When will we ever learn?

Andy Longshaw & Chris Cooper-Bland, SPA2014, Monday 30th June, 2014 4:00pm – 5:15pm

Introduction

Think tank with objectives and outputs – techniques and tactics for learning.
There was a blog with pre-reading – most of the audience hadn't read it
Two collaboration periods – 20 and 30 minutes.

Usual Findings

Learning is not part of day-to-day activity in most organisations. Where learning is done, it happens sporadically, in batches, disconnected from the work and/or largely driven by individuals with a specific desire to learn.

Questions:

1. Does it have to be this way?
2. What are the blockers and enablers?
3. How do we meaningfully measure knowledge and learning?
4. What techniques and tactics can we adopt?

A learning organisation would have to have the right atmosphere – supportive rather than blame culture.

Organisational and team learning:

- Lessons-learned reviews can be cathartic, but are the lessons actually learned?
- Do retrospectives lead to new understanding and actions?

Individual learning:

- Use up the training budget
- Pick something that will look good on my CV

Four Elements of Organizational Learning

Stanford Review:

- Supportive Leaders
- Intuitive Knowledge Processes (what does that mean?)
- Culture of continuous improvement
- Defined learning structure – individuals need to know what the organisation wants them to learn

Examples

- Google: ring-fenced time for own projects
- Microsoft: knowledge-sharing
- Toyota: lean improvemements
- Many others: see http://www.clomedia.com/articles/what_are_learning_organizations_and_what_do_they_really_do

Collaboration 1

- Do you work in a learning organisation?
    - If not, why is it not?
    - If yes, what does it do to make it so?
- Does it depend on context?
- What would you advise if you could make yourself heard in an organisation?

Work in groups and report back.

Results

- About one-third of those present consider that they work for a learning organisation
- Knowledge must be applied to be useful
- One company insists on at least one training course attended per year and the learning applied on return (at the very least, by giving a presentation to colleagues)
- Data shows that the investment in training pays for itself in improved revenue
- Training project motivates participation
- Managers have a tendency to narrow project focus (tunnel vision)
- Some people prefer structured classroom learning, others prefer videos, computer-aided learning etc.
- Measuring the learning and making this a KPI helps incentivise ("knowledge accounting")
- Individuals are proportionally more valuable to small organisations
- Culture is important – do you talk about resources or people?
- Evangelise internally and externally
- Establish a space where the learning can happen and insist that people take the necessary time off project work, even when tight deadlines are looming
- Hackathon conventions internally are fun and foster skills development

Assessing Knowledge

Taxonomies

Benjamin Bloom has devised a taxonomy of "higher order thinking skills": Remembering, Understanding, Applying, Analysing, Evaluating, Creating. Who has used this? Did it work?

Competence model: Unconscious Incompentence → Conscious Incompetence → Conscious Competence → Unconscious Competence → back to square 1 to learn more *or to teach others*

Setting Direction

- Work out what skills and knowledge you currently have
- Which ones do you need (or believe you need) to apply?
- Create a radar map (for example) plotting level of competence against need to use, for various technologies – aim is to move to the top right quadrant

Learning Styles

Many theories are unproven but potentially useful. We all use a mix – different styles for different things.

Resources

- Training courses
    - Physical
    - Online (CBT)

- Books
- Online conference sessions
- Blogs
- Dojos
- Katas
- Workshops

Collaboration 2

Discuss in your groups:

- Measurement: how do you measure what you currently know and what you've learned?
- Filling the gaps: how do you determine what you need to know?
- Techniques and tactics for learning: what have you tried and how well did it work? How much depends on the context of organisation or people?

Conclusions:

- Measure competence by comparing typical practices of beginning, intermediate and advanced practitioners in each area of software practice (team based self-assessment)
- Set up communities of practice around each area
- Danger sign: single head of knowledge (SHOK)
- Root Cause Analysis
- Measure speed of knowledge diffusion through a team
- Measure skills and knowledge separately
- Filling the gaps: Foster a culture in which it's OK to say "I don't know"
- Skills Roadmap
- Identify what to learn for next project
- Assess Learning by (a) passing it on (b) applying it