7	7	7	7	NV
14		9		8	8	8	8	8	8	NV
15		10		9	9	9	9	9	9	NV
16		11	***Gender***	1			2			R
17		12	***Age***	1			2			R
18		13		3			4			R

Example with horizontal number (NH):



The Excel macro file would be configured as follows:

	A	B	C	D	E	F	G	H	I	J
1	Enter the Answer (Bubble) Labels, Field Numbers and (									
2			Page 1							
3		Number of Lines on Page 1:						8		
4				Answer (Bubble) Labels						
5		Line	Field	1	2	3	4	5	6	Type
6		1	RTS ID		0	1	2	3	4	NH
7		2			5	6	7	8	9	NH
8		3			0	1	2	3	4	NH
9		4			5	6	7	8	9	NH
10		5			0	1	2	3	4	NH
11		6			5	6	7	8	9	NH
12		7	1-Relevance	1	2	3	4	5		R
13		8	2-Level	1	2	3	4	5		R

4. Post your entries by clicking the '**Post Field Map**' button.

5. Save this customized file under a new name. (Save As…) and close Excel.

Capture survey data

1. Start the Scan2xls software (Start – All Programs – Scan2xls – Scan2xls).

2. If this is the first time you are scanning forms or if you are using new forms, recalibrate:
    a. Please check with Academy Technologies (888-456-SCAN) regarding which forms to use for calibration.
    b. Using 8 unmarked forms calibrate the BubbleScan.
        i. Click <**Utilities**> and select **Setup & Calibrate**.
        ii. If the software is unable to detect the presence of the BubbleScan, it will prompt you to **auto-detect the** port.
        iii. Click <OK> when the software has found the 'Data Collection Machine'.
        iv. Click <**Calibrate Data Machine**> and drop the 8 calibration forms through the BubbleScan.
        v. Click <**OK**> twice when the message "Calibration data stored successfully!" appears.
3. Select the correct BubbleScan mode by clicking **Utilities** and then selecting
    a. **Multi Bubble Mode** – whenever multiple bubbles per line should be read (e.g. vertical numbers) or whenever question/answer text is printed in bubble positions
    b. **Single Bubble Mode** – whenever only one bubble per line should be read. Single Bubble Mode reports only the darkest bubble in a line in case multiple bubbles are marked or one bubble is poorly erased.

4. Click <**File**> and **Open**. Select the customized Excel macro file created above.

5. If you are not already on the Records worksheet, click on the blue tab labeled "**Records**" at the bottom of the screen.

6. Drop one survey form after the other.

	A	B	C	D	E	F
1	6	Forms scanned.		Clear Import	Clear Records	Export
2		Question (Field) >>>				
3	ZIP	Gender	Age			
4	24667	1	2			
5	84604	2	1			
6	84604	1	3			
7	84604	2	1			
8	84604	2	2			
9	23339	12	3			
10						

7. The information read by the BubbleScan is displayed in a list. The most recent data record is at the bottom. Feel free to edit any entries there if you feel it necessary.

8. When you are done capturing data you can print a report:

   a. Report 1 does not include numeric values such as IDs or ZIPcodes (any field of type NH or NV).

	A	B	C	D	E	F	G	H	I	J
1	ANSWER FREQUENCY						Total Respondents:	6		
2								Date:	5/7/2007	
3	Questions		Answers >>>							
4			1	2	3	4		1	2	3
6	Gender		2	3				33.33%	50.00%	
7	Age		2	2	2			33.33%	33.33%	33.33%

   b. Report2 will report answer frequencies by session (IDs or ZIPcodes).

	A	B	C	D	E	F	G	H	I	J	K	L
1	Report by Session							Date	11/1/2007			
2												
3												
4	Session	1				# Respondents		15				
5	Questions		Answers >>									
6			1	2	3	4	5		1	2	3	4
7	Q1		0	12	0	0	3		0.00%	80.00%	0.00%	0.
8	Q2.1		0	12	0	3	0		0.00%	80.00%	0.00%	20
9	Q2.2		0	12	0	3	0		0.00%	80.00%	0.00%	20
10	Q2.3		0	12	0	3	0		0.00%	80.00%	0.00%	20
11	Q2.4		0	12	0	3	0		0.00%	80.00%	0.00%	20
12	Q2.5		0	12	0	3	0		0.00%	80.00%	0.00%	20
13	Q2.6		0	12	0	3	0		0.00%	80.00%	0.00%	20
14	Q3.1.1		12	0	3	0	0		80.00%	0.00%	20.00%	0.
15	Q3.1.2		3	3	3	3	3		20.00%	20.00%	20.00%	20
16	Q3.2.1		12	0	3	0	0		80.00%	0.00%	20.00%	0.
17	Q3.2.2		12	0	3	0	0		80.00%	0.00%	20.00%	0.
18	Q3.3.1		12	0	3	0	0		80.00%	0.00%	20.00%	0.
19	Q3.3.2		12	0	3	0	0		80.00%	0.00%	20.00%	0.
20	Q4.1		12	0	3	0	0		80.00%	0.00%	20.00%	0.
21	Q4.2		12	0	3	0	0		80.00%	0.00%	20.00%	0.
22	Q4.3		12	0	3	0	0		80.00%	0.00%	20.00%	0.
23	Q5		12	0	3	0	0		80.00%	0.00%	20.00%	0.
24												
25	Session	2				# Respondents		9				
26	Questions		Answers >>									
27			1	2	3	4	5		1	2	3	4
28	Q1		0	0	0	0	9		0.00%	0.00%	0.00%	0.