Do You Have the Right Stuff to Manage a Software QA / Test Team?

Software Quality Consulting Inc.
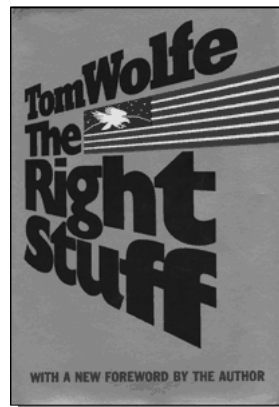
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Topics

- **Some Observations…**

- **Good Managers are Hard to Find**

- **What is the Right Stuff?**

- **Special Challenges Managing SQA/Test Teams**

- **References**

- **Summary**

TomWolfe
The
Right
Stuff

WITH A NEW FOREWORD BY THE AUTHOR

Some observations...

- **Not everyone has the Right Stuff to be a good manager**

  - Having strong technical skills doesn't mean you have the right skills or the right disposition to be a good manager...

  - Good management skills are not easily taught...

  - Many managers often lack good role models, coaches, or mentors...

Original Seven Mercury Astronauts

Slide 3

Some observations...

- Five hundred years ago, Machiavelli posed the question of whether it is better for a leader to be loved or feared.

- He concluded if you can't be both (few people can), being feared is more effective.

- For many decades, management by fear was dominant style...

Snook, S., "Love and Fear and the Modern Boss", *Harvard Business Review*, Jan 2008

Slide 4

Some observations…

- **Provide 10 praises for every critique.**
- **Clearly define expectations.**
- **Manage/teach by example.**
- **Provide some degree of autonomy.**
- **Admit <u>your</u> mistakes.**
- **Listen.**
- **Be patient.**
- **Be consistent.**
- **Care about individual accomplishments.**
- **Know something of outside interests.**

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Some observations…

- **People Person**
- **Big-picture Manager**
- **Task Master**
- **Frustrated Techie**
- **Administrator**
- **Dictator**
- **Micro-manager**
- **Empire Builder**
- **Pleaser**
- **Other types?**

Slide 6

How would you describe your current boss?

Tough but effective 8%

Mean and demeaning 11%

I have so many bosses I can't keep them straight 5%

Totally apathetic 13%

A neurotic micromanager 22%

Fair and pleasant 41%
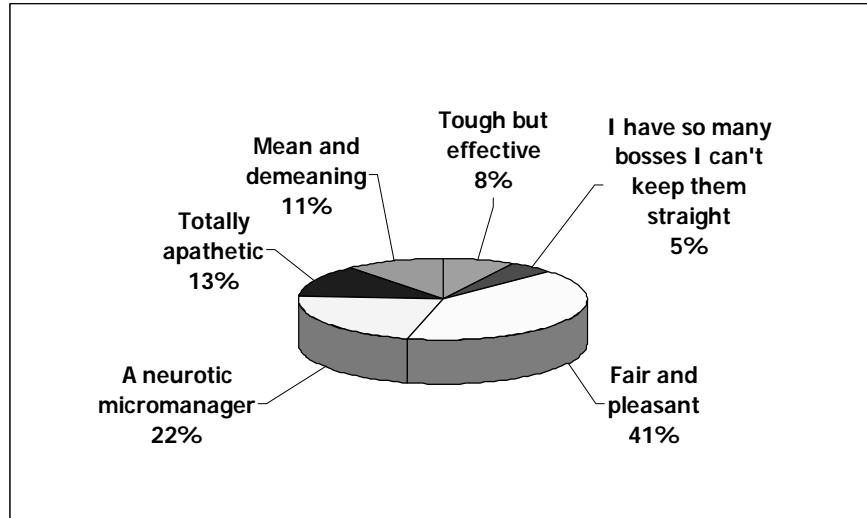
Source: Boston Globe Careers Section pg. 18, Feb. 3, 2008.

Good managers are hard to find…

- **Dilbert appears in 2,000 newspapers in 56 countries.**

- **dilbert.com was first syndicated comic strip to go online**

- **Most widely read syndicated comic strip…**

Good managers are hard to find…

- **And now there's a hit TV series…**

Good managers are hard to find…

- **Maybe because many managers…**

  - never had good role models
  - lack basic management skills
  - lack interpersonal communication skills
  - believe they have to be smarter than their staff
  - often view a manager's job as a power trip
  - think they have to be busy all the time
  - need to feel important
  - are often very insecure
  - anything else?

What is the Right Stuff?

Which set of characteristics are most important for good managers to have?

- **Intelligence**
- **Education**
- **Organizational Ability**
- **Political Savvy**

- **Leadership**
- **Focus**
- **Delegation**
- **Lack of Control**

Source: Peter Varhol, ED Online ID #4135, March 19, 2001

What is the Right Stuff?

- **A good manager…**

  - **empowers** people so they can achieve their full potential

  - **works behind the scenes** to make his/her team more effective by removing obstacles and roadblocks

  - **recognizes** every person has something **different** to contribute

  - **knows** each person's strengths and weaknesses

  - is **committed** to helping each person achieve his/her professional career goals

  - **spends time** with each person setting realistic project and professional goals and then works with each person to help him/her achieve those goals

What is the Right Stuff?

- **A good manager…**
  - **gives specific, timely feedback** when it is warranted

  - **asks for feedback** about his/her own performance as a manager

  - is a skilled and **effective communicator** that does not shy away from dealing with difficult situations

  - **leads by example**

  - uses **Management By Walking Around**…

  - recognizes that when people feel valued and truly enjoy their work, **they can move mountains** to achieve shared goals

From Blanchard, K., and Johnson, S., <u>The One Minute Manager</u>, Morrow, 1981.

What is the Right Stuff?

- **Feedback**
  - One of the most important things good managers do is **give feedback** - both positive and negative.

  - Managers uncomfortable doing this, should seek out coaching.

  - Without ability to give timely, specific feedback, you can't be a good manager.

  - Some managers avoid giving feedback because they're afraid of people's reactions.
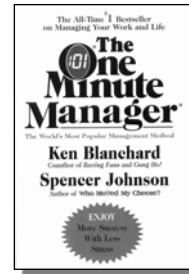
What is the Right Stuff?

- **Suggestions for giving positive feedback:**

  – **"Catch people doing something right."**

  – **Giving feedback can be tricky...**

    - Too much quickly becomes meaningless.
    - Too little leads to frustration.
    - Provide meaningful recognition when your people accomplish something **they deem significant**.

  – Doing this **well** is a critical skill for good managers.

  – Know **what** to recognize, **when** to recognize and **how** to recognize...

  Blanchard, K., and Johnson, S., <u>The One Minute Manager</u>, Morrow, 1981.

What is the Right Stuff?

- **Suggestions for giving positive feedback:**

  – **WHAT:** Specific behavior or result deemed worthy of recognition

  – **WHEN:** As close as possible to when behavior or result occurred

  – **HOW:**

    - **Clearly describe what person did to deserve praise.**
      – Feedback must be specific and individualized

    - **Express your personal appreciation**
      – Explain why this is important to you, the team, the organization.

    - **If a reward is given, it needs to be meaningful to recipient...**
      – Know what kind of reward would be meaningful to each person

What is the Right Stuff?

- **Suggestions for giving positive feedback:**
  - Recognize particularly good work
    - at group meetings, team lunches, and corporate meetings
    - Add recognition to employee's personnel file
    - Nominate them for Quality Awards, etc.

  - Not everyone wants to be recognized publicly

    - Some like public recognition, some don't.
    - As a manager, you need to know preferences for each of your people.

What is the Right Stuff?

- **Some examples of behaviors to recognize:**
  - Handles a dicey situation in a particularly diplomatic manner
  - Prepares a well-written, detailed, concise Test Report
  - Finds a critical bug
  - Prepares well-researched report on problems with last release
  - Does an exceptional job of training a new hire
  - Works extra hours on a critical project without being asked
  - Handles a task that others were loathe to take on
  - Shows creativity and out-of-the box thinking
  - Handles changing priorities and assignments without complaint

What is the Right Stuff?

- **What motivates most people?**

  - **Surprisingly, it's not money...**

  - Money, benefits, and so on are 'hygiene' factors - they create dissatisfaction if they're absent, but they don't make people feel good about their jobs and give them the needed **internal generator.**

  - What **does produce the generator** are:
    - recognition of achievements,
    - pride in doing a good job,
    - more responsibility,
    - advancement, and
    - personal growth

  Herzberg, F., "One more time: How do you motivate employees?", *Harvard Business Review*, Jan-Feb 1968.

What is the Right Stuff?

- **Suggestions for giving negative feedback:**

  - Gather **specific examples** of behaviors or results that negatively affect work or working relationships

  - Feedback needs to be **timely**...

  - **Don't be judgmental**...

  - **Always deliver negative feedback in private.**

  - State specific **behaviors or results you want.**
    - If you're open to other solutions, try joint problem solving.

  - Agree to **follow up**. Set a date...

  - End on a **positive note...**

What is the Right Stuff?

- **I can't believe you stopped testing this morning without telling anyone. What we're you thinking?**

- **I heard you had to stop testing this morning. Knowing you, there must have been a very good reason. What can we do to get back on track here?**

- **Your bug reports are missing key pieces of information and development is giving me grief about it. Can't you fill out forms correctly? Why are you so lazy?**

- **There are some problems with bug reports. Do you have any suggestions for how we can ensure that developers get all the info they need so that we don't slow down the process?**

What is the Right Stuff?

- **Feedback is a two-way street**

  - Managers need to **receive feedback** about how they are doing as a manager...

  - Feedback is essential for managers if they want to improve.

  - Ask your staff to critique your management skills in a manner that's **safe** for them...

  - If you're uncomfortable having this discussion, involve an impartial third party (HR) to act as an intermediary.

What is the Right Stuff?

- **Resist temptation to micro-manage:**

  - **Remember there's always more than one right way**
    - How you would solve a problem isn't the only way

  - **It's all about trust**
    - Your employees have to believe you trust them to do a good job.

  - **People need to find solutions on their own**
    - If you constantly step in and solve their problems, they will never develop skills they need to be successful in long run

  - **Beware of burnout**
   - When you micro-manage, you're going to get tired. *Really tired.*

What is the Right Stuff?

- **Performance Plan is a powerful tool…**

  - To set professional and personal **goals**

  - To **identify** training and professional development needs

  - For frequent **communication about expectations**

  - To **change** negative behaviors and poor performance...

  - To **reward** positive behaviors and good performance...
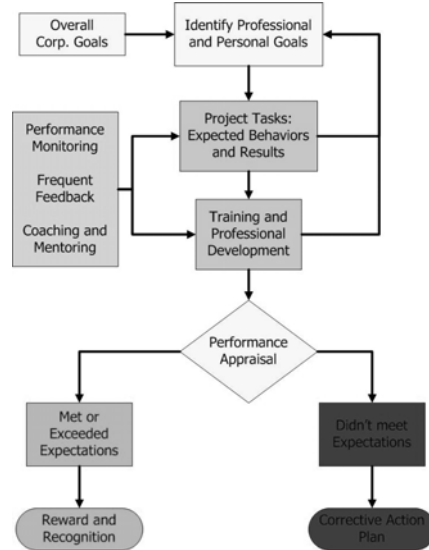
What is the Right Stuff?

What is the Right Stuff?

- **Performance Plan Basics**
  - **This is really important...**
  - Take time to prepare for your annual discussions
  - Have objectives you want each person to consider
  - Ask each person to bring their own list of objectives...
  - When you meet, ensure **no interruptions...**
  - Update plan as tasks are accomplished with periodic one-on-one meetings...
  - At annual performance review, there should be **no surprises...**
  - **This is really important...**

What is the Right Stuff?

- **Some common mistakes made by managers:**
  - Fail to give feedback
  - Wait too long to give feedback
  - Give vague feedback
  - Fail to praise good performance
  - Overreact to minor errors or performance problems
  - Act out of anger, spite rather than desire to correct performance
  - Solve problems for employee rather than help them find own solutions
  - Fail to recognize that people generally behave in ways that are determined by how they are being measured.

What is the Right Stuff?

- **To become a good manager:**
  - Find experienced, respected managers you can learn from
  - Ask if they would be your coach/mentor
  - Talk to your coach/mentor in confidence about your current management challenges and ways to address them
  - Else, find a mentor through **IEEE Mentoring Connection**

- **Attend professional management training…**
  - HR can help identify management training programs
  - Contact American Management Assoc. (AMA)

- **Ask HR to start New Manager's Support Group**
  - Share experiences with other new managers

What SQA/Test Managers Face Daily...

- Project schedules are always wrong.

- Your team rarely, if ever, has time requested for an adequate testing cycles, while Development always takes longer.

- Development often delivers buggy code later than planned.

- Schedule pressure is intense throughout project, reaching a crescendo during weeks just prior to release.

- Prior to release, 60+ hour work week is often required.

- Intense scrutiny, second guessing, and armchair quarterbacking by others who know little of what is involved in testing software is constant...

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What SQA/Test Managers Face Daily...

- Support and recognition from upper management is negligible.

- Developers often praised for writing good code - regardless of number of defects SQA finds - while SQA receives little if any recognition.

- Measures of testing progress are demanded while it is rarely required that Development or Marketing provide measures of progress of their work.

- If the project fails, you will be blamed.

- Finding and retaining talented people is a constant challenge.

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Special Challenges Managing SQA/Test Teams

- **People Challenges - Professionalism…**

  – It's taken a long time to raise level of professionalism for SQA Engineers and Testers.

  – Today, enlightened organizations realize SQA Engineers and Testers are just as important as Software Engineers and Developers.

  – Attracting and retaining SQA Engineers and Testers is a chronic problem.

  > **For more information on this topic:**
  > **See my Nov 2006 e-newsletter**
  > **www.swqual.com**
  > Food for Thought
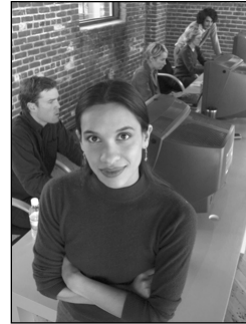
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Special Challenges Managing SQA/Test Teams

- **People Challenges - Professionalism…**

  – Review **job descriptions** for SQA Engineers and Testers
  – If necessary, strengthen requirements for **educational background, professional certifications, experience, and communication skills**
  – Work with your team to identify skills essential for their job
  – Know background (education and work experience) of each member of your staff
  – Work with each person to identify strengths and weaknesses
  – Performance plan to leverage strengths and improve weaknesses

- **How others view your team reflects on your management skill**

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Special Challenges Managing SQA/Test Teams

- **Some characteristics of good testers…**
  - Integrity and strong commitment to Quality
  - A "Show Me" attitude
  - Ability to role play…
  - Experience using many computers and many applications
  - Good estimating skills
  - Excellent written and oral communication skills
  - Good at guessing where bugs might be hiding
  - Good at solving puzzles
  - Able to juggle several simultaneous tasks
  - Good time management skills
  - Careful observer, patient, pays close attention to details

Based on Caner, C., et al., <u>Testing Computer Software</u>, Thomson Computer Press, 1993.

Special Challenges Managing SQA/Test Teams

- **Some types of testers…**
  - Some are good at following rules
  - Some are good at breaking rules
  - Some have extensive domain knowledge
  - Some have programming skills
  - **Other types?**

- **Career paths for testers…**
  - People want to grow professionally
  - As a manager, you can help them or you can hold them back
  - Testing is sometimes viewed as an entry level position…
  - Each employee should have clear career paths…

Special Challenges Managing SQA/Test Teams

- **People Challenges - Attracting and Retaining Staff**

  - Work with other technical managers to identify career paths into your group as well as career paths out of your group

    - **Technical Support** career path into SQA/Test can work extremely well

    - People in Technical Support usually have an extraordinary amount of **domain knowledge** and these folks can be easily trained in basic testing skills

  - Discuss career paths with your team and identify long-term career goals in their **Performance Plans**...

  - Take a **sincere interest** in helping your staff achieve shared career goals

Special Challenges Managing SQA/Test Teams

- **Organizational Challenges - Blame**

  - SQA/Test Team often viewed as obstacle to meeting schedules

  - A blaming organization can be a **toxic** place to work...

    - "Why is a blame culture unhealthy for test teams? Because we become fearful of taking any risks in case we make a mistake.

    - When asked do you [have] a blaming culture, [a manager] replied; 'Well if we do, it's their fault!'

    - If we are to learn, progress and become more productive as a team then we must fight the 'blame culture' mentality."

Roden, L., "Choosing and Managing the Ideal Test Team", Grove Consultants.

Special Challenges Managing SQA/Test Teams

- **Organizational Challenges - Blame**
  - **Take steps to avoid blaming culture**
    - Acknowledge poor performance by your team to demonstrate you are willing to accept responsibility when it is deserved...
    - Provide objective evidence when others are at fault in a non-accusatory way to demonstrate you're not interested in blame...
  - **Maintaining positive, productive working relationships is critical...**
    - Project Management
    - Senior Management
    - Software Development
    - Technical Support

Special Challenges Managing SQA/Test Teams

- **Organizational Challenges – Reporting Status**
  - Management wants information they think is important...
  - Bug counts alone can be a very misleading indicator of status...
  - Use **Balanced Scorecard Approach**
    - How much of product has been tested?
    - How much of planned testing has been completed?
    - How many problems found?
    - How many problems are still under investigation?
    - What is level of confidence in testing effort so far?
    - How much testing is blocked for any reason?

Kaner, C., et. al., Lessons Learned in Software Testing – A Context Driven Approach, John Wiley, 2002.

## Special Challenges Managing SQA/Test Teams

- **Organizational Challenges - Relationships**

  - Independence...

  - Organizational Reporting...

  - SQA/Test Team Role must be clearly defined and communicated...

  - SQA/Test Team should be one of several participants in the release decision process...

Summary

- **Managing an SQA/Test Team IS very challenging and can be very rewarding...**

- **Good managers need Right Stuff for their team to be effective**

- **Find a coach or mentor...**

- **Good managers are good leaders and good leaders lead by example**

- **How will you know when you've become a good manager?**
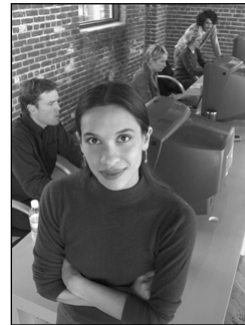
Resources

- Blanchard, K., and Johnson, S., <u>The One Minute Manager</u>, Morrow, 1981.

- Derby, E., and Rothman, J., <u>Behind Closed Doors - Secrets of Great Management</u>, The Pragmatic Bookshelf, 2005

- Snook, S., "Love and Fear and the Modern Boss", *Harvard Business Review*, Jan 2008

- Roden, L., "Choosing and Managing the Ideal Test Team", Grove Consultants.

- Rakitin, S., <u>Software Verification and Validation for Practitioners and Managers</u>, 2nd edition, Artech House, 2001.

- IEEE Mentoring Connection, **www.mentoringconnection.com**

Additional Workshops

- Project Retrospectives
- Root Cause Analysis for Customer Reported Problems
- Writing Software Requirements
- Estimating and Scheduling Best Practices
- Software Verification & Validation for Practitioners and Managers
- Accurate Schedules Using the Yellow Sticky Method
- Predictable Software Development ™
- Peer Reviews and Inspections
- Improving the Effectiveness of Testing
- Risk Management for Embedded Software Development

- **For more information, please visit www.swqual.com**

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