

## THE VALUE OF MANAGEMENT EDUCATION AND HOW TO CAPTURE IT.

PER TRYDING\*  
Learning Lab Denmark  
Copenhagen

### ABSTRACT

This paper deal with the value added of management education for executives. While there is evidence of value added from education and training in general, the value of such programs has been questioned. The value may differ between different stakeholders such as manager and her organisation. Showing positive outcomes for participating managers seem to be within grasp. However, it is not likely that research will find the smoking gun that, without a shred of doubt, proves improved organisational results as a result from executive management education. There are considerable methodological issues standing in the way of this. Definitions of management and leadership, separation of the benefits and costs between the stakeholders and the problem of isolating different causes from each other belong to these. But it might be possible to capture important levers of value creation and learn more about what strategies that may increase the likelihood of adding value to the stakeholders. This may be done by studying the intended outcomes of executive education providers, perceptions of graduates and sponsors as well as third party witnesses,

That management education for executives is a growth industry has been shown in many studies (Engwall, 2007). In Britain the number of annual graduates rose from about 1.200 to almost 10.000 between 1985 and 1998 (Baruch, 2000). In the Nordic countries, the *Executive MBA* alone has doubled over the last decade in terms of the number of schools and graduates (own estimate). In spite of rapid growth executive and management education has received plenty of stick for not delivering value (Baruch, 2000; Beck, 2004; Grey, 2005; Mintzberg, 2004). This may seem odd, since such growth without some perceived stakeholder value delivery should not be sustainable. Yet there seems to be little research of the actual value added of management education for executives.

The lack of evidence refers both to participant value added and to organisational value, i.e. value to the organisation in which the participant is working. Two fairly recent and independent reviews on the issue both conclude that there is little solid evidence of organisational value added (Hirsh *et al.*, 2002; Reid, 2003).

Hirsch, Burgoyne et al (2002) find only weak evidence in terms of effects of individual business, management and leadership capacity and individual task performance at work.

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\* Per Tryding, Learning Lab Denmark, Tuborvej 164, DK-2400 Copenhagen NV, telephone +46 708 735 660, fax + 45 88 88 90 01 and e-mail [petr.lld@dpu.dk](mailto:petr.lld@dpu.dk) (corresponding author)

The link from individual task performance to organisational performance is equally weak. However, the relationship between management education and certification as well as employment is supported by strong evidence and there is some evidence that education lead to development of individual business and management capacity. The report remarks on the lack of research, noting that evidence of a link from executive education and performance at work is “far short of a strong case of positive performance” but also notes that many evaluations are probably kept unpublished in company records.

Reid (2003) concludes that in an absolute sense, there is no evidence of value to the sponsoring companies of management development, but asserts that such proof is not likely when dealing with such a complex social issue. In stead, considerable circumstantial evidence points to a strong positive relationship between management development programs and organisational value-added. The size of this value may be influenced by organisational process.

Measured or not, there is also an important issue of how to increase the chances of value creation (Haskins, 2006). By digging deeper into the perceptions of the drivers of benefits and costs and stakeholder perception of value, we might better understand the process of value creation.

## **1 VALUE ADDED OF EDUCATION AND TRAINING IN GENERAL**

Value added, value and customer value can of course be expressed in many ways (Näslund *et al.*, 2006). Generally, an activity is value adding if the benefits of it overshoot the costs it causes. In management the notion of *perceived* value is common, emphasising the subjective nature of value.

In economics the similar concepts of *rate of return* and *return on investment* are used. There are large amounts on studies on rates of return to most conceivable varieties of general education. Psacharopoulos (2004) ambitious review of available evidence finds that micro economic research has shown “without any reasonable doubt” that there are tangible and measurable returns on investment in education. The global private average rate of return for an extra year of studies is about 10% (Psacharopoulos, 2004). However, there are also results which questions the link between societal economic growth and investment in education and knowledge (Monteils, 2004). Other studies have questioned the general link between public spending and school quality in terms of student outcomes, finding teacher quality to seemingly be the only determinant of student quality (Hanushek, 1996, 2004).

Another category of studies relates to training effects. This focus mostly on learning interventions related to individuals in a workplace. Literature on the returns of *training* reports statistically significant positive economic outcomes (Barrett & O’Connel, 2001; Bartel, 2000; Blandy *et al.*, 2000). Here, rates of return range from 7 % to 500 % (Doucouliagos & Sgro, 2000; Lankard Brown, 2001; Psacharopoulos, 2004). In terms of employee benefits, a number of studies show increases in real earnings at about five per cent, and up to 10 % if higher qualifications are obtained (Blundell *et al.*, 1999) Lillard and Tan (1992) find support that employer-provided training have the largest earnings increases (16%) followed by training from business and vocational schools (11 %) and regular schools (8 %) (Lillard & Tan, 1992). This may imply that the former is more specific. A

recent study shows a relationship where 1% point of increased training is associated with an increase in value added per hour of about 0.6% and an increase in hourly wages of 0.3% (Dearden *et al.*, 2006).

Using panel data, recent work find that returns to training vary across firms, but that the organisational return to training may be higher than other investments and is estimated up to 24% but it may be negative if not provided by the firm (Almeida & Carneiro, 2005)

Besides economic expressions there are other measures of value, such as student self perception of value added using different measures such as academic, social and personal growth (Tam, 2004). In other words, value can exist in the eyes of a person, regardless of whether this value can be perceived by others. Value can also be seen a measure of predicted and actual pass rates of university students to ascertain value added of institutions (Yunker, 2004).

## **2 CONSIDERABLE AND OBVIOUS METHODOLOGICAL CHALLENGES**

In terms of method, most conceivable approaches seem to have been exploited in exploring these issues and frameworks from pedagogic theory, economics, management and psychology have all come to use.

There are, however, crucial methodological challenges in determining value of education and training (Tucker *et al.*, 1999). There is the issue of capturing accurately the full costs of all relevant stakeholders, the problem to capture benefits without relying on subjective and potentially biased accounts and, finally, to isolate the effect if the intervention from other effects. In addition to this, practical matters such as access and evaluation cost may stand in the way. Theoretically there is of course a fundamental problem regarding conclusions on an individual level; once a specific person has taken a program, the option to test the alternative cause of action is lost forever.

These are the main reasons why reports of co-existence of training or human development with results are plentiful, whereas causality is much harder to establish (Wright, 2005). It is trivial to establish a relation between cost and training, fairly clear to find a link between value and actionable assignments during a program, but much harder to isolate effects occurring long after a program.

## **3 STAKEHOLDERS AND VALUE ADDED; WHO IS WHO?**

Obviously, value creation is dependent on the stakeholder perspective. The rate of return of an education may for instance be much more beneficial for a single student, than for society as a whole (Steel & Sausman, 1997). In education there are normally two main stakeholders; the school/provider and the participant. In executive management education and on the job training there is a third, namely the sponsor. This is normally the employers of the participants. It is the interaction of these three parties in fusion that produces value (Baruch & Leeming, 2002).

From the provider’s point-of-view, value creation may be expressed simply by measuring e.g. free cash flows or customer retention rates of their business (see e.g. Thomas, 2007).

But this does not help to fully understand the link to value creation by their customers after the program has ended.

Interestingly, the sponsoring organisations seem to be the stakeholder which has received the least attention in Literature. Only 15% of firms even measured change in performance on the job after training in a 1986 survey (Bartel, 2000). However more recent data indicate that evaluation will become more important according to 85% of polled HR managers (Charlton & Osterweil, 2005). As for evaluation methods four kinds (“levels”) of evaluation are often used, namely participant reaction, learning, behaviour and results (Kirkpatrick, 1998). Other measures might be induction costs, sales, time management or safety (Doucouliagos & Sgro, 2000). And drawing on the fields of financial forecasting and methods estimating and simulating economic return on investment has been developed (Phillips, 2003). However, many such evaluation methods ultimately rely on what the participants report.

It can indeed be argued that a relevant measure of value of education is found through the participants (Kirkpatrick, 1998; Mallier & Rodgers, 1995; Tracy, 1997). These are after all the agents for any change as a result of training and education. They are also the constant variable as the organisational context may change over time. Analysis of wage earnings before and after an education or compared to a control group is one approach (Steel & Sausman, 1997). Comparing self-reported competence of MBA graduates and non-MBA managers show significant advantages for the former group, indicating stronger managerial competences (Baruch, 2000, 2001). Another approach is to ask participants about value delivery (GMAC, 2005).

### **3.1 Defining and separating value for participant and organisation**

But the relation between participant and sponsor is of particular importance. One complicating factor is that employer and employee may share in costs and benefits of training (Barron, 1999). Human capital theory (within labour economics) deals with this issue at considerable length and basically assumes that value added exists but is concerned with understanding how benefits and costs are split between the organisation and the participant. This is important in order to discuss the components or drivers of the value chain for the participant and the organisation.

In his seminal work, Becker stipulates that there are two basic kinds of training (Becker, 1964). First, there is general training. This is a kind of training that gives knowledge and skills which are useful to all employers on the labour market. General skills are thus portable, i.e. the student can take them with her to the next employer. Secondly, there is specific training. This training gives knowledge and skills relevant to one single firm only and these skills cannot, by definition, be transferred between companies.

The characteristics of general and specific training have implications. Firstly it offers an idea of whether training should or could be paid for by a firm. Secondly it sheds light on a number of issues, such as staff turnover, i.e. if an employee is likely to serve a long time with the sponsoring firm, or not. In fact the risk of termination of employment is central to arriving at Becker’s results.

Becker showed that under assumption of perfect competition, general training will never be paid for by the employer. The chief reason is that there is no way that the firm can guarantee that the skills stay with the firm after the investment. Thus, to the extent that executive management education is general training, no company would ever pay for it. It would essentially mean giving away money. Thus the organisational benefits and costs are not relevant, since there are none. A firm will be prepared to pay for specific training since gains earned from raised productivity of specific training will be shared by the participant (employee) and the organisation (employer).

The split of benefits and costs between sponsor and participant is of course important for the discussion of value added and its distribution. Research in Becker's foot steps show that values are shared between firm and worker even in the case of general training and that firms thus gain from general training. This can be explained with a number of market imperfections, notably lack of information on employee ability and training levels between employers (Katz & Ziderman, 1990). Other contributions show, that because of market imperfections, there are compressed wage structures, which explain why many firms actually do pay for parts of general training (Acemoglu, 1999).

This does not mean that measurement of this split is unproblematic. Data from France and Sweden indicate that firms retain most from investments in physical capital, but also from innovation and training. For the latter up to 60% of benefits goes to the firm (Ballot *et al.*, 2006).

It has been argued that leadership skills are so highly context dependent, that it is in fact not portable, i.e. leadership skills are not general skills in human capital theoretical terms (Mole, 2004). This has consequences since specific training has clear benefits to the organisation and to a degree locks the graduates to the organisation.

Another issue is what components of the training process create these values. Economics elaborates with different sources of value. Briefly there are effects from training and education itself and a signalling effect of training, which serves to reveal employee innate ability. Studies of firms hiring temporary workers, found that these offer general training to its employees and seem to use this as a selection device (Autor, 2001). The study concludes that part of the service offered by such firms is information about worker ability. A further study find that individuals most likely to be placed in training programs are also those with the highest unmeasured abilities (Goux, 2000). In an attempt to quantify how much of the value created stems from selection aspects, revealing ability, one study finds that about 25% of the gains from schooling is related to this factor (Lange, 2007).

It seems that while there is a difference between stakeholders in terms of value creation, they are clearly related and it is not obvious how to separate them and split benefits and costs.

### **3.2 Stakeholders in the case of management education.**

Arguably this relationship between participant/graduate and organisation may be even harder to study in the case of management education. The issue of separation between manager and organisation may be problematic. Also, the nature of managerial work itself is complex or even illusive, let alone the concept of leadership. It has been noted, that

managerial work requires a more versatile set of skills than other functions (Desjardins, 2004). There is considerable discussion about what managers should do and what constitutes leadership (Barker, 1997; Hales, 1986, 2001). Quite apart from a general disagreement of what functions and task a leader has (or should, or could have) there are also research indicating that tasks and perception differs slightly between cultures (Holmberg & Åkerblom, 2006; Smith, 2003). This may make benefits even harder to isolate.

In practice, however, providers of management education often work with a fairly clear view of what types of skills and preparation a manager needs. This is manifest in the curriculum, and formulation of e.g. intended learning outcomes. The “version” of management that the provider stands for may be disputed, but is often fairly expressive.

#### **4 CULPRITS AND CASUSES OF VALUE ADDED**

In spite of scarcity, there are a few studies suggesting that there is value adding effects of management education. Some evidence suggest that employer-provided managerial training has most significant returns of the major training types (18%) as opposed to technical training (13 %) and semi-skilled training and that some aspects of management training (evaluating performer, time management, leadership and change) effects earnings more than other types of training, such as problem-solving, communication, decision making (Blundell et al., 1999). Training of top managers has been shown to impact significantly on competencies and skills (Baruch & Hunt, 2003). Again however, organisational values remain illusive or implicit.

This may have different explanations.

One reason for the lack of evidence of organisational value may be that there is no such value. All actual benefit and cost goes to the graduate, so the issue is irrelevant. This is a view supported by classic human capital theory, but it is not consistent with other more recent studies.

Another reason may be that there is organisational value added, but that it is indirect and for this reason very hard to prove. This is supported by a view where self-selection is a major value contributor of training, revealing employee innate ability. This information has a value to the organisation. Economic theory often simply assumes presence of increased marginal productivity in excess of wages.

A third option may be that there is tangible value added in the organisations, but while theoretically understood, this fact is hard or prohibitively expensive to monitor

If value is hard to capture, one approach to examining value added of executive management education is to identify major factors that may influence benefits and cost (and perceptions of such) and to identify sources of information about these.

The main components for estimating value of an open executive management program, such as an executive MBA, are straightforward. There are direct costs, i.e. the cost of the program itself such as tuition fee, travel, literature. Then there are indirect costs, mainly

opportunity cost. While cost can mostly be directly linked to the activity in time and place, the benefits are not as easy to isolate. There is some value from projects implemented *during* the program, such as change implemented through assignments in the home organisation.

But the main benefits are expected to arrive from actions taken *after* the program. These benefits may be direct and indirect. For instance there may be lasting effects in motivating staff, cost reductions, increased sales. There may also be more subtle benefits such as options value of training, i.e. the value of versatility or economies of scope. These effects may however not necessarily last indefinitely, as there are documented depreciation effects (e.g. Mincer, 1994, Booth and Elias, 1997).

It has been suggested that up to 80% of the value potential from training depends on how organisations receives persons with new training or skills (Brinkerhoff, 2006). Therefore not only the program and the participant are of interest, but the organisational environment itself may be important to organisational value opportunity. Even if we should be able to expect that managers can influence this environment to a degree, it may be discussed how much e.g. middle managers actually control their agenda (March & Blau, 2007). Thus post-program benefits are harder to grasp (Cross, 2001; Doucouliagos & Sgro, 2000). They are a function of what is being applied, to what degree, how often and for how long. But to untangle the specific effects of education or training from other influences is notoriously problematic.

Making the calculation as such is unproblematic, once benefits and costs are defined. The case from the participant’s point of view (i.e. the “schooling decision”), in its simplest form is

$$NPV = \sum_{t=1}^n \frac{b_t}{(1+r)^t} - c_0,$$

where  $b$  is the wage benefit,  $r$  is the (personal) discount rate, and  $t$  is the number of years earning  $b$ , and  $c$  is the costs of the education (including opportunity cost and assuming all cost occur during the program period). The rate represents the risk-willingness and the attitude to future earnings of the particular individual in question.

For an organisation, the benefit (wage) is replaced by marginal productivity related to the educational intervention and rates with some measure of internal rate or return (possibly average capital cost or a benchmark hurdle rate). The organisations share of the opportunity cost may differ from case to case. The main difference lies in the time. For a firm this may be short if the participant leaves, but for the participant it is the remainder of their working life, normally between 15 and 30 years.

## 5 WITNESSES OF VALUE CREATION

The takeaways of the stakeholders may differ but they are also created in fusion. Those likely to be in a position to influence and perceive value are the following stakeholders.

First, there are the program providers (i.e. business schools, management institutes). Second, there are participants/graduates, (i.e. managers attending the programs). Third, there are the organisations where participants and graduates are active, (i.e. persons in the organisation nominating and sponsoring the participants and subsequent employers.). Finally, there are informants who are not directly involved in the process, but might be able to observe effects, such as recruitment professionals

### **5.1 Program providers**

The program provider is in a position to actively influence three parameters; the costs and the direct benefits. These can be managed for example through pricing or program design. For instance, inclusion of action-learning projects related to the sponsor’s agenda is one way to offer value opportunity as part of the program itself.

Recruitment to the program, the content and method of delivery obviously define the value. It is through these processes that value is supposed to unfold. By defining the direct costs (fee) and partly controlling benefits during the program, the providers are in a position to manage value added to some extent. Understanding the programs is crucial to assessing value creation. If, for example, accounting skills are not part of intended learning outcomes, value creation in that area is not likely to occur as a result of the program.

It is quite possible that different programs fill different needs, i.e. a program may be more useful to some kinds of participants than others. It is also quite possible that a program offers unintended benefits and costs. These may be social strains in private life of a participant that lead to temporarily changed behaviour which lowers firm productivity.

It is also possible to draw some conclusions by studying how different providers or program models develop seen as businesses. If the number of participants increase and the turnover of the programs increase, this indicates that there is value delivery taking place. Since open management education programs are offered to a competitive market, a value destroying activity would not be sustainable. This may be a very crude and trivial observation, but the steady increase in the number of programs offered and the number of graduates gives one measure of the value of executive management education. The pricing decision (program fee) need to consider demand, which in turn relates to perceptions of value (Monroe, 1990). If a certain type of program seems to grow more than other types, this indicates presence of value perception among the target constituency. If, for instance, programs containing only leadership components outsell any other type of program to broad segments of the market, this hints that such content is perceived as value adding. This remains true even if the institutes offering programs themselves are not-for-profits.

### **5.2 Participants, sponsors and organisation**

The other main stakeholders are the participants and their organisation. Value creation can take place as a matter of value perceived by the participant in isolation. Just knowing things may itself be valuable to some persons. However, the general idea is that value creation in the organisation should be caused by actions taken and initiated by the participant during and after the program. As stated above, the crucial issue of the split of actual costs between organisation and participant is problematic. The name of the sponsor may be printed on the invoice from school, but the actual cost may be carried by the participant, directly or



indirectly. If the organisation takes none of the cost, even a minimum of benefits is value adding.

Further, it is problematic how value of the organisation is defined and measured and to find who represents or best can understand and interpret the organisational value. Measures of Economic Value Added may not be available for the organisation in question. And if it is the causes of it may be subject to internal debate and theoretically inseparable from other causes. Asking every single member of the organisation is not practical or economical for large cohorts of graduates.

However, in the case of the E-MBA programs and other long mid career programs there is, as a rule, a specific sponsor nominating the participant. This sponsor is normally the supervisor of the participant. However the relationship sponsor and participant is likely to change over time, since graduates often change tasks inside or outside of the organisation. For these reasons the contribution of such persons as witnesses to organisational benefit is limited and biased.

At the start of the program, however, sponsors may express the expectation and rationale for nomination and support of a participant. This gives an impression of what benefits the sponsor perceive in relation to cost, i.e. expected value added at the time of the decision to enter a program. This is important to the future perception of the outcome.

In larger organisations, where HR-systems for approving training costs are established, contacting informants from Human Resources may give valuable perspectives.

Even so, the organisational outcomes are the most problematic to establish. It is generally assumed that actions of the manager are related to outcomes of the organisation. But the precise cause of an organisational result, such as increased sales, is hugely problematic. Was it the due to failing competitors, the general economy, pure coincidence, better management, a new process? The level of noise is simply overwhelming. In the specific case, we can only reason about it and offer likelihoods of cause and effect-relations, which is essentially what methods to estimate financial R.O.I. of training aims to do (Phillips, 2003).

Turning to the participants/graduates, these are in many ways the informed witnesses to outcomes, but also potentially highly biased. Using backward looking evidence two approaches may be beneficial (see e.g. Hirsh et al for further suggestions). One is to survey graduates and compare them to a control group or some other measure of normality. Wage increase and responsibility in terms of number of direct reports may offer examples of proxies of their development as managers. In education economics, as a standard, measures of remuneration are used as a proxy for productivity, i.e. firm value. Any skills that the manager applies will influence the organisation. What is problematic here is to define and find a relevant control group against which to evaluate this.

Another approach is to look for perceptions of benefits and trying to document these. This may be collected by interviewing participants and graduates. Furthermore, in the case of executive management education, the participant may often be the manager of the organisation where skills are supposed to be applied. On the one hand this means that the

graduates can be understood to potentially influence the organisational results, on the other hand they may not be trustworthy as informants about the reasons for such results.

Regardless, such an approach may generate ideas and examples of perceived benefits and how they materialise in form of reactions, learning, behaviour and results, to use Kirkpatrick terminology. There are studies using the approach to survey perceptions of outcomes (Baruch & Hunt, 2003; Mabey & Gooderham, 2005).

Such perceptions can be held up against what measure of value is needed as a minimum to defend the investment. Making a calculation of the minimum benefit needed for value added is much less problematic than proving value added undisputedly *ex post*. Defining size of the required benefit to reach value added may result in actionable data to those facing a decision to enter a program.

Apart from the three main stakeholders, there are other potential informants of value. One source is brokers of executive manpower, i.e. recruitment professionals. Their views may give a perspective of the value added of having completed a program in terms of for example employability or value on the labour market which may also be interpreted as a proxy of organisational value.

## 6 CONCLUSION.

In conclusion, there are severe method challenges to over-come in working out the value added of management education.

All in all there are fundamental theoretical limits to how much is possible to prove in terms of effects of educational interventions. Finding a smoking gun proving beyond any *conceivable* doubt that a program alone causes a result may simply not be theoretically possible. But such is the nature of a posteriori knowledge.

Participant value added is easier to examine as the matters of defining benefits and isolating them is less problematic than in the case of organisational value added of one individual's education.

However, it seems there are a number of sources available to examine the value added of specific executive programs. First, the program studied must be well understood in terms of what it attempts to achieve in terms of outcomes. Secondly participants and graduates may testify to how they perceive personal, professional and organisational benefits and costs in terms of reaction and application of learning, behaviour and results. Thirdly, there are sometimes other key witnesses in the organisations, notably the sponsors and supervisors, peers and direct reports and, in some cases, training professionals. In addition to these there may be outside witnesses, notably recruitment professionals.

To evaluate benefits and cost, historic cases can be studied. Based on such cases, it is possible to make judgement on the likelihood of value added materialising in future cases. This may lead to better informed operative decisions by the stakeholders in the process of creating value. Quite possibly this is all which is achievable, but it might also be all which is actually desirable.

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