

Creating a Survey Using the Survey System at Acadia

Learning Technologies Centre
Acadia University

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Table of Contents

Before You Begin	3
Key Concepts	4
Technical Terms	4
Constructing a Survey	5-15
A. Useful Survey and Question Options	16
B. Skip Logic	17
C. Adding Survey Responses Collected Through Other Means	18

About This Document

This document is intended to provide a step-by-step guide to using LimeSurvey to construct a survey with common question types and features, along with some additional information about extra, useful features in the system. It is not meant as full documentation of the survey software, nor is it intended to be a guide to survey design or statistical analysis of survey results. The Acadia University specific content is limited, and changes for other contexts should be minimal.

Any suggestions for additions or changes to this document should be sent to Duane Currie (duane.currie@acadiau.ca). It is best to be specific with the changes, including suggested wording and screenshots, if possible.

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Before You Begin

Before constructing your online survey, there are some essential planning steps beforehand in order to ease your work, reduce editing, and help your survey be able to answer the questions you are trying to examine.

First, know **what research questions you are trying to answer**. This is a vital step often skipped in the search for information. It is tempting to start constructing questions related to your topic, but unless you know specifically what you are trying to learn, it is possible to have a survey of many questions which answers nothing. The goal(s) might be very specific, such as assessing a demographic group's preference. It might be an exploratory study, where you're looking for trends to inform later studies. It might be data collection for a geographic map of resources. Or, it may be something else entirely. There's a wide range of possible goals, but you should make a clear statement of the goals, and design the questions in the survey based on trying to achieve those goals.

Second, **plan a rough draft of your questions in a word processor or spreadsheet**. It's easier to draft, edit, and discuss with other people a list of questions in a simple text file than in an online system. You may do some final edits later in the online system, but it's best to use your plain old word processor to initially draft some questions. An example is shown below. There is no single standard for such a document, but this catches the most important information in an easy manner to distribute and edit with other people involved in designing the survey.

Lunch Habits Survey		
Welcome Message		
<p>The Lunch Habits Survey is a survey of Acadia Students to provide information on the lunchtime habits of students. Information from this survey will be used to inform initiatives for the dining halls, other food service establishments, and student programming on campus.</p> <p>Your survey responses will be anonymous. They will also only be shared in aggregate form with food service and student programming groups.</p> <p>If you have any questions, comments, or concerns regarding this survey, please contact Duane Currie.</p>		
End Message		
Thank you for your response to this survey.		
URL after survey:	http://lunchbreak.acadiau.ca/offerings.html	
SURVEY QUESTIONS		
Question	Type	Options
Demographic Questions:		
Do you live on campus or off campus?	Multiple Choice (single-answer)	On campus / Off campus
What is your year of study?	Multiple Choice (single-answer)	1st / 2nd / 3rd / 4th / 5th or higher
Lunch Preferences:		
Do you regularly eat a meal at lunch time?		Yes/No
Which of the following foods would you frequently seek out for lunch? (check all that apply)	Multiple Choice (multiple-answer)	Chinese / Fruit&Yoghurt / Pizza / Salad / Sandwich / Soup / Sushi / Other
I am satisfied with the variety of on-campus food offerings.	Multiple Choice (single-answer)	Agree scale (1-5)
I am satisfied with the quality of on-campus food offerings.	Multiple Choice (single-answer)	Agree scale (1-5)
Additional Comments:		
Please provide any additional comments you may have regarding lunch options available at Acadia.	Text area	

Key Concepts

Before you begin, there are a few essential terms that will be used throughout.

A **survey** is a tool for collecting information from people, generally online, on paper, or both.

Each survey generally has a list of **questions** which a person answers and submits. These questions are divided into sets called **question groups**. It is very frequent for a survey to begin with a set of questions which ask demographic information about its participants (e.g. age range, gender, area of residence, etc.). Thus, we would call that set of questions a question group, called 'Demographic Questions'. The particular questions about demographics of the participants would be questions inside the Demographic Questions question group.

There are many types of questions. Most ask a participant to select from a list of **answer options**, which are just a list of options that can be chosen in response to a question. Typically, for any one question, a participant can only select one answer option. Some question types (like arrays of questions, and multi-answer multiple choice questions) can have **sub-questions**. A sub-question is like a smaller individual question within a question. To demonstrate the difference between answer options and sub-questions, consider the following example. This question has its own question text, but consists of two sub-questions, each of which has five answer options.

Please rate your level of agreement with the following statements.

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree	No answer
I am satisfied with the variety of on-campus food offerings.	<input type="radio"/>	<input checked="" type="radio"/>				
I am satisfied with the quality of on-campus food offerings.	<input type="radio"/>	<input checked="" type="radio"/>				

To summarize, a **survey** consists of some general settings (title, welcome message, thank you message, etc.), and a set of question groups (like Demographics). Each **question group** has some of its own settings (like title, description), and a set of questions. Each **question** has its own settings (like when to show/hide the question), the question text, type, and depending on the type, may have a list of **answer options** and a list of **sub-questions**.

Technical Terms

Radio buttons are used when a person must select one of a smaller, or at least more visually concise list of options. These appear as a set of small circles (often with labels beside them), only one of which can be selected at a time.

Do you live on campus or off campus?
Choose one of the following answers

On Campus
 Off Campus
 No answer

Drop-down boxes are boxes that have an initial option presented, but when a person clicks on the box it expands to show a list of options they can select from. Often, these are used when a person must select only one option, but the list is large.

What is your year of study?
Choose one of the following answers

Please choose... ▾

Checkboxes are similar to radio buttons, except they are the square boxes which can be checked or not. These are used for when a person may select multiple options at the same time, such as in questions that select "select all which apply".

Which of the following foods would you frequently seek out for lunch?
Check any that apply

Chinese
 Fruit & Yoghurt
 Pizza
 Sushi
 Other:

Text boxes are short one line boxes where you can type text.

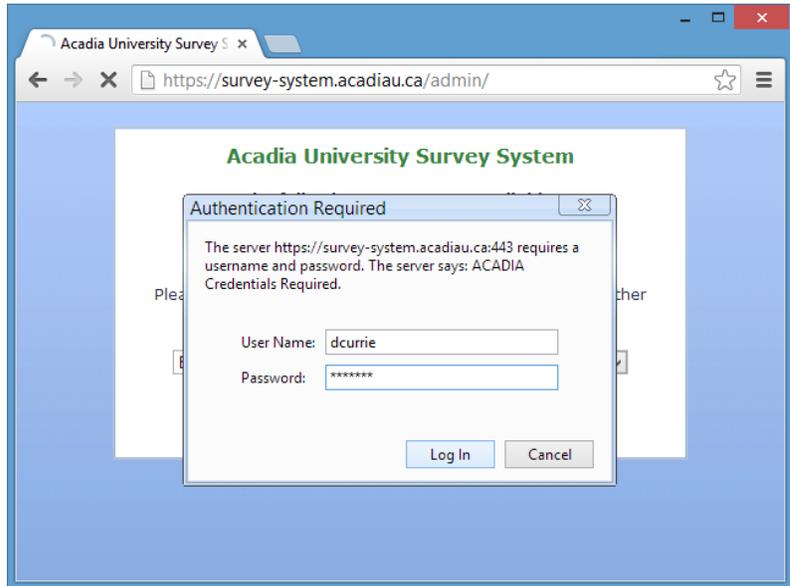
Please provide any additional comments you may have regarding lunch options available at Acadia.

Text areas are larger, multi-line text boxes where you can type text. These are what you often see for 'additional comments' questions at the ends of surveys.

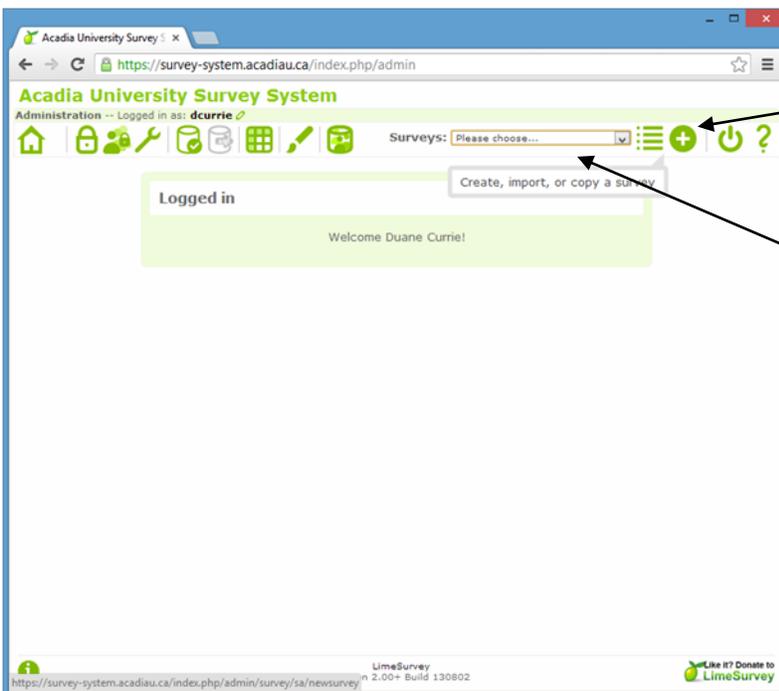
1. Logging In

Go to <https://survey-system.acadiau.ca/admin/> and log in with your network username and password.

If you can not log in, it may represent an issue with your network account. In such a case, please contact the Service Desk (902.585.4357, help-desk@acadiau.ca, or in person on the 1st floor of the BAC).



2. Creating A Survey



After logging in, you should see a screen similar to that on the left.

To create a new survey, click on the add button (the plus sign in a circle).

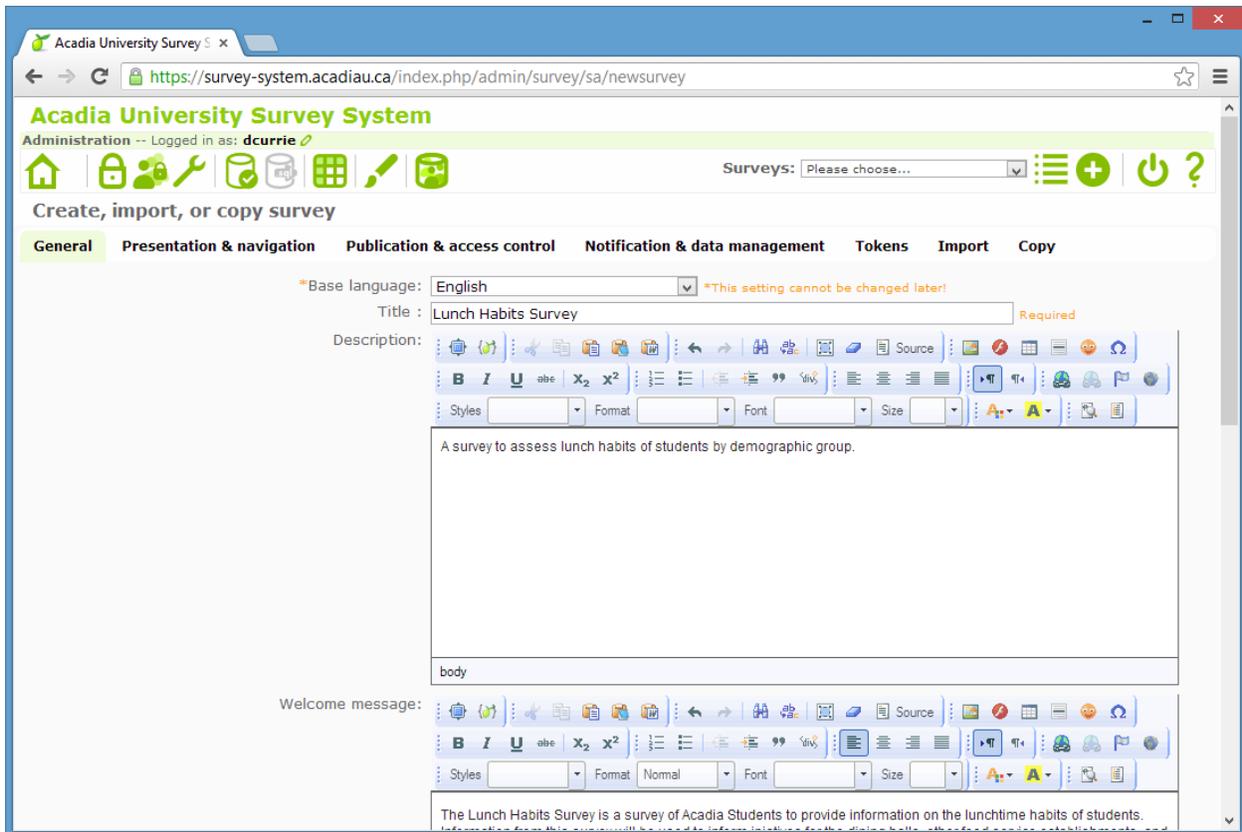
Alternatively, if you already have an existing survey you wish to edit, select it from the drop-down list beside "Surveys:".

3. Setting the Initial Survey Settings

When creating a new survey, you will be asked to set some information general to the survey as a whole. Although there are a lot of potential settings, the key ones for most surveys are the following:

- **Title:** The title of the survey. This is normally what will appear in headings on survey pages as people fill out the online survey.
- **Description:** This is a short description of the survey. This may be visible to survey takers when they view a list of public surveys on the system.
- **Welcome Message:** When someone fills out the survey, the first page they view contains the Welcome Message, and a button that allows them to continue on to fill out the survey. The key things to include in the welcome message are: 1) the purpose of the survey; 2) what the survey data will be used for; 3) who will make use of the results of the survey; 4) who will have access to the survey responses; 5) if the survey responses will be anonymous; and 6) who to contact (and how) with any questions or concerns about the survey.
- **End Message:** After someone has finished all the questions, a page containing the end message will be displayed.
- **End URL:** On the same page as the End Message, a button will be present that will take the survey taker to the link in this field.

The default values in other fields should be fine for many surveys, but feel free to explore.



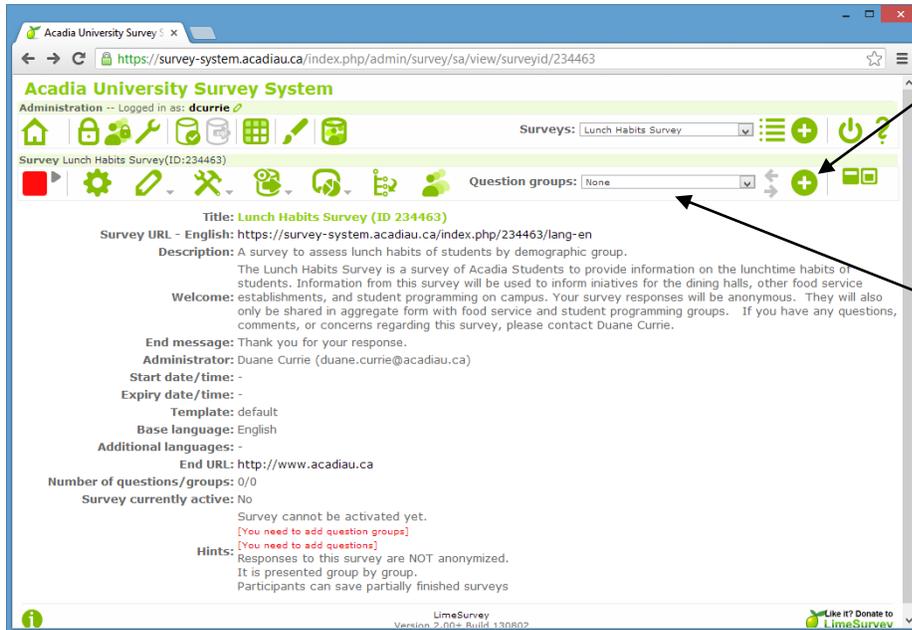
The screenshot shows the 'Acadia University Survey System' administration interface. The user is logged in as 'dcurrie'. The main navigation bar includes icons for home, lock, user, settings, and help, along with a 'Surveys' dropdown menu. The 'Create, import, or copy survey' section is active, with the 'General' tab selected. The 'Base language' is set to 'English'. The 'Title' is 'Lunch Habits Survey' (marked as required). The 'Description' field contains the text: 'A survey to assess lunch habits of students by demographic group.' Below this is a 'body' field. The 'Welcome message' field contains the text: 'The Lunch Habits Survey is a survey of Acadia Students to provide information on the lunchtime habits of students. Information from this survey will be used to inform initiatives for the dining halls, student services, establishments, and...'. The interface includes a rich text editor with various formatting options like bold, italic, underline, and text color.

Once you have finished entering these settings, scroll to the bottom and click Save.

Later, you can go back to editing these settings by entering the survey, and choosing one of the options under the Edit Settings button

4. Creating a Question Group

Before you can add questions, you should create a question group. By default, for people taking the survey, each question group's questions will appear on a different page. For example, all the questions in the group 'Demographic Questions' would appear on one page, and the 'Lunch Preferences' questions would appear on another page.



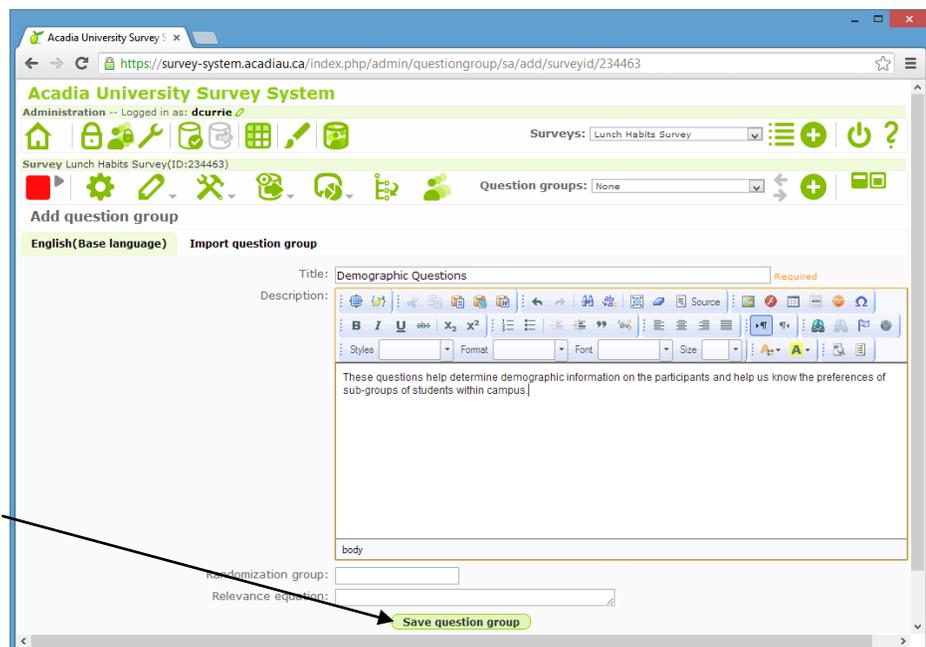
To add a new question group, click the 'Add' button for question groups.

If you wish to change settings for an existing question group, or add questions to an existing question group, select the question group from the "Question groups:" drop-down list.

After creating a question group, you need to set its Title and Description.

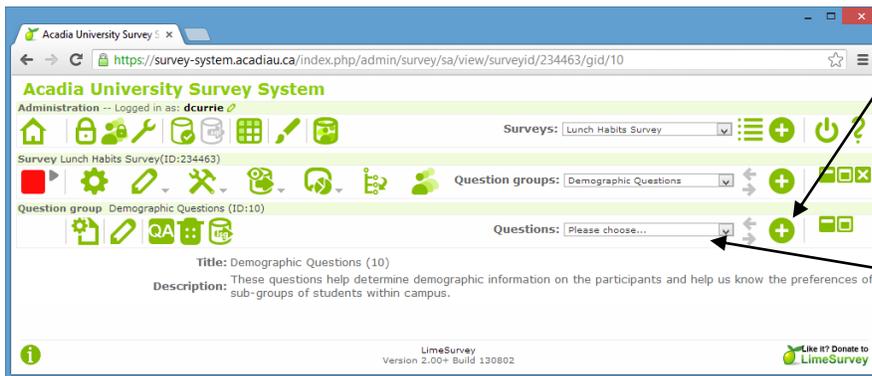
When a person is taking the survey, at the top of the page of questions for the question group, the title and description of the question group will appear, so these should be written as if the survey-takers will be reading them.

Once you have set the title and description, scroll to the bottom and click the 'Save question group' button.



5. Creating a Single-Answer Multiple Choice Question

Now that we have created a question group for ‘Demographic Questions’, we will need to add questions to this group.



To add a new question to the current group, click on the Add button for questions.

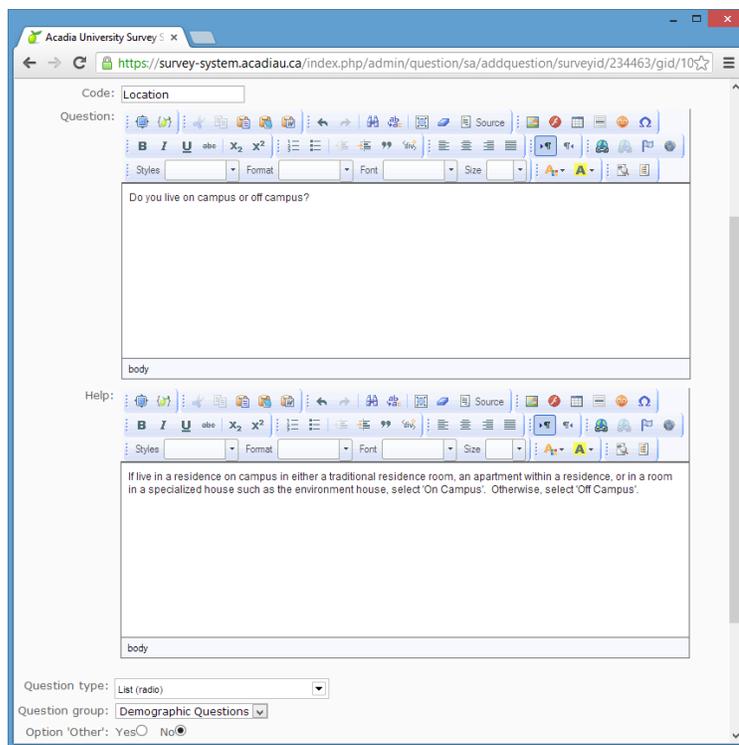
Alternatively, to edit an existing question, select it from the drop-down box for “Questions:”

The Code is a short label for the question. This does not appear to people taking the survey; rather, it is a code that is used by you in editing the survey, and in viewing the results of the survey. Make it meaningful, but short.

The Question box is for the text of the question you are asking.

Help is additional instructions that you may want to give survey takers for clarification. Normally, when a person takes the survey, if there is help available for a question, a question mark appears underneath the question. Beside the question mark, the help for that survey question appears. This is useful for giving clarifications on how to interpret terms in the question.

The question type identifies the sort of question. By default, it is “Long free text” (like a comments box), but you should change this to an appropriate type for your question.

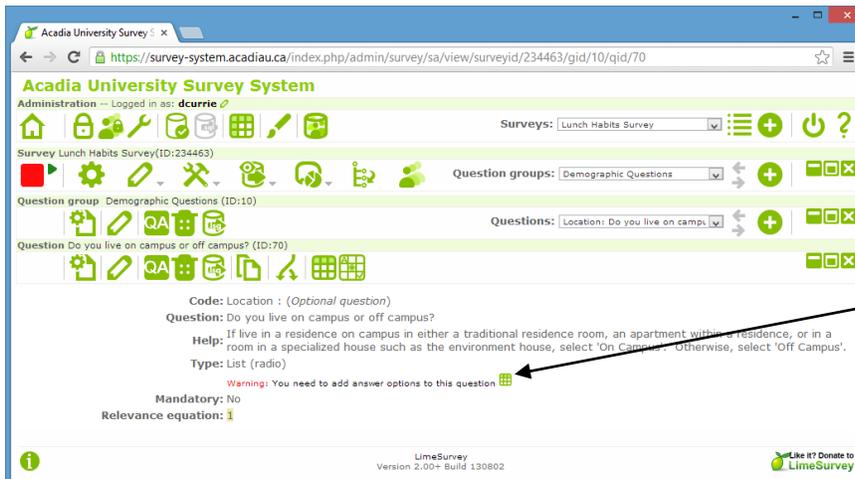


There are two significant options available for most questions. You may mark a question as being Mandatory, meaning that the participant must answer the question in order to continue. Many question types also have a option to allow for an “Other” answer to a question, which automatically provides a text box for an alternate answer, if selected.

For the first demographic question in our example, a radio list type is appropriate—this creates a visible, vertical list of options, only one of which can be selected. The Code, Question, and Help are set as well. To save the question initially, scroll to the bottom and click the ‘Add Question’ button.

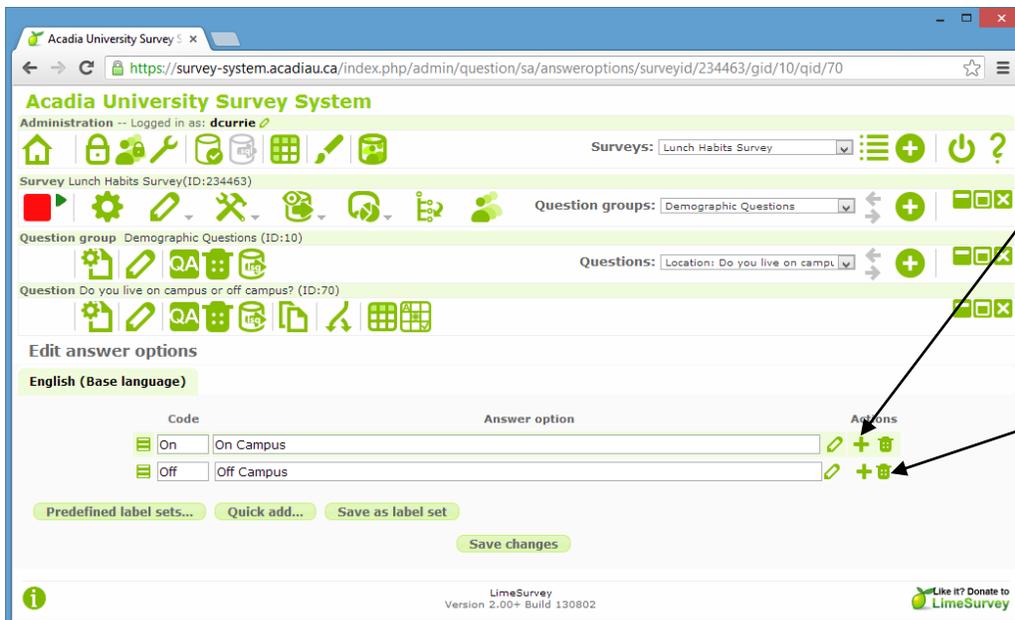
5. Creating a Single-Answer Multiple Choice Question, part 2

We are not yet done adding the question. For many question types, especially those that have a list of options for survey participants to select, we still need to add some more information. Fortunately, the survey software is good at notifying us of this need.



Here, we can see that we need to add answer options. We can do this now by clicking on the answer options button.

You will now be presented with a page which allows you to enter the options for answering this question. Each option has a Code and Answer Option. The Answer Option is what the participant sees when they fill out the survey. The Code is a short label that you will see in the results file you download after people have taken the survey.



To add another answer option, click on the Add button to create a new option.

To delete an answer option, click on the Delete button next to the answer option you wish to delete.

When satisfied with the list of answer options, click the 'Save changes' button at the bottom.

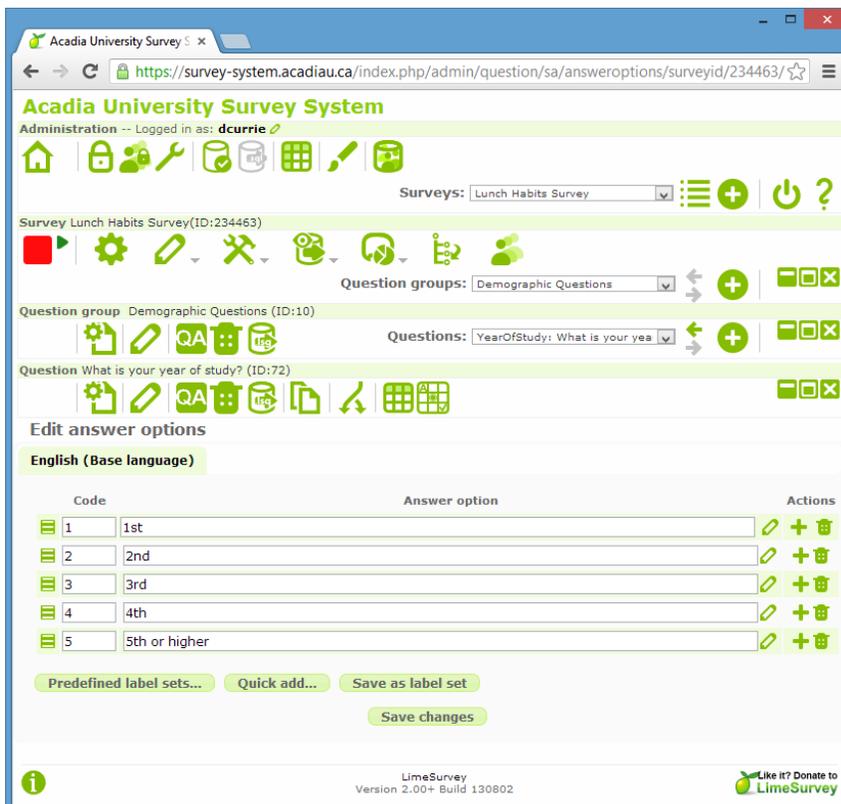
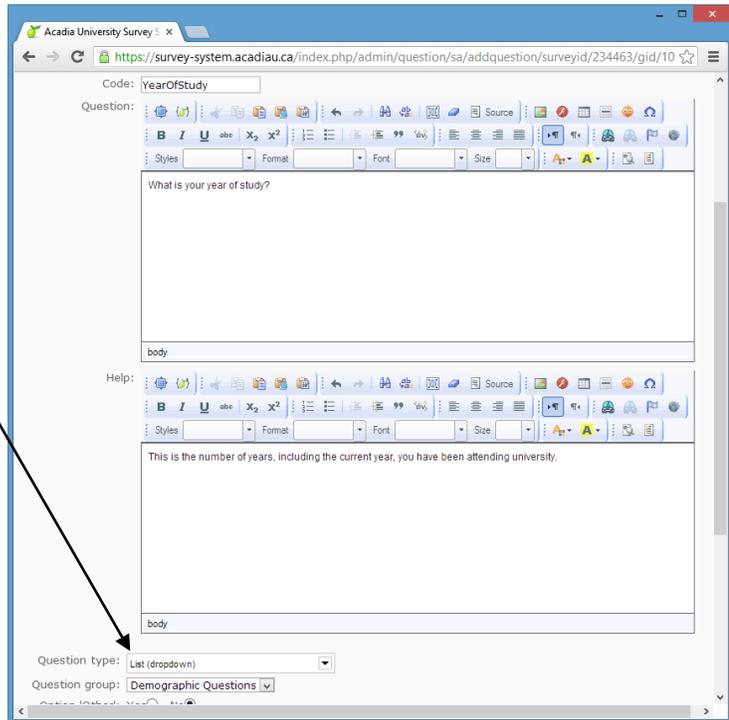
Note: A list of codes and options is called a "label set". There are some pre-existing label sets defined that you can use. We will see an example of this shortly in another question.

6. Creating a Drop-down Box Question

The first question we created allowed the user to select one option from a list, where the options would be presented using radio buttons. For some question types with more options, it can be convenient to provide a drop-down box. For the second demographic question, asking the year of study, we will use this type of question.

Similar to the earlier question, use the Add button for questions to add a new question. In the form, fill in the Code, Question, and Help as appropriate, and choose the Question Type to be “List (dropdown)”

After you’ve set these fields, click on the ‘Save Question’ button at the bottom. You will again go to a page that warns that a list of answer options are needed. Click on the Answer Options button to go to the page to set these options.



As before, create a list of codes and answer options as appropriate.

When done, click the ‘Save changes’ button at the bottom.

7. Create the Next Question Group

As with the 'Demographic Questions' question group, create a new question group by clicking on the Add button for Question groups. Set the title to "Lunch Preferences", set the description to some appropriate text, and click on the 'Save question group' button at the bottom.

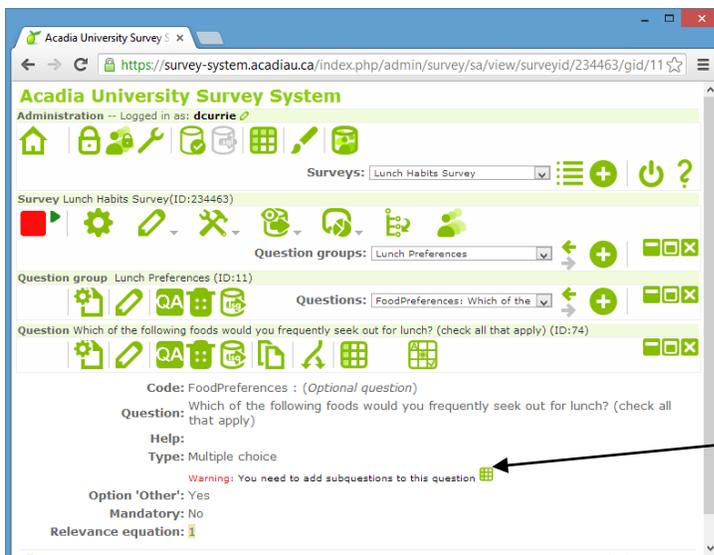
8. Create a Yes/No Question

The next question in the survey is appropriate for a 'Yes/No' question type. Create the question by clicking the Add button for Questions. In the following form, enter an appropriate code (e.g. 'EatAtLunch'), the question text ('Do you regularly eat a meal at lunch time?'), and set the question type to 'Yes/No'. Scroll to the bottom and click 'Add question'.

You will notice that, because the question type already clarifies the answer options available, it is not necessary to set any answer options for this type of question.

9. Create a Multi-Select Multiple Choice Question

This next question will allow participants to select multiple options, and also allow an 'other' option for which they can enter a suggestion of their own.



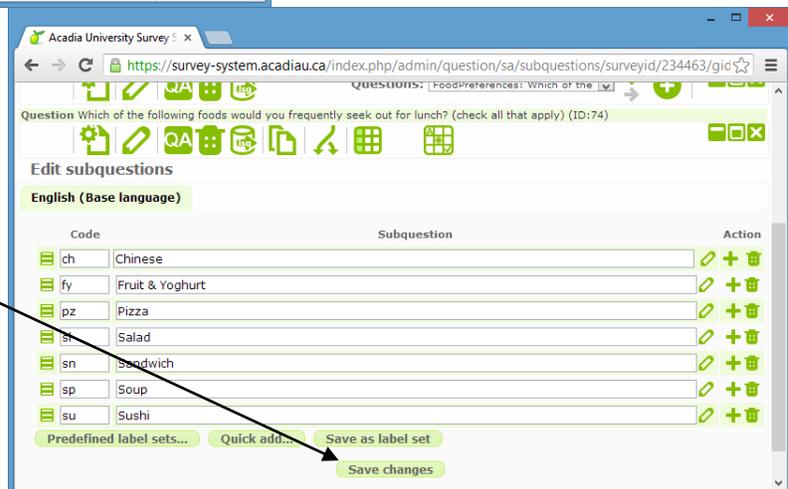
To begin, click on the Add button for Questions. In the following form, enter an appropriate code (e.g. "FoodPreferences"), the question text ("Which of the following foods would you frequently seek out for lunch? (check all that apply)"), and set the question type to 'Multiple Choice'. Also, set "Option 'Other'" to Yes; this takes care of creating the other option along with the textbox for you. Scroll to the bottom and click 'Add question'.

On the page that follows, it will give a warning that you need to add sub-questions (i.e. the options participants can select). Click on the Add Subquestions button to provide the options.

Add the codes and sub-questions (options) for the participant to be able to select. Note: because the Option 'Other' setting was Yes for this question, you do not need to add 'Other' as a sub-question.

When complete, click on the 'Save changes' button.

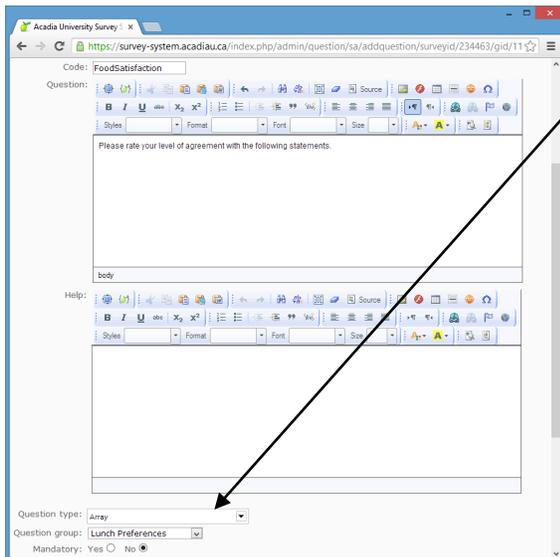
Recall, these are **sub-questions, not answer options**. This is because more than one can be selected. You can also see it as seven different yes or no questions being asked to the participants.



Code	Subquestion	Action
ch	Chinese	✎ + ✕
fy	Fruit & Yoghurt	✎ + ✕
pz	Pizza	✎ + ✕
sr	Salad	✎ + ✕
sn	Sandwich	✎ + ✕
sp	Soup	✎ + ✕
su	Sushi	✎ + ✕

10. Create a Question Array

Frequently, in surveys, you see a question which asks to respond to a list of statements or sub-questions on a same scale. In this system, these are called Question Arrays. In the survey being used as an example, there are two adjacent questions with the same scale. We can combine these into one question array.



Code: FoodSatisfaction

Question: Please rate your level of agreement with the following statements.

body

Help:

Question type: Array

Question group: Lunch Preferences

Mandatory: Yes No

To initially create the question, click the Add button for Questions, and on the form that follows, enter appropriate information for Code, Question, and Help. Set the question type to 'Array'. Scroll to the bottom and click the 'Add question' button to initially save the question.

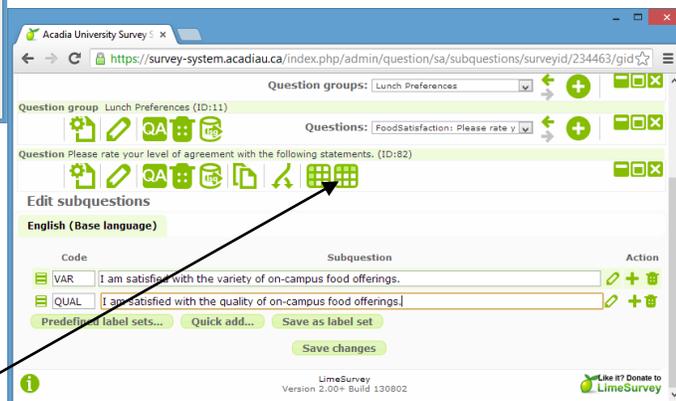
Afterwards, you will notice two warnings—that you must add answer options and that you must add que-questions. In this context, there are two sub-questions, specifically the two statements for which the participant must enter their level of agreement.

First, we will add the sub-questions. Click on the button for adding sub-questions.

Here, enter the two statements as sub-questions, and add appropriate codes that you will see later in the results.

Click on the 'Save changes' button at the bottom to save the sub-questions.

After saving the changes, click on the button to set the answer options.



Question groups: Lunch Preferences (ID:11)

Questions: FoodSatisfaction: Please rate y

Question Please rate your level of agreement with the following statements. (ID:82)

Edit subquestions

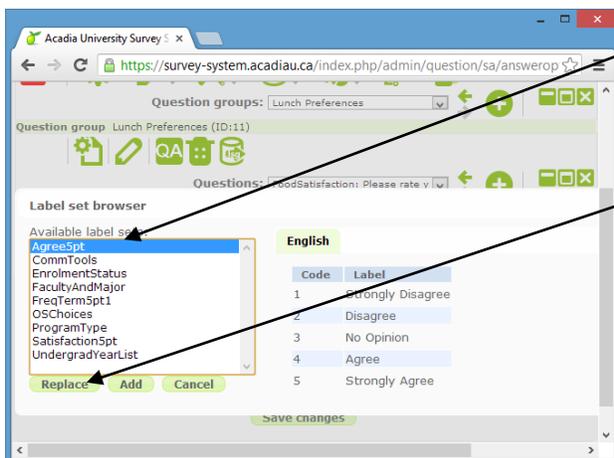
English (Base language)

Code	Subquestion	Action
IVAR	I am satisfied with the variety of on-campus food offerings.	
QUAL	I am satisfied with the quality of on-campus food offerings.	

Predefined label sets... Quick add... Save as label set

Save changes

A 5-point scale for degree of agreement with statements, centered about a neutral response is common in surveys (technically, an example of a "5-point Likert scale"). For some common sets of codes and labels (called 'label sets'), we have created predefined label sets on the system. A 5-point scale of agreement is already defined on the survey system, and we will use this to set our answer options.



Label set browser

Available label sets

- Agree5pt
- CommTools
- EnrolmentStatus
- FacultyAndMajor
- FreqTerm5pt1
- OSChoices
- ProgramType
- Satisfaction5pt
- UndergradYearList

Replace Add Cancel

Save changes

Code	Label
1	Strongly Disagree
2	Disagree
3	No Opinion
4	Agree
5	Strongly Agree

Click on the 'Predefined label sets...' button. In the popup that appears, select the label set called 'Agree5pt'. To the right, you will see the codes and labels for the label set selected.

To set your questions answer options to the ones in this label set, click on the 'Replace' button.

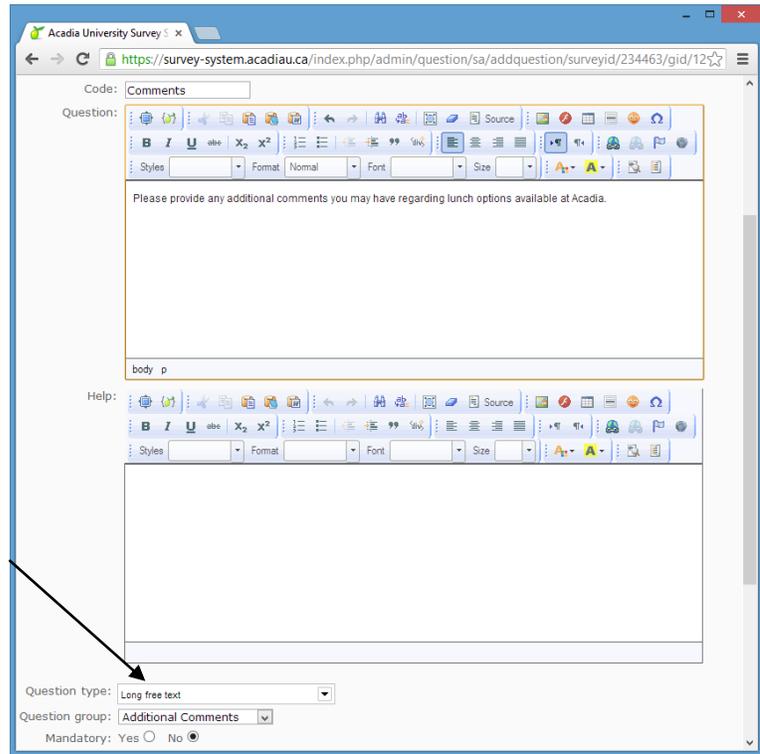
Now, your answer options should be set to those for a 5-point scale of agreement. Click on the 'Save changes' button to save these answer options for the question.

11. Create an Additional Comments group

It is very common for surveys to allow participants to provide free-form comments at the end of the survey. So that it will appear as a page on its own, we will add this as a question group with a long text question for the comments.

Click on the Add button for Question Groups. Set the Title to 'Additional Comments', and leave the description blank. Click on the 'Save question group' button at the bottom.

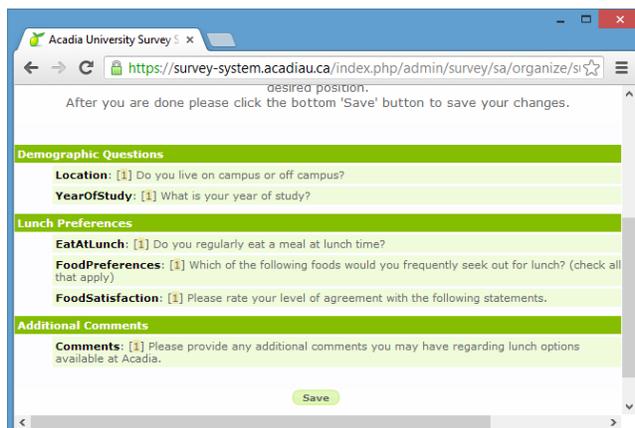
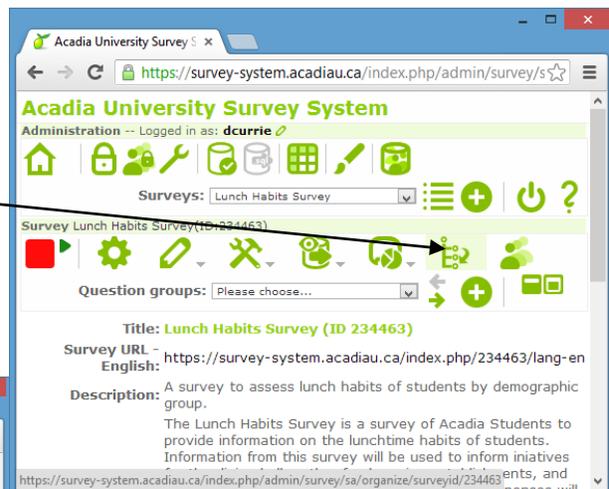
Once saved, click on the Add button for Questions. Set the Code and Description to appropriate values. Set the question type to 'Long free text' (that should be the default, anyway). Scroll to the bottom and click 'Add question'.



12. Check the Order of Question Groups and Questions

Before testing and releasing the survey, you should check the order of question groups and questions in the survey.

To go to a screen that summarizes, and allows you to quickly change, the order of question groups and questions in a survey, click on the Reorder button for the survey.



On the page that follows, you can click and drag questions and question groups to re-order them. Once satisfied, click on the 'Save' button to save the changed order.

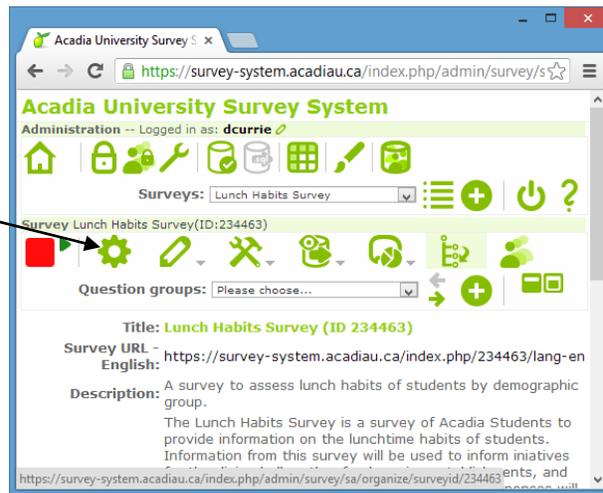
Note: Question arrays appear as a single question. Thus, what looks like 4 questions for Lunch Preferences in the survey design appears as 3 questions here.

13. Preview the Survey

The survey is now constructed. However, before releasing the survey to participants, you will want to preview the survey in order to see what the participants will see and to fix any issues (question order, grammar/spelling, incorrect options, etc.)

To preview/test the survey, click on the Test button for the survey. Aside from answers not being saved, you will see the survey the same way participants will see it.

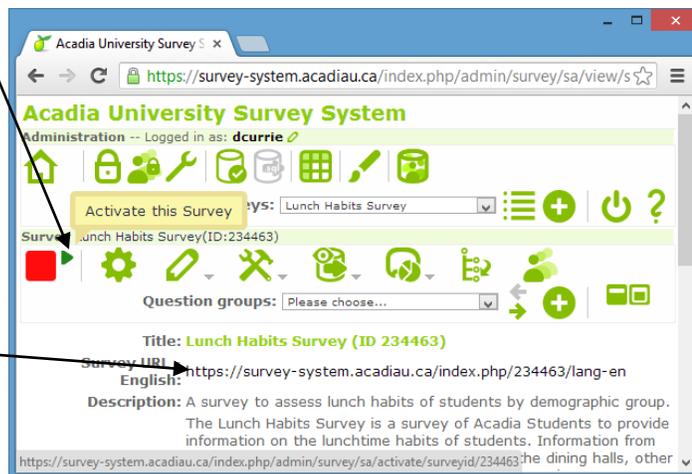
If you find any issues, note them, and go back to the survey, question groups, questions, answer options, and/or sub-questions where the issues exist and correct as needed.



14. Release the Survey

Before participants can take the survey, you must activate it. To activate the survey, click on the small green triangle (looks like a play button) beside the red square. This will make the survey ready for participants to take.

In order for participants to take the survey, you'll have to notify them and send them the link to the survey. Often, people do this through email and email lists, social media sites, and other paper and online methods. In all these locations, you will need to provide the link (URL) to the survey, which you can find on the description page for the survey. Copy this URL and paste it wherever you need (email, social media sites, etc.).



15. Wait for Responses

Sit. Wait. Grab a coffee. Read a book. Complete a knitting project. Give your participants time to complete the survey at their leisure.

It is good to send reminders periodically in order to encourage responses. If you are allowing three weeks for people to participate in the survey, you might consider sending reminders a week before, and a couple days before the survey is to be closed.

16. Expire the Survey

Close the survey from new responses by expiring it—on the page for the survey, click the little red square. You will be asked if you wish to expire the survey or deactivate it. **MAKE SURE TO EXPIRE THE SURVEY.**

17. Obtaining and Working with Responses

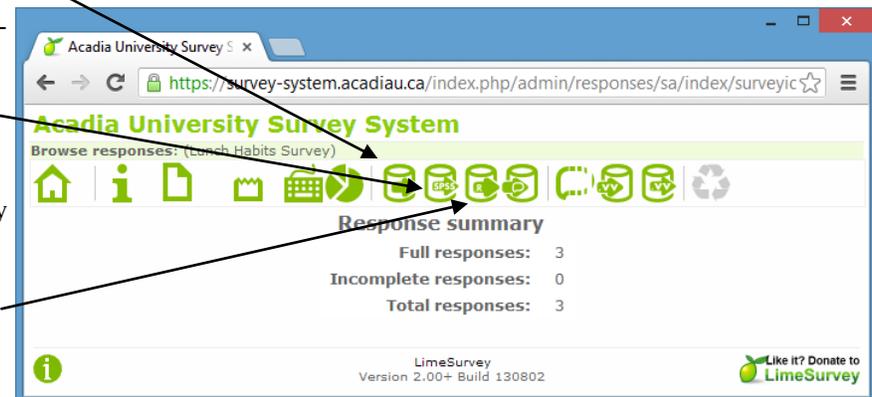
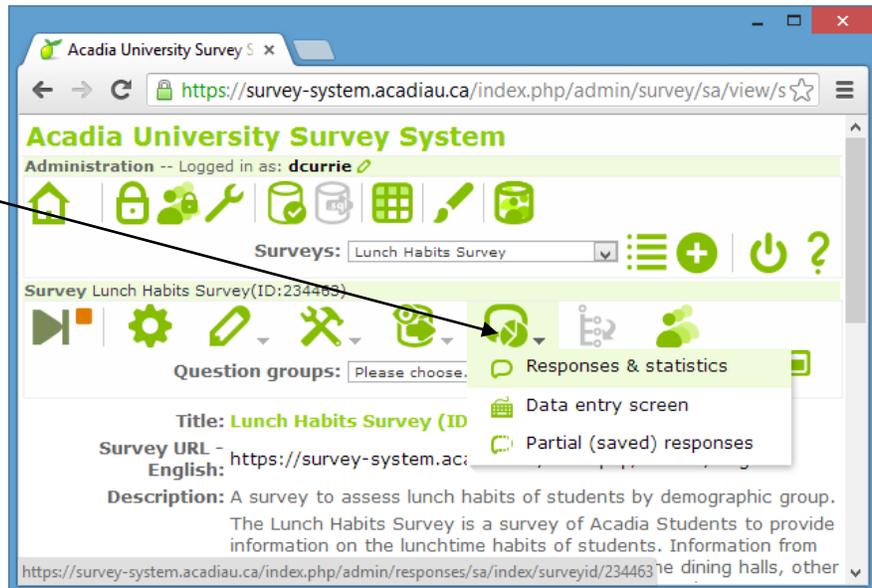
Typically, you will want to download the responses, and work with them in other software (e.g. Excel, SPSS, PSPP, R).

To access the responses, first go to the Responses and Statistics menu item for the survey.

There are 3 major options for exporting data. You can export as a table/spreadsheet in CSV, Excel, Word, or PDF. Typically, you would only use the Word or PDF options to store a full-text copy of the survey results. More often you would download it as Excel or CSV. **Note:** when doing this, it is suggested you set the Headings to “Question code”, and Responses to “Answer codes.”

A popular choice of software people use for survey analysis is SPSS. For convenience, you can download files specific to SPSS that can be imported directly.

Another popular option for survey and data analysis software is R. The survey system also allows exporting responses in a format that can be directly imported into R.



A. Useful Survey and Question Features

Survey Start and Expiry Dates	In the admin area, open the survey, For the survey, pick the Edit->General Settings option, then click on the “Publication and access control” tab.	Allows you to set a start date before which surveys can’t be submitted, and an expiry date when the survey will automatically expire. This is useful for setting up the expiry beforehand, so you don’t have to do it manually.
Setting survey to be single-page	In the admin area, open the survey, For the survey, pick the Edit->General Settings option. Change Format to “All in one”	Allows you to set a survey to be presented all on a single page, instead of one page per question group. This is convenient for short surveys.
Stopping spam submissions	In the admin area, open the survey, For the survey, pick the Edit->General Settings option, then click on the “Publication and access control” tab. Change “Use CAPTCHA For” to also include survey access (i.e. all 3 captcha options)	<p>For short running surveys (up for less than a month), it is not usually necessary to take any steps to prevent spam bots from submitting responses. However, for long running surveys or a form meant to collect responses for a long-running initiative, often spam bots will discover the survey as a page they can submit to, and will create fake submissions advertising a product.</p> <p>CAPTCHA is the technology for blocking submissions unless a person types something they see (or hear). This largely prevents spam bots from being able to legitimately submit responses and helps guarantee it is an actual person submitting a response. You will have seen this on website registration forms.</p>
Randomized answer order	Edit a question which has multiple order options (like a list type question), click on Advanced Settings at the bottom, and in the box for Display, set “Random answer order” to “On”	<p>For questions with multiple available answers, you can have the answers randomized for each participant.</p> <p>For most types of surveys, this is undesirable. However, for some cases where you wish to avoid having the order of responses bias the results, randomizing the answer order can be helpful.</p>

B. Skip Logic

It is common in surveys to have a question which appears only if another question has been answered in some particular way. For example, if we had a survey containing the following two questions:

1. Do you live in residence? (Yes/No)
2. Do you make use of your residence phone? (Yes/No)

we would only want to show the second question if the participant answered 'yes' to the first question.

Step 1: Create the Questions

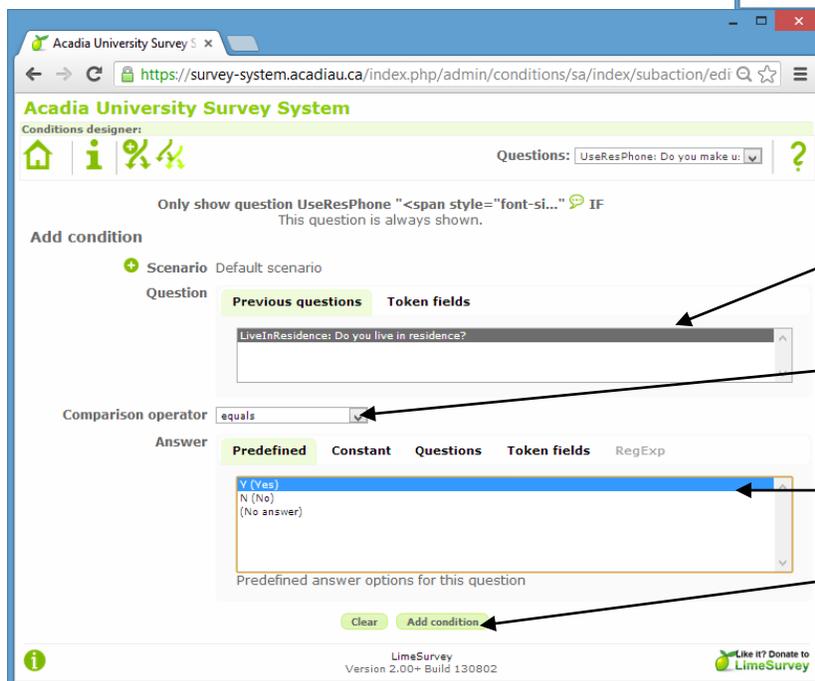
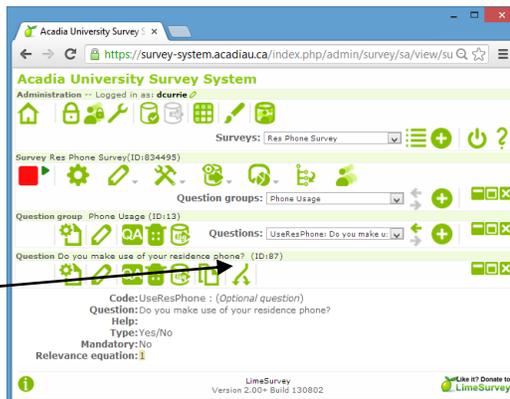
Create the questions as if all questions in the survey would be answered.

Thus, for this example, we would follow through the usual steps for constructing the two Yes/No questions.

Step 2: Set the Second Question's Display Conditions

Now that the two questions exist, in order to have the second one display only if the first has been answered with a "Yes", we need to set the second question's **Display Conditions**.

To access a question's display conditions, select the question and click on the Conditions button for the question.



On the page that follows, we want to set the condition that this question should only appear if the "Do you live in residence?" question has been answered with "Yes".

Select the "Do you live in residence?" question from the list of questions.

Since we wish to display only when the answer is (or 'equals') yes, then we set the comparison operator to "equals".

Then, we choose "yes" from the list of possible answers to the question.

When done, we click the "Add Condition" button. Now we can go back to the survey by clicking the home button at the top of the page.

The process is similar for any question: select the question, and click on the Display Conditions button. Select the question it depends on, and which answers are required for this question to appear. Then click "Add condition".

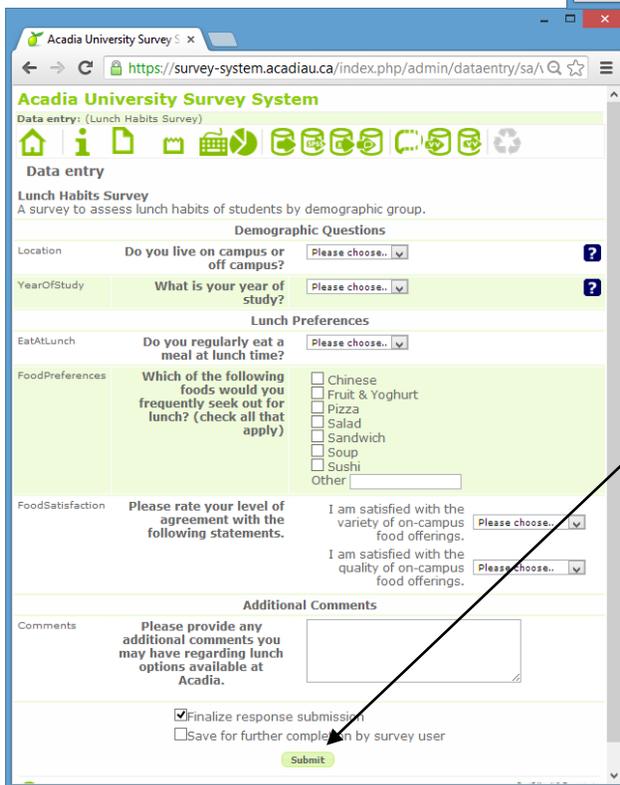
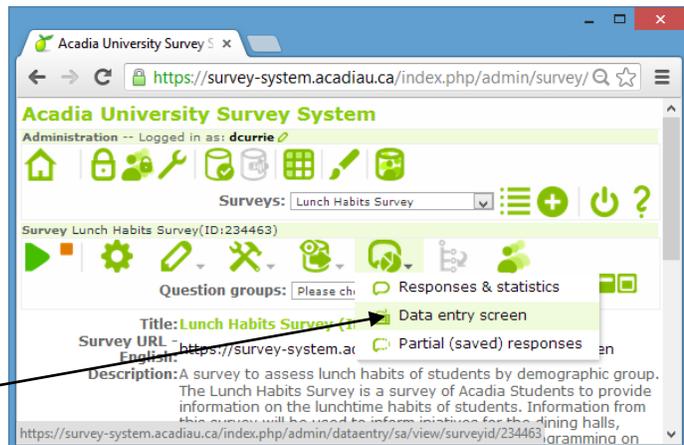
If needed, you can edit or delete conditions at the top of the page for editing conditions by clicking the edit or delete button next to the condition in the list.

C. Adding Survey Responses Collected Through Other Means

Online surveys are remarkably convenient. However, many people do not have ready access to a computer, or you may want to reach people when they are not in a location supporting online access. It is possible to input additional survey responses collected on paper, through email, or other means, and have these added to the set of responses collected online.

The process is to enter a data entry screen where you will be able to fill out a full survey at a time.

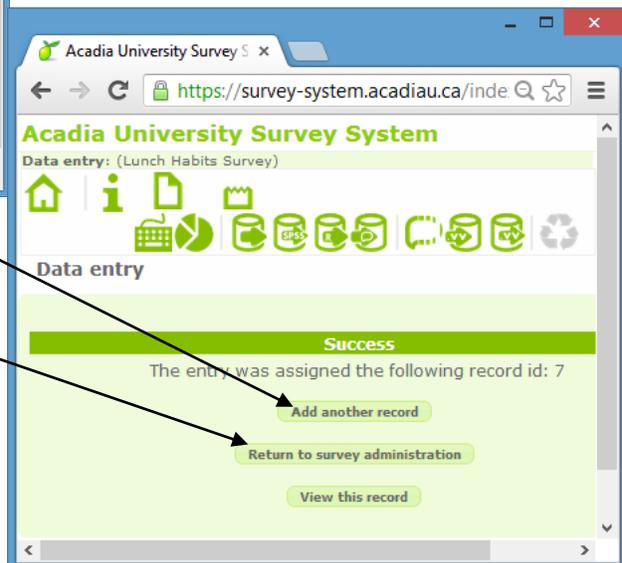
To begin adding new responses, go to the Data Entry Screen for the survey.



You will now be given a form for the full survey (regardless of how it would be displayed to participants, the data entry screen will show all questions in one page). Please note - some of the formatting of questions will be different than participants will usually see, but the results will still be stored the same way. Array questions, for example, will appear as individual questions in the data entry screen.

Fill in all the answers for a particular respondent.

Scroll to the bottom and click the 'Save' button.



If you have more responses to add, click the 'Add another record' button.

When you are done adding responses, click the 'Return to survey administration' button.