Crossing the Chasm

Helping Testers Make an Agile Transition

Lisa Crispin

With material from Janet Gregory
Agenda

- Introduction
- The Chasm
- Support for the Transition
- Transition of Traditional Activities
- Building a Bridge
- Q & A
- References
Introduction

- Me: Coding, testing
- Joined first agile team in 2000
  - Tester's place in agile unclear!
- Currently on Scrum/XP team
  - Developing Java-based web app
  - Since 2003
- Help agile teams/testers
Introduction

- **Our Goals**
  - Give you traction in agile testing
  - Show you what to look for
  - And where to find it

- **Audience Goals**
  - What are your problems?
  - What do you hope to get out of this presentation?
Challenges to Crossing the Chasm

- Separate test team
- No common language
- Fear – loss of identity
- Testing always at the end
- Organizational culture
- Don’t know enough about agile concepts
- Lack technical and tool skills
- Physical limitations – work space
What Support Do You Need?

- Management Support
- Whole Team Support
- The Right Physical Logistics
- New Roles
- Training
  - Agile Principles and Values
  - Communication Strategies
  - New Testing Terminology
  - Tools
Management Commitment

- Allow self-organization
- Provide the right motivation
- Provide time to learn
- Provide resources
  - To enable learning
  - To do the job successfully (tools, infrastructure)
Whole Team Commitment

- Deliver quality
- Deliver value
- Every role has equal value
- Automation
- Ensure testing is done
- Anyone can pick up a testing task
- Manage resources as a team
Physical Logistics

- Workspaces
- Seating arrangements
- Test environments
- Distributed teams
New Roles

- Tester
- QA Manager
- Functional Analyst
- What’s blocking progress?
Agile Tester Role

- Provide feedback
  - Defects are only one kind
- Estimating and planning
- Elicit and clarify requirements
  - Uncover hidden assumptions
  - Watch for testability
  - Ask questions
- Drive development - capture examples as tests
- Collaborate: customers & programmers
QA Manager Role

- Practice manager
- Resourcing
- Letting testers do what they do best
- Provide support
- Consider performance / reward changes
- No blame
Functional Analyst Role

- When customers aren’t available
- Empowered to make decisions
- Deep domain understanding
- Good technical understanding
What’s Blocking Your Team?

• Your team needs the expertise it needs
  ▪ Analyze what is keeping you from progressing
    ▪ Do you need a database expert?
    ▪ Do you need performance testing help?
    ▪ Do you need more testers, more programmers, functional managers…?
    ▪ What about customer side?
Training

- Learn agile principles, vocabulary
- Build a common vocabulary
  - Testing terminology
  - Types of tests
- Communication, collaboration skills
- Tools
  - Code management
  - Test automation
Agile Principles, Vocabulary

Agile Manifesto

- Individuals and interactions
- Working software
- Customer collaboration
- Responding to change

Vocabulary

- Release Planning
- Iterations
- Stories
- Continuous Integration
Testing Terminology

- Acceptance Tests
- Exploratory Testing
- Agile Testing Quadrants
  - Think about all test types
  - Non-functional tests
- Test Automation Pyramid
Communication and Collaboration Skills

- Elicit examples, requirements
  - Example-writing workshops
  - Examples as a common language
- Work with customer team
  - Learn the domain
  - Learn who does what
- Work with technical team
  - Learn system architecture
  - Learn tools
Tools

- To manage code
  - Source code control
  - Continuous integration
  - Test environment deployment and maintenance
  - IDEs

- To automate tests
  - Scripting language
  - Functional test tools
Transition Traditional Test Activities

- **User Acceptance Testing (UAT)**
  - Get users involved early

- **Defect Tracking**
  - Consider alternatives
  - Focus on prevention, not tracking

- **Quality Models**
  - ITIL
  - SOX
  - CMMI

- **Audits**
Discussion

- Give us an example of an obstacle blocking your or your test team's transition to agile.

- Who has an idea of how to help overcome that obstacle?

- *(We will discuss and possibly role-play as time permits).*
Building a Bridge

- What development teams can do
- What managers, coaches can do
- What programmers can do
- What testers can do
Success Story – ePlan Services Inc.

- Team given time, training to learn TDD, CTDD
- Retrospectives used to continually improve
- Team consensus to select test tools, frameworks
- “Engineering Sprints” to try new tools, refactor, upgrade
- All roles have equal value
- Team support of audits
- Team support of compliance
What can the team do?

- Collaborate, pair across roles
- Establish environment of safety, respect
- Incorporate testers into development team
  - Parity with programmers, other developers
- Use business-facing tests as a common language
What Can the Team Do?

- Commit to whole team approach to testing, quality
- Use retrospectives
  - Identify obstacles to testers, testing
  - Focus on one or two problems at a time
  - Experiment
- Celebrate successes
  - no matter how small
What can Managers, Coaches do?

- Provide the right physical, virtual infrastructure
  - which facilitates collaboration
- Be patient
  - Convince team that quality is the #1 goal
  - Convince testers of team commitment to quality
  - Give time to learn
- Educate team: No story is done until it’s tested!
- Let team self-organize, find ways to improve
  - Big visible charts to track progress
  - Let team choose tools that work for them
What Can Programmers Do?

- Ask testers for their help
- Offer testers your help
- Include testers in design discussions
- Share responsibility for testing, automation
- Practice TDD, CTDD well
- Help testers understand technical aspects
What Can Testers Do?

- Collaborate with customer
- Provide tests for the developer
- Find ways you can add value
- Get involved at the start
- Focus on business value
- Face to face communication is always the best
  - Get up and go talk
  - Drawing on a whiteboard helps
Building a Bridge

- Let go of your fears
- Share responsibility
- Use a team approach to solving problems
- Take charge of your education
- Use quadrants, pyramid as guides

JUST TRY IT!!
Group Exercise

- Divide into small groups
- Take turns describing to the others in your group:
  - What is your primary role on your current team?
  - What’s the biggest problem testers on your team are having in adapting to agile?
  - What’s the first thing you’ll do when you go back to help address this problem?
- Share a couple of interesting ones with the class
Some Agile Testing Resources

- lisa.crispin.home.att.net
- www.agilealliance.org
- www.exampler.com
- agile-testing@yahoogroups.com
- www.fitnesse.org
- webtest.canoo.com
- fit.c2.com
Available for pre-order!

Agile Testing: A Practical Guide for Testers and Agile Teams

By Lisa Crispin and Janet Gregory

www.agiletester.ca
Agile Resources

User Stories Applied
by Mike Cohn
Agile Resources

Agile Estimating and Planning

By Mike Cohn
Collaboration

Collaboration Explained: Facilitation Skills for Software Project Leaders

By Jean Tabaka

Available on Amazon
Implementing Change

Fearless Change: Patterns for introducing new ideas

By Linda Rising and Mary Lynn Manns

Available on Amazon
Agile Testing Resources

Available on Amazon
Goal

Have fun, whatever you do!

lisa.crispin@gmail.com
lisacrispin.blogspot.com