Agile Training: Prelude to a Manifesto?[U+F8E9][?[U+F8E9][?]]

1 Why?

Because providing a training service that adds value to a business and genuinely increases productivity and job satisfaction for individuals is difficult. Over time training providers have adopted practices to increase the likelihood of satisfactory outcomes at several levels. For example

1. Classroom practice.
   Trainers are increasingly professionalised and aware of best practice in delivering training. They are familiar with notions of different modes of delivery, of different learning styles and of attentional and attitudinal factors that affect learning.

2. Materials Development
   Training and materials are often developed with attention to the results of research in education and training and (less often perhaps) development is governed by structured methods (for example ADDIE or IDS).

3. Service provision.
   Training is frequently understood as a service and delivered in a service wrapper conforming to best practice in business (often following guidelines for IT management for example).

4. Evaluation.
   Training is understood as involving evaluation at all levels from the much derided but pervasive *happy sheet*, to more reflective and sometimes broader research into workplace effectiveness.

Like it or not, these last three are *heavyweight* processes. They weigh heavily on many trainers daily work experience. They are however deeply ingrained in ideas of best training practice, reflecting anxiety that training should show itself to be of demonstrable value and professionally delivered.

In some respects this situation is comparable to the state of software development ten years ago. The search for well managed processes to deliver well designed, effective software on time and within resource constraints led the industry to a re-evaluation of software engineering methodology. This had several somewhat surprising outcomes. For example, previous best practice had involved solid concentration on

1. Developing fixed requirements analysis with change control procedures designed to discourage change.

2. Development of comprehensive documentation was emphasised to such an extent that some practitioners claimed documentation was more important than code.

3. Traditional project management procedures that envisaged fixed term projects.
4. A rigid separation between the firm and the development team with formalised control of communication between them.
5. Monolithic applications geared to single solutions.

Now the sector is characterised by lean, agile methods of development that are noted for

- flexible development methods
- re-usability and refactored solutions based on frameworks and design patterns
- constant sponsor input
- the centrality of changing requirements and a consequent constant review of project parameters
- the promotion of acceptable working code over all other requirements.

This has involved change at every level from coding practice to project and service management. The results have been a complete change in the culture of the software sector ensuring a sustainable and valued role for software development.

The phrase *agile training* is obviously chosen to hitch my wagon to a waxing star but the name doesn't matter except as a hook to hang productive ideas on.

1.1 We need sustainable training

Training as a function must be sustainable given institutional and individual constraints on human and other resources. We must face the perception that

- Training can be costly
- Training can be wasteful

And our own experience that

- Being a trainer is dull and causes burn-out

Trainers who are not able to develop training that meets learners' actual needs become jaded and exhausted.

1.2 Issues

1.2.1 Training is slow to develop

Good training is slowly developed. This is for two reasons:

- We think slowly
- We implement ideas slowly

We want to change both points, but addressing the second is the priority. Slow thought is a good thing, but when specific training requirements arise we want to address them in suitable time frames. One of the most important factors affecting the development of training however is not an attribute of trianing practise but of culture

Trainers don't feel supported in prioritizing training development and following best practise in development.

Indeed, trainers often feel that they are best appreciated when they ignore best practise and develop materials *right now*, usually achieved by *coping*.

1.2.2 Training is too often generic

The needs of learners and organisations are never really generic. Training fails at both the organisational and individual level if it is perceived as generic. This is intimately linked to the next point.

1.2.3 Training is not targeted

Because traditional *Training Needs Analysis* is difficult, costly, time consuming and we rarely get to do it to our own satisfaction, we develop generic, scattershot training and hope that we score.

Often the burden of TNA makes it difficult to get management buy-in and trainers complain that this adversely affects proper targeting, but actually trainers know that TNA is cumbersome and that it is sometimes carried out in a routinist fashion that is not effective.

We need to do analysis, including skills auditing of learners, but the old method isn't working for us.

1.2.4 Training is not aligned to the business

Consider the least obvious example: *word processing*. What could possibly need business alignment there? Well, many of us know that the self-acquired skills that many people have are inimical to best practice in producing long documents or in producing documents that may require re-use in different formats. But much training persists in introducing users to low level formatting techniques and only hitting the loft heights of the use of outlining, styles and templates or multiple section documents at advanced stages - stages that most learners never get to. This is just not aligned to what business needs.

1.2.5 Training is not aligned to the learner

Often skills auditing is either not carried out, or badly carried out and focusses on abstract conceptions of competence rather than on productive behaviours. One reason for this is that traditional skills auditing techniques are mostly unacheivable in most working contexts. Refocussing skills auditing on qualitative data collection and analysis by use of small focus groups and highly prioritized questionnaire techniques can over come this.

1.2.6 Overall

We want

- Effective training that will
- Meet real needs and
- Change behaviour.
- That can constantly develop and
- Let us enjoy our job and
- Be appreciated

2 How?

2.1 Gathering requirements

Requirements analysis can be much simpler when designing training to target specific needs. Instead of monolithic TNA that attempts to build a plan for the organisation as a whole, we carry out continual TNA on demand. The process should involve the following factors and processes:

2.1.1 Understanding the stakeholders

The sponsor Meet the sponsor for the first scoping of training. Concentrate on the change that they want to see. Understand how the perceived need for training has arisen.

At this point the sponsor's understanding of responsive training is crucial. We have to win the sponsor to the position that their continued involvement in the process will be to their advantage.

Despite the fear that this emphasis on sponsor involvement engenders, this is not a burdensome requirement in reality.

The learner Find out what the learners need in order to change in the desired way. This is the skills audit but focussed on the goals set by the sponsor. For responsive training development focus on qualitative research methods. Rarely is objective assessment of skills necessary unless in safety critical domains.

Partly understanding learners depends on identification. If the scoping exercise identifies a defined target audience for training then the skills audit can be directed to that group. Where the target learners are not a determinate group then we rely on shared notions of typical learners that develop from discussion with both sponsor and candidate learners.

Not all learners have the same deficit with respect to the desired outcomes. Objectives should recognise this as it feeds into the modularity and granularity of the training materials to be developed.

A small focus group with a controlled agenda can often provide better input than survey methods.

Where surveys are necessary – because there is evidence that the range of learner differentiation will not allow for the collection of adequate data by focus group – simple questionnaires that encourage users to focus on increasing their working productivity should be used. Ask not what learners don't know, but what they can't do that would improve their working lives. Where learners are required to access their own skills, use a simple, three point confidence scale:

1. I could only do this with help
2. I could do this
3. I could show a colleague how to do this

This seems simple minded compared to the traditional Dreyfuss assessment scale and that is fully intentional: the Dreyfuss method is simply more complex than needed in most cases. If a more complex method is needed the sponsor or trainer as researcher will know.

2.1.2 Identify the training goals

These develop from

- Behaviourally specified objectives from the sponsor
- Skills audit from the learners

These are the two elements that combine to make a formal statement of the goals of training.

As far as possible try express to the objectives in terms of behaviour: *we would like our staff to do this* rather than competencies or knowledge. This will make it more likely that you train to the right goal and focus correctly and will also direct you to practical outcomes.

2.1.3 Agree the scope of training

Use the results of the requirements analysis to agree the scope of training with the sponsor but always accept the possibility of change. Goals can change according to sponsor input throughout the process.

The format of the scoping agreement is less important than developing a shared understanding and consensus around continued communication for development.

2.2 Creation

2.2.1 Sponsor involvement during the development

Involve the sponsor in the development of materials and ensure that you continue to meet their goals as they perceive them.

Software engineering demonstrates that continual sponsor input produces a better product and better resource management. This will facilitate Iterative feedback and revision for fast turn-around

2.2.2 Responsive training requires timely, effective development

- Task driven materials development
- Development in a modular fashion
- Concentration on meeting task requirements
- Stopping with sponsor agreement

2.2.3 Sustainability requires re-usable learning objects

- Don't repeat yourself
- Develop in a modular fashion
- Adopt a working model that encourages good practice
- Implement library management routines

2.2.4 A Method

Use a wiki

- Allows revision control
- Permits reflection and discussion
- The sponsor can contribute
- Automatic generation of PDFs
- Modular (the unit is the page)

- Wide range of objects and activities possible
  - Text
  - Audio
  - Video
  - Quizzes
  - Hide and show
  - Learner commentary for reflective learning

From a resource point of view you get

- Lightweight FOSS environment
- Easy deployment over standard technologies

2.2.5 Use variant/sub-set of IDS, Addie or any method.

You can use your own method but it must exist at least in outline. This is mine:

1. Do while there are learning objectives unmet:
2. *State learning objective*
3. *Specify in terms of behavioural outcomes*
4. *Write task for learning objective*

This should be something the learners currently *wouldn't* do that it is prefered that that they do do.

1. *Develop exercises for the task*

An exercise embodies behaviour that demonstrates whether a task has been carried out effectively.

Don't obsess over the difference here: the task definition is declarative and generic and the exercise procedural and specific.

1. *Create data for the original state of affairs, eg an unformatted document; a column requiring calculation.*
2. *Write instructions*
3. *Create example solution*
4. *Create a snapshot of data files exemplifying solution*
5. *Write demonstration materials for exercise which constitute your documentation, slides etc.*

End

1. Wrap the tasks in a situational context

Task oriented or situated training requires that learners identify the tests as part of their work experience. This last step is *logically* prior but in practise is often easier to leave until at least the list of learning objectives is agreed and indeed can sometimes be the last step actually carried out.

2.3 Delivery

Content should be *mode indifferent*. Your materials can be used for

- Coaching
- Class-room
- Facilitated learning
- Self-study

This is the key to reuseability and responsive training: if you have modular, mode indifferent materials you can respond positively to training needs as they arise.

In any mode, put the learner in control. Flexible materials and learner autonomy will help you address the question of differentiation and reduce common anxieties about the pace of class room delivery. If your learning materials are mode indifferent the pace of your demonstration and explication in the classroom can be de-coupled from the pace of learning.

Encourage learners to accept that they can follow through on any content outside of your classroom. Don't derail classroom activity to attend to outliers (at either end).

2.4 Training as a service: evaluation is the key

The most urgent aspect of managing training as a service is evaluation. Keep in mind that

- Requirements analysis is the first stage of evaluation
- Learner responses are evaluation
- Trainer reflection is evaluation
- Sponsor response is evaluation

Service evaluation must be

- Comprehensive
- Continuing

- 360
- Achievable

However, if we specify evaluation procedures that are too burdensome we just won't do evaluation. The tendency will be to implement evaluation that isn't carried out, or to use tools that don't provide the information we really need.

One problem is believing that because a form was filled in, evaluation was carried out but this is manifestly not the case. Evaluation is only carried out when the data are analysed and the information derived is turned into a plan of responsive action.

Nothing is more corrosive to real training development than evaluation for its own sake. Collecting data that aren't analysed or where analysis doesn't deepen understanding is worse than collecting no data.

Evaluation data can be simple and light-weight. Light weight evaluation is more likely to be carried out and more likely to be useable. Evaluation data itself should be translatable into behavioural objectives for the training function.

The evaluation process should be understood as a component of *action research*. Good evaluation data will often lead to change.

If we adopt responsive practices then collecting evaluation data becomes achievable because each training project is adequately specified and has definite scope. Because of this we can collect the right amount of qualitative data from the three major stakeholders which gives us the right perspectives and can be used to motivate changing practise.

Training should always be followed by

- Rapid response from the learners – the happy sheet but properly understood as mainly an indicator of operational problems
- Delayed response from the learners – simple defered inquiry as to whether they perceive change in their behaviour
- Trainer reflection – record it and feed it into the development of training in your situation
- Sponsor response – this is another opportunity to find out if there has been change following training and it provides the important complement to the learner responses

the specificity of training requirements makes evaluation a much simpler and more rewarding task than trying to find out if generic training courses have any effect.

3 When?

Now. It's really the only time. Responsive training – *Agile Training* to give it a fashionable handle – is the best hope we have for thriving as trainers. Survival is not an option: that way lies burnout and redundancy.

References

[1] $JimTyson, January - March 2012.$