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# Management by objectives: the Swedish experience in upper secondary schools

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## Abstract

**Purpose** – This paper seeks to explore how managing by objectives (MBO) has been adopted in Swedish schools and to reflect on some of the consequences in a longitudinal study. Results relate to whether introduction has increased student performance and whether it works as a tool for the principals to create more effective schools.

**Design/methodology/approach** – A comparative cross-sectional study was made on the adoption of MBO as perceived by principals in upper secondary schools in Sweden. Initially, a mail questionnaire was distributed to every principal in Swedish upper secondary schools, which determined the extent to which mandated MBO practices were being implemented. Ten years later, the study was replicated, which made initial and subsequent practices comparable.

**Findings** – Principals' perceptions suggest that the effects of MBO have diminished over the ten-year period. Ancillary measures of student performance correlated to MBO practices appeared statistically insignificant, or perhaps even negative. Thus, the change appears to have produced unimproved student performance, frustrated principals and perhaps somewhat less stressed teachers.

**Practical implications** – These findings have implications on the direction the management of upper secondary schools subject to central direction may take. Although MBO may improve efficiency in staff performance, it appears to have little effect on effectiveness, if student performance is used as a criterion.

**Originality/value** – Adoption measures of MBO have been obtained and associated with student performance for the first time.

**Keywords** Education, Educational policy, Secondary schools, Management by objectives, Sweden

**Paper type** Research paper

## Introduction

In 1994 it was decided to implement management by objectives (MBO) in the Swedish education system. This move was part of a global movement that began earlier, which produced a debate in the 1980s about what could be done to make the public sector more efficient. A statement such as the public sector was lacking in efficiency, or how more value could be obtained for tax money, focused attention on how the private sector was organized. This debate produced a change that became known as new public management (NPM (see Hood, 1991)). This development has been seen as a market-based ideology, which focused on financial control with the intention to make the public sector more business-like. Inherent in the approach was that efficiency should be stimulated. Pollitt (1990, pp. 10-11) argued that that progress would be characterized by importation from the private section.

The conviction that development of human capital created a competitive advantage grew (Bell and Stevenson, 2006), and the educational system was one of the sectors

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where many countries decided to make reforms that were inspired by NPM. Mante and O'Brian (2001) argue that secondary schools are an important component of human capital formation and a major component for taxpayers. According to Tolofari (2005) reforms started in the USA and Britain and spread in the OECD, but it was in New Zealand that the most acclaimed reforms took place. Whitaker (2003) reflects that local management of schools is designed to move decision making closer to the school and that the daily work was changed dramatically in countries like England. She reports that numerous reforms gave the principals a greater control over the budget, but their workload became overwhelming. Britain introduced the 1988 Education Act and the legislation inaugurated a period of reforms that has lasted for 20 years (Simon 1991, Barker, 2008); New Zealand introduced the 1989 educational reform of the New Zealand educational system and the public finance act with arguments that it should increase i.e. the efficiency and accountability (Tooley and Guthrie, 2003). According to Fusarelli and Johnson (2004) education in the USA is big business, and the education policy has changed radically in the past decade. Policymakers at the state levels are incorporating systematic reform initiatives. The reforms influence how schools are managed, and there are reports about how the role of the principal has changed the last decade (Rowley, 2002), but implementation studies on the organizations with focus on the public sector are more sparse (Lapsley and Wright, 2004).

Sweden was one of the countries that decided to implement one steering device that was included in the NPM, namely MBO. The MBO model in Sweden was constructed to promote effectiveness, decentralization, long-term commitments and accountability in the governmental administration. The local principal was charged with the implementation in his/her schools. The experiment of course piqued interest. A study of how far the adoption had gone in upper secondary schools was made in 1998 (Lindberg, 1998). The study had a local management perspective and results were disappointing as well as encouraging and it became obvious that much work remained. More recently, there has been criticism of the model as well before the decision to adopt it (Brunsson, 2002). Several scholars argued that it had always been difficult for politicians to control schools and implementing MBO would make no exception to the problems that were likely to develop (Brunsson, 1995; Weick, 1995).

Now, a decade later, it seems appropriate to study what another ten years with the implementation have accomplished and to identify the current impact of this reform. Part of this interest is motivated by local concerns, especially in light of observations of others. Barker (2009), most recently, summarized observations in England and raised the question of why progress in public reform in education is so slow. He argues that the experienced effectiveness has not materialized. Consequently, the question of whether MBO has facilitated the principal's quest to create effective schools is congruent with the intentions behind the reform. In other words, has it given the principals in Sweden a tool that help them to create more efficient schools? Specifically:

(1) To what degree has MBO been implemented in this important target area?

(2) Has the adoption been further implemented from initial observations?

(3) What has been the impact on the performance of students?

The paper should be of interest to educators and administrators because of the history that has developed in use. It may carry somewhat of a wider interest because of a statement made by Porter (1990, p. 343) that one of the competitive advantages of

Sweden was the universally high educational level of its population. People thus might generally like to know a bit more about what is going on in its system.

## Background

### *MBO*

Robbins (1997) defined MBO as:

> A system in which specific performance objectives are jointly determined by subordinates and their superiors; progress toward objectives is periodically reviewed and rewards are allocated on the basis of this progress.

MBO was first presented by Peter Drucker in his classic, *The Practice of Management* (Drucker, 1954, pp. 121-36). An MBO process converts overall objectives into specific objectives down to organizational units and individual members. By linking objectives throughout the levels of the organization it allows each employee to make a specific, identifiable contribution. The process is promoted as being motivational because employees participate and improving efficiency because well-defined, measureable goals are set. Drucker (1979, pp. 439-40) writes:

> The greatest advantage of management by objectives is perhaps that it makes it possible for a manager to control his own performance. Self-control means stronger motivation: a desire to do the best rather than do just enough to get by. It means higher performance goals and broader vision. Even if management by objectives were not necessary to give the enterprise the unity of direction and effort of a management team, it would be necessary to make possible management by self-control.

It might be noted that early on, studies were made of the effectiveness of MBO. Kondrasuk (1981) surveyed results from 185 studies of MBO effectiveness made up until the time of writing. The results of reports of positive contributions to not positive were 9:1, he noted "that the less sophisticated the research approach, the more likely the study to show MBO as effective. There are also tendencies for MBO to be more effective in the short term (less than two years), in the private sector, and in organizations removed from direct contact with the customer." Debate about MBO's effectiveness has spilled into the public sector, and several researchers have argued that there are difficulties in its applications (Brunsson, 1993, 1995; Rothstein, 1994; Lauglo, 1994; Broadbent et.al. 1999; Brunsson, 2002; Shimon and Salvador, 2002 and Frölich, 2005).

Nevertheless, although originally associated with manufacturing in the private sector and about concerns in its use, the approach moved into the public, service sector. Representatives from the private sector, for instance, argued that the public sector could learn a lot from the private sector (Hood, 1995). Changes in public sector accounting in a number of OECD countries during that time were central to the rise of the "new public management" (NPM) and its associated doctrines of public accountability and organizational practise (Brignell and Modell, 2000). Central to this change was "accountingization" and an emphasis on rational decision making. Much of NPM is built on the idea (or ideology) of homeostatic control; that is, the clarification of goals and missions in advance, than building the accountability systems in relation to those preset goals (Hood, 1995), i.e., MBO. This approach means that an organization in the public sector was to be given or had to identify explicit goals, made priorities among them and evaluate if they were fulfilled (Broström *et al.*, 1998). Specifically, the history of reform

and changes in the organization and structure of education during the 1980s and 1990s can be connected to these broader changes in the public sector (Edwards et.al. 1999) who studied 17 schools in the UK and distinguished three categories that were characterized by safe hands, active managers and crisis managers. Only 5-10 percent of their budgets were available to be linked to the school's objectives. In addition to the Edwards (1999) study there have been others that have included MBO either directly or indirectly. In this journal, Boles (1975) was a pioneer in the area. He described the experience of a study of group in Australia that was using MBO. Although somewhat interesting as an initial experience, he concluded its use was not understood and thus not effective. Jacobsson and Pousette (2001) studied intra-organizational coordination in 30 Swedish upper secondary schools. MBO was one of the approaches used and actually ranked second in strategies used. The approach may have some advantage in use because it was found less emotionally exhausting than situations in which professional consideration was the focus. Among other studies the one by Nolan and Nolan (1999) is interesting for the simple reason that it is written as a poem. It suggests that MBO is a 1950s thing, but extends hope for managers in education. It ends with the unanimous thought that all will get to heaven. Myers and Murphy (1995) established the importance of principals in mid-management and also the importance of student performance in a principal's performance.

*MBO in Swedish schools*

Simultaneously with these developments, the public sector in Sweden became strongly influenced by these new techniques. One that had a dominant position was MBO. It was combined with an emphasis on downsizing central planning and control and with focus on financial responsibility (Anell *et al.*, 1990; Collin and Hansson, 1993). The debate focused on reducing demands on taxpayers, while at the same time maintaining the volume and quality of services supplied to the public. Particular attention was paid to the schools. A debate started in the middle of the 1970s and by the end of the decade the approach seemed unworkable. An official national investigation was made (Utbildningsdepartementet, 1974), which suggested that the responsibility and power for actions should be decentralized. In 1992 control of Swedish schools changed, i.e., the focus on central planning changed and MBO replaced, or at least supplemented, the old system. In short, command-and-control was replaced by MBO, and most detailed regulations were removed. Implementation of MBO was influenced by central planning and it was created at the top of the hierarchy in a national authority (Skolöverstyrelsen (SÖ)). The state was the body in charge, controlling both resource allocation and operations. Funding was earmarked, and a special state authority (The National Agency for Education) controlled the schools through a detailed regulatory system. The regulatory framework meant that all schools in Sweden were allocated resources in a similar way and the state was in charge for the financial control. For example, there was a limit on the number of students per class. Regional officials kept track of local operations, reviewed the allocation of funds and monitored the quality of operations. However, the environment had started to change and thus made central planning harder.

Basically, the new control system meant that the authority responsible – the state – drew up the objectives for the curricula and imposed on municipalities the main responsibility as the educational organizer. The municipalities defined how things

were to work in their own school plans and left the responsibility for implementation of activities to the principals. There is a wide variety between Swedish municipalities according to the size, number of citizens, political intensions, and knowledge, but the problems they had to solve when the organization at the national level changed to MBO was the same.

Practically speaking, the principals became responsible for the implementation of a steering device in their local schools for which they had not asked. Results from Lindberg's (1998) implementation study suggested that implementation at that time was incomplete. That is, it had advanced in some areas such as budgeting, but still had not been fully adopted in others. Nevertheless, principals indicated the earlier detailed regulatory system was fading away and replaced by local rules; the use of MBO had increased and most of them thought that it was a good control form that should be developed and expanded. The National Agency of Education had, in fact, recommended a four-step process of implementation, i.e., formulating the goals, carrying out the function, evaluation/follow up, and changing the goals or changing the function if satisfactory results were not found. In this light a second study has been made based on Lindberg's (1998) methodology to see if another ten years of implementation has enhanced use of MBO and created conditions for more effective administration in Swedish upper secondary schools.

## Methodology

The sampling frame used in this study was principals of all upper secondary schools in Sweden, and a basic survey methodology was used to assess their perceptions of school operation and control as affected by MBO. Zikmund (2003, p.175), for instance, suggests that surveys are quite flexible and when properly conducted, extremely valuable as a research approach. They also have the attributes of efficiency and accuracy when questions can be clearly formulated and the population well-defined. These criteria were met in the study. Consistent with recommendations by Chang (1994) regarding surveys valid for a school setting and the job of principals, we relied on self-report items using a four-point Likert scale (1 = never to 4 = always) as well as previously-developed measurements of the study constructs (see Tables I and II for the individual items used). This approach to assessing attitudes concerning MBO seemed to be especially appropriate insofar as it was the example used to illustrate usage of a Likert methodology by Zikmund (2003, pp. 312-14). To ensure face validity, all questions were tested in a pilot study with principals in environments similar to our final sample. Divergences in response were minor, and respondents found the questions meaningful for their role and could relate to them in their profession. Tests run on both data sets indicated responses were normally distributed (non-skewed) within the usual range of expectations in such a study.

Questionnaires were distributed to the principals from addresses published on the official web site of the National Agency for Education. The mailing was made at the beginning of June in 1998 and then again in 2008, after the school session and grading period had concluded. A follow-up packet was mailed out a week later to non-respondents, and a second questionnaire was mailed in late in June, one week before the summer break. A final attempt to garner responses to the questionnaire was made in August, after the semester had started but before students had arrived. Again, this final questionnaire was followed by a letter of reminder, and in 2008 an e-mail was

used two weeks later. When the database was closed at the end of September, 351 responses were received of the 780 mailed; of the mailing we were informed that 16 schools in a certain pedagogical group would not respond because the approach was inapplicable. Thus, there was an initial response rate of 45.9 percent. Of the responses, 311 were usable for a usable response rate of 39.9 percent. In the 1998 study questionnaires were sent to 473[1] principals and 331 usable responses were obtained, representing a usable response rate of 70.0 percent. As a check against non-respondents, demographics of late respondents were compared with early responses and there were no significant differences. Questionnaires in the second phase of the study were coded so that results could be correlated with student performance measures from the individual districts.

## Results

Initially, upper secondary school principals had no choice but to implement an MBO program. Consequently, when the initial study was made, it was anticipated that each respondent would have implemented a program. Thus, responses were requested on the basis of how well developed their programs had been in several different areas, among them budgeting, teaching, and institutional service. Table I suggests that respondents perceived that they were doing pretty well in the budgeting area (3.56/4.0), fairly well in teaching (3.36/4.0) and not so well in institutional service (2.75/4.0). If we were to give letter grades for these efforts, they would be A −, B + and B − respectively.

These results could be interpreted by noting that administrators must live within a budget irrespective of any system used. Basically a quantitative approach is used in which both revenues and expenditures are pretty well known for the one-year period covered. Further, this area is the one in which the principal him/herself had greatest input and control. Thus, it was not surprising that principals thought they had a good grasp in this area. In other words, meaningful objectives could be set and met. In the teaching area, however, principals had to depend on their teachers for input on objectives. The area, although deemed the most important responsibility of teachers – in effect it is how they tend to identify themselves, it tends to be both qualitative and subjective. Thus, a B + grade in this area is not a bad grade – basically satisfactory, but room for improvement. On the other hand, institutional service tends to get lower priorities by both administrators and teachers. It is the "extra" that is done and tends to get squeezed as both parties become swept up in their primary duties. It would be unlikely that one would be censured for not meeting objectives here; peers appreciated

| Activity | Description | 1998 | 2008 | Significance |
|---|---|---|---|---|
| Budgeting | The principal makes a forecast of future economic events scheduled for the school | 3.56 | 3.36 | $<0.01$ |
| Teaching | Processes in teacher leadership aimed at obtaining knowledge and values | 3.36 | 3.36 | NS |
| Institutional service | School development, student welfare, mentoring, skills development, planning, administration | 2.75 | 2.57 | $<0.05$ |

**Note:** Four-point scale: 1 = not at all; 4 = fully adopted and implemented

**Table I.**
MBO adoption in educational activities (mean values)

shortages and stress under which they function. Basically, there is a shortage of time to do justice to objectives here and thus the relatively low score.

Ten years on, the second study was made. There appeared to be a statistically significant retrenchment in performance in two out of the three areas of potential impact. That is, when presented with the question shown in Figure 1 respondents tended to see less of an effect in the 2008 survey. Budgeting dropped off to 3.36/4.0 (significant at 0.01) and institutional service dropped to 2.57/4.0; the teaching area remained the same as it had been ten years earlier, i.e., 3.36/4.0 (significant at 0.05). These results are not so easily characterized and thus are discussed in the next section.

There are two ways in which these responses may be viewed. First, and strictly speaking, the two surveys were cross-sectional at two different points in time for populations that had changed over that time. That is, there were 307 upper secondary schools added over the ten-year period to the 473 base. Further, of these additional schools, a number were private. Thus, a strict comparison cannot be made of principals' attitudes from the raw data. The additional schools would have newer principals with different experiences, education, training and responsibilities. These data, however, would be significant to governmental administrators at the state level because public and private schools in Sweden have certain policies in common. For these individuals it would appear that implementation of MBO in general had problems and things were not getting better.

The study became longitudinal when respondents were questioned at two different times, which is a well-accepted approach to studies of change (see Zikmund, 2003, pp. 187-8). These studies, however, are meaningful only when the same sampling frame is used. Anonymity in responses precluded the possibility of following the progress of individual principals. Further, attention was not paid to the identity of individual schools in the 1998 survey so it was not possible to follow responses at the school level. It was, however, possible to trace the identity of public ($n = 205$) and private ($n = 102$) schools in the 2008 survey for which that information was supplied. Thus, it was possible to compare public school perceptions over the ten-year period and contrast public and private perceptions for 2008. These results are summarized in Table II.

Differences were noted. In general the scores of the subsample of public school responses were lower that the mean for the aggregate sample, although not statistically different from that shown in Table I for the whole sample. There were, however,

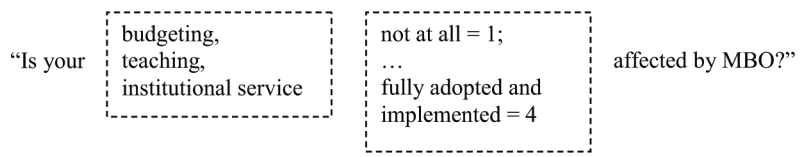


**Figure 1.**

**Table II.**
Public: private comparisons (1998 and 2008)

| Activity | 1998 (public) | 2008 (public) | Significance 1998-2008 (public) | 2008 (private) | Significance 2008 (public v. private) |
|---|---|---|---|---|---|
| Budgeting | 3.56 | 3.31 | $<0.01$ | 3.45 | $<0.08$ |
| Teaching | 3.36 | 3.33 | NS | 3.42 | NS |
| Institutional service | 2.75 | 2.45 | $<0.01$ | 2.82 | $<0.01$ |

differences in the values recorded for private school principals versus their public counterparts. They were marginally significant for budgeting ($p < 0.08$) and certainly for institutional service ($p < 0.01$), where responses were higher from private school principals than public ones. It is beyond the scope of this study to assess causality to this latter result in particular, but one suspects that perhaps other factors such as time and inclination may come into play here. Certainly, this factor in private schools is the only one to score higher than the 1998 values.

In Table III we summarize some of the mitigating factors that could affect the development of programs in the areas of budgeting, teaching, and institutional service through adoption of MBO. They included training available to principals, age class (under 50 or over), gender and the public/private differentiation. Of these mitigating factors, the only one that had statistical significance was the public/private differential as described above. It affected perceptions of progress in budgeting and institutional service as would be suspected from the previous results.

In the second part of this study, the 2008 survey responds were correlated with three measures of student performances – an academic rating of schools, their through-put, and admission success to colleges and universities defined as follows:

(1) *Rating*. This is the average score points for students with a final grade. The average grade is calculated as a weighted average where each weight is given by the relative size (in hours) of the course. Weights for grades are IG = 0, G = 10, VG = 15, MVG = 20. Only courses in which grades were awarded are included in this measure.

(2) *Through-put*. This is the percentage of pupils who complete their secondary education within three years. For the academic year 2006/2007 means the novices who began their secondary education in autumn 2004 and received final grades or the equivalent of secondary school academic year 2006/2007 or earlier.

(3) *Admission*. This is the percentage of pupils with general admission to colleges and universities. General admission is that in their final grade from the national program, specially designed program or training in independent school a pass on courses of at least 90 per cent (2 250 points) of the upper secondary credits required to complete the program and have an approved project was received.

Data on these measures are available on an annual basis, for each school in the country, on the Sveriges Kommuner och Landsting (Swedish Association of Local Authorities and Regions) homepage[2]. These data were correlated with the perceived MBO influence in the three areas of Table I in a MLS relationship of the form:

$$RA_i = C_{rai} + ra_1 B_i + ra_2 T_i + ra_3 IS_i$$

| Item | Budgeting | Sig. | Teaching | Sig. | Institutional service | Sig. |
|---|---|---|---|---|---|---|
| Principalship education | 0.001 | 0.89 | 0.007 | 0.33 | −0.012 | 0.29 |
| Age class | 0.073 | 0.43 | 0.045 | 0.58 | 0.181 | 0.17 |
| Gender | −0.064 | 0.47 | −0.086 | 0.26 | 0.157 | 0.21 |
| Public/private | −0.163 | 0.08 | −0.085 | 0.30 | −0.398 | 0.00 |
| Constant | 3.45 | 0.00 | 3.44 | 0.00 | 2.64 | 0.00 |

**Table III.**
Mitigating factors in MBO adoption

$$TP_i = C_{tpi} + tp_1 B_i + tp_2 T_i + tp_3 IS_i$$

$$AD_i = C_{adi} + ad_1 B_i + ad_2 T_i + ad_3 IS_i$$

where $RA$, $TP$ and $AD$ represent rating, throughput and admission scores respectively; $B$, $T$ and $IS$ are the budgeting, teaching and institutional scores constants and coefficients of the relationships are given in Table IV.

Reflections on these results suggest there is very little impact of any of the MBO results into any of the measures of student performance. The only coefficient that was statistically significant was coefficient of throughput with teaching, and it was negative. That is, the more management by objectives affected teaching, the lower the throughput of students in the system. All other coefficients were statistically insignificant and the adjusted $R^2$ for the three relationships were $-0.016$, $-0.034$ and 0.000 respectively.

## Reflections

When Porter (1990, p. 343) made his reflection on the quality of Swedish education, he also noted (it) "has had difficulty keeping pace with rising standards and the changing skills needed by industry." His observation was not unique, but a reflection of a general assessment of upper secondary schools in the Swedish system. Observations from a recent Skolverket[3] concurred:

> Swedish pupils perform less well in school today compared to the early 1990s. Since the mid-1990s, Swedish pupils' performance in knowledge measurement deteriorated. The decline is evident in mathematics and science subjects but also in reading comprehension.

Consequently, and at the same time in congruence with NPM ideas in circulation, MBO was implemented in the Swedish system. The Lindberg (1998) study suggested it was generally accepted and early on indicated it was having some perceived impact.

Now, ten years after that initial study, it would appear that there has actually been some retrenchment from those initial perceptions. These results initially seemed strange. Diffusion generally increases outward and so greater impact in the three categories might be expected. Obviously, that was not the case here. Instead of perceived effects expanding, they apparently contracted. Such observations would not be inconsistent with Kondrasuk's (1981) observations that MBO effects tend to be short-term. In retrospect, there are a number of reasons why this retrenchment was seen. With the expansion in the number of schools, there were undoubtedly more new

| Item | Rating | Through-put | Admission |
|---|---|---|---|
| Budgeting | 0.212 | −0.353 | −0.080 |
| Teaching | −1.094* | 1.445 | −0.512 |
| Institutional service | −0.386 | 0.507 | −1.255 |
| Constant | 105.872 | 91.576 | 105.852 |
| Adjusted $R^2$ | −0.016 | −0.034 | 0.000 |

**Note:** Significant at 0.04 level

**Table IV.**
Student performance as a function of MBO adoption

principals and they might have had a different attitude than the ones queried in the earlier study. Additionally, the implementation of the program was supported by an educational program for principals; the realities introduced in these programs could have increased the appreciation of how far MBO was expected to go, as would experience in its use. In Lindberg's (1998) study, he found that principals who had attended the national principal training program tended to use MBO more than those who did not. Finally, a certain amount of frustration was exhibited by some respondents. One advantage of using mail surveys is that sometimes one gets more than a return of competed questionnaires. That is there are occasions when respondents write in the blank spaces around the questions. Several that seemed to capture some elements of frustration came in this way, which suggested an acute scarcity of time and interference from conflicting priorities:

> Who cares about goals? Getting money to last is our real job.
>
> Hey! I don't have time to prioritize for instructional leadership.
>
> Because of the long hours which are characterized by managing finance, administration and acute problems, I do not get the time over that is required for long-term school development.
>
> I do not even have time to answer the questionnaire (free translations from Swedish).

Nevertheless, Myers and Murphy (1995) established the relevance of this study by suggesting the importance of principals (our target) in mid-management and also the importance of student performance (one of our evaluation metrics) in a principal's performance. That evaluation could be totally unfair. That is, the experience of Sweden in student performance does not appear at odds with other experiences in the area of NPM. Put another way, Table IV suggests that across the board, there appeared to be no, or possibly negative, impact of MBO implementation on student performance. Fusarelli and Johnson (2004), in their No Child Left Behind study in the USA, concluded significant improvement had not been obtained. Further, they suggested that many of the lessons of what works in private organizations are not transferable to the public sector. Barker (2008) suggested that 20 years' experience with the educational reform act in England resulted in mixed results. There were some early gains, but progress appears to have stalled and intervention itself may be a barrier to further progress.

This *ex post* treatment of NPM does not dismiss the selection of MBO as an approach. Even before MBO was introduced and implemented in the Swedish educational system, there were questions about its effectiveness in operations (Duffy, 1988; Kondrasuk, 1981). Consensus was that one had to be careful in its application. That being said, one must consider what was being done. Principals were to sit with subordinates and agree on goals ranging from budgeting to institutional service. Theory would have this as a "bottoms-up" approach, but practice deems it to be "top-down" (see Duffy, 1988). At the extreme, these factors might have only a secondary effect on student performance. That is, budgeting and institutional service may not be that important in the learning process. Students might do marginally better under conditions of pleasant surroundings and well-paid teachers, but any impact would be indirect. Likewise, there could be an impact associated with teacher service, but again those implications would be expected to be marginal. Thus two of the three terms that were tested might or might not be important.

If there were a significant influence, it would be agreements made between principal and the individual teacher. These agreements affect how classrooms are run and how courses are taught. As it turned out, the effect that might be sought just did not develop. The voluntary write-ins on the returned questionnaires suggested this area is one that suffered with the shortage of times. Further, other studies have shown that student performance has a complex dependency on a number of factors; some important ones such as family income and education lay outside the control of the school or teachers (see Olsson, 2009). Thus, it might be expected that MBO might have something to do with bad deportment on the behavior of teachers and thus protect against poor performance, but it is not surprising that it did not affect statistically better performance.

The comparison that could be made between public and private school respondents adds an interesting footnote to the study. As one of our reviewers to the initial submission of this paper noted, private school principals are often recruited, introduced and trained differently. Nevertheless, they appear to share common perceptions of MBO with their public school colleagues – at least as far as this study goes. The one area where there was a difference was in the area of institutional service – results were higher not only for private schools versus public in 2008, but also for private schools versus public in 1998. As we attempted to suggest in the results section, this observation may be a consequence of differences in the two systems as much as any effort on the parts of principals and/or teachers.

In the end, even if MBO did not improve student performance, it did not and likely does not deleteriously affect it. That is, it did not make matters worse. In making significant changes that may be regarded as a plus, because all changes do not produce positive or even neutral results. Additionally, the study by Jacobsson and Pousette (2001) in Swedish schools suggest teachers under stress may like the approach because it gives insight into expectations of them. Thus, the change appears to have produced unimproved student performance, frustrated principals and perhaps somewhat less stressed teachers. We will see where developments take the system. If MBO stays, it would be expected that some allowances would be made for introducing some flexibility into the implementation. Certainly the system requires such an approach and current thinking on MBO applications would seem to support it (see Dahlsten *et al.*, 2005; Lindqvist, 2008; Roth, 2009).

## Conclusions

A comparative cross-sectional study has been made of the implementation of MBO in the upper secondary school system in Sweden. Its impact on student performance appears to be basically neutral. That is, it neither improved nor lowered performance in the areas of ratings, throughput and admission. Despite the fact that there appears to be some retrenchment in effect on staff performance, the approach has the apparent positive effect of reducing stress by providing expectations. Continued use would predictability be improved by allowing flexibility in application, which appears to be the direction encouraged by current thinking.

### Notes

1. The difference in number of mailings represents the growth in number of schools over the ten-year period.

2. http://130.28.2.87/default.aspx (accessed October 8, 2009). These data first became available in 2007 and so could only be used in the second portion of the study.
3. www.skolledarna.se/Sidor/hem.aspx (accessed October, 13, 2009).

## References

Anell, A., Rosén, P. and Hjortsberg, C. (1990), "Choice and participation in the health services: a survey of preferences among Swedish residents", *Health Policy*, Vol. 40 No. 2, pp. 157-68.

Barker, B. (2008), "School reform policy in England since 1988: relentless pursuit of the unattainable", *Journal of Education Policy*, Vol. 23 No. 6, pp. 15-26.

Barker, B. (2009), "Public service reform in education: why is progress so slow?", *Journal of Educational Administration and History*, Vol. 41 No. 1, pp. 57-72.

Bell, L. and Stevenson, H. (2006), *Education Policy: Process, Themes and Impact – Leadership for Learning*, Routledge, London.

Boles, H.W. (1975), "An administrative team?", *Journal of Educational Administration.*, Vol. 13 No. 2, pp. 73-80.

Brignell, S. and Modell, S. (2000), "An institutional perspective on performance measurement and management in the new public sector", *Management Accounting Research*, Vol. 11 No. 3, pp. 281-306.

Broström, B., Haglund, A. and Solli, R. (1998), *Extern- och intern redovisning i Kommuner och Landsting*, Studentlitteratur, Lund.

Brunsson, K.H. (2002), "Management or politics – or both? How management by objectives may be managed: a Swedish example", *Financial Accountability and Management in Governments, Public Services, and Charities*, Vol. 18 No. 2, pp. 189-209.

Brunsson, N. (1993), "Ideas and action; justification and hypocrisy as alternatives to control", *Accounting, Organizations and Society*, Vol. 18 No. 6, pp. 489-506.

Brunsson, N. (1995), "Utvärdering och inlärning. Från sanningssökande till styrmedel", in Rombach, B. and Sahlin-Anderson, K. (Eds), *Moderna utvärderingar I offentlig sektor*, Nereius & Santerus förlag, Stockholm.

Chang, L. (1994), "A psychometric evaluation of 4-point and 6-point Likert-type scales in relation to reliability and validity", *Applied Psychological Measurement*, Vol. 18 No. 3, pp. 205-15.

Collin, C.O. and Hansson, L. (1993), *Kommuner och landsting i förändring*, Studentlitteratur, Lund.

Dahlsten, F., Styhre, A. and Willander, M. (2005), "The unintended consequences of management by objectives: the volume growth target at Volvo Cars", *Leadership & Organizational Development Journal*, Vol. 27 No. 7, pp. 529-41.

Drucker, P. (1954), *The Practice of Management*, Harper Road, New York, NY.

Drucker, P. (1979), *Management: Tasks, Responsibilities, Practices*, Fankenham and Reading, London.

Duffy, M.F. (1988), "ZBB, MBO, PPB and their effectiveness within the planning/marketing process", *Strategic Management Journal*, Vol. 10 No. 2, pp. 163-73.

Frölich, N. (2005), "New public management in Norwegian universities", *Proceedings of the 1st International Euroducs Conference*, Science Po, Paris.

Fusarelli, L.D. and Johnson, B. (2004), "Educational governance and the new public management", *Public Administration and Management: An Interactive Journal*, Vol. 9 No. 2, pp. 118-27.

Hood, C. (1991), "A public sector for all seasons?", *Public Administration*, Vol. 69 No. 1, pp. 3-19.

Hood, C. (1995), "Contemporary public management: a new global paradigm?", *Public Policy and Administration*, Vol. 10 No. 2, pp. 104-17.

Jacobsson, C. and Pousette, A. (2001), "Managing stress and feelings of mastery among Swedish comprehensive school teachers", *Scandinavian Journal of Educational Research*, Vol. 45 No. 1, pp. 37-53.

Kondrasuk, J.N. (1981), "Studies in MBO effectiveness", *Academy of Management Review*, Vol. 6 No. 3, pp. 419-30.

Lapsley, I. and Wright, E. (2004), "The diffusion of management accounting innovations in the public sector: a research agenda", *Management Accounting Research*, Vol. 15 No. 3, pp. 355-74.

Lauglo, J. (1994), "Forms of decentralization and their implications for education", paper presented at the Conference of the Comparative and International Education Society, San Diego, CA.

Lindberg, E. (1998), *Målstyrning i Svenska Gymnasieskolor*, LTU, Luleå.

Mante, B. and O'Brian, G. (2001), "Efficiency measurement of Australian public sector organization", *Journal of Educational Administration*, Vol. 40 No. 3, pp. 274-89.

Myers, E. and Murphy, J. (1995), "Suburban secondary school principals' perceptions of administrative control in schools", *Journal of Educational Administration*, Vol. 33 No. 3, pp. 14-37.

Nolan, B.C. and Nolan, C.R. (1999), "Gridlock at the gates", *Journal of Educational Administration*, Vol. 37 No. 2, pp. 159-64.

Olsson, L.M. (2009), "Orsaker till försämrade skolresultat kartlagda: Sociala bakrund har fått större betydelse", *Skolverket*, 25 September, available at: www.skolverket.se/sb/d/2573/a/17272;jsessionid=3DEDA6C0EBE539A7C16B02CCF745A67C (accessed October 13, 2009).

Pollitt, C. (1990), *Managerialism and the Public Services: the Anglo-American Experience*, Blackwell, Oxford.

Porter, M. (1990), *The Competitive Advantage of Nations*, The Free Press, New York, NY.

Robbins, S.P. (1997), *Managing Today*, Prentice-Hall International, Upper Saddle River, NJ.

Rothstein, B. (1994), *Vad bör staten göra? – Om välfärdsstatens moraliska och politiska logik*, SNS, Stockholm.

Rowley, A. (2002), "The impact of educational policy on headship in primary schools in England, 1994-2001", *Journal of Educational Administration*, Vol. 40 No. 3, pp. 195-210.

Tolofari, S. (2005), "New public management and education", *Policy Futures in Education*, Vol. 3 No. 2, pp. 75-89.

Tooley, S.T. and Guthrie, J. (2003), "The accounting for 'rational management' and financial management in the New Zealand education sector", *Proceedings of 7th International Research Symposium in Public Management, Hong Kong*.

Utbildningsdepartementet (1974), *SOU 1974: 53. Skolans arbetsmiljö. Betänkande avgivet av Utredningen om skolans inre arbete – SIA*, Utbildningsdepartementet, Stockholm.

Weick, K.E. (1995), *Sensemaking in Organisations*, Sage, Thousand Oaks, CA.

Whitaker, K.S. (2003), "Principal role changes and influence on principal recruitment and selection", *Journal of Educational Administration*, Vol. 41 No. 1, p. 37.

Zikmund, W.G. (2003), *Business Research Methods*, South-Western, Mason, OH.

## Further reading

Broadbent, J. (1999), "The state of public sector accounting research, the APIRA Conference and some personal reflections", *Accounting, Auditing & Accountability Journal*, Vol. 12 No. 1, pp. 52-8.

Edwards, P., Ezzamel, M., McLean, C. and Robson, K. (2000), "Budget and strategy in schools: the exclusive link", *Financial Accountability & Management*, Vol. 16, pp. 309-34.

Pollitt, C. (1991), "Performance indicators: root and branch", in Cave, M., Kogan, M. and Smith, R. (Eds), *Output and Performance, Measurement in Government, The State of the Art*, Jessica Kingsley, London.

Simon, D., Salvador, G., Diegoli, D. and Auerbach, G. (2000), "Organisational values as attractors of chaos: an emerging cultural change to manage organisational complexity", Economics Working Paper 485, Department of Economics and Business, Universitat Pompeu Fabra, Barcelona.

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