Little
Testing Revolutions I've Attended

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TISQA 2007

QUARDEV

Revolution

A significant, energetic change

Revolution

A significant, energetic change *in my perceptions, actions, or thinking*.

Revolution Area #1

Open Tester Certification

Workshop on Open Certification

June 2006

Cem Kaner, founder of the Open Certification project:

"Software testers are professional skeptics. To require them to adopt a compliance mentality, in which they set aside issues of ambiguity, oversimplification, unstated assumptions or controversial conclusions in order to provide the answer expected by an examiner is to demand conduct so removed from what testers should do as to be invalid on its face."

From a study by RapidSQA

"IT professionals have several options for pursuing software-test-centric certifications from IIST, ISTQB, and QAI. Each organization offers their own interpretation of what they consider to be the knowledge and experience required to earn this credential from them."

http://www.astqb.org/documents/Software%20Test%20Certification%20Report.pdf

Conventional cert #1: IIST

"The purpose of the Body of Knowledge is to define all knowledge areas that a test professional must be proficient with.

"The Body of Knowledge <u>needs to be mastered by everyone</u> who performs software testing."

http://www.iist.org/certification.php

Conventional cert #2: ASQ

"The Q-BoK^{TM} delivers valuable ideas and practical insights, theory and application, for use by individuals, groups, business units and communities, and entire enterprises."

The ASQ has 13 different Bodies of Knowledge, one for each of their certifications.

http://www.asq-sections.org/asq1109/ht/a/GetDocumentAction/i/4087.

Conventional cert #3: ISTQB

"Candidates are required to sit (at) a 1 hour, 40-question multiple choice examination designed to evaluate a candidate's knowledge and understanding of the entire Foundation syllabus.

A grade of 60% must be attained in order to pass.

"Through this format and structure the ISTQB and its National Boards can examine and measure tester capability against a professional <u>uniform baseline standard</u>."

http://www.astqb.org/exams.htm

The "Open" Alternative

- It's free

- It has an open body of knowledge where exam authors can publish study guides with their exams; others can critique or supplement them.

- Authors must justify questions and answers, and critics justify comments, by linking to credible free-access documents on the Web.

- Anyone can create a question and all questions in the question database are visible to the public. Different authors can create identical questions with different designated-correct answers.

- Anyone can comment on a question and its grading scheme. Any employer can administer an exam during an interview and then discuss scored questions and answers with the examinee.

Revolution Area #2

Developments in Exploratory Testing

Two common perspectives

1) "What's the big deal? Exploratory testing is random pounding on the keys. A child could do it, but that's the point, right?"

2) "How they find those great bugs without test cases, I'll never know. I guess some people are just natural explorers -- you either have the knack or you don't."

ET Research Summit (ExTRS)

February 2006 – Palm Bay, FL

James Bach
Jon Bach
Scott Barber
Michael Bolton
Elisabeth Hendrickson
Mike Kelly
Cem Kaner
James Lyndsay
Jonathan Kohl
Rob Sabourin

Mission of ExTRS

To foster and promote community

To achieve consensus on what ET is

To expose disagreements on what ET is

To learn about teaching styles

To trade models and exercises

To learn more about what we collectively know about ET

Conversation starters

1) How do you define exploratory testing?
2) Are there different *kinds* of ET, in your view?
3) Name five constituent skills or behaviors of exploratory testing.
4) Name two specific things a tester can do to gain skill in exploratory testing.
5) What is the relationship between scripted testing and exploratory testing?
6) What is the relationship between context-driven testing and exploratory testing?
7) What would be the *opposite* of exploratory testing?
8) In your personal test methodology, where does exploratory testing fit in?
9) What makes ET effective or ineffective?
10) What kind of research should we be doing to further develop ET into a viable discipline?

Some ET Definitions

- **Sabourin**: "continuous test design as testing continues; continuous testing as design continues; continuous test planning as testing continues"

- **Hendrickson**: a style of testing in which you explore the software while simultaneously designing and executing tests, using feedback from the last test to inform the next (Test-Driven Testing?)

- **Bolton**: Operating and observing the product with the freedom and mandate to investigate it in an open-ended search for information about the program.

- **Me**: The freedom to use ideas, experience, and heuristics from emerging and evolving context while testing.

Consensus on a definition

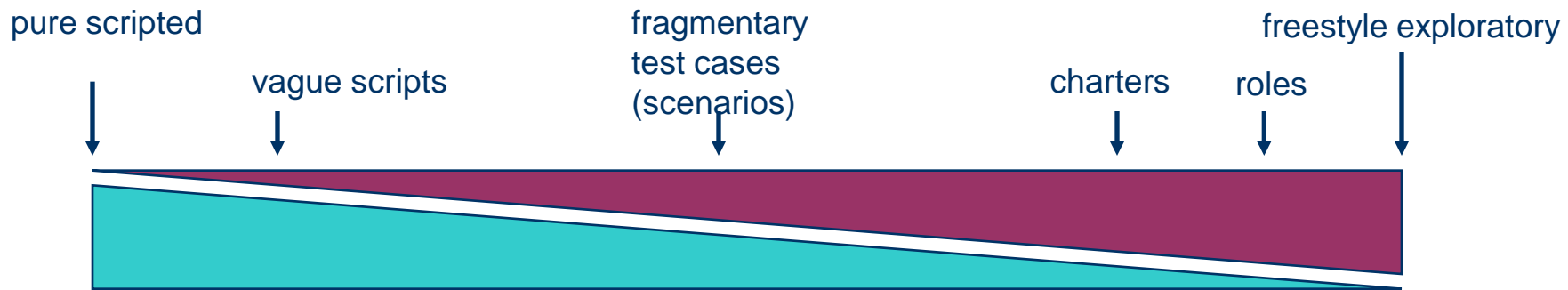ET is not a technique, but a way of **thinking** about testing:

"Any testing process that involves simultaneous learning, test design, and execution."

Paradigmatic examples

- **Mike Kelly**: Retesting and testing around a defect

- **Scott Barber**: The developer walks to my desk and asks "can you whip up a test to see if..."

- **Michael Bolton**: Working with a new build of an existing product, checking for bug fixes by using old test paradigms with new variations; not under the control of a script

- **James Bach**: "Please investigate this puzzling situation", "Please test this product that doesn't yet exist"

- **Cem Kaner**: Tests from a bug taxonomy or "quick test" list

- **James Lyndsay**: Once a script has executed, choosing different data and re-executing

Scripted vs. exploratory

pure scripted

vague scripts

fragmentary
test cases
(scenarios)

charters

roles

freestyle exploratory

To know where a test falls on this scale, ask yourself: *"to what extent am I in control of the test, and from where did the idea originate?"*

WHET 4: Boundary Testing

Revolutionary thinking:

- Definitions
- "Testing for" vs. "Testing at"
- 145 ways to find boundaries
- New terms: "Naviguessing" and "Bounduendo"
- The "curb" as subjective boundary
- Focusing

Toward a new language for ET

Some Exploration Skills and Tactics

"MR.Q COMP GRABC R&R?"

Modeling	**Chartering**	**Generating/Elaborating**	**Recording**
Resourcing	**Observing**	**Refocusing**	**Reporting**
Questioning	**Manipulating**	**Alternating**	
	Pairing	**Branching/Backtracking**	
		Conjecturing	

Exploratory testing is a <u>mindset</u> using this <u>skillset</u>.

SBTM

- SBT Lite

- STAR track devoted to it

- Developments in note-taking

- Tool in SharePoint

- Discussion group:

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Revolution #3

Testing

Conferences

The standard conference

Little time or opportunity to challenge speakers' data

Hundreds of people

Presentations aren't required to be speakers' experience

Little time to meet and talk at length with others

The program is static

CAST (Conference for the Association for Software Testing)

Every talk is facilitated

The program adapts from problems brought up during the day

Every attendee has question placards

Exhibition / Competition

The program is dynamic

Non-testing tracks

The LAWST-style conference

(Los Altos Workshops on Software Testing)

- Facilitation
- IP agreement
- Check-ins
- Definitions
- Paradigms
- K cards
- Breakouts
- Open season vs. Clarifying only
- Starting your own revolution -- doesn't have to change the world, just change your world

Revolutions from WTST

(Workshop on the Teaching of Software Testing)

- Andy Tinkham -- Mind Maps

- Grigori Melnik – "this app can break"

- Becky Fiedler -- CHAT model
  - "Boundaries" idea came from breakout

LEWT (London Exploratory Workshop on Testing)

James Lyndsay, 2005

- All the talk ideas are stuck on a wall. Participants can add new talks at any time.

- Everyone gets a limited number of sticky dots. These are votes – you vote for the talks you would most like to hear. Votes may be cast throughout the day.

- The day is split into 90-minute sessions. Before each session, and with attention to the vote and the flow of the day, the facilitator chooses a group of three talks to be covered in the 90 minutes.

- Each talk is 30 minutes. The speaker presents his or her ideas for ten minutes at most, preferably less. The rest of the time is spent on questions. When time is up, we move to the next talk.

Lightning talks

5-minute presentations (slides optional)

Your revolutions? (or revelations)