The 2018 Research Psychologist's Guide to GIFT

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The Nation's Premier Laboratory for Land Forces

Outline of Presentation

- Why should a Research Psychologist use GIFT?

- Using GIFT to create an experiment

- Recommendations for GIFT

- Future Directions and Conclusions

DON'T PANIC

- "It is said that despite its many glaring (and occasionally fatal) inaccuracies, the *Hitchhiker's Guide to the Galaxy* itself has outsold the *Encyclopedia Galactica* because it is slightly cheaper, and because it has the words 'Don't Panic' in large friendly letters on the cover" (Adams, 1979).

- The 2018 Research Psychologist's Guide to GIFT

  - An accurate and encouraging guide for those who wish to use GIFT in their own research that has the phrase 'Don't Panic' in large friendly letters on the top of the page.

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DON'T PANIC

The Research Psychologist's Guide to GIFT

- Initially GIFT can seem overwhelming

- GIFT is relatively straight forward to use once you have invested a little bit of time into learning it

- GIFT can be a powerful tool for a research psychologist

Why should a Research Psychologist use GIFT?

- **Advantages of Using GIFT in Psychology Research**
  - Reduces the number of research assistants needed, and their tasks
  - Does not require in-depth computer science or programming background
  - Survey authoring tool with many features
  - Integrated with PowerPoint and Slideshows
  - Provides a continuous research experience for the participant
  - Has a Cloud Version that can be used for online surveys and experiments
  - Can export the data to be easily viewed with Excel and SPSS

Creating an Experiment with GIFT ARL

# Process for Creating an Experiment

- Decide if it will be online or desktop based

- Create a GIFT "course" using the authoring tools

  - Drag and drop interface

  - Add course objects in order

- Author surveys using the survey authoring tools

  - Make sure to add "tags" to each question

- Create a version of the course for each condition

- "Publish" your course

Creating an Experiment with GIFT ARL

GIFT Authoring Tools

Course Objects include:
- Information as Text
- Images
- Web Address
- Local Webpage
- PDF
- YouTube Video
- Slideshow
- PowerPoint
- Survey/Test
- Question Bank
- Conversation Tree

… and more

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Course Objects
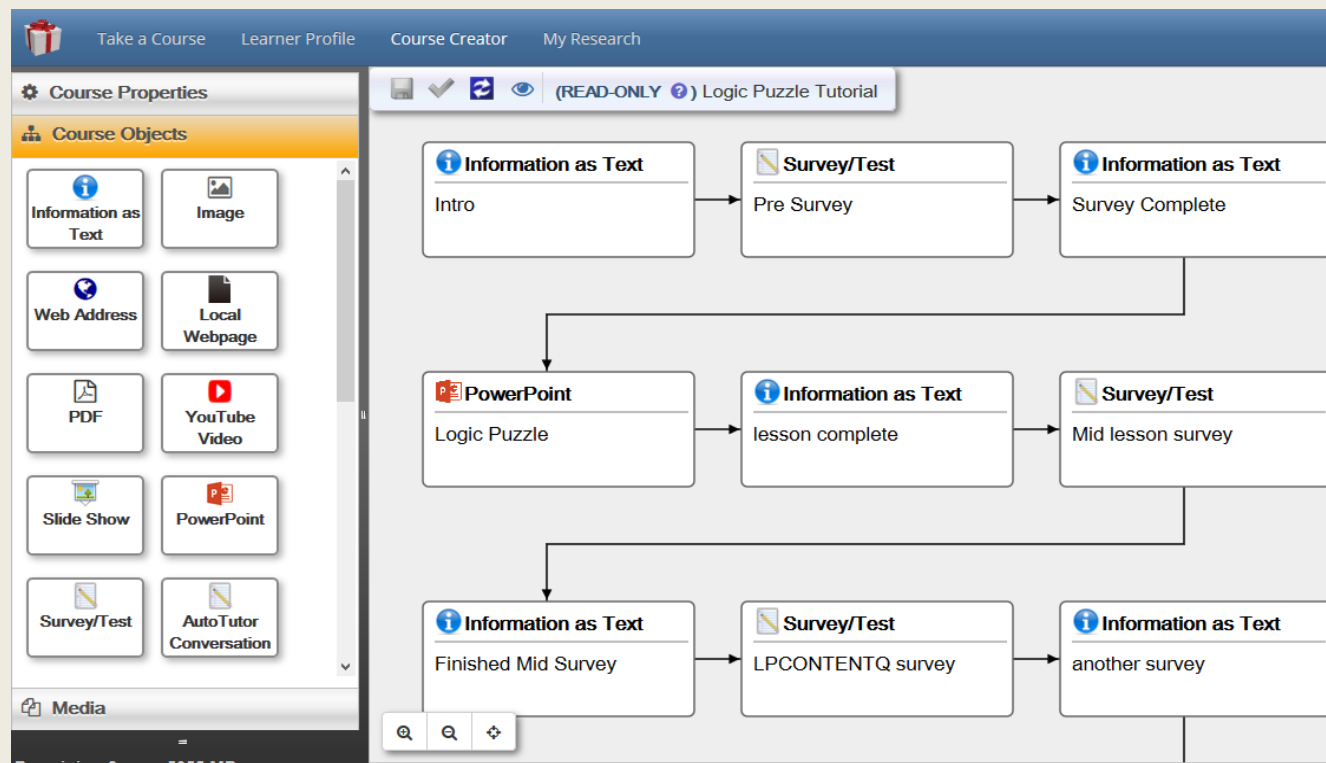
PowerPoint Object vs. Slideshow Object

Requirement	PowerPoint Object	Slide Show Object
PowerPoint with or without images and no interactions		X
Videos or Audio in the PowerPoint Presentation	X	
Visual Basic for Applications or Macros is used	X	
Online presentation of materials on participant's own computer		X
Assessment or time spent on slides is needed	X	

Creating an Experiment with GIFT

Survey Authoring System

Survey/Test Object vs. Question Bank Object

Requirement	Survey/Test Object	Question Bank Object
Present questions in a random order		X
Present questions that are associated with concepts		X
Collecting demographics information	X	
Using a questionnaire or measure that requires a specific order of presentation	X	
Not all generated questions are required to be answered		X
Using an assessment that requires all questions to be answered and to be shown in a specific order	X	
Questions will be reused in Adaptive Course Flow object		X

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Experimental Process

Publishing the course

- After completing the authoring process you will publish your course

- Publishing makes a copy of the course at that moment in time

- Any changes made to the original course will not impact the published course

- After it is published it will give you a web address to give to participants

- Make sure to add a survey question asking for the participant number, as they will not be required to login

Experimental Process

Publishing a Course

Publish Course

Publish Course as: ► What's this?

[Experiment] [LTI]

Published Course Name:
Condition 1

Description (Optional):

Select Course: [Search...]

Course Name	Workspace
2 Go Course Branching Final Version - 2 Copy	
Basic Training Study Guide	
Cognitive Psychology	
Cyber Security Mod 1 - Intro to Cyber Security	
Excavator Training (demonstration version)	Public
Go Course Branching Final Version	
Hello World	Public
Hemorrhage Control	Public
Logic Puzzle Tutorial	Public
MyNewCourse1	
RapidMiner Demonstration	Public
Sample of TC3 course	
Science is Zarked	Public

[Publish Course] [Cancel]

Experimental Process

Extracting Data

Experimental Process

Extracting Data

Build Report

Please specify which events from **Condition 1** should be included in this report:

- ☑ **Frequently reported events**
- ☐ **Training application events**
- ☐ **Other events**

Frequently Reported Event Types

- ☐ **Learner states**
- ☐ **Pedagogical requests**
- ☐ **Performance assessments**
- ☐ **Scenario Adaptation (Environment Control)**
- ☐ **Show Feedback in Training App**
- ☐ **Show Feedback in Tutor**
- ☑ **Survey responses**

Select All | Select None

☑ **Merge each participants's events into a single row**

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Recommendations for GIFT

- # **Recommendations**

  - ## Participant Management

    - Method to create/utilize participant accounts without needing to create additional online GIFT accounts

  - ## Export Surveys and Survey Keys

    - Ability to export a full version of each survey, and export the survey "tags" so that there is a key available to help understand the survey data.

  - ## Improved Data Extraction Tools

    - Update the Event Report Tool to be more user friendly, and offer clearer options for researchers.

- **Advantages of Using GIFT**

  - Moving towards being more user friendly

  - Provides a continuous research experience for the participant

  - Can export the data to be easily viewed with Excel and SPSS

  - Powerful tool for research psychologists with many features

  - GIFT is continually improving, and user recommendations can have an impact

- **DON'T PANIC**

Acknowledgements

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Questions?