Abstract

Training managers want to deliver the best quality training possible. Customers want to receive the best quality training available. Sounds like a match made in heaven, doesn’t it? Unfortunately, too many elements of training may interfere with the ability to give and receive the kind of training needed.

We are often forced to balance limited budgets against expensive training needs, juggle schedules to get people together and keep up with the ever changing technology. These problems can easily overpower the best attempts for quality training.

Introduction

This paper will discuss what the elements of quality training programs are and how to balance those elements within the constraints placed on all of us. We will briefly explore the ideas of "Total Quality Management" and relate these ideas to an effective training program. The need for gaining management support of training will be explored, with tips for convincing the decision makers to commit the resources needed for an effective training program.

Some ideas on how to measure the results of your training program are included, with the idea that this is an ongoing process, not a static event.

The basics of Total Quality Management (TQM)

A Short History

In the late 1980s and early 1990s management experts began pushing the concept of "Quality" as the way to improve a product to compete in the global marketplace. The book stores were inundated with materials promising to improve the management of any organization, following ideas originally used to describe a Japanese-style management approach to quality improvement.

Authors such as J. M. Juran took quality control concepts originally attributed to management guru W. Edwards Deming, among others, and changed the focus to include managerial responsibility for quality, planning and continuous improvement. Older quality control methods had been focused on the factory shop floor. This view of quality looked at the finished product as the important end result, instead of emphasizing design quality as part of the overall manufacturing cycle.

What is TQM?

The concept of TQM has as many definitions as there are authors writing about it, but they all focus on one major idea: "Quality sells products."

The basic approach to TQM encompasses these steps:

1. Problem identification
2. Problem analysis
3. Planning
4. Data collection
5. Data interpretation
6. Action
7. Appraisal
8. Go back to step 1!

This paper cannot and will not spend time explaining these in detail. The key point of the above steps is the last step, that is, continually reviewing and changing the "process" to achieve the result - a quality product.

The heart of TQM is the belief that an organization should be viewed as a system that can be continually improved to generate a better product or service, resulting in greater customer satisfaction. TQM is based on participation of all members in an organization in improving the process that produces the product.

How does TQM relate to training - or - Total Quality Training (TOT)

To relate the concepts of TQM to the training "product", we need to define our "product" into three types of quality:

1. Process Quality (what you do)
   Exists when the process reliably produces the desired outcome, without waste or retraining the same areas. Constant process improvement is crucial to a TQT mentality. This process quality relates to the thought "Do it right the first time."

2. Product Quality (what you deliver)
   A quality product or service performs exactly as expected when delivered. This
may not be what your training customer expects, but allows the trainer to work with consistent materials and content. Is the material, style and content of a good quality? Can the trainer work with the material without worrying about the product quality?

3. Benefit Quality (what the customer gets from what you deliver)

Training customers never pay for "training", they pay for the benefits derived from that training. If the training does not deliver benefits to the customer, it is a failure.

The third type of quality, Benefit Quality, is probably the hardest to define and agree on. A common form of customer dissatisfaction (lack of quality!) is the failure of the training to provide the expected result, or benefit.

The training may have been created in a highly professional and thorough style (process quality). It may have been accepted by the customer as the greatest course he or she has ever completed (product quality). But if you do not deliver what the customer needed, the program fails. Unfortunately, we cannot always know what the customer wanted in the first place, nor does the customer always know what they need!

Your training customer often has three very different expectations as to the benefits in taking the training you are providing, so the "Benefit quality" can be further described as:

1. Explicit benefits
   These are expected based on the course outlines and "published" agenda.

2. Assumed benefits
   What the customer assumes they will gain from the training...very tough to identify, and even harder to provide in your training. The customer may not even be able to verbalize these assumptions, but they are there.

3. Bonus benefits
   These are benefits from the training not explicitly outlined in the course objectives. These are intangible, but often can make or break the customer's response to the presentation.

A training program can have plenty of Product quality, but will often fail if there is little or no Benefit quality. Make it your goal to present Process quality, realizing you cannot guarantee Benefit quality.

Elements of TQT

In order to design a training product that can produce the desired benefits, Total Quality Training requires the management and continuous monitoring of these three elements:

- Requirements
  (what the training needs to accomplish)
- Results
  (the outcome of the training, are the goals being met?)
- Resources
  (cost of time, materials, etc.)

Using the ideas of TQM to produce and manage these elements of training will require an ongoing process involving all levels of an organization. The customers must be involved to be sure the needs are being met. Your management must be involved to assure the resources are being provided and used effectively.

The following steps are the TQT approach to the TQM steps mentioned above. These steps need to be reviewed as an "endless loop". The key to an effective training program is to never stop improving the "product".

Keep in mind that the ultimate goal of training is the benefit quality. Of all your design activities, the most important is listening to your customer. The difficult part is asking the right questions to be sure you are understanding the real training needs.

Designing TQT - Total Quality Training

Ask these questions as you develop the training approach, and continually re-ask these questions throughout the training cycle:

1. What do we want to achieve - or what is the desired results of all this training effort?

Often the hardest part of any journey is deciding where you want to go - is our goal to have lots of technical experts or to provide the basic tools as a foundation to grow on?

When developing effective training in technical topics such as computer software, deciding on just how far to go and how much to teach is difficult. The training must be specific enough to give the customer confidence in using the tools presented,
but has to recognize the wide range in abilities of your customers to learn and use the technology.

Being as specific as possible when laying out your course objectives is crucial when determining the length of a training class and the intended audience you are marketing the course for. This may mean that you try to group the intended audience into like groups when scheduling the training. Some of the best training classes we have presented has been when the audience is all programmers, or all accounting staff, etc.

Be sure the course objectives specify the intended audience, and when reviewing the effects of training later, do so with this student mix in mind. If the course is taught well but the wrong audience is present, the quality is gone.

2. What information should be presented in the material?

All trainers know that we never have enough time in a training course to show the audience everything we know. Whether evaluating a new training curriculum or reviewing existing material, you will be required to make the sometimes hard decision to include less or more of a given topic.

Evaluate the course by keeping in mind the exact skills you wish the customer to leave with. This allows you to better be able to determine if material can be pulled or added to accomplish these goals.

A good outline is absolutely necessary to the design of a training course. The outline will help you to assure the important topics are covered, but allow an easier visualization of the "flow" of the course. The hot topics can be emphasized in the outline so enough time is planned for them, and the less critical topics could be put into optional coverage areas, to be used if time permits. This outline should be shared with the intended audience in the development cycle, they are then able to provide feedback as to whether the topics appear to be the ones they want.

3. What is the best presentation style for the material?

You have a wide variety of training methods available today, such as computer based (CBT), video based, on-line tutorials and instructor led. Your approach may even be as simple as "here's a manual, read it." (Obviously, not my preferred approach, but for some people it works.)

In order to produce the product quality mentioned earlier, a wide variety of training methods may be incorporated. As the needs of your audience changes and the subject matter evolves (new releases of software, new topics) the more flexible your materials are initially, the better equipped for meeting these changes you will be. Don't discount the old fashioned overhead projector as a training tool. As archaic as it may seem, it is also one of the easiest to change as the needs arise.

In any training presentation, the best advice is repetition and frequent "hands-on" exercises. In software training, lecture alone will not teach the topics, the students need the chance to get their hands on a computer and see that what the instructor says really works.

4. How long should the training be?

This may sound like part of the first two questions above, but really needs to be considered as a separate question. For a technical topic such as a software application, the length of the training sessions need to be long enough for several repetitions of the key points as well as hands on time.

Some software can be presented in a series of short sessions, one topic per session, others require a longer time. This longer time of 2 or 3 days forces an undivided attention span and the ability to cover more topics in the schedule. Presenting the same material from a 3 day class in smaller 1/2 day sessions usually will take a longer total time. Students forget topics and lose the train of thought when the subjects are broken up over a longer period. This does not even consider the scheduling nightmare of short sessions.

"Even the best plan degenerates into work."  
- Anonymous

Sometimes management has to be convinced that a technical subject requires the time investment in terms of days, not hours.
Gaining Management Support for Training

Often the hardest part of developing a training plan is to get the approval to do so in the first place. As mentioned already, the constraints of time and money are always present. You need to be able to argue with the boss as to why the training is needed. Be prepared to relate your argument for training in terms of profit and loss. You already agree training is needed, or you wouldn’t be reading this paper! The hard part is convincing whoever holds the purse strings to go along.

The following are some ideas as to how to present your case for effective technical training. These are meant as broad suggestions that should apply to a variety of budgeting situations.

1. Do your homework.

Be sure the need does exist. Interview your intended audience and get a feel for the number of people you expect to train, and prioritize the needs. Invite the intended audience to provide you with written needs requests for the anticipated training. Develop costs for several approaches to the training (CBT, outside vendor, in-house development, etc.)

2. Collect and publicize “success stories”.

If you have an example of a case where providing the type of training you are proposing has resulted in a savings to the company, by all means promote it. Toot your horn. The management may not be aware of the successes already seen, and usually the customer of your successful previous training will be happy to provide a “testimonial” to show off the benefits available.

For new type of training, you may be better to put together a “dog and pony” show. This could be a 1/2 to 1 hour demonstration of the new technology available, where potential training customers and their boss are invited in to see what the latest and greatest technology can do for them. This could also be done in print, for instance the company newsletter. The point is make noise:

"Marketing is creating an awareness of your value." - L. Paul Ouellette

3. Try to do a Cost-Benefit analysis

The greatest reason for trying to develop a cost-benefit analysis of proposed training is because this is often the one piece of your argument management keys into. It can be very useful in justifying training. As a training professional, you should realize your growth and survival in an organization depends on the attitude of upper management to what you do and the effect on the company bottom line.

The initial cost analysis could focus on the out-of-pocket costs of training comparing the approach proposed. Compare the cost of using outside vendors, purchasing a “canned” course or developing your own material. Include travel costs, equipment, extra software needed as well as the training staff time.

Keep in mind that developing new training materials always takes a lot longer than expected. Our rule of thumb - estimate the time you think a project will take and double it. Then double the time estimate again.

This is a difficult task, especially the inability to put a price tag on the quality of the training program. As you compare different training proposals the quality of each should be emphasized with the cost analysis and quantified if possible.

4. Emphasize the cost of not training.

The famous quote says: “If you think training is expensive, try ignorance”. A good example of this may be to take a look at how the technology you plan to teach is currently being used inefficiently or poorly, and show how proper training in the tools could provide cost savings.

Be careful not to antagonize people by stepping on toes, but try to convince management that a better way, at a better return is available to tap into the incredible resources available in the company.

5. Start the process before the formal budgeting process

It is harder to gain acceptance for spending when the budget ax has just been sharpened. Promote the idea of training early and often. Consider the process like an election, you must go through a primary before the final votes are cast.

6. Sell your department continually

Communicate to the whole organization what you are offering, frequently and loudly. Internal advertising of your successes can only help gain support for more of the same.

Having a good training program does no good if no one knows about it.
Evaluating the Quality of the Training

Part of any Total Quality movement involves the ability to measure the end result. In training, that can often be a difficult if not impossible task. Some of the methods of evaluating training involve measurable elements as well as a huge amount of "gut" instinct.

Course evaluations right at the end of training can be used to gauge the immediate reaction of the student, but often are only useful to measure if the student liked the instructor or the room. It is important to ask for this immediate feedback, however, to see if the initial expectations of the student were met.

A sample course evaluation is included as the last page of this paper.

Follow up evaluations of training weeks or months after the class are rarely done on a formal basis, but may be worth considering. This most often is measured by the "gut" feel of the training staff, either by grapevine communications about the training effectiveness, or by the amount of more advanced training being requested. If customers are not happy or not using the tools presented, they probably will not be requesting more training.

This evaluation as to the results of training has two aspects:

- **How effective was the training**

  Were the students happy?
  
  Are they using the materials presented?
  
  Did the course fulfill the published objectives?
  
  Did the course meet the students objectives?

- **How efficient was the training**

  Measure the learning...
  
  Was the course too long/too short?
  
  Could another vendor or approach be used at lower cost?

Remember - you cannot always predict how a given group of students will react to training. One group may love the material, another may vote to impeach the training department. Continuing evaluation of the training after the class ends is the only valid way of determining the effectiveness.

Summary

Quality is a moving target. You and your training organization must be able to adjust your goals and course offerings to match that moving target. Commitment from the top is also an important TQT element, and the proper marketing of what you have to offer can assist in gaining the support required to allow the quality improvements needed.

Continually evaluating and adjusting your training methods can transform a curriculum into a concise and highly effective training program. This does not mean to revise the materials after every class, but to realize the need to be flexible in not only the contents and delivery style but the variety of training offered.

Moving to a Total Quality Training environment boils down to: measure needs, change what you are doing as required and evaluate the results. Sounds simple, and it can be, but it does require commitment as well as the desire and ability to be flexible as your customers needs change.

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Suggested References


COURSE EVALUATION

Course Title: ___________________

1. XYZ Training Company strives to maintain the high quality of its programs. How do you feel about this program?

   Excellent___; Very Good___; Average___; Fair___; Poor___.

2. What portions of the subject matter, if any, should have been omitted, added or more in-depth?

3. To what extent will it help you do a better job?

    To a large extent____; To some extent____; Very little____.

4. How would you rate the instructor?

    Excellent___; Very Good___; Average___; Fair___; Poor___.

5. Was there the right amount of lecture and discussion?

    Just right____; Too much lecture____; Too much discussion____.

6. How would you rate the materials?

    Excellent___; Very Good___; Average___; Fair___; Poor___.

7. Would you recommend this training for others?

8. Do you have any suggestions for improvement?

9. Name: ___________________(Optional)

    Company: ____________________