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abstract

In this session

- an approach to engaging students who experience introductory statistics as a service course will be presented.
- a problem solving approach is employed
- the students collect their own data via a real-time classroom survey tool.
- exemplar resources will be introduced

Summary

- i. Introductory statistics modules
- ii. Engaging students
- iii. Using a problem solving approach
- iv. Implementing real-time survey data collection

Introductory statistics modules

What often happens in the first semester

- EDA
- Graphical presentation of data
 - The usual suspects
- Descriptive statistics
 - Location
 - Spread

The rest of the year might include:
regression; ANOVA; chi-squared test for
contingency tables; ...

Introductory statistics modules

What often happens in the first semester?

- **The students have done much of this before**
- **The students are bored**
- **They talk among themselves**

What do students talk about?

- What are they talking about?
 - Themselves and their friends
- What topics interest them?
 - Their accommodation
 - The neighbourhood they live in/crime
- So– ASK them to talk about these topics in class

Engaging students

- We can use this to get students to learn introductory statistics
- If we use *real* data that is relevant to the students
- If we use a problem solving approach (PSA)

The Statistical Problem Solving Approach

Plan

Collect

Process

Discuss

You can build on the first try by continuing here...



Discuss

Have you got all the evidence you want?



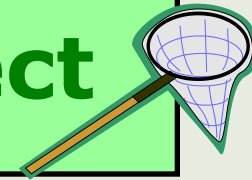
Process



Plan

First you decide what problem to solve and what data you need

Collect



Then you collect suitable data.

The first introductory stats lecture

- Introduce the problem
- PLAN
 - Discussion
 - Student questions
 - Choose data
- Reminder of the PSA

Start screen

**What sort of
neighbourhood do
you live in?**

Start screen

How safe is the area you live in?

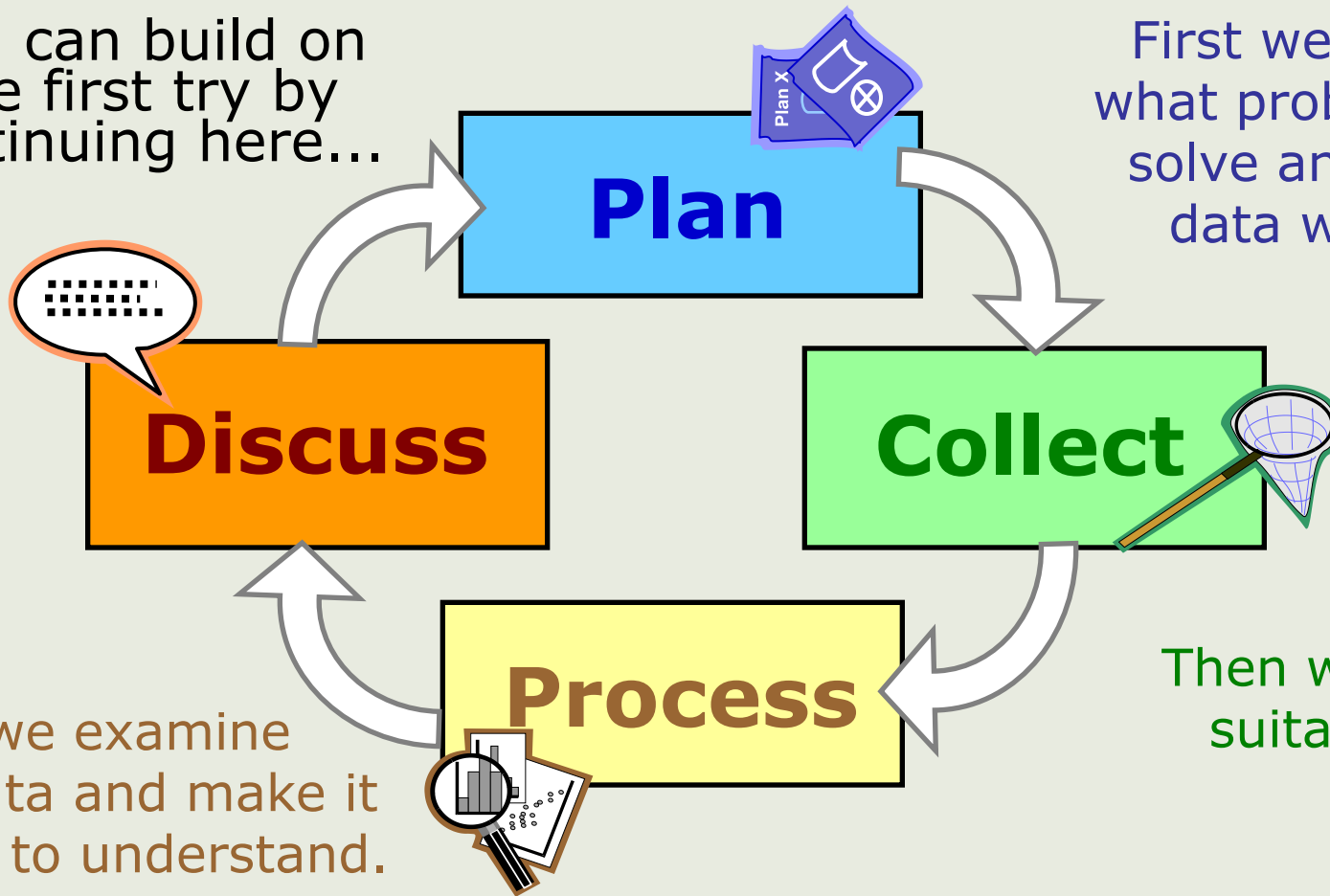




**How safe
do you
think it
is?**

The Problem Solving Approach

You can build on the first try by continuing here...

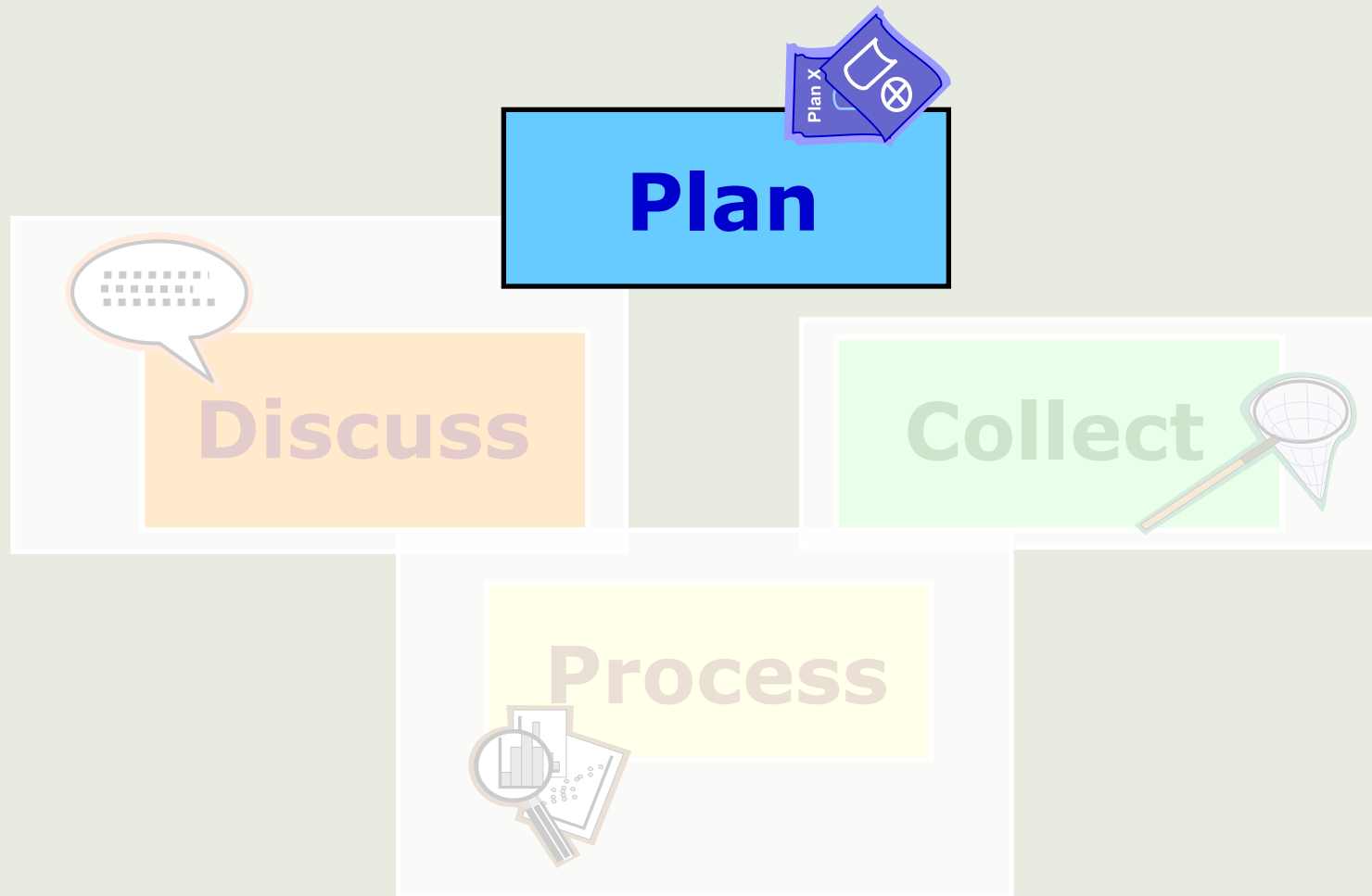


First we decide what problem to solve and what data we need

Then we collect suitable data.

Then we examine our data and make it easier to understand.

The Problem Solving Approach





How safe is your neighbourhood?

Set the problem

Are the crime figures as bad as some of the newspapers suggest?



What are the crime figures like in your neighbourhood?

Are crime figures increasing each year?

Should people be more/less concerned about certain crimes?



**Do most freshers
live in safe
neighbourhoods?**

**What
proportion of
students
worried about
safety?**

How can you find out?

**What should you
ask them?**

**Who should you
ask?**



**Do freshers choose
'safe' neighbourhoods
to live in?**

Crime in the Media

**Are students at all
universities
worried?**

**What crimes worry
students most?**

Use a questionnaire?

**Is there any association between
university town and attitude to
safety?**



Eight categories

- Develop a model of the population.
- One variable may depend on another.
- Turn the model into precise statistical hypotheses (null and alternative).

H_0 : There is no association between university town and concern about being mugged

H_1 : There is an association



The questionnaire

How worried are you about being the victim of the following?

Very worried

Fairly worried

Worried

Not very worried

Not at all worried

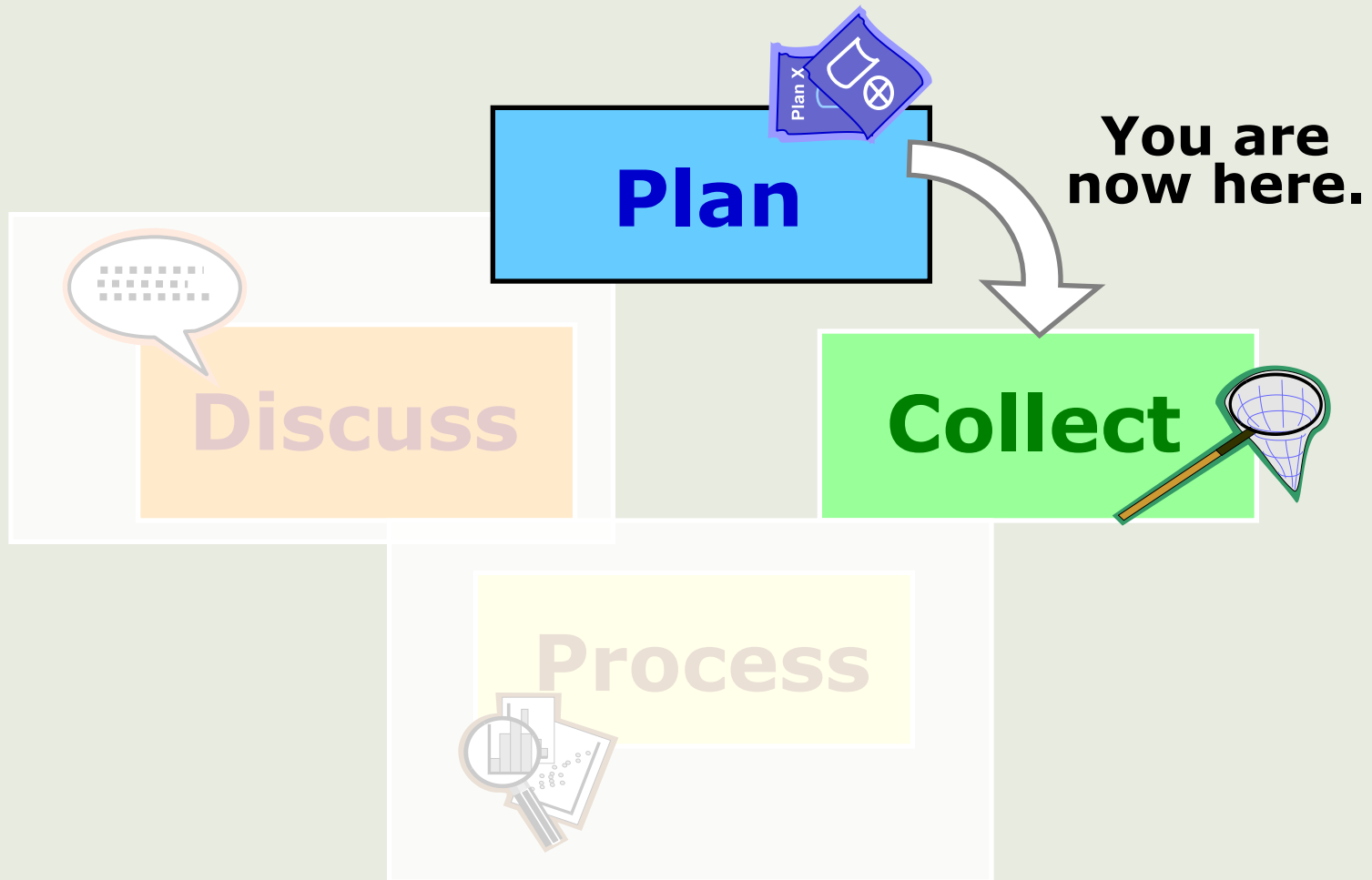
Having something stolen

Being mugged or robbed

Being physically attacked

Being insulted or pestered

The Problem Solving Approach



The First Seminar/Workshop - Collect

- The students complete a short questionnaire (online)
- The questionnaire comprises?
 - demographic questions including date of birth
 - questions about accommodation
 - questions taken from the British Crime Survey (www.statistics.gov.uk/ssd/surveys/british_crime_survey.asp)

The First Seminar/Workshop - Collect

Collect student responses in real time

How it works:

- a. Member of staff (MoS) enters activation code
- b. Students logon using class code and complete questionnaire
- c. MoS enters end of class code – deactivates survey
- d. RSSCSE server publishes csv file to url
- e. Students download csv from url – class continues
- f. Next class/workshop do (a) to (e) but NEW (c)

The First Seminar/Workshop

– Process and Discuss

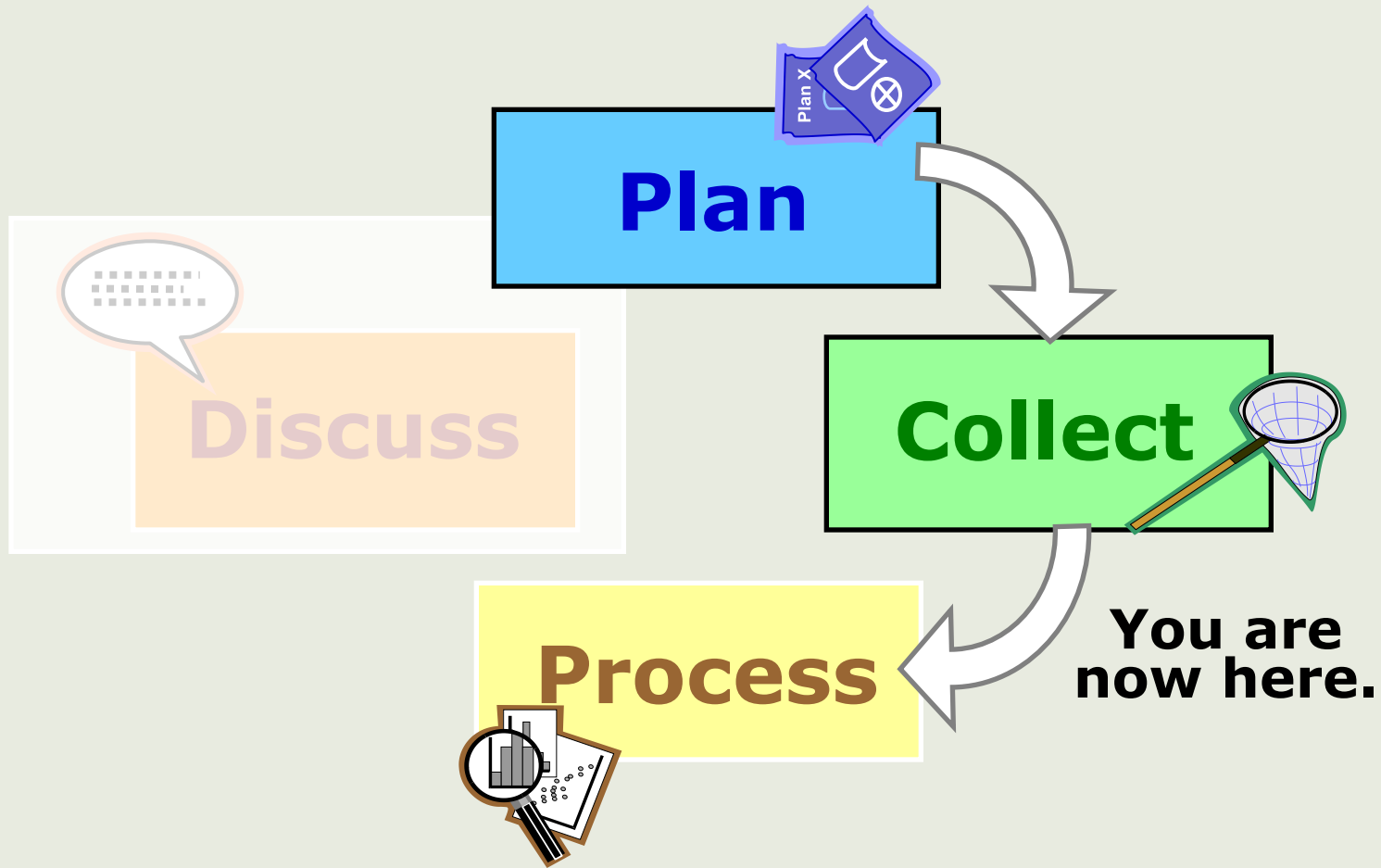
- Students revise data summary presentation
 - use their collective seminar data for this
 - summarise their seminar group's perceptions
- Students draw tentative conclusions
 - limitations of the seminar 'sample' discussed
 - possibility of using the whole module group's responses in next seminar session discussed

Collect

You will do this in your first seminars

Students at three other UK universities have completed the questionnaire

The Problem Solving Approach





Process

| | Scale of worry: 1 is very worried | | | | | |
|-------|-----------------------------------|----|----|----|----|-------|
| | 1 | 2 | 3 | 4 | 5 | Total |
| A | 19 | 29 | 27 | 49 | 16 | 140 |
| B | 7 | 14 | 15 | 23 | 6 | 65 |
| C | 1 | 2 | 5 | 24 | 13 | 45 |
| Total | 27 | 45 | 47 | 96 | 35 | 250 |

If University and scale of worry are *INDEPENDENT*

$$P(\text{B and fairly worried}) = P(\text{B}) \times P(2)$$

$$= \frac{65}{250} \times \frac{45}{250}$$



Process

| | Scale of worry: 1 is very worried | | | | | |
|-------|-----------------------------------|----|----|----|----|-------|
| | 1 | 2 | 3 | 4 | 5 | Total |
| A | 19 | 29 | 27 | 49 | 16 | 140 |
| B | 7 | 14 | 15 | 23 | 6 | 65 |
| C | 1 | 2 | 5 | 24 | 13 | 45 |
| Total | 27 | 45 | 47 | 96 | 35 | 250 |

$$P(B \text{ and } 2) = \frac{65}{250} \times \frac{45}{250} = 0.0468$$

$$\text{How does this compare with } P(B \text{ and } 2) = \frac{14}{250} = 0.0560$$

How close are they??

Expected frequencies

| | Scale of worry: 1 is very worried | | | | | Total |
|-------|-----------------------------------|----|----|----|----|-------|
| | 1 | 2 | 3 | 4 | 5 | |
| A | 19 | 29 | 27 | 49 | 16 | 140 |
| B | 7 | 14 | 15 | 23 | 6 | 65 |
| C | 1 | 2 | 5 | 24 | 13 | 45 |
| Total | 27 | 45 | 47 | 96 | 35 | 250 |

How many would we have expected to be B and 2?

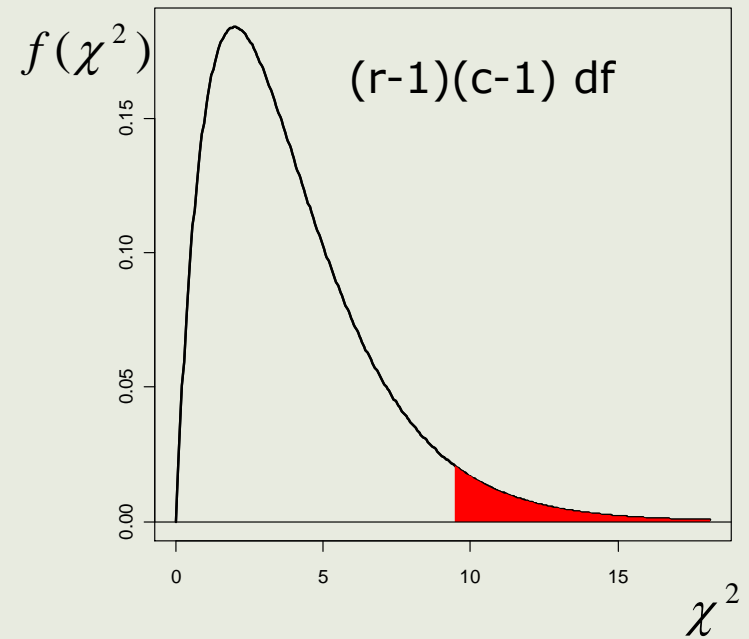
If B and 2 are *independent*

$$\begin{aligned}
 \text{Expected frequency} &= P(\text{B and 2}) \times (\text{total number}) \\
 &= \frac{65}{250} \times \frac{45}{250} \times 250 = \frac{65 \times 45}{250} = 11.7 \\
 &\quad \frac{\text{row total} \times \text{column total}}{\text{overall total}}
 \end{aligned}$$

Test statistic

$$X^2 = \sum_{i,j} \frac{(o_{ij} - e_{ij})^2}{e_{ij}}$$

has a chi-squared distribution with $(r-1)(c-1)$ degrees of freedom



$$(r-1)(c-1) = \text{rc} - r - c + 1$$

Diagram illustrating the calculation of degrees of freedom $(r-1)(c-1)$ for a chi-squared test:

- rc**: number of o_{ij} frequencies
- r**: number of row totals
- c**: number of column totals
- 1**: Remove double counting

The χ^2 de **Process**

$$X^2 = \sum_{i,j} \frac{(o_{ij} - e_{ij})^2}{e_{ij}}$$

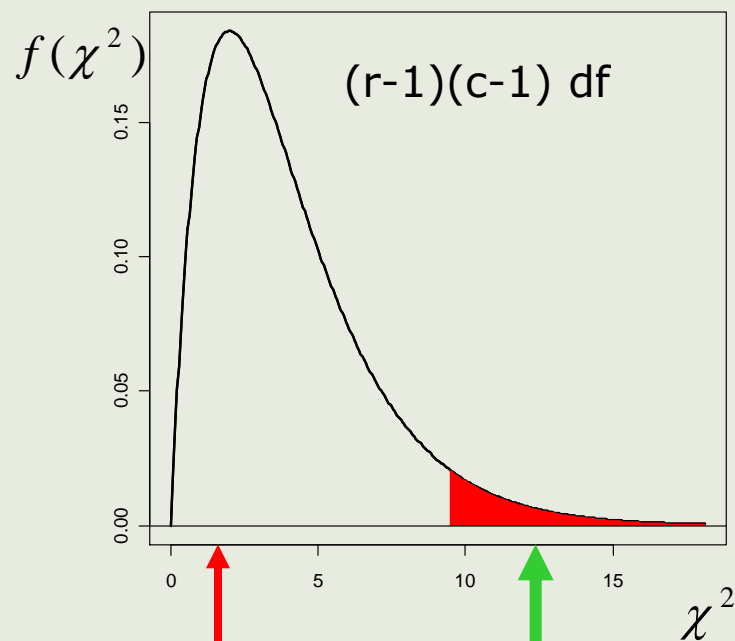
If **o_{ij} close to e_{ij}**

$(o_{ij} - e_{ij})^2$ will be close to zero and

X^2 will be small

If **o_{ij} very different from e_{ij}** , $(o_{ij} - e_{ij})^2$

and **X^2 will be large**



DECISION RULE

Reject H_0 if X^2 is too big



Which processes

Example

H_0 : There is no association between university and worry about being mugged

H_1 : There is an association

$\alpha = 0.05$

DECISION RULE

d.f. = $(3-1) \times (5-1) = 8$

Reject H_0 if

$$X_{calc}^2 = \sum_i \frac{(o_{ij} - e_{ij})^2}{e_{ij}} > \chi_{0.05,8}^2 = 15.507$$

From sample data ...



Process

From Minitab

| | m1 | m2 | m3 | m4 | m5 | Total |
|-------|-------|-------|-------|-------|-------|-------|
| 1 | 19 | 29 | 27 | 49 | 16 | 140 |
| | 15.12 | 25.20 | 26.32 | 53.76 | 19.60 | |
| | 0.996 | 0.573 | 0.018 | 0.421 | 0.661 | |
| 2 | 7 | 14 | 15 | 23 | 6 | 65 |
| | 7.02 | 11.70 | 12.22 | 24.96 | 9.10 | |
| | 0.000 | 0.452 | 0.632 | 0.154 | 1.056 | |
| 3 | 1 | 2 | 5 | 24 | 13 | 45 |
| | 4.86 | 8.10 | 8.46 | 17.28 | 6.30 | |
| | 3.066 | 4.594 | 1.415 | 2.613 | 7.125 | |
| Total | 27 | 45 | 47 | 96 | 35 | 250 |

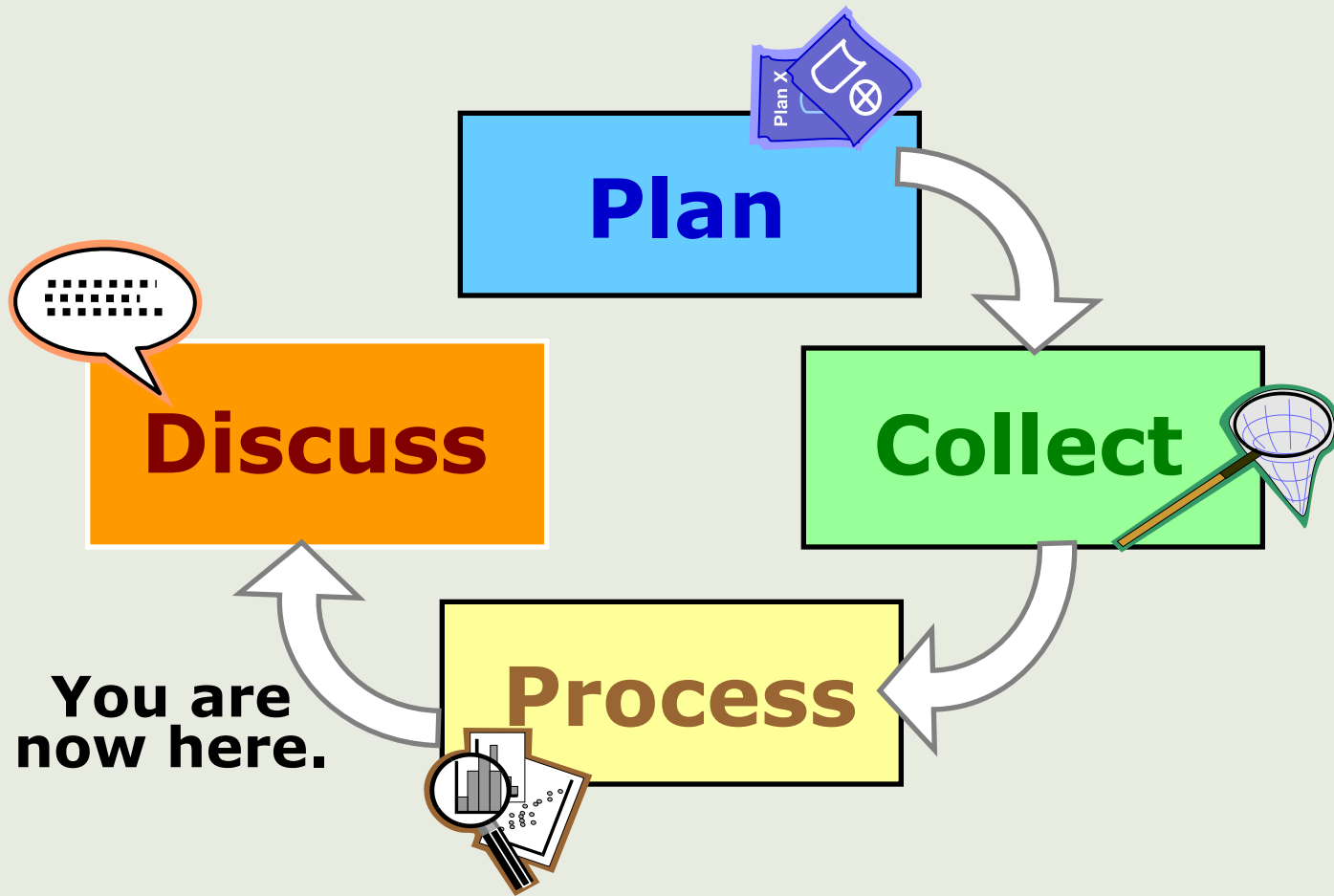
Chi-Sq = 23.777, DF = 8, P-Value = 0.002
 1 cells with expected counts less than 5.

Expected frequencies

Contribution to test statistic

Test statistic

The Problem Solving Approach





H_0 : there is no association between university attended and fear of being mugged

H_1 : there is an association

$\alpha = 0.05$

DECISION rule

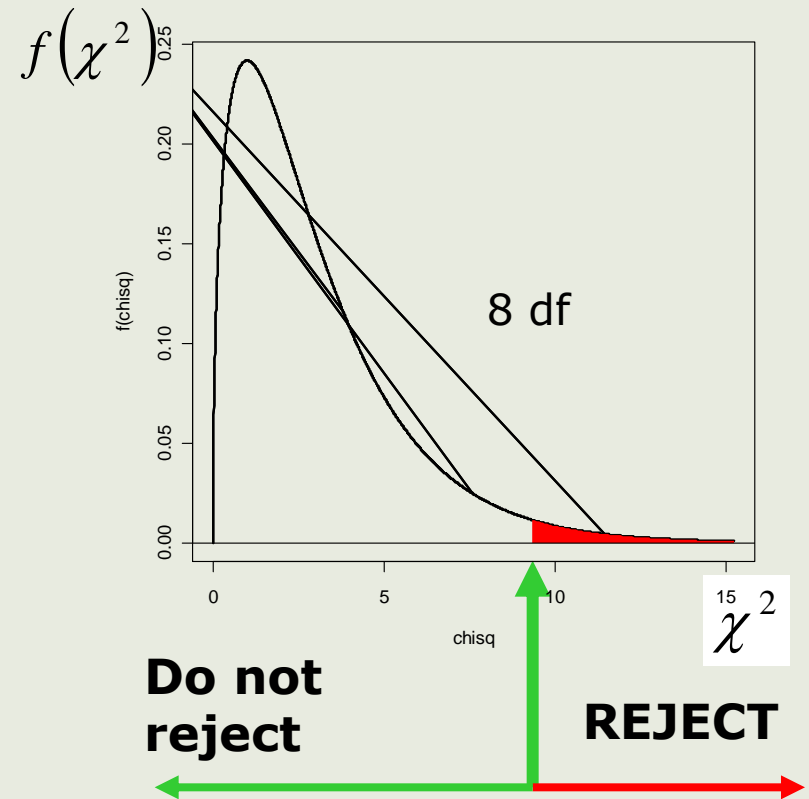
Reject H_0 if

$$X^2 = \sum_i \frac{(o_{ij} - e_{ij})^2}{e_{ij}} > 15.507$$

From sample data

$$\chi_{2calc}^2 = 23.777$$

$$d.f. = (r-1) \times (c-1) = 8$$





Discussion

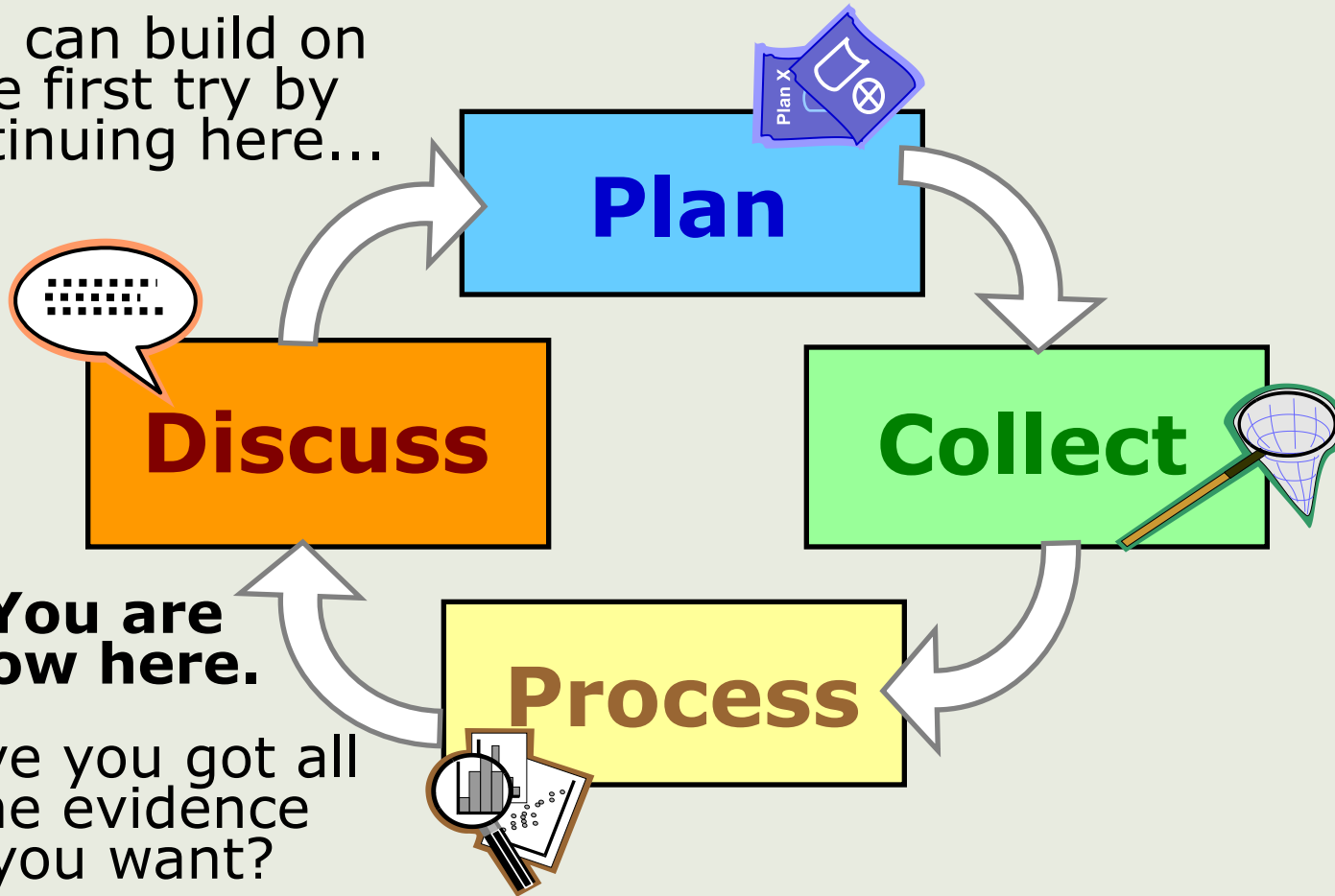
What can we conclude?

Other questions?

- about what is this due to
- about other questions/associations

The Problem Solving Approach

You can build on the first try by continuing here...



You are now here.

Have you got all the evidence you want?

The First Seminar/Workshop - Collect

Collect student responses in real time

How it works:

- a. Member of staff (MoS) enters activation code
- b. Students logon and complete questionnaire
- c. Tutor closes class survey – deactivates survey
- d. RSSCSE server publishes csv file to url
- e. Students download csv from url – class continues
- f. Next class/workshop do (a) to (e) but NEW (c)

HOW IS THIS ACHIEVED?

The survey – the student view

<http://www.rsscse.org.uk/acc>

The survey

Student accommodation - How good is yours? (GetStats)

This *anonymous* questionnaire is designed to discover some important and useful facts about the accommodation that university students use during term time.

There are 19 questions in this survey.

A note on privacy

This survey is anonymous.

The record kept of your survey responses does not contain any identifying information about you unless a specific question in the survey has asked for this. If you have responded to a survey that used an identifying token to allow you to access the survey, you can rest assured that the identifying token is not kept with your responses. It is managed in a separate database, and will only be updated to indicate that you have (or haven't) completed this survey. There is no way of matching identification tokens with survey responses in this survey.

Load unfinished survey

Next >>

[Exit and clear survey]

I

Student accommodation - How good is yours? (GetStats)

0% 100%

University and Seminar

Select your university

Choose one of the following answers

Please choose...

- Oxford; University of
- Oxford Brookes University
- Co Peninsula College of Medicine and Dentistry
- Plymouth; University of**
- Portsmouth; University of
- Queen's University Belfast
- Belfast Bible College
- Se Queen Margaret University; Edinburgh
- Ch Reading; University of
- Henley Business School
- Robert Gordon University; The
- Roehampton University; London
- Royal College of Art; London
- St Andrews; University of
- Salford; University of
- Schiller International University; London
- Sheffield; University of
- Sheffield Hallam University
- Southampton; University of
- Southampton Solent University

[Exit and clear survey]

Resume later

Student accommodation - How good is yours? (GetStats)

0% 100%

University and Seminar


Select your university
Choose one of the following answers


Please choose... 

Course:

BA not-stats

Seminar
Choose one of the following answers

Please choose... 

Please choose... 

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Resume later

<< Previous

Next >>

[Exit and clear survey]

Student accommodation - How good is yours? (GetStats)

0% 100%

University and Seminar

Select your university

Choose one of the following answers

Plymouth; University of



Course:

BA not-stats

Seminar

Choose one of the following answers

C



Resume later

<< Previous

Next >>

[Exit and clear survey]

What is your age in years?

18

What is your gender?

Female Male No answer

What year of your course are you on?

Eng1

What is your mode of study?

Choose one of the following answers

Full time

What describes your course?

- Choose one of the following answers
- Please choose...
 - Your home
 - Room in a university hall of residence
 - Room in a university flat
 - Room in a private rented house
 - Room in a private rented flat
 - Private rented bedsit
 - Rented room in a family home
 - Other:
 - No answer
 - Please choose...

What is your term-time accommodation?

What is your mode of study?

Choose one of the following answers

Full time

Which of the following areas of study best describes your course?

Choose one of the following answers

Engineering

Which of the following best describes your term-time accommodation?

Choose one of the following answers

Your home

How much rent per calendar month do you pay in term time? Give your answer in pounds sterling.

320

Only numbers may be entered in this field

Indicate any extras that are included in the rent you pay

Choose one of the following answers

Gas, electricity and water

Resume later

<< Previous

Next >>

[Exit and clear survey]

Travel

Estimate the distance you travel from your term-time accommodation to your university. Give your answers

Only numbers may be entered in these fields

EITHER in miles to the nearest tenth (0.1) of a mile

OR in kilometres to the nearest tenth (0.1) of a kilometre

Estimate the total amount of time it takes for you to travel from your term-time accommodation to your first class of the week. Give your answers in minutes.

Only numbers may be entered in this field

For the journey to your university decide which of the following components make up this journey and estimate the total time spent *for each type of travel*. For any type of travel you *do not use* on your journey please leave the answer blank. Give your answers in minutes.

Only numbers may be entered in these fields

Bicycle

Bus/coach

Car

Motorbike/scooter/moped

Train

Tram

Metro

Student accommodation - How good is yours? (GetStats)

0%  100%

Quality of life

How would you describe the quality of your accommodation?

Choose one of the following answers

OK

How worried are you about being the victim of the following?

| | Very worried | Fairly worried | Worried | Not very worried | Not at all worried | No answer |
|----------------------------|-----------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|
| Having something stolen | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Being mugged or robbed | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Being physically attacked | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Being insulted or pestered | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

What is the *maximum rent* per calendar month you would be prepared to pay for your term-time accommodation? Give your answer in pounds sterling.t

350

Only numbers may be entered in this field

robbed

Being physically
attacked

Being insulted or
pestered

What is the ***maximum rent*** per calendar month you would be prepared to pay for your term-time accommodation? Give your answer in pounds sterling.

Only numbers may be entered in this field

What is the ***maximum time*** (in minutes) you would be prepared to spend travelling ***to university*** each day?

Only numbers may be entered in this field

Estimate the distance from your term-time accommodation to your university ***as the crow flies*** (that is, in a straight line)

Only numbers may be entered in these fields

EITHER in miles to the nearest tenth (0.1) of a mile

OR in kilometres to the nearest tenth (0.1) of a kilometre

Resume later

<< Previous

Submit

[Exit and clear survey]

Thank you!

Institution: Plymouth; University of

Course: ba not-stats

Survey: Student accommodation - How good is yours? (GetStats)

| Seminar | Download |
|--------------|---|
| C | In progress (check again) [1 result(s)] |
| All seminars | Not yet available (check again) |

Institution: Plymouth; University of

Course: getstats

Survey: Student accommodation - How good is yours? (GetStats)

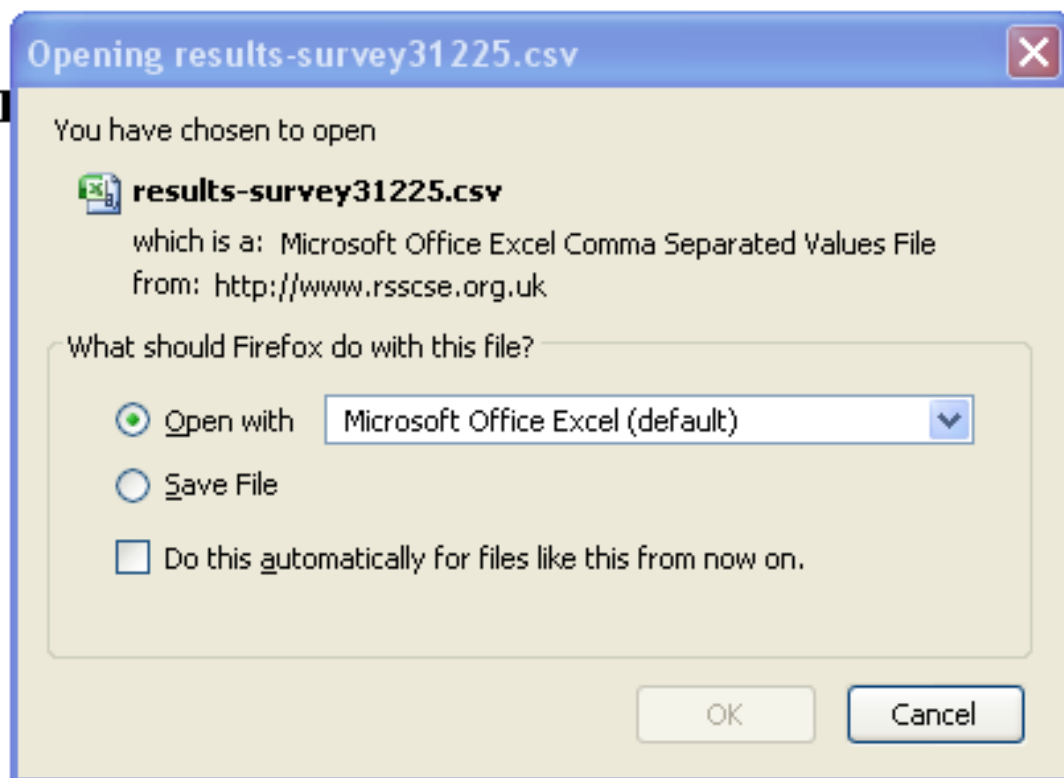
| Seminar | Download |
|--------------|--|
| A | Download [8 result(s)] |
| B | Download [9 result(s)] |
| C | Download [5 result(s)] |
| All seminars | Download |

Institution: Plymouth; University of

Course: getstats

Survey: Student accommodation - 1

| Seminar | Download |
|--------------|--|
| A | Download [8 result(s)] |
| B | Download [9 result(s)] |
| C | Download [5 result(s)] |
| All seminars | Download |



results-survey31225.csv [Read-Only] - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Add-Ins Acrobat

Paste Cut Copy Format Painter Clipboard

Arial 12 Font

Wrap Text Merge & Center Alignment

General Number

Conditional Formatting Styles

Format as Table

Cell Styles

Insert Delete Format Cells

AutoSum Fill Clear Editing

Sort & Filter Find & Select

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|----|----|-------------|----------|---------|-------------|-------------|-----------|-------------|-----------------------|-------------|--------------------------|-------------|----------|-------------------------|-------------|
| 1 | id | Select your | Course: | Seminar | What is you | What is you | What year | What is you | Which of th | Which of th | Which of th | Which of th | How much | Indicate an | Estimate th |
| 2 | 6 | Plymouth; U | GetStats | C | 41 | Male | 24 | Full time | Computing | | Your home | | 320 | Gas, electr | 25 |
| 3 | 7 | Plymouth; U | getstats | C | 22 | Male | 4 | Full time | Computing | | Room in a private rente | | 460 | Water | 0.6 |
| 4 | 8 | Plymouth; U | getstats | C | 19 | Female | 3 | Full time | Business | | Room in a university ha | | 530 | Gas, electr | 1.1 |
| 5 | 9 | Plymouth; U | getstats | C | 21 | Male | 4 | Full time | Engineering | | Private rented bedsit | | 350 | No extras | 5.2 |
| 6 | 10 | Plymouth; U | getstats | B | 32 | Male | 4 | Part time | Science | | Room in a university fla | | 150 | Gas, electr | 0.3 |
| 7 | 11 | Plymouth; U | getstats | B | 29 | Male | 6 | Part time | Education | | Your home | | 300 | No extras | 1 |
| 8 | 12 | Plymouth; U | getstats | B | 32 | Male | 2 | Part time | Education | | Your home | | | | 7 |
| 9 | 13 | Plymouth; U | getstats | B | 22 | Female | 1 | Full time | Mathematical sciences | | Room in a university ha | | 300 | Gas, electr | 1 |
| 10 | 14 | Plymouth; U | getstats | A | 29 | Male | 11 | Full time | Social science | | Your home | | 325 | No extras | 0.9 |
| 11 | 15 | Plymouth; U | getstats | A | 43 | Male | 23 | Part time | Arts | | Your home | | 1200 | No extras | 500 |
| 12 | 17 | Plymouth; U | getstats | A | 44 | Female | 3 | Part time | Education | | Your home | | 0 | No extras | |
| 13 | 18 | Plymouth; U | getstats | A | 34 | Female | 1 | Part time | Social science | | Your home | | 480 | No extras | 0.5 |
| 14 | 19 | Plymouth; U | getstats | B | 40 | Male | 1 | Full time | Mathematical sciences | | Room in a university ha | | 200 | Gas, electricity and wa | |
| 15 | 20 | Plymouth; U | getstats | B | 25 | Female | 1 | Full time | Humanities | | Room in a university ha | | 500 | Gas, electr | 1 |
| 16 | 21 | Plymouth; U | getstats | B | 44 | Male | 1 | Full time | Mathematical sciences | | Your home | | 0 | No extras | 120 |
| 17 | 22 | Plymouth; U | getstats | A | 60 | Male | 1 | | | | | | | | 1 |
| 18 | 23 | Plymouth; U | getstats | A | 47 | Female | first | Full time | Mathematical sciences | | Room in a university fla | | 200 | Electricity a | 0.2 |
| 19 | 24 | Plymouth; U | getstats | A | 42 | Female | | 1 Part time | Science | | Your home | | 650 | Gas, electr | 2 |
| 20 | 25 | Plymouth; U | getstats | A | 44 | Male | | 3 Full time | Mathematical sciences | | Room in a private rente | | 600 | Gas, electr | 5 |
| 21 | 26 | Plymouth; U | getstats | B | 54 | Male | | 1 Full time | Science | | Room in a university fla | | 500 | Water | 2 |
| 22 | 27 | Plymouth; U | getstats | B | 35 | Male | | 1 Full time | Business | | Your home | | 105 | Gas, electr | 30 |
| 23 | 30 | Plymouth; U | getstats | C | 18 | Male | year1 | Full time | | | Room in a university fla | | 455 | No extras | |
| 24 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | |


The survey – the tutor view

LimeSurvey




Username

Password

Language 

[Forgot your password?](#)

LimeSurvey

Administration -- Logged in as: **getstats** 




Surveys

Welcome getstats!
You logged in successfully.



LimeSurvey
Version 1.87+ Build 8472

LimeSurvey

logged in as: **getstats** 



Surveys:

| Status | Survey ID | Survey  | Date created | Owner | Access | Anonymous answers | Full responses | Partial responses | Total responses |
|--|-----------|--|--------------|-------|-------------|-------------------|----------------|-------------------|-----------------|
|  | 31225 | Student accommodation - How good is yours? (GetStats) | 09.06.2010 | admin | Open-access | Yes | 24 | 2 | 26 |

Administration -- Logged in as: [getstats](#)

Surveys:

Survey Student accommodation - How good is yours? (GetStats) (ID:31225)

Question groups:

Title: **Student accommodation - How good**

Survey URL (English): <http://www.rsscse.org.uk/gary/limesurvey>

[Browse responses for this survey](#)

Description:

Welcome: This anonymous questionnaire is designed to discover some important and useful facts about the accommodation that u
term time.

Administrator: John Marriott (john.marriott@rsscse.org.uk)

Fax to:

Start date/time: -

Expiry date/time: -

Template: default

Base language: English

Additional languages:

Exit link:

Number of questions/groups: 19/4

Survey currently active: Yes

Survey table name: lime_survey_31225

Hints: Answers to this survey are anonymized.

It is presented group by group.

Participants can save partially finished surveys

No email notification



LimeSurvey

Browse responses: (Student accommodation - How good is yours? (GetStats))



Export Results to Takers

Response summary

| | |
|------------------------------|----|
| Full responses: | 24 |
| Incomplete responses: | 2 |
| Total responses: | 26 |



LimeSurvey

rs: (Student accommodation - How good is yours? (GetStats))



Export to takers

Institution: Plymouth; University of

List of courses [from responses so far]

| Course | #responses | Results link | Close seminar |
|----------------|------------|---|---|
| A test example | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=A test example | All seminars are closed! <input type="button" value="close"/> |
| BA not-stats | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=BA not-stats | C [1 responses] <input type="button" value="close"/> C [1 responses] |
| Business | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=Business | B [1 responses] <input type="button" value="close"/> |
| GetStats | 21 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=GetStats | All seminars are closed! <input type="button" value="close"/> |
| test | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=test | Z [1 responses] <input type="button" value="close"/> |

LimeSurvey

Export to takers: (Student accommodation - How good is yours? (GetStats))



Export to takers

Institution: Plymouth; University of

Course **BA not-stats** seminar **C** is now closed.



LimeSurvey
Version 1.87+ Build 8472

LimeSurvey

Accommodation - How good is yours? (GetStats)



Export to takers

Institution: Plymouth; University of

List of courses [from responses so far]

Course #responses Results link

| | | |
|----------------|----|---|
| A test example | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=A test example |
| BA not-stats | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=BA not-stats |
| Business | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=Business |
| GetStats | 21 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=GetStats |
| test | 1 | http://www.rsscse.org.uk/gary/limesurvey/responses.php?sid=31225&u=126&c=test |

Close seminar

| | |
|--------------------------|-------|
| All seminars are closed! | close |
| All seminars are closed! | close |
| B [1 responses] | close |
| All seminars are closed! | close |
| Z [1 responses] | close |



Title: Student accommodation - How good is yours? (GetStats) (ID 31225)

Survey URL (English): <http://www.rsscse.org.uk/gary/limesurvey/index.php?sid=31225&lang=en>

Description:

Welcome: This anonymous questionnaire is designed to discover some important and useful facts about the accommodation that university students use during term time.

Administrator: John Marriott (john.marriott@rsscse.org.uk)

Fax to:

Start date/time: -

Expiry date/time: -

Template: default

Base language: English

Additional languages:

Exit link:

Number of questions/groups: 19/4

Survey currently active: Yes

Survey table name: lime_survey_31225

Hints: Answers to this survey are anonymized.

It is presented group by group.

Participants can save partially finished surveys

No email notification

The results

Available from a url

Discussion

- New project at RSS centre
 - Implementation of real-time responses to classrooms from Lime survey
- What resources are needed?
- What topics
 - Global warming?
 - The environment?
- Do we need subject specific resources?
- 'Portable' version being developed

Where now?

- Exemplar resources
 - 3 available
 - PSA PowerPoint template
 - www.rsscse.org.uk
from the main menu:
*Resources > For Higher Education >
Teaching Through Problem Solving >
Workshop Resources*
- Additional supporting material?
- More resources needed