

Heuristic Triggers for Teaching Testing

Cognitive tools to help with “completeness”

Jon Bach

Manager, Corporate Intellect and Methodology

jonb@quardev.com

February 5, 2006



Definitions

Heuristic:

a solution for solving a problem that is wrong at least some of the time

Trigger:

a device to initiate an event

How do you think?

(1-minute exercise)

How many kinds of fruit are yellow?

Triggers

Remember taste

Shape

Look at websites

Go through the alphabet

Picture a fruit stand or produce section

Look at your existing list

Talk with others

The “reveal”

- 1) Banana
- 2) Melon
- 3) Pineapple
- 4) Mango
- 5) Star Fruit
- 6) Lemon
- 7) Grapefruit
- 8) Pear
- 9) Canteloupe
- 10) Papaya

Words greater than 4 letters?

E	G	O	L
I	X	P	R
O	T	A	E
F	N	S	W

Reviewing Their Work

Agenda: "PROOF"

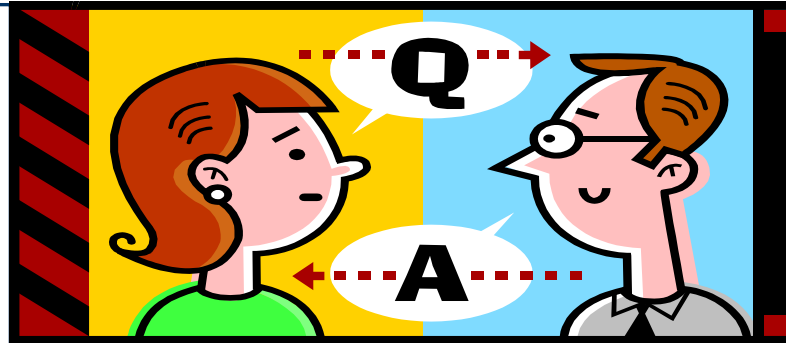
Past

Results

Obstacles

Otlook

Feelings



How did you spend your time?

What was the longest word you found?

Did you need to consult the dictionary?

Do you think you found all the words?

Do you like dislike word games?

The “reveal”

5-letter		6-letter	7-letter	8-letter	9-letter	10-letter	11-letter	12-letter
apres	rants	answer	expanse	explores	operation	operations	exploration	explorations
axons	rapes	gitano	explore	orations				
exits	ratio	ixoras	operant	operants				
exons	repeg	lorans	options	prestige				
fonts	resaw	operas	oration					
iotas	rewan	option	rations					
ixora	rewax	pantie						
loper	ropes	pastie						
lopes	sapor	presto						
loran	sawer	ration						
lores	septa	rawest						
napes	sewan	repast						
nares	sewar	serape						
opera	snare	taxons						
panto	snarl							
pants	stare							
pares	sware							
parol	swear							
patio	sweat							
pawer	swept							
peans	taper							
pearl	tapes							
peats	tares							
pesto	tawer							
pores	tawse							
prase	taxon							
prats	wants							
presa	wares							
prest	weans							

AFI's 100 greatest film quotes

What's in the top ten?

The “reveal”

- 1) Frankly, my dear, I don't give a damn.
- 2) I'm going to make him an offer he can't refuse.
- 3) I coulda been a contender.
- 4) Toto, I've got a feeling we're not in Kansas anymore.
- 5) Here's looking at you, kid.
- 6) Go ahead, make my day.
- 7) All right, Mr. DeMille, I'm ready for my close-up.
- 8) May the Force be with you.
- 9) Fasten your seatbelts. It's going to be a bumpy night.
- 10) You talking to me?

Triggers

- * Watch TV for an hour
 - * Talk to other people (spouse)
 - * Internet
- * Think of:
 - actors
 - top movies
 - quotes w/ questions
 - eras
 - famous characters
 - voices (e.g. John Wayne)
 - famous directors
 - sequels
 - words (“daddy”, “mommy”, “lucky”, “punk”...)
 - "greatest" according to whom?
 - past Academy Awards

The software context

(10-minute exercise)

Mission: Find a crashing bug

Triggers for test ideas

- Look at bug database
- Talk with testers (paired testing)
- Talk with Programmers (different domain expertise)
- Look at design docs
- Web – MSN Search
- Look at discussions for similar or competing products
- User documentation
- Help files
- Manuals
- Tech support
- Customer issues
- Side of the box -- claims made by marketing

Other heuristic triggers

Test Plan Evaluation Model

Test Planning Checklist

Heuristic Test Strategy Model

London Underground

Are these all of the possible states?

<http://www.faqs.org/faqs/uk/transport-london/section-6.html>

Have We Thought of Enough?

- 1) Sufficient benefits
- 2) No critical problems
- 3) The benefits outweigh the problems
- 4) All things being equal, further design and testing is more harmful than helpful

The answer must be “Yes” to all four in order to ship

Contextual considerations

- Good enough for who?
 - Good enough for what?
 - Good enough for when?

Sources / More info

Jon Bach (jonb@quardev.com)

Quardev, Inc.

<http://www.quardev.com>

James Bach (james@satisfice.com)

Satisfice, Inc.

<http://www.satisfice.com>