

# TOWARDS EFFECTIVE EDUCATIONAL POLITICS THROUGH IMPROVING THE PERFORMANCE MEASUREMENT SYSTEM

Tuuli Reisberg, Reelika Irs  
University of Tartu

## Abstract

Educational field is impelled to increase performance and quality, financial discipline, strategic behaviour and its goals in order to enhance “effectiveness”. As a result the incorporation of private sector management practices into the educational field is taking place. But it is important to notice that a proliferation of private managerial practices into the educational field goes along with a conflict-laden and contradictory process. Education provides an important area of implementation for techniques of performance evaluation aimed at improving the performance of public services. One of the most common conceptual frameworks in measuring organisational performance takes the form of a production function where the educational institution is seen as analogous to a company transforming inputs into outputs and outcomes through a production process. But the problems and the vagueness in determining educational system’s inputs, outputs and outcomes cause difficulties in making political decisions and that is why clear policy prescriptions have been difficult to derive.

The purpose of this article is to create a discussion whether performance measurement should be a part of decision-making in educational politics. The authors debate about incorporating private sector management practices into the educational field. The debate is based on the example of evaluating the social impact in the educational field and the performance of teachers’ work in the educational system. The article consists of three parts. Firstly, the theoretical background of the performance measurement in educational field is discussed. Secondly, the important criteria for performance measurement design and political issues are argued. Thirdly, the evaluated shortcomings in Estonian educational organisations, which restrict them to be effective, are brought out. Relieving some of these shortcomings could be in authority of Estonian educational politics.

**Keywords:** performance, efficiency, measurement, appraisal, educational politics

## Introduction

In recent years, educational field organisations have witnessed many changes in their environment. Public schools must compete with private schools. These pressures have pushed them to continuously improve their performance. During the 1990s, in what has become known as the “new public sector”, many services in advanced economies have come under pressure to become more efficient and effective, so as to reduce their demands on taxpayers, while maintaining the volume and quality of services supplied to the public (Brignall, Modell 2000: 281). To achieve this, several private sector management techniques like performance management and performance evaluation are incorporated to public service practice.

But it is important to notice that a proliferation of private managerial practices into the public sector and also to educational sector goes along with a conflict-laden and contradictory process.

For example the dominant view in the public policy and administration literature is that public and private organisations are so different that New Public Management prescriptions, which tell that public organisations should import managerial processes and behaviour from the private sector, are inappropriate. While many of the issues that arise in its use are common to both sectors, researchers studying the behaviour of public sector organisations have recently drawn attention to the fact that the public sector is different from the private sector and, therefore, a public sector organisation faced with change in incentives will not necessarily behave in the same way as a private sector one. (Propper, Wilson 2003: 251) Same criticism accompanies educational institutions. But still performance management is used in both the private and public sectors and is becoming more common in educational institutions.

Management techniques cannot be exported successfully from one sector to another because of differences in organisational environments, goals, structures, and managerial value etc. These variables represent a set of contingencies that require different approaches to management in public agencies and private firms. (Boyne 2002: 118) Boyne also tested many hypotheses about the differences between public and private organisations. The findings show that only three of the hypotheses are supported by a majority of the empirical studies: public organisations are more bureaucratic, and public managers are less materialistic and have weaker organisational commitment than their private sector counterparts (Boyne 2002: 97). Authors believe that it is possible to incorporate private sector managerial processes to public including educational field, if their singularity is taken into account. Thus, if public managers are to derive lessons from the private sector, the first step is to ascertain more clearly the determinants of performance in private organisations, compare them to the ones in their sector, and then develop an appropriate system based on public service organisation's objectives. The authors make the same proposal to educational institutions.

Performance management involves aligning human resource management practices so that employee performance and development are enhanced, with the aim of maximising organisational performance (Hartog et. al 2004: 558). High performance is proposed to positively affect employees' commitment, trust, and motivation. Employees will be motivated by personal as well as organisational success. For example, performance affects commitment as much as vice versa. Empirical support for such processes is available from several researches (Locke, Latham, 2002: 707-708).

Lately, performance management is more valued in both Estonian private and public organisations, which also creates the need to evaluate the work performance of the organisations, their divisions, and employers. The term "performance management" is used differently by many authors, but it mainly stands for managing the

organisation by its objectives. Good performance management provides direct benefits to the organisation through a rigorous, focused approach to the achievement of goals (Macaulay, Cook 1994: 7; Winstanley, Stuart-Smith 1996: 66-67, Hartog *et al.* 2004: 556).

Introducing performance management into industry, trade, and service organisations was common in developed countries during the 80's. In the last decade, it is used to motivate public servants. From the motivational systems research of the State Chancellery of the Republic of Estonia, the results show that performance management is one of the fields that would increase public servants' devotion and performance (Avaliku teenistuse motivatsioonisüsteemide ... 2007: 45). Unfortunately there is no such research about employees in educational field; therefore there is no proof of willingness to adapt new management approaches into educational institutions. That is a problem, because for example Marsden and French (1998: 121) claimed in their research that teachers' resistance to new performance management system result from the resistance to changes.

Performance measurement is a topic which is often discussed, but is not defined very often. It is said to be the process of quantifying action, where measurement is the process of quantification and action leads to performance (Neely *et al.* 2005: 1228-1229). The authors point out that measurement may be the process of quantification, but its effect is to stimulate action, because all organisations' strategies are realized only through consistency of action.

Irrespective of the multitude of the literature and articles written on the topic, the perpetual "reliable criterion problem" and the creation of effective measurement system continues to receive considerable attention within the performance management literature (Fletcher 2001: 474). It is said that it is impossible to manage something if you cannot measure it. Senior executives understand that their organisation's measurement system strongly affects the behaviour of managers and employees (Kaplan, Norton 1992: 172). But there is a danger that organisations implementing measurement systems can become too obsessed with performance measurement, potentially at the expense of performance management. That is why the question is raised – how to develop dynamic rather than static measurement systems and how to ensure an appropriate focus on organisation's performance management, rather than simply performance measurement. (Neely 2005: 1272) There is another question for politicians – should performance measurement be a part of decision-making in educational politics?

Nowadays managers realize that no single measure can provide a clear performance target or focus attention on the critical areas of the organisation's action. The balanced view is used, where both qualitative and quantitative performance indicators are used.

## **Performance measurement and political issues in educational field**

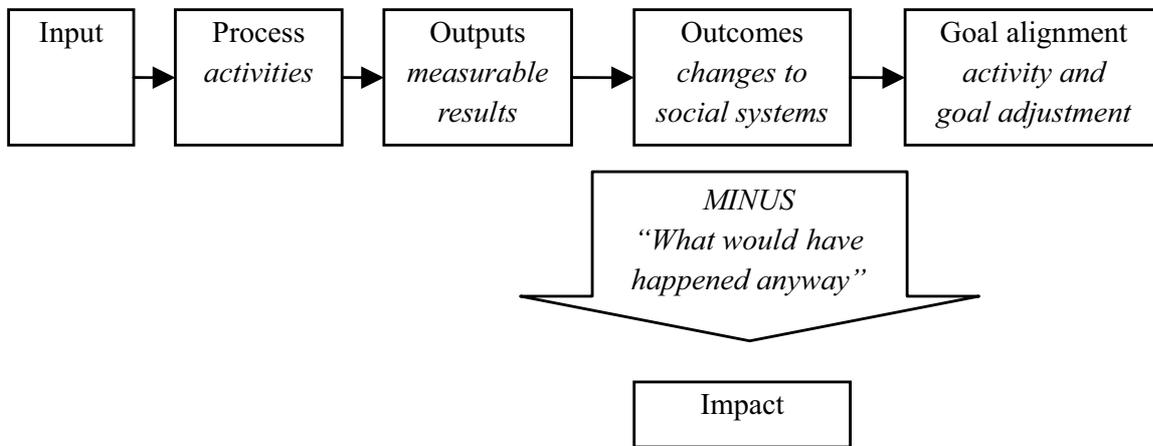
Performance management is progressively used in managing educational institutions, which also creates the need to evaluate the work performance of these institutions and pedagogues. Performance management is a way of helping educational institutions to improve by supporting and improving pedagogues' work, both as individuals and in teams. Performance management focuses attention on more effective teaching and leadership to benefit pupils, teachers, and educational institutions (Performance management in ... 2000). It sets a framework for pedagogues and school leaders to agree and review priorities and objectives within the overall framework of schools' development plans.

Though performance measurement has many positive impacts, there are also reasons why politicians are not interested in constructing an effective measurement system. Based on third sector examples Dees (2007) argues that there are at least two reasons why not to be interested in performance measurement. First, if not to invest in performance assessment, then more money goes for programs. Secondly, it might be more popular to support a needy organization, rather than one that seems to be doing well, even if the latter could create more impact dollar for dollar. Resource flows depend more on sentiment, popular causes, personal charisma, and marketing skills than on social value creation. Additionally, it is said to be one of the main weaknesses of democratic societies that instead of launching long-term projects, politicians just tend to hold selected positions. Therefore, short-term planning is common in politics and it is essential to achieve mostly tangible objectives and to do it quickly. The reason is that the process of evaluating impact is so difficult and time-consuming, and politicians are afraid that their effort is attained to others who will get selected later.

The principles and tasks in public, including educational field are quite multiple and vague, therefore performance relative to these goals is difficult to measure. Performance measures in the public sector as in education are substitutes for profitability measure in the private sector. They are essentially measure of productivity and efficiency. Whereas the ultimate test of a private sector organisation's performance is the bottom line of profit, measuring the performance of public sector organisations (central and local government, schools, hospitals, etc.) is more difficult and calls for a complex mosaic of indicators. Some areas of performance do not allow quantification. For many decisions the immeasurable might be more important than the measurable. Quantification also often means simplification. This is especially true when considering quality, consumer satisfaction and the effectiveness of many social services. (Jackson 1988: 11-14) Education provides an important area of implementation for techniques of performance evaluation aimed at improving the performance of public services. Education is currently an area with a high national priority in Estonia, in the United Kingdom, United States, and elsewhere.

One of the most common conceptual frameworks employed in the economic analysis of organisational performance and also in educational field takes the form

of a production function (Worthington 2001: 245). Here, the educational organisations are seen as analogous to companies transforming inputs into outputs and outcomes through a production process (see figure 1).



**Figure 1.** The transformation process of inputs to outputs, outcomes, and goal alignment. (Clark, Rosenzweig, Long, Olsen 2004: 9)

Input includes all the resources that are committed to the organisation, which means both tangible (pecuniary and non-pecuniary means) and intangible (mainly workforce) resources. Typical inputs in the education production function are the characteristics of the teaching and learning environment (Worthington 2001: 245). The general conceptual model describes the achievement of a given student at a particular point in time as a function of the cumulative inputs of family (socio-demographic characteristics of the families), peers or other students (aggregate summaries of the socio-demographic characteristics of other students in the school), and schools (class sizes, facilities, administrative expenditures, and so on) and teachers (education level, experience, sex, race, and so forth). These inputs also interact with each other and with the innate abilities, or “learning potential”, of the student. Hanushek (1986: 1155) brings out two points that deserve emphasis: the inputs should be relevant to the students being analyzed; and the educational process should be viewed as cumulative – past inputs have some lasting effect, although their value in explaining output may diminish over time. Failure to recognize these points has probably caused the greatest problems in interpreting individual studies, the teachers’ work performance and schools’ performance.

While measuring educational organisations’ performance, the value added to the society is being discussed. Therefore the measurement of the process is essential. Output, outcomes, impact and goal alignment all express the benefits that arise from the educational process. Generally there is an opinion that the most proper measure for value added is the evaluation of impact. The impact is the portion of the total outcome that happened as a result of the activity, above and beyond what would have happened anyway (Clark Rosenzweig, Long, Olsen 2004: 9). Impact is difficult to measure; therefore, it is measured indirectly through measuring outcomes and qualitative analysis. Outcomes comprehend all the changes in the social system while output stands for all the results that can be directly measured. Outputs for an

after-school program, for example, could include the number of children participating in the program, the percent that drop out, and the percent that re-enrol the following year. For the after-school program, desired outcomes could include higher self-esteem for participants or higher educational achievement for participants. (Clark Rosenzweig, Long, Olsen *et al.* 2004: 8) It is important to notify that it is difficult to determine the output and outcomes of educational process that is itself influenced by numerous elements which lie outside the formal education context (the socio-economic environment of the family, innate abilities, accumulated human capital etc.) (Mancebon, Bandres 1999: 134). Although it is difficult to measure whether the outcomes have been achieved, it is essential for educational organisations to define all these desired outcomes and outputs that correlate with these outcomes.

The outcome of the educational process – that is, the achievement of individual students etc. – is directly related to series of inputs. Some of these inputs – the characteristics of schools, teachers, curricula, and so forth – are directly controlled by policy makers. Other inputs – those of families and friends plus the innate endowments or learning capacities of the students – are generally controlled. Further, while achievement may be measured at discrete points in time, the educational process is cumulative; inputs applied sometime in the past affect students' current levels of achievement. (Hanushek 1986: 1150) To sum up, problems and the vagueness in determining inputs, outputs and outcomes makes the policy decisions for policy makers much harder.

Educational production outcomes are generally defined in terms of students' test scores. Considerable uncertainty exists about the appropriateness of using test scores as outcome measures. Existing empirical evidence is inconclusive about the strength of the link between test scores and subsequent achievement outside schools. How effective test scores are in measuring the contribution of schooling to subsequent performance probably varies at different points in the schooling process. Specifically, test scores might be more appropriate in the earlier grades, where the emphasis tends to be more on basic cognitive skills – reading and arithmetic- than in the later grades. (*Ibid.*: 1153-1154).

Measuring school's performance by test scores also brings out some difficulties that may lead to inefficiency. The average test results are compared between different schools and therefore schools are ranked by these average scores. But failure to maintain a high ranking may result in adverse consequences, such as poor chances of career advancement for individual teachers and head teachers, and a lower level of demand for places in the school from parents to whom the published school league tables are readily available. Once the performance management system places pressure on each educational institution to maximise its aggregate point score, the result may be a switching of pupils out of subjects that are perceived to cause difficulties for achieving target grade levels. Another problem is that those pupils who are on the borderline of achieving higher grades are identified and additional resources and attention is directed towards this borderline group. (Mayston 2003: 680) It is important to notify that schools also have to deal with students with poorer

performance by offering support systems for learning; and school's performance also depends on its socio-demographic environment. Each school's circumstances and efforts have to be taken into account to avoid misleading conclusion.

The use of academic test scores to measure the performance of teachers is also quite misleading. Particular problems in this regard include: statistical uncertainty, especially in the case of small classes; the fact that few schools use measures of year-on-year value added progress for all year groups; some classes are taught by more than one teacher; some teachers have greater access to teaching assistants than others; some parents use part-time private tutors to boost their children's performance; some pupils experience personal or home problems which may affect their academic performance; again, performance is not measured for the majority of subjects taught; and test scores do not take account of the fact that primary school teachers' job responsibilities usually include more than the academic performance of their pupils. (Brown 2005: 474-475) The complexity and multiple tasks of teacher profession make evaluating teachers' performance difficult. Also each teacher's effort and specific context has to be included to the evaluation.

However, a disturbing pattern in the multitude of studies of this type is that no strong empirical evidence exists to support the contention that traditional educational inputs have the expected positive influence on educational outcomes (Worthington 2001: 245). Many previous economic studies have concluded that school inputs do not matter because school output is often uncorrelated with input variations (Brown, Saks 1975: 571). That brings problems to educational policy makers who have made their decisions based on this input-output-outcome model. They often assume that inputs are strongly and positively correlated with outcomes but have not analysed the causal relations between these three parts of performance measurement.

Because of the vagueness in determining certain production model, including input, output and outcomes, clear policy prescriptions are difficult to develop. For example it is often believed that higher school expenditures and the optimal size of a class have an important positive influence on pupils' achievement. Therefore, in a number of programs, states either set explicit class size maximums or provide monetary incentives to have smaller class sizes. They also believe that higher school expenditures are related to school performance and, therefore, extra monetary incentives are directed to them. But researches have shown that none of these practices seem very useful from a public policy view related to student achievement. Likewise, the fact that a school spends a lot of money on each of its students simply gives little information on whether or not it does well in terms of value added to pupils. Instead states' primary justification must come in terms of compensating teacher or restricting the supply of teachers (Hanushek 1986: 1170).

Educational institutions worldwide are increasingly the subject of analyses aimed at defining, measuring and improving efficiency. The educational process is very complex, so any performance measurement system will at best be an imperfect measure of the multiple tasks undertaken by school and some of these tasks may be

inherently immeasurable. Educational institutions' performance, unlike the business corporations' performance, is impossible to measure in the value of money. Evaluating the performance of educational institutions is complicated because instead of measuring financial performance, the value added to the society needs to be measured. Evaluating the non-financial part of performance is the most difficult part of measurement.

Schools' main objective is to shape individuals who are active, capable of developing and to create the fundamentals for their successful subsistence in society (Eesti Vabariigi Haridusseadus 1992). It is very difficult to measure it reliably, therefore, there is a need to develop a measurement system and find information sources that accord to the schools' goals the most and which are associated with teaching and learning.

There are several characteristics of the educational process that complicate the evaluation of efficiency (Engert 1996: 250; Mancebon, Bandres 1999: 133-134):

1. Educational organisations have multiple objectives and multiple outputs and outcomes. Moreover, there are often conflicting opinions regarding the goals, and the relative importance of these goals, by the stakeholders of education. For example, emphasis could be placed on short-term cognitive results, intermediate "follow-up" tests, or long-term employment outcomes and prospects in higher education.
2. Many of the outcomes of an educational organisation cannot be unambiguously measured or quantified. For example, many educational outcomes are non-separable so that improvements in skills in one area may lead to improved skills in another, and/or be associated with an enhancement of self-esteem. Still other educational outcomes, such as socialization, do not allow parameterization.
3. The subject of exchange in the education market is not one single good with a physical and directly observable form, but rather an outcome made up of elements having a diverse nature (knowledge, attitudes, rules of behaviour, values) which are produced in a joint form and are difficult to measure and aggregate.
4. Many of the components in the process of education only reveal themselves later, once the education years have finished and even throughout the length of an individual's life cycle (attitudes towards life, position on the economic scale etc).
5. The educational process is cumulative over time.
6. An indeterminate part of education received by an individual is not the consequence of his passage through the education system but rather that of his personal experiences, of the communication media or of the relationships that he has had (family, social, friendships).
7. The educational process is carried out by the customer itself (the pupil), who represents a fundamental input and whose involvement is an authentic determinant of the products obtained (the time dedicated to learning, his interests, his innate capacities).
8. Limited knowledge of the true correspondence relating inputs to outputs in the educational production process is a major problem (Hanushek 1986: 1154).

All these characteristics mentioned above, need to be taken into consideration while analysing the evaluation results of educational institutions', teachers' and pupils' performance.

### **Creating an effective performance measurement system**

There is a lot of literature on the topic of performance measurement and it is believed to be a very effective mean in management. Performance measurement system helps to identify organisation's key areas, problem areas, assists the organisation in updating strategic objectives and helps to make tactical decisions to achieve these objectives. It also allows feedback about the success of the decisions made. Performance measurement, if used appropriately, has the potential to support better decision making (Lancer Julnes, Holzner 2001: 693). Therefore, one might expect a movement toward its universal acceptance in support of better government. Instead, performance measurement is still not being used in many educational organisations.

It is argued that traditional models and approaches to performance management generally do not succeed in meeting their objectives, are flawed in implementation, act to demotivate staff, and are often perceived as forms of control which are inappropriately used to "police" performance (Winstanley 1996: 66). By one method or another, performance management and management information and performance indicators will continue to be key issues for organisations. If people's energies and activities are to be effective, then some thought needs to be given to an interlinked set of questions: clarity of objectives; communication of them; evaluation of progress measured against objectives chosen; and so on (Storey 2002: 336)

Different authors bring out several common flaws of performance measurement systems (Winstanley 1996: 67-70; Kravchuk, Schack 1996: 350):

- concentrating too much on the mechanics and design of performance management and measurement systems and on the control mechanism rather than managing organisation's performance;
- difficulties of setting performance objectives, their inability to reflect intangibles, their lack of flexibility to respond to change, and the problems of making objectives cover the whole job;
- poor development of the mission, vision and values;
- lack of fairness arising from the subjectivity and bias of the appraiser, as well as their lack of skill (there are two kinds of unfairness, procedural unfairness, in terms of the methods used, and outcome unfairness, in terms of the effects these have on people);
- the absence of unitary view of the organisation; usually only employers' view is represented.
- unfair and unreliable measurement criteria which do not cover the important areas and activities of the organisation or measures do not relate to the rate of improvement been introduced or which do not relate to both the long- and short-term objectives of the organisation.

Performance measures need to be positioned in a strategic context, as they influence what people do. Performance measures should be derived from strategy; that is, they should be used to reinforce the importance of certain strategic variables (Neely *et al.* 2005: 1231). This does not always appear to happen in reality. Performance measures can also be used to influence employees' behaviour. Actually the concept of measuring performance has broadened substantially during years. Earlier, it had rather elementary and raw control function, during what employees' performances were given quantitative estimations by its superiors (Pratt 1991). Nowadays it also concludes a lot of activities by what organisation tries to evaluate its employees, motivates them, trains, develops and promotes them and tries to improve organisations efficiency, also rewards are given for efficient work (Mani 2002: 141-142).

Here the authors bring out criteria for performance measurement design based on many sources (Globerson 1985: 640; Neely *et al.* 2005: 1244-1245; Storey 2002: 331; Neely *et al.* 2005: 1229-1231; Modell 2004: 44; Kravchuk, Schack 1996: 350)

- Measures should be directly related to the organisation's strategy.
- The measures should be designed so that they stimulate continuous improvement rather than simply monitor.
- Performance criteria must be chosen from the organisation's objectives.
- Performance criteria must make possible the comparison of organisations which are in the same business and also comparable on different moments.
- Measures should be adaptable and flexible meaning that they should change while circumstances change.
- Measurement strategy must be explicit. The purpose of each performance criteria must be clear, the measures should be simple and easy to use and provide fast feedback.
- Data collection and methods of calculating the performance criteria must be clearly defined.
- Both financial and non-financial measures should be adopted.
- Performance criteria should be under control of the evaluated organisational unit and it should be recognized that measures vary between locations – one measure is not suitable for all departments or sites.
- Performance criteria should be selected through discussions with the people involved (all interest groups).
- Both objective (quantitative) and subjective (qualitative) performance criteria should be taken into account.

Therefore, while developing a performance management system, the first step is to clearly define organisation's mission statement. The mission statement is also a guide for identifying organisation's strategic objectives. If there is a goal orientation in the organisation, adoption and implementation of performance measures is more likely to occur (Lancer Julnes, Holzner 2001: 695). Performance measures are supposed to capture the key dimensions of what constitutes success or failure for the organisations concerned and, therefore, an understanding of each functional area's role in achieving the various strategic objectives needs to be developed. All strategic

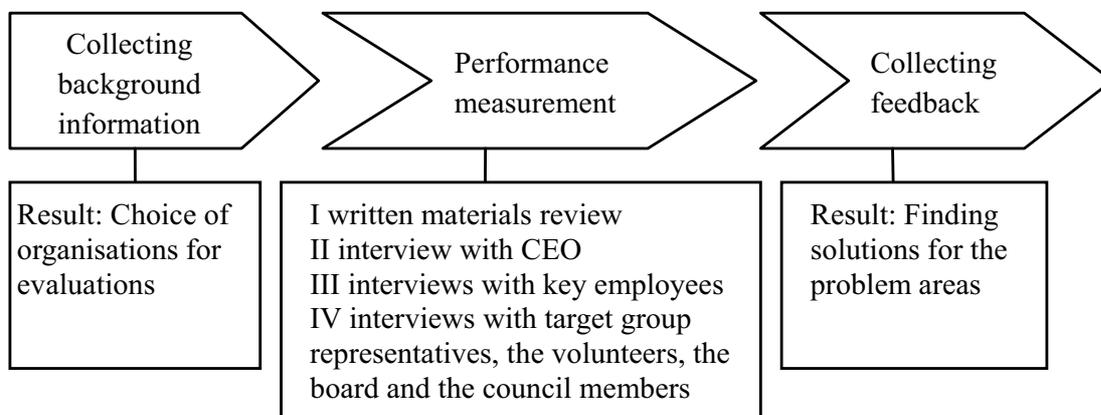
objectives should be communicated to all levels of the organisation so that each of the lower levels could establish more specific performance criteria that are consistent with strategic objectives. The creation of the effective performance measurement system is a continuous process, so the appropriateness of that system should be re-evaluated periodically and changes should be made if needed.

But it is important to notify that all the parties involved should be joined into the creation process of performance measurement system. If it is not done this way, measurement systems won't work even when they are suitable and reflecting exactly the organisation's objectives, strategy and other important processes. Researches show that appraisal systems merely created by top-management did not lead to desired changes and did not become an inseparable component of management processes. The reason for that was insufficient involvement of personnel into the development process of measurement systems and the lack of consensus in the opinion of its role. It is also pointed out that those teachers who were involved in the development of appraisal systems were much more aware of and accepted the expectations set on their performance, understood the appraisal process better and were much more committed to it (Kelly *et al.* 2008: 44). The research of Williams and Levy showed that the understanding of used appraisal systems was positively correlated with work satisfaction, organisational commitment and perception of justice (Williams, Levy 1992: 841).

While there are many examples of shortcomings in the process of measurement system design and measuring organisation's performance in the world, the authors were interested in determining that situation in Estonia on the example of three educational institutions.

**Methodology**

For the empirical part of the article together with *Heateo SA* (Good Deed Foundation, which is a launch pad for new and exciting social initiatives) three educational institutions were evaluated. The evaluation was carried out between October 2006 and March 2007. Every organisation's evaluation was executed in three stages (see figure 2).



**Figure 2.** Evaluation process. (Compiled by authors)

In the first stage of the evaluation, background information about Estonian education field was collected. Based on public written information analysis and interviews with specialists on the field, it was determined what the main problems in the field are and how they are being solved. As a result of first stage three most influential organisations were selected (from now on, X, Y and Z). Influence was interpreted as the ability to bring most impact on Estonian society. It means that the activities of these three organisations take place on state level and these organisations purpose is to make a qualitative change in educational system. The selected organisations acted in the variety of educational areas including teaching methodology improvement for kindergartens and primary schools, leadership training, schooling of adults on environmental issues and offering supplementary programs for public schools. Also these three organisations cover the sector starting from preschool education and ending with life-long learning including formal and informal education. The rest of the article is based on knowledge, observations and problems that emerged evaluating these three organisations.

In the second stage of the evaluation (performance measurement), information on specific organisations was collected. This included familiarising with written materials connected to the organisation and interviews with management, council, and target groups. Target group was defined as people whose educational problems or improved social wellbeing are important primary goals for the organisations.

Written materials' analysis included the following documents and information sources: homepage, statutes, annual reports, annual short-term and long-term goals and publications. In organisation X the researchers viewed strategy discussion results, annual reports from last three years, organisation overviews for the financiers. In organisation Y the documents were the current strategy, annual reports from the last three years. In organisation Z the documents were the strategic directions, annual report, annual plans for the organisation and its subsections, self-audit report. In all three evaluated organisations the homepages including statues and publications were analysed.

Structured interviews were conducted with the CEO and at least two key employees in every organisation. All people were interviewed separately, the interviews lasted two hours, and the interviewers were the researchers and a specialist on evaluating organisations from *Heateo SA*. Both interviewers made separate notes that are stored on paper and electronically. Both interviewers compiled their own conclusions and after a discussion it was determined in what areas they needed additional information from the board and/or council and/or volunteers and/or partners.

In organisation X four employees and three members of the council were interviewed. In organisation Y three employees, one volunteer and two partners were interviewed. Two of the employees were also members of the board and the volunteer was a member of the target group. In organisation Z two paid employees, five volunteers, one member of the advisory body and two members of the target group were interviewed. The advisory body was a form of council but there was no official council. All specific interviewees were selected randomly.

As a result of second stage the problem areas were charted by interviewers. The evaluations from the interviews coincided in a significant amount (around 80%). There was no difference of opinion on the existence of problem areas. The differences occurred due to one side not discovering/detecting certain problem areas. The third stage of the evaluation was gathering feedback from the management. The discussion included the strengths and problem areas detected by the evaluators. Only the problem areas (shortcomings) agreed to by the management are reported in this article.

### **Shortcomings of the organisations in the education field**

The shortcomings agreed by the evaluators and the organisation representatives have been summarised in table 1. In the table “⊗” represents existing shortcoming and “⊕” the shortcoming not existing. “⊖” represents it was not possible to determine whether the shortcoming existed or not. Bold typing highlights the shortcomings that were discovered in all three organisations. The development of the evaluations is explained and reasoned as follows.

Vision was lacking in all three organisations. In organisation X the key interviewees’ had significantly different understandings of the direction aimed as they gave different answers to the related question. A certain amount of stagnation was sensed from the organisation Y as their vision was solely based on existing resources and changing or rearranging activities had never been considered. In organisation Z was no real action plan towards achieving that vision. The vision was shared on the board level but it was not familiar to the regular members of the organisation.

In all organisations secondary activities were related to the goals but there was no qualitative analysis on whether all areas had been covered and whether the same goals could be achieved using different resources. All organisations acted based on the fact how they had been founded but a later analysis on whether all activities are justified were lacking.

The short-term goals dominated as there was a lack of or unclearness of long-term goals. Organisations did not even have year-long plans related to the quality of training (though it is the main activity of these organisations) and did not engage the research and strategic development plans in producing added value. It stood out in all three organisations that the members had theoretical knowledge that should be used in managing the organisation but that knowledge was left unutilized. Organisation X had the knowledge that the current management structure did not make it possible to make changes but the know-how about improving the structure was missing. Organisation Y had repeatedly compiled various detailed strategic development plans and a communications’ strategy but there was no skill on how to act on them. Organisation Z made detailed plans every year but due to lack of clarifications and information this was not in sync with subdivisions’ activities. Lack of planning did not enable the employees to focus their work efforts on the important fields and therefore the work was fragmented between many projects.

**Table 1.** Main shortcomings of the organisations in the educational field (based on interviews with active management, confirmation from the short interviews)

		Organisation	X	Y	Z
Weaknesses					
Problems related to organisation's goals	Mission is understood	☺	☺	☺	
	<b>Vision is shared</b>	☹	☹	☹	
	Secondary activities are related to vision and mission	☺	☹	☹	
	<b>Short-term goals are related to long-term goals</b>	☹	☹	☹	
	<b>Plans and research is implemented</b>	☹	☹	☹	
Problems related to performance measurement	<b>Reliable effectiveness evaluation</b>	☹	☹	☹	
	<b>Reliable comparative data</b>	☹	☹	☹	
	<b>Reliable accounting</b>	☹	☹	☹	
Problems related to employees and members	<b>Effective division of labour</b>	☹	☹	☹	
	Motivated employees	☺	☹	☹	
	Relations between members	☹	☺	☺	
	<b>Spread of information</b>	☹	☹	☹	
	<b>Goals and activities are related</b>	☹	☹	☹	
Resources and possibilities for gaining additional income	Possibilities for economic activity and income	☺	☹	☺	
	Financial resources	☺	☹	☺	
	Non-material (means, facilities)	☺	☹	☹	
	<b>Human resources</b>	☹	☹	☹	
	<b>Knowledge, skills</b>	☹	☹	☹	

In the table “☹” represents existing shortcoming and “☺” the shortcoming not existing. “☹” represents it was not possible to determine whether the shortcoming existed or not.

Problems related to setting goals directly influence performance measurement. Lack of goals made performance measurement harder because there was nothing that the results could be compared to. Theoretically, there are three types of comparative data: comparison to ideals/goals, comparison to other similar organisations and comparison to the same organisation in the past. In the educational field there are not enough similar organisations that one can compare itself to and often there is no available data. In order to evaluate oneself compared to the past constant evaluation is necessary. Constant evaluation only allows objective view on whether the observed objects have improved or not. This evaluation includes the risk of missing one or more aspects of performance and it is also hard to put these results on an absolute scale of success. Comparing to plans presupposes professional planning that would set realistic goals. The evaluated organisations as examples have shown that plans are often missing and, therefore, the comparative data is not useful.

Employees of all three organisations claimed that they had tried to evaluate the number of people who had received training but had given up since the actual number had little merit. This was due to two reasons: first, there was no comparative data to interpret the result and second, the qualitative component of the training

evaluation had been discarded. Since the organisations had not found means to evaluate the quality of trainings, there was a trend of giving up on evaluating entirely which of course is not improving performance. Lack of qualitative criteria made the quantitative analysis useless since the interviewees felt that accumulated data did not adequately reflect the organisation's activities.

One of the reasons for the lack of qualitative criteria was the accountancy in the organisation. Accountancy was aimed at the outside user and did not support organisation based performance and effectiveness analysis. So far the supports and the national reports only demanded quantitative indicators. Since the organisations had only the obligation to analyse quantitative indicators, they sensed that creating further organisational reporting would have been too bureaucratic.

Personnel management requires extra attention because often workers in the educational field receive much lower wages and, therefore, personal motivation plays a bigger part. Lower wages causes lack of human resources that is enhanced by unclear division of labour in the organisations that resulted in the employees getting tired. Lack of performance analysis does not enable to improve the division of labour (work allocation) and focus on more important areas and also resulted in decline in motivation. Employees not in the leader position felt that information is not accessible to them.

Since personal motivation is very important in the field of education, contradictions between personal goals and organisational activities affected the relations between employees a lot. In organisation X extra tension came from the salary system that was focused on short-term goals and quantitative indicators. The salary depended on how many people were trained and that did not allow ensuring quality.

There was no analysis of lacking resources and effectiveness. Middle-management decisions derived from financial possibilities and the scarce resources were more inclined to be given to current members and activities instead of more qualitative activities. Long-term development was also disturbed due to using resources only focused on short-term gain. No attention paid to infrastructure and acquiring the needed resources to achieve long-term goals.

Surprisingly the resource-related problems in the organisations were not related to shortage of financial means as could be guessed but lack of human resources and know-how. It should also be pointed out that weakness in financial accounting and managerial accounting did not make it possible to get an overview of usage of finances. The know-how was missing for implementing theoretical knowledge in practice.

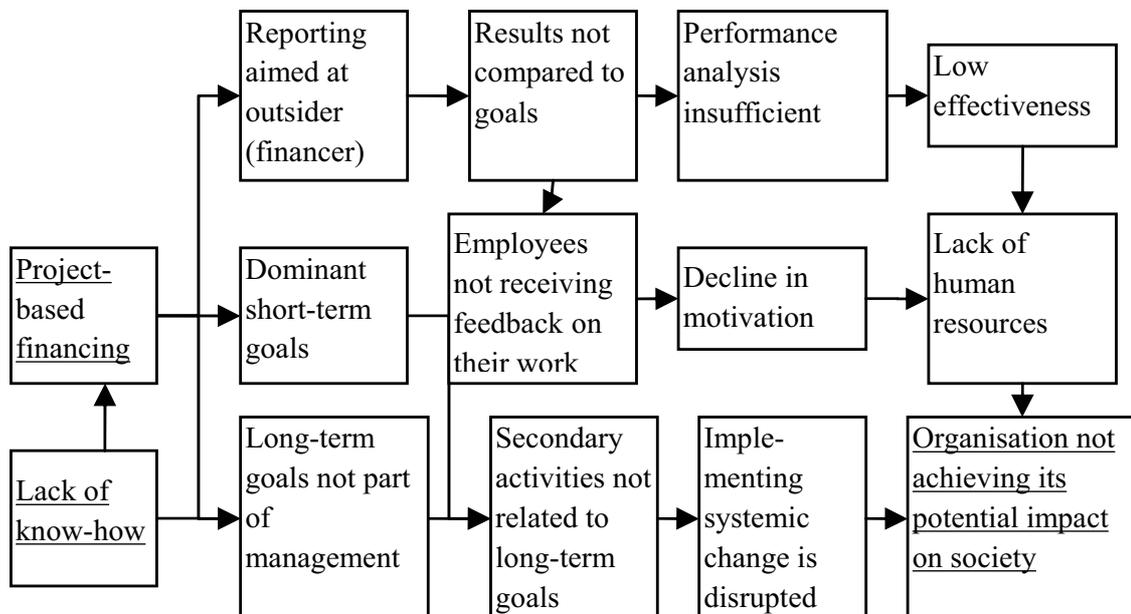
**Conclusion: Analysis of the connections between shortcomings in the organisation and the need for effective performance measurement system**

Important areas where the shortcomings existed in the evaluated organisations are the following (synthesis by the authors based on main problem areas discovered in the interviews):

- Analysis of activities and analysis of management and management processes:
  - Which activities are connected to the mission
  - Which activities are necessary to achieve the goals
  - Areas that are relevant for achieving goals but that are not dealt with
  - Setting goals and analysing results
- Analysis of personnel shortcomings:
  - Personal characteristics (danger of opportunist behaviour, readiness to act)
  - Motivation
  - Professional competence
  - Relationships within personnel
- Analysis of financial capabilities:
  - Financial analysis (exit possibilities for outside supporters)
  - Resource demand (material and human resources)

In the evaluated organisations in the education field there were shortcomings in almost all forementioned areas (occurrence in the evaluated organisations pointed out in table 1): (1) problems related to setting goals in the organisation; (2) problems related to personnel and personnel management; (3) problems in planning and analysis that did not allow evaluation and improving of effectiveness; (4) problems related to resources and self management.

Foregoing problems are entwined by the authors' vision on main reasons for the problems and connections between different problems are presented in figure 3.



**Figure 3.** Connections between shortcomings in organisations in the educational field. (Compiled by authors)

Main problems related to goal setting are no common vision, secondary activities not related to goals and mission, dominance of short term goals, weak or nearly non-existent planning.

Problems related to goal setting starts from either missing long-term plans or that the plans cannot be used as part of practical leadership. Short-term plans are dominant or sometimes absent as well. Lack of plans or non-fulfilment of plans was excused with concentration on quality instead of quantity in all three organisations. At the same time, none were able to identify minimal quality requirements.

Weak planning leads to weakness in evaluation of results. If no clear goals have been set, performance is very difficult to measure. So far practice has shown that performance is only measured in quantity. Since there is no comparative data and qualitative analysis, it is difficult to evaluate performance indicators. Lack of evaluations does not allow increase the effectiveness in work or identify shortcomings in the organisation's everyday practice

A great emphasis should be put on a complex analysis, both quantitative and qualitative when evaluating organisations. Complex in this sense means that the qualitative and quantitative performance indicators should not be separated or analysed separately. Intra-organisational evaluation should be marked by consistency because only consistent data collecting allows acquiring information on changes in performance. Both internal and external evaluators should pay attention to changes in the environment and activities of other organisations in the same field. This allows finding comparative data for the performance measurement and provides both new ideas for enhancing productivity and new opportunities for improving performance through co-operating with other organisations in the same field.

It is surprising that the main reasons why educational organisations are not effective do not lie in the lack of resources. As a matter of fact, the analyzed organisations were even not able to say how much resources they are in need of. That leads the authors to the opinion that just giving more money to educational organisations without an analysis of performance is not an effective way to build up educational politics. Thus, performance measurement may be a part of decision-making in educational politics. Unfortunately that presumes the existence of reliable performance measurement system in every educational institution, which is still distant future in Estonia.

## References

1. *Avaliku teenistuse motivatsioonisüsteemide uuring*. (2007). TNS Emor, 86 lk.
2. **Boyne, G. A.** (2002). Public and Private Management: What's the difference? *Journal of Management Studies* 39:1 January 2002, pp. 97-122.
3. **Brignall, S., Modell, S.** (2000). An institutional perspective on performance measurement and management in the 'new public sector'. – *Management Accounting Research*, 11, pp. 281-306.

4. **Brown, A.** (2005). Implementing performance management in England's primary schools. – *International Journal of Productivity and Performance Management*, Vol. 54 No. 5/6, pp. 468-481.
5. **Brown, B. W., Saks, D. H.** (1975). The production and Distribution of Cognitive Skills Within Schools. – *Journal of Political Economy*, Vol. 83, No 3. pp. 571-593.
6. **Clark, C., Rosenzweig, W., Long, D., Olsen, S.** (2004). *Double Bottom Line Project Report: Assessing Social Impact in Double Bottom Line Ventures*. 72p.
7. **Dees, J. Gregory.** (2007). Taking Social Entrepreneurship Seriously. *Society*; Vol. 44 Issue 3, pp. 24-31.
8. Eesti Vabariigi Haridusseadus. (1992). Vastu võetud 23.03.1992, jõustunud 30.03.1992.
9. **Engert, F.** (1996). The reporting of school district efficiency: the adequacy of ratio measures. – *Public Budgeting and Financial Management*, 8, pp. 247-271.
10. **Fletcher, C.** (2001). Performance appraisal and management: The developing research agenda. – *The Journal of Occupational and Organisational Psychology*, 74, 473-487.
11. **Globerson, S.** (1985). Issues in developing a performance criteria system for an organisation. – *International Journal of Prod. Res.*, Vol. 23, No. 4, pp. 639-646.
12. **Hanushek, E. A.** (1986). The Economics of Schooling: Production and Efficiency in Public Schools. – *Journal of Economic Literature*, Vol. 24, Issue 3, pp. 1141-1177.
13. **Hartog, D. N., Boselie, P., Paauwe, J.** (2004). Performance Management: A Model and Research Agenda. – *Applied Psychology: An International Review*, 53 (4), pp. 556-569.
14. **Jackson, P.** (1988). The Management of Performance in the Public Sector. – *Public Money & Management*, winter, pp. 11-16.
15. **Kaplan, R. S., Norton, D. P.** (1992). The Balanced Scorecard: Measures That Drive Performance. – *Harvard Business Review*, pp. 172-180.
16. **Kelly, K. O., Ang, S. Y. A., Chong, W. L., Hu, W. S.** (2008). Teacher appraisal and its outcomes in Singapore primary schools. – *Journal of Educational Administration*, Vol. 46, No. 1, pp. 39-54.
17. **Kravchuk, R. S., Schack, R. W.** (1996). Designing Effective Performance-Measurement Systems Under the government Performance and Results Act of 1993. – *Public Administration Review*, Vol. 56, No. 4, pp. 348-358.
18. **Lancer Julnes, P., Holzner, M.** (2001). Promoting the Utilization of Performance Measures in Public Organisations: An Empirical Study of Factors Affecting Adoption and Implementation. – *Public Administration Review*, Vol. 61, No. 6, pp. 693-708.
19. **Locke, E. A., Latham, G. P.** (2002). Building a Practically Useful Theory of Goal Setting and Task Motivation: A 35-Year Odyssey. – *American Psychologist*, Vol. 57, No. 9, pp. 705-717.
20. **Macaulay, S., Cook, S.** (1994). Performance Management as the Key to Customer Service. – *Industrial and Commercial Training*, Vol. 26 No. 11, pp. 3-8.

21. **Mancebon, M.-J., Bandres, E.** (1999). Efficiency Evaluation in Secondary Schools: the key role of model specification and of ex post analysis of results. – *Education Economics*, Vol. 7, No. 2, pp. 131-152.
22. **Mani, B. G.** (2002). Performance Appraisal Systems, Productivity, and Motivation: A Case Study. – *Public Personnel Management*, Vol. 31, No. Summer.
23. **Marsden, D., French, S.** (1998). *What a Performance?: Performance Related Pay in the Public Services*. Centre for Economic Performance, 182 p.
24. **Mayston, D. J.** (2003). Measuring and managing educational performance. – *Journal of the Operational Research Society*, Vol. 54, pp. 679-691.
25. **Modell, S.** (2004). Performance Measurement Myths in the Public Sector: A Research Note. – *Financial Accountability & Management*, Vol. 20, No.1, pp. 39-55
26. **Neely, A.** (2005). The Evolution of Performance Measurement Research: Developments in the Last Decade and a Research Agenda for the Next. – *International Journal of Operations & Production Management*, Vol. 25, No. 12, pp. 1264-1277.
27. **Neely, A., Platts, M. G., Platts, K.** (2005). Performance measurement system design: A literature review and research agenda. – *International Journal of Operations & Production Management*, Vol. 25, No. 12, pp. 1228-1263.
28. *Performance Management in Schools: Performance Management Framework*. (2000). DfEE 0051/2000, Guidance for Headteachers, Teachers & Governors.
29. **Pratt, H. J.** (1991). Principles of effective performance management. – *Records Management Quarterly*, Vol. 25, issue 1.
30. **Propper, C., Wilson, D.** (2003). The Use and Usefulness of Performance Measures in the Public Sector. – *Oxford Review of Economic Policy*, Vol 19, No. 2.
31. **Storey, A.** (2002). Performance Management in Schools: could the Balanced Scorecard help? – *School Leadership & Management*, Vol. 22, No. 3, pp. 321-338.
32. **Williams, J. R., Levy, P. E.** (1992). The effects of perceived system knowledge on the agreement between self-ratings and supervisor ratings. – *Personnel Psychology*, 45, pp. 835-847.
33. **Winstanley, D., Stuart-Smith, K.** (1996). Policing performance: the ethics of performance management. – *Personnel Review*, Vol. 25, No. 6, pp. 66-84.
34. **Worthington, A. C.** (2001). An Empirical Survey of Frontier Efficiency Measurement Techniques in Education. – *Education Economics*, Vol. 9, No. 3. pp. 245-268.