The 12th Asia-Pacific Manning and Training Conference
Manila, The Philippines
16th and 17th November 2011

Chris Haughton MA BA PGCC CertEd Master Mariner FIfL FNI
Consultant, and Non-Executive Director of Videotel Marine International

STCW leadership development and management training in practice.
Is leadership training a waste of money?

Introduction

Mr Chairman, seafarers, ladies and gentlemen, thank you once again for inviting me to speak. My work with junior officers brings me to Manila quite frequently and it's always a delight to attend these conferences; to network with so many professional and influential people and to share your generous hospitality. I hope we get an opportunity to continue the dialogue outside the conference hall and at the GlobalMET event on Friday morning.

My talk this morning concerns the value we expect to receive in return for the money and effort we put into training and development. In short, the return on investment that our stakeholders demand from our activities. I ask the question – is leadership training a waste of money? That question raises so many subsidiary ones and we certainly don't have time for all of them today. However there IS just enough time to whizz through the underpinning concepts of evaluation and, hopefully, give some pointers as to the direction you may like to go.

Before we start, may I emphasise that the views I espouse are personal ones and do not purport to represent the position of my sponsors, Videotel, or any other organisation or institution.

What is Return On Investment?

Return on Investment, ROI as it's more commonly called, is a term used rather loosely, so one of my objectives this morning is to tighten that up. It's important to remember that ROI is only one tool in the box when it comes to evaluation and, as we will see, it may not always be applicable.

ROI has been with us, in one shape or form, for hundreds of years but it's probably over the past twenty years or so that its popularity has risen. It comes up regularly in journals and newsletters and numerous books on the topic have been published. There are some references at the end of my paper which you may wish to follow up.

Some leadership development professionals maintain that ROI is not something you *can* measure while others go to extraordinary lengths (and cost) to calculate perceived benefits. Wherever your sentiments lie, it's likely that the majority of us will be somewhere in the middle and want to show some evidence of the impact of our work. Without that it's extremely hard to justify the effort put in and indeed to energise the facilitators, never mind the participants.

There are many issues to consider and that fact is in itself one of the problems. It's appealingly seductive to reach for a solution – a model course for instance – and make a massive leap in logic to assume it will meet all our needs. Well, adoption of a model course (together with its audit trail of energy-sapping policies, procedures and check lists) will certainly achieve the ticks in the boxes and buy you Port State Control compliance. But it may bring with it unintended consequences.

Consider the following scenario: a company, realising it needs to do something to satisfy the Manila amendments, includes some leadership training and rolls it out to the ships; the system has been created by management based perhaps on a model course; there has been little or no input from sea staff who accept and implement the system; someone audits it; companies get their compliance; sea staff are praised; the flag states think it's wonderful; the port states can claim to be doing their job; the superintendents get a bonus and the directors move on to the next agenda item.

There's a cycle of virtuous self-congratulation in which we all tell each other what a wonderful job we're all doing. The trouble is, there doesn't appear to be much behavioural change on the ships. Ships still run aground, engineers fit magic pipes and officers routinely falsify their log books. An extract from recent research exemplifies this clearly:

> 'There is...disconnect between what is in the paperwork, what is in the files and what is actually happening on board...' (Devitt and Holford, 2010:17).

Some officers won't understand the need for the new system. This can lead to disillusionment and only half-hearted efforts. You'll get your boxes ticked. But, when you do get them together, it becomes even tougher to sell your vision and get your officers to see the benefits of the 'new' training. Amazing. After everything you've done for them!

Only, it's not amazing at all but predictable. Your efforts and the model courses seem to be having the opposite effect to that intended. The model courses - I have heard said – are intended to motivate and encourage some of the less energetic companies and flag states to give them minimum, threshold standards to work to.

An unintended consequence and alternative interpretation is that they actually give average-performing organisations an excuse for not doing anything substantive. So, instead of putting training at the apex of strategic thinking, it gets relegated to a relatively junior manager or superintendent and is assumed to be happening – after all – the boxes are being ticked!

If you've ever worked in a company like this you may recognise some of these steps. Regrettably the conclusion in these cases would have to be that money is indeed being wasted.

So why is this? As I have said from this platform before, it starts with the difference between 'training' and 'development'. The industry tends to be quite good at training. It's what seafarers spend much of their professional lives doing. Training to load cargoes, take bunkers, fight fires, navigate ships and so on. This is not news and it's what we would expect.

But it doesn't go half far enough, as we shall see. There are three fundamental components to address.

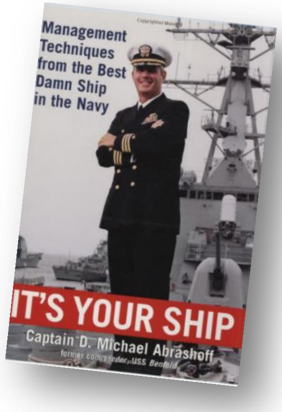
Firstly, effective performance in any organisation starts at the top. If the senior management team aren't aware or involved in the training and development of their people then it shouldn't come as a surprise if the people themselves don't value the training.

So, are the interventions in your companies offered from top to bottom? Is it all-encompassing, integrated and inclusive? Is it differentiated where necessary? Do you have programmes for shore staff, middle management, superintendents and, most crucial of all, the senior management team? Do you operate as two distinct teams ashore and afloat or do the staff feel as though they're part of one organisation? In short, does your organisation espouse and practice collective leadership which engages and motivates everyone involved?

Secondly, are managers ashore ready for this and are they actively working toward it? There is the assumption that driving a ship or managing an engine room automatically qualifies an individual to lead or manage a desk ashore. My research into officers' performance when they come ashore into the world of maritime education points to a desperate need for understanding, support and training. The 'office' doesn't come under STCW and so many of us leave it to do its own thing.

And thirdly? I mentioned it a moment ago, and it's the use of the word 'training' within a leadership context as though this is something where, if we learn a few rules, everything will be alright. Not so. There isn't a leadership or management expert in the world who doesn't argue cogently in favour of personal development as the basic foundation block for all effective leadership work. Commander Abrashoff, US Navy, in his book 'It's Your Ship' makes this point very strongly.

In leadership theory we talk about transactional and transformational leadership. The former concept revolves about an exchange of something that has value for leaders and followers alike. Transformational leadership, on the other hand, is practiced on a higher level and happens when people do things in response to a moral or ethical standpoint. If you're leading transformationaly, it will be almost impossible for you to behave in a way that is unsafe, deviant or illegal. It's about the difference between what leaders *do* and who leaders *are*.



This is mainstream leadership theory and has been so for decades. But when it comes to this notion of 'personal development' we see a big black hole in the STCW. It's simply not addressed. It's as though the theory underpinning leadership practice developed over the past fifty years simply doesn't exist. Quite extraordinary and I can't think of any other facet of maritime endeavour where we would allow this to happen. Can you imagine creating a new syllabus on bridge team management without factoring in satellites and IT.? It really is as astonishing as that.

The working group formed by GlobalMET (of which I'm a member), tasked with designing a model course, is very aware of this deficiency and some of us are working studiously to ensure at least there's some recognition of these concepts in the model course.

Evaluating your leadership development requires a lot more work than this, of course, but at least if we appreciate the importance of personal development, collective leadership and whole-staff involvement, we're off to a flying start. So, moving on to Evaluation...

Levels of Evaluation

Building on the earlier work of Kirkpatrick (1959), Phillips and Phillips (2007) present different levels of evaluation with ROI as the fifth level. This is shown in Table 1.

Evaluation Level	Measurement Focus
1. Reaction and planned action	Records and measures participants’ immediate reaction to the event together with their action plans. This is normally collected by written ‘Happy Sheets’ and/or verbal feedback at the end of the event.
2. Learning	Measures acquisition of skill, knowledge and attitudes. This is relatively easy to do and will involve some type of test, exam, simulation or observation.
3. Application and Implementation	Measure changes in behaviours exhibited in the work place and how well the learning is being applied. These are sometimes referred to as ‘behavioural markers’ and the process as the ‘learning transfer’. 360s are commonly used here.
4. Business Impact	This gauges the impact of the leadership development on the business. This means you have to separate out some aspect of the business to measure, such as productivity, quality, costs, time, customer satisfaction or job satisfaction. You need to ensure that it is the leadership development intervention that has the effect and not something else.
5. Return On Investment	Purports to show the financial benefits of the intervention divided mathematically by the cost, resulting in a percentage change. If you want to do this, the Level 4 Business Impacts have to be converted into monetary value.

Table 1: Levels of Evaluation
Source: Phillips and Phillips (2007). Adapted by the author, 2011.

These levels are interconnected and need a process model in order to make sense of them. Every higher-level evaluation requires the lower-evaluations to have happened first. The process model suggested by Phillips and Phillips (2007) shows this very clearly.

At the outset of any leadership development intervention it is crucial to carry out a needs assessment to establish objectives. These dictate the type of intervention, its design, implementation and, of course, evaluation. A Training Needs Analysis is one of the basic models that you may be use to inform the direction of any future activity.

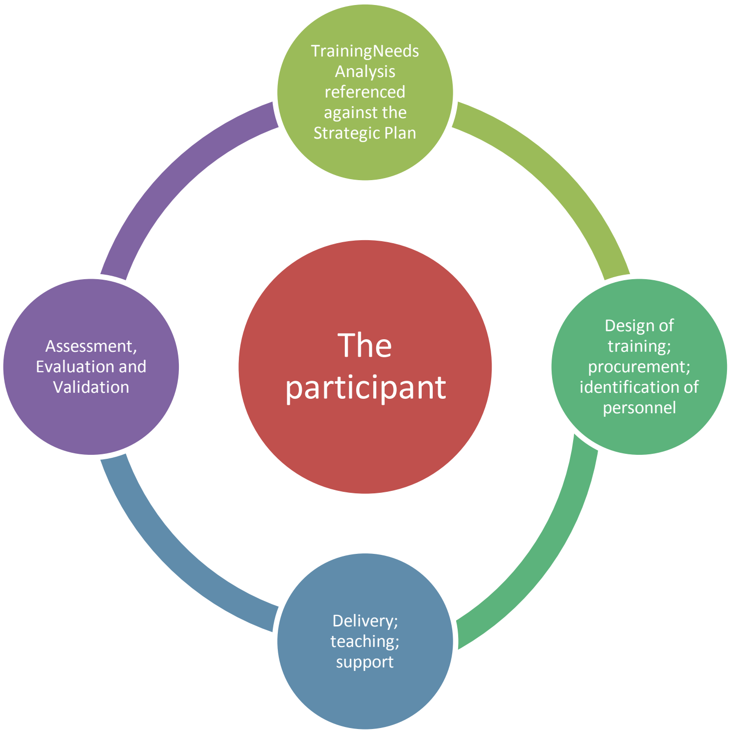


Figure 1: A basic model of Task Needs Analysis (TNA)

At every stage in this process you should have ‘evaluation’ high on the agenda. Creating the curriculum or the syllabus is the easy part; measuring the complexity of what happens as people are exposed to it is a different order of magnitude.

Consider the following leadership development programme (Table 2). There are different ways to do this, an example being the CBT programmes of my own company, Videotel, where we deliver underpinning knowledge most effectively in a lively and interactive style. They're not the same as experiential or action learning, of course, but yet still have a great contribution to make in the overall process.

The ultimate aim of the organisation in our example is to achieve potential payoff. In order to achieve that, each of the levels in the Needs Assessment has to be realised and worked through the model. Evaluation at every stage of the process will build, eventually, towards measuring ROI.

Needs Assessment	**Leadership Development Objectives**	**Evaluation**
5 Potential payoff	ROI	ROI
4 Business Needs	Impact Objectives	Business Impact 4
3 Behaviour	Application Objectives	Application 3
2 Skill/Knowledge	Learning	Learning 2
1 Course design/needs	Satisfaction	Reaction 1

Table 2: The Links between Needs, Objectives and Evaluation

Source: adapted from Phillips and Phillips (2007).

Each of the levels will require its own methodology for data collection (starting as we have said with Happy Sheets at the end of a programme). There are numerous methods for collecting data including surveys, tests, questionnaires, observations, interviews, focus groups, the results of action plans, personal performance contracts and business performance monitoring. Videotel's CBT allows effective monitoring of training impact as well as measuring participants' learning acquisition.

The more complex the data gathering the more time consuming and expensive, so this aspect needs to be considered carefully against the level of payoff you're trying to achieve and the resources you wish to spend. That expense will, of course, impact on the ROI.

Having gathered the data it needs to be analysed. There are five basic steps to this: isolate the effects; convert data to money; capture the costs; calculate ROI and finally identify the intangibles.
Each of these steps needs to be addressed separately and carefully: I will here give a brief synopsis of each step.

1. **Isolate the Effects of Leadership Development**

This process is often ignored. But as with any research or intervention you need to make sure that the effect you are measuring is caused by the thing you are measuring. In other words – are the behavioural changes you are witnessing caused by the leadership course or would they have happened anyway?

There are various ways you can try and do this:

i. control groups: using this method, one group of people follow a programme while another group doesn't. Any differences which you see in behaviours may tentatively attributed to the programme. If this is set up well, this is the most effective way of measuring effect;
ii. trend lines: here, you would forecast trends in costs, time or other specific variables before the programme commenced and then compare these trend lines with actual performance after the programme;
iii. forecasting models: when you know mathematical relationships between input and output variables you can use these models. Having predicted the forecasted output variable assuming no intervention, this is compared to the actual output, the differences being attributed to the intervention;
iv. self-reporting by the participants: with this method participants are appraised of the changes that have been observed and are asked to scale the perceived attribution of the programme;
v. supervisors and senior management observations: as in the last method, observers are asked to scale their perceptions as to how much the programme has contributed to any change;
vi. third party observations by experts;
vii. identifying and isolating other causative factors: once these are taken into account any residual change would be the effect of the programme;
viii. customer feedback: has the intervention influenced their decision to use your products or services?

Some of these isolating methods are more straightforward than the others. Phillips and Phillips suggest the first three are 'more credible' (2007:156) but that they should all be explored where possible.

2. Convert Data Collected into Monetary Value

This is often considered to be the difficult part of ROI but, in fact, having identified the important factors, it's one of the easiest. Phillips and Phillips (2007) suggest ten approaches, described here:

i. convert output data into profit contribution or cost savings;
ii. calculate the cost of quality and convert your quality improvements to cost savings;
iii. measure time saved in any particular process (as the result of the intervention) and convert to money;
iv. having isolated a specific variable, compare historic costs with post-intervention costs and log the savings (or increased expenditure if the programme has had a negative effect);
v. inside and outside expert opinion (subjective evidence but may nevertheless be useful);
vi. benchmark your organisation's costs against industry, national or sector norms before and after the programme;
vii. ask participants to put a value on the effects of the leadership development programme;
viii. superintendents and senior management are asked to put a value on the effects of the programme;
ix. attempt to value the intangibles (see below) such as customer satisfaction, employee satisfaction, morale and grievances, staff complaints. Some of these will have metrics you can convert into monetary value.
x. the leadership development organisation is asked to place a value on their work. Likely to be biased so this method is a last resort.

3. Capture Costs

A straightforward calculation of all the costs involved in delivering the programme. These might include:

i. management time in planning, designing, monitoring and evaluating the programme;
ii. cost of programme materials;
iii. course tutor costs (including preparation time and post-course marking etc)
iv. venue costs – these should be allowed (as an opportunity-cost) even where the programmes are delivered in-house;

v. travel and subsistence for delegates;
vi. pay and allowances to delegates and for the cost of reliefs sent to cover delegates' participation;
vii. back-office and administration costs.

4. Calculate the Return on Investment

Having converted the benefits into monetary value and calculated the costs, it is common for two calculations to be made.

The first is called the benefit-to-cost ratio (BCR) and is a straightforward calculation as follows:

$$\text{BCR} = \frac{\text{Programme benefits}}{\text{Programme Costs}}$$

So, for instance, where a programme is assumed to have produced benefits of, say, $US427,000 and cost $US61,000. The BCR is given by:

$$\text{BCR} = \frac{427{,}000}{61{,}000} = 7 \ \textit{or} \ 7{:}1$$

But of course, the benefits in BCR are gross. In order to calculate the ROI we need to derive the net benefit figure which, in this example is 427,000 – 61,000 = 366,000.

The ROI is achieved using the following formula:

$$\text{ROI} = \frac{\text{net programme benefits}}{\text{programme costs}}$$

$$= \frac{366{,}000}{61{,}000} \times 100\% = 600\%$$

Your task would be to benchmark this against your strategic goals to see if you are doing what you said you were going to do.

5. **Intangibles**

The last process to negotiate is to identify and consider the Intangible benefits. They are those impacts which you expect and need to see but which are hard to measure or convert into monetary terms. They are very important since they represent human dynamism, peoples' commitment to the organisation, their motivation, teamwork capabilities and communication strategies. (In fact, many of the behavioural markers identified by Devitt and Holford (2010) and used in BRM and CRM courses).

Some examples of these, identified by Phillips and Phillips (2007) include:

• job satisfaction	• customer complaints
• organizational commitment	• customer retention
• climate	• customer response time
• employee complaints	• teamwork
• engagement	• co-operation
• stress reduction	• conflict
• employee timekeeping	• decisiveness
• employee transfer	• communication
• image	• creativity
• customer satisfaction	• competencies

Table 3: Intangibles

Where should you use ROI?

Because of the cost in collecting and analysing the data it is unlikley that you will want to use this technique for every intervention. Using the Levels of evaluation (see Table 1) it is suggested that the following targets would be a rational approach:

	Recommended Targets
Level 1 – Reaction	100%
Level 2 – Learning	60%
Level 3 – Application	30%
Level 4 – Business Impact	10%
Level 5 - ROI	5%

Conclusion

In these few minutes I have tried to show that there are aspects of leadership training and development that are not adequately represented by STCW, namely the personal development and transformational leadership skills so important to longitudinal and sustained impact.

I have argued in favour of a top down collective leadership model in which everyone, from MDs and CEOs down, are actively involved, hands-on, and in which staff get a strong role in deciding and designing any intervention.

There has been an outline, in brief, the steps needed to calculate Return On Investment and argued that not all interventions may need or require this treatment. Also, I hope the scope, definition and complexity of ROI is more fully understood.

Overall, I hope the information has been of some use and would be delighted to continue discussions outside the conference hall.

With any luck I've transmitted my own passion for this topic and my positive belief that, done properly and with rigour, leadership and management development is anything but a waste of your money.

Thank you for your attention.

Christopher Haughton
November 2011

References

Abrashoff,D.M. (2002). *It's Your Ship. Management Techniques from the Best Damn Ship in the Navy*. Warner. New York.

Devitt, K. and Holford, S. (2010). *The development of resource management and leadership behavioural markers for the Merchant Navy.* In: Maritime Human Resources Solutions Conference, 28th - 30th September 2010, St John's, Newfoundland. Canada.

Ladewig, H. & Rohs, F.R. (2000). Southern Extension Leadership Development: Leadership development for a learning organization. Journal of Extension, 38(3), http://www.joe.org/joe/2000june/az.html.

Patterson, T.J. (1998). Commentary II: a new paradigm for extension administration. Journal of Extension, 36(1), http://www.joe.org/joe/1998february/comml.html.

Phillips, J.J. (1997). Return on Investment in training and performance improvement programs. Houston: Gulf Publishing Company

Phillips, J. and Phillips, P. (2007). *Measuring Return On Investment in Leadership Development.* In The Handbook of Leadership Development Evaluation. (2007). Eds. K.M. Hannum, J.W. Martineau and C. Reinelt. Jossey-Bass. San Francisco. CA.

Rohs, F.R. (undated). Leadership Development: Return On Investment – Calculating The Monetary Value Of The Managerial Assessment Of Proficiency Program For The Georgia Extension System. http://www.leadershipeducators.org/Resources/Documents/Conferences/Anchorage/rohs.pdf [accessed 20-10-11].

Senge, P.M. (1990). The Fifth Discipline. The art and practice of the learning organization. New York: Doubleday.

Training Evaluation-Industry Report: Who's Learning What? (1996, October). Training Magazine, p.63.

W.K. Kellogg Foundation (2002). Evaluating Outcomes and Impacts: A Scan of 55 Leadership Development Programs. Battle Creek: Kellogg Foundation.

http://www.roileadershipinternational.com/ [accessed 23/10/11]

http://www.roi-international.org/ [accessed 23/10/11]

http://www.roiinstitute.net/ [accessed 23/10/11]