

School-Based Management

Lessons from International Experience and Options for Turkey

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Education Sector Unit
Europe and Central Asia Region

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Abbreviations and Acronyms

AGE	<i>Apoyo a la Gestion Escolar</i> (Support to School Management Program, Mexico)
ECA	Europe and Central Asia
EDUCO	Education and Community Participation (El Salvador)
ERI	Education Reform Initiative
GDP	Gross domestic product
MoNE	Ministry of National Education
OECD	Organisation for Economic Co-operation and Development
PDE	<i>Plano de Desenvolvimento da Escola</i> (Brazil)
PISA	Program for International Student Assessment
SBM	School-Based Management
SDP	School Development Program
TIMSS	Trends in International Mathematics and Science Study
TL	Turkish lira

Executive Summary

As Turkey explores how to further improve education quality, there is growing interest from policy makers in increasing school autonomy. Providing more autonomy to local-level decision makers is referred to generally as School-Based Management. The Ministry of National Education (MoNE) requested the World Bank to undertake an analysis of School-Based Management (SBM) reforms globally and explore options for Turkey. In response, this policy note begins by presenting some of the concepts around SBM, provides a summary of international experience, describes Turkey's experience in this area to date and concludes with some broad policy options for Turkey.

Policy makers throughout the world have been looking to SBM as a mechanism for increasing the quality of education. Most developed countries whose students perform well on international achievement tests give their local authorities and schools substantial autonomy over adapting and implementing educational content, allocating and managing resources, or both (World Bank 2009). There is now a trend across the Organisation for Economic Co-operation and Development (OECD) countries, as well as in many developing countries towards increasing autonomy and encouraging responsiveness to local needs as a way of improving student performance. The potential benefits of SBM reforms include: a more effective use of resources as those in charge of decision making are more aware of pressing needs and challenges and a more open school environment because the community is involved in its management. This can lead to reduced grade repetition (retention) and dropout rates, and, in some cases, better learning outcomes (World Bank 2009). While rigorous evidence on the impacts of SBM is limited, the available evidence strongly suggests that a number of these important positive outcomes have been realized in education systems in a wide range of country settings. Yet Turkey has one of the most centralized school systems in the OECD. This suggests that an SBM reform in Turkey may prove fruitful as a mechanism for increasing both the quality and equity of education outcomes; areas in which Turkey has improved its performance greatly in recent years, but where much still remains to be done.

Five inter-related reforms are proposed for consideration in the Turkish context. *First, deepen budgetary autonomy.* Schools in Turkey, particularly elementary ones, may work better if they are given more autonomy in the planning and management of financial resources, similar to the current status of secondary schools, where principals are given full control over non-salary expenditures. *Second, improve financial equity through per-capita financing mechanisms.* This is a school funding formula that provides a way to increase financial equity in contrast with the current input-based financing system used in Turkey. Per-capita financing enables budget autonomy to be meaningful. *Third, strengthen the Education Management and Information System (EMIS).* A successful implementation of per-capita financing and accountability mechanisms requires the availability of data on education statistics and student performance through an effective EMIS. *Fourth, measure and report learning outcomes on a regular basis.* National student assessments would help government and citizens monitor student learning outcomes and maintain schools' accountability for their students' performance. Finally, *make schools accountable and implement moderate decentralization in decision-making.* One way to do this is by empowering and improving the capacity of the School-Parent Associations.

I. What is SBM? Exploring school autonomy and accountability

1. **SBM is based on the concept of decentralization.** A simple definition of SBM is the decentralization of authority from the central government to lower levels of government or schools (Bruns, Filmer and Patrinos 2011; Caldwell 2005). The idea is that people who have the most to gain or lose—namely students and parents—and those who know what is happening in the classroom and schools—teachers and principals—should have greater autonomy and accountability in the decision-making process in order to improve school performance. Responsibility for and decision-making authority over school operations change the school climate and can be transferred to principals, teachers, parents, and in some cases, students and community members (Gertler et al. 2007). If community members—usually parents of children enrolled in schools—are involved in schools’ decision-making processes, then they will have the incentives and, in some cases, the means to improve their children’s education.

2. **Accountability is a key concept underpinning successful SBM.** School autonomy goes hand-in-hand with school accountability. Accountability is achieved when actors depend on each other for checks and balances. Accountability is important because good education relies not only on physical inputs but also on having in place the right incentives to lead to better learning and education (Bruns, Filmer and Patrinos 2011). Good quality education can be ensured only if service providers are accountable to clients—parents and students—usually with goals associated with measurable student outcomes. SBM programs have evolved over time. School autonomy and accountability are seen now as tools to improve education quality, usually measured as student achievement, rather than as simply an end in themselves. Schools are accountable to parents and to the central government for performance, ultimately measured by students’ educational attainment (World Bank 2009).

3. **Having information available empowers stakeholders.** The effectiveness of SBM depends strongly on the accountability of the school towards the community as well as the pressure that the same community can exercise on the school. To better participate in SBM, communities need information and skills (Lawler 1986). Information on inputs (school budgets and curriculum) as well as students’ educational outcomes (enrollment, graduation rates, and achievement) can easily be made available. Local monitoring of the school budget and teacher performance by parents and school councils can result in better school outcomes and higher teacher effort, positively impacting student learning. Notwithstanding, making information available is not enough for positive results (Bruns, Filmer and Patrinos 2011). The effectiveness of school-based information relies on a number of factors, including how that information is disseminated. Parents should be able to understand the information and comparisons among schools should be straightforward. For example, many programs around the world have opted for easy to understand report cards with school information to disseminate to students and parents. Public reporting of results, via league tables as in England, or through an inspection agency as in the Netherlands, has been shown to spur fundamental changes in education practice and ultimately improvements in learning outcomes (Koning and van der Wiel, 2010; Bradley, Johnes and Millington 2001). SBM can improve learning and, at the same time, increase transparency in resource allocation and management. In fact, Program for International Student Assessment (PISA)

results show that in education systems where most schools disseminate achievement data, average student performance is higher, although marginally, than in those schools that have autonomy over resource allocation without accountability (OECD 2011). But implicit in these results is that accountability can only be effective to the extent that school principals know how, and have the means to, improve education service delivery.

4. **SBM offers several benefits.** The system of SBM outlined above has several potential benefits. First, SBM involves a more democratic system than that of traditional centralized administration as it goes beyond central government officials for education decisions and involves more actors, such as teachers and parents. Second, it relies on local actors who have first-hand knowledge of their situation and can thus better identify problems and solutions to improve education. Third, it is argued that SBM is less bureaucratic. For instance, actions can be taken faster if decision makers do not have to communicate all the way up to the central government to make a case. Fourth, there is stronger accountability under SBM. Schools are held accountable to parents, increasing their effectiveness. Fifth, there is greater resource mobilization: teachers and parents are more eager to contribute to schools when they are involved (De Grauwe 2004).

5. **But there may be disadvantages to SBM as well.** First, SBM is not a “quick fix” for education systems. Evidence from developed countries shows that it takes at least five years for SBM reforms to start enabling changes at the school level and around eight years to bring about any significant changes in student achievement (Bruns, Filmer and Patrinos 2011). Second, if accountability to the local and central level is weak, higher autonomy in the use of resources by the principal or the school board may not yield their more effective or efficient use. Without a supportive central government and adequate accountability mechanisms in place, SBM runs the risk of system disintegration and disparities (De Grauwe 2004). Third, decentralization may not work if imposed on local authorities without consultation. In many developing countries, the trend towards SBM has not been a result of internal debate, but rather the result of political imperatives whereby national governments are unable to finance basic public services. Such cases have been marked by the absence of participation of local authorities or communities in the decision-making process regarding SBM. Fourth, in certain economies there may be a problem of untrained school staff who are unequipped to undertake the added responsibilities under SBM. Fifth, school principals and teachers may become overloaded with administrative and managerial work, crowding out time for pedagogy leadership, training, and preparation. In general capacity challenges are more likely to affect the most disadvantaged schools in terms of human or financial capital, so appropriate capacity building strategies to mitigate against this risk are important. Sixth, community involvement is complex and can lead to elites using school boards to create exclusionary policies. For instance, New Zealand and Australia, where SBM reforms are extensive, show a lack of minority representation on their school boards.

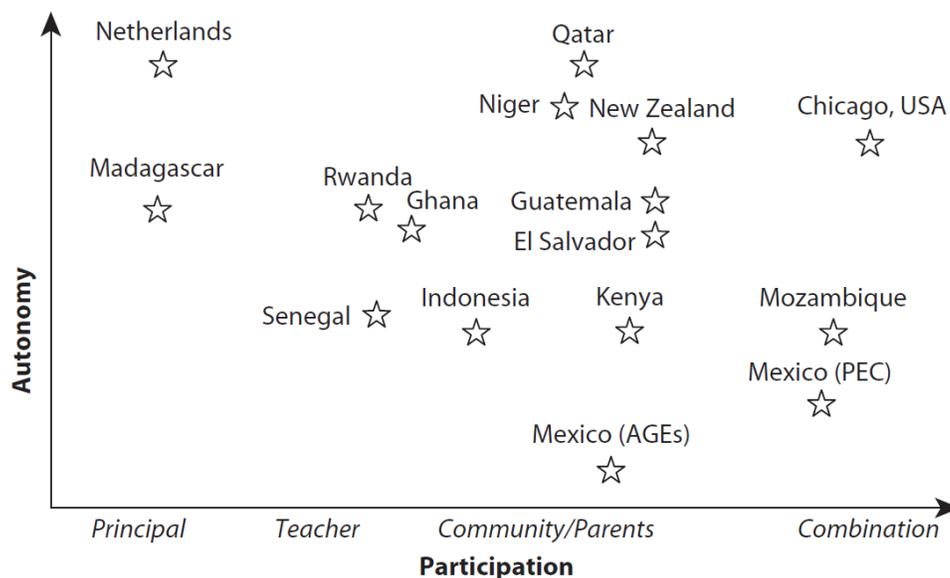
6. **SBM can take many forms.** SBM reforms are influenced by reformers’ objectives, national policies, and social contexts, which explains the large variation in SBM programs around the world (World Bank 2009). SBM policies are implemented within a larger national education framework and reforms must be conceived within this context. SBM policies also rely on the local level context and on

the support of school staff and local community members (Caldwell 2005). SBM programs lie on a continuum based on the degree to which authority is devolved to a school (World Bank 2009). Two key dimensions in the devolution of decision making are: the degree of the autonomy being devolved (the “what”); and the people to whom decision-making authority is devolved (the “who”). In reality, there are multiple combinations of these two dimensions making almost every SBM reform unique.

7. **SBM programs can grant school-level actors the power to make decisions regarding a number of resources (human, material, and financial).** The “what” that can be devolved includes: budget allocations; school staff management—like hiring, promotion, and firing of teachers and other school staff; curriculum development; procurement of textbooks and other educational materials; infrastructure improvement; and monitoring and evaluation of teacher performance and student learning outcomes (Gertler, Patrinos and Rubio-Codina 2007; Caldwell 2005).

8. **Approaches to SBM are also based on “who” gets the decision-making power.** Four types of common arrangements exist for SBM. First, *administrative-control SBM* relies on devolving authority to school principals to make schools more accountable to the central district or board office. Administrative-control SBM cannot exist in a pure form since principals cannot act in isolation. This type of SBM relies on the assumption that it is more efficient to give school principals authority over decision areas such as budget, personnel, and curriculum, because the incentives are set so that principals use resources efficiently. Principals can consult informally with teachers, parents, students, or community representatives. Usually, site councils are formed to provide principals with advice (Leithwood and Menzies 1998). Second, *professional-control* refers to forms of SBM where teachers hold the main decision-making authority and use their knowledge of the school and students to make decisions about the budget, curriculum, and in some circumstances, personnel. This model of SBM assumes that teachers are the best informed to take such decisions because they are closest to students. Professional-control SBM also assumes that involving teachers in decision making will make them more likely to contribute to the implementation of policies and is presumed to increase teacher performance. Third, *community-control SBM* devolves authority to parents or the community through a board for decision-making. In this form of SBM, teachers and principals are assumed to become more responsive to parents and the curricula more directly reflects the preferences of parents and the local community. Fourth, in *balanced-control SBM*, decision-making authority is shared by parents and teachers and seeks to take advantage of teachers’ knowledge of the school to improve school management and to make schools more accountable to parents (Leithwood and Menzies 1998). In practice, these distinctions do not hold, and real models of SBM are a mixture of the four arrangements. Often, decision making is devolved to a formal legal entity like a school council or committee that includes teachers and principals. Most forms of SBM include community representatives on their committee, but their role is superficial so that they do not interfere with principals’ and teachers’ decisions. To ensure effectiveness, school staff need community participation and vice versa. Figure 1 highlights the link between participation (who gets the decision-making authority) and autonomy (how much decision-making power they have) in various countries with SBM initiatives.

Figure 1: The autonomy-participation nexus in SBM, selected countries



Source: World Bank 2009.

9. **SBM reforms range along a continuum from weak to strong — although this is not a determinant of good or bad SBM programs.** Weak SBM reforms are those at one end of the spectrum, where decision-making authority is devolved to the municipal or regional level and schools have very limited autonomy (World Bank 2009). For example, this holds in cases where school decision making is concerned only with instructional methods or planning for school improvement, or where the school only plays an advisory role. An example of a weak SBM system is Mexico's *Apoyo a la Gestion Escolar* program (AGE, Support to School Management), which has parent councils with limited autonomy. The parent councils receive grants to spend on a needed educational activity, but the spending is primarily limited to improvements in school infrastructure. Moderate SBM initiatives include school councils that have an advisory role or have limited autonomy in the school's decision-making process. Moderate types of SBM reforms include examples where school councils can advise principals on various staffing and budgeting issues but do not have legal authority to manage the budget themselves, such as in Edmonton, Canada (World Bank 2009, see case study in next section). Strong SBM reforms grant school councils a high degree of autonomy over the school's budget and personnel management. In Guatemala, the PRONADE program gives community school councils the power to pay staff salaries; hire, fire, and monitor staff; decide the school schedule and calendar; maintain school facilities; and oversee the budget. Very strong types of SBM systems comprise education systems where parents have complete choice and control over public education and all decisions concerning operational, financial, and educational management of schools are in the hands of school councils or administrators. For example, in the Netherlands, parents can create new schools that cater to their cultural or religious needs (World Bank 2009).

10. **For SBM reforms to succeed, basic preconditions need to be met.** Schools need to have a minimum amount of resources and competent teachers. Autonomy measures should be implemented

alongside accountability mechanisms. As discussed above, information is critical for helping measure the success of SBM policies as well as to make within-country and cross-country comparisons as a basis for exploring ways to improve SBM policies. Also, because all education systems are not equally equipped, it is not advisable for education systems to suddenly lose support from the central government, as this may lead to SBM reform failure. In fact, the central government plays an important role in SBM as it needs to develop a national framework within which the reforms can work and the central government remains the key player in redressing inequalities within the education system. Similarly, local government offices have an important role to play (Fullan and Watson 1999). Finally, school staff and principals need to be adequately prepared to undertake a new role with many more administrative and financial responsibilities. Overall, there should be a balance amongst the stakeholders between accountability, advice, control, and support.

II. What is the international evidence from SBM? What works, what doesn't, and why?

11. **Rigorous evidence of the effect of SBM on educational outcomes is accumulating.** Overall, there is a positive relationship between school autonomy and educational attainment, but the evidence is more mixed with respect to achievement. The evidence available from international experience finds positive effects of SBM reforms on educational variables, such as reduced grade repetition and dropouts and improved attendance rates. The available evidence on the effect of SBM reforms on student achievement (usually measured by test scores) is more mixed. Measuring the effectiveness of SBM poses several challenges because it takes time to form parent councils, to give them legal authority to hold schools accountable, and for them to exercise this authority effectively; thus, in the short term, SBM policies can negatively influence education outcomes as the school system adjusts. Moreover, school learning is a cumulative process and the school body, including students, must be exposed to the reform for a longer period of time to enjoy its benefits.

12. **SBM generally has had a positive impact on reducing repetition rates, failure rates, dropout rates, and school environment.** But results vary for developed and developing countries. For instance, student enrollment increased in El Salvador after its SBM reform, the *Education and Community Participation* (EDUCO) model. It is worth noting that SBM in El Salvador got implemented after the war was over and used as a way to expand school availability in remote rural areas. The EDUCO program was implemented to disperse central government funding to the community. The elected community associations in El Salvador implemented education policies and managed the hiring and firing of teachers. Studies on EDUCO show that attending an EDUCO school increased the probability of a student staying in school by 64 percent compared to a student who attended a traditional, non-EDUCO school (Jimenez and Sawada 2003). Community participation was a key component of the EDUCO model, contributing to the positive impacts on education outcomes. Studies in El Salvador also found that teachers at EDUCO schools spent more hours in parent-teacher meetings than teachers in traditional schools, perhaps reflecting that teachers are more accountable to parents in SBM model schools (Sawada 1999). Parents of children who attended EDUCO schools were also more likely to visit

the classroom, which may reflect increased parental investment and involvement in the local school. Other cases of positive outcomes include Brazil and Mexico. After Brazil implemented financial autonomy, through the *Plano de Desenvolvimento da Escola* program, studies found that this SBM reform had a positive effect on grade repetition rates (Paes de Barros and Mendonca 1998). In Mexico, two years after SBM reforms were implemented in rural areas, studies found positive impacts on grade repetition and failure rates (Gertler, Patrinos and Rubio-Codina 2007).

13. **Nonetheless, SBM reforms show more mixed impacts on test scores.** In the United Kingdom SBM had a significant positive impact on test scores (Clark 2009) as it did in Nicaragua (Arcia, Porta, Pallais and Laguna 2004; King and Ozler 1998). But in El Salvador, studies found no statistically significant difference between the math or language test scores of third graders in EDUCO schools compared to students who attended non-EDUCO schools. In Guatemala, studies found higher student achievement on reading test scores for students attending SBM schools compared to students in traditional schools, but interestingly, teachers at SBM schools were three times more likely to resign (Di Gropello 2006). Nepal transferred school management of financial and personnel decisions from the central government to community committees, but there is no evidence of improved learning outcomes. Research from the United States suggests that, in general, an SBM reform must have been in operation for about 8 years before test score improvements can be seen, although over this length of time the impacts of SBM were large (Borman et al. 2003; Cook 2007). In Brazil, after 11 years of SBM implementation, there have been no test score improvements (Paes de Barros and Mendonca 1998).

International case studies

14. **This section provides an in-depth look at three international case studies.** These cases were selected to offer a diverse look at the type of SBM models implemented around the world in terms of design as well as success.

Case Study of Edmonton Public School District (Canada)

15. **Edmonton Public School District is a good example of a successfully implemented SBM reform.** Located in an urban area with over 80,000 students, Edmonton Public School District is the second largest district in Alberta, Canada (Wylie 2014). Superintendent Michael Strembitsky conducted a pilot program in seven Edmonton schools before implementing the SBM reform district-wide in the late 1970s. The pilot schools had a budget for staff, supplies, equipment, and services. Overall, the pilot schools had discretion over 80 percent of their resources compared to 2 percent in the rest of the public schools (O'Neil and Strembitsky 1995). Strembitsky's motivation was to give principals control over their schools' budgets, staff, and resources within a district policy framework. Principals had more authority to make school-based decisions, but as district employees they could not work in isolation (Wylie 2014). The pilots showed that schools were accountable to parents, students, and the district superintendent, who in turn was accountable to the district's board of trustees (Wylie 2014). Interconnecting the various stakeholders increased accountability, collaboration, and motivation. Even though a principal held the power to make decisions for his or her school, the principal had to involve teachers in the planning process to foster a sense of ownership over the school's future.

16. **The district makes decisions about the allocation of funding to schools while schools make decisions on how to use the resources** (Delaney 1995). Edmonton Public School District uses a weighted funding formula to calculate how much money schools receive. Principals have authority over 80 percent of their schools' budgets and can keep any savings for the following year (The Heritage Foundation 2006). Schools receive funding based on enrollment figures plus any additional money based on student characteristics. For example, a school that has students with special needs receives additional funding to provide special education classes. Parents can choose which school to send their children to and the funding follows the students, so schools are motivated to offer special education programs to attract students (The Heritage Foundation 2006). In addition, since schools have control over their funds, they can pay for consulting and professional development services within or outside of the school district to help with decision-making responsibilities. Schools can also spend their discretionary funding on maintenance (Wohlsletter and Mohrman 1994).

17. **Edmonton Public School District's program can be labeled as "moderate."** In Edmonton, the school councils are advisory rather than managerial (i.e., whereby a school council can hire and fire teachers). The school councils comprise the principal, at least one teacher, and at least one community representative who can be a parent (Alberta Education 1999). The school councils play an advisory role and can raise money for the school. School council representatives are not elected by parents, and therefore some principals do not see the council as representative of their local community (Wylie 2014). Principals are the primary decision makers at the school level and are legally accountable even though they can ask for staff input, and the district conducts annual satisfaction surveys amongst parents, students, and school staff (O'Neil and Strembitsky 1995). The district superintendent also reviews school principals every three years. Principals in Edmonton Public School District cannot hire and fire teachers since the district signs contracts with teachers, but principals can choose which teachers they want in their schools. The district central office oversees curriculum although principals can provide input and help the district develop relevant policies (Wylie 2014). The district also publishes data on schools' performance and academic achievement so parents can use the information to choose a school (The Heritage Foundation 2006).

18. The first two years of the SBM reform implementation were difficult while the district and schools adjusted. This supports evidence that SBM reforms take time to take effect since school climates have to change first. Strembitsky emphasizes that SBM reforms are not about whether or not the district decentralizes but about what should and should not be decentralized (O'Neil and Strembitsky 1995). Edmonton Public School District's SBM programs work in conjunction with an open enrollment policy that allows parents to choose their children's school, one potential reason for the program's success (Government Accountability Office 1994).

Case Study of Bulgaria

19. **Bulgaria's SBM reforms started in 1998.** At the time, the government launched a small pilot program (Delegated School Budget System) that decentralized financial decision making to 100 schools in four municipalities. The purpose was to improve efficiency in the use of resources by changing the

incentives for principals. The pilot schools received lump-sum budgets for maintenance costs through a formula arrangement based on the number of students. School principals had full autonomy in the use of school budgets for maintenance purposes. Pilot schools could also, with the supervision of the funding authority (municipality), manage their property, rent unused facilities, and use the rental income. Further, schools could also introduce fee-based activities and provide external services. However, the pilot was limited to the budget for non-personnel expenditures because the conditions of teacher and non-teacher staff employment were determined at the national level. Further, devolution of authority to the principal came without appropriate accountability mechanisms. School principals were not held accountable to parents or municipal authorities for the efficient use of resources or for learning outcomes.

20. **In 2000, the pilot was extended nationwide.** However, local governments were unwilling to fully let go decision making to the schools as there was no accountability mechanism for school principals, who were hired by the Ministry of Education, Youth, and Science and were thus accountable to national and not to the local government. A comprehensive framework for fiscal decentralization was launched in 2001 and education funding was made more transparent. To make the education system more efficient, a new per-student service cost standard for non-staff operating costs provided incentives to increase average class size, and the per-student cost standard for school staffing provided incentives for schools with classroom sizes of less than 16 students to reduce staff. Although the new system more equally distributed transfers across municipalities, it nonetheless created inequalities across schools within a municipality because funds could only be transferred between schools of the same type where some types were very well funded and others had deficits.

21. **In 2007, the central government introduced further decentralization reforms for primary and secondary schools to increase the system's efficiency and schools' autonomy.** School principals gained more control over the school budget, the hiring and firing of teachers, pedagogical decisions, class size, and the number of classes. The 2007 reform eased regulations on staffing, teachers' workload, and class sizes; increased teacher salaries; and introduced a differentiated pay scale for teachers (World Bank 2010). However, decision making was transferred from the municipalities to the schools without accountability mechanisms in place. Principals are not accountable to municipalities or parents for the use of resources or for student achievement. In fact, the reform did not empower parents. There are school councils that can fund-raise, but they have no legal authority to participate in the budget decision-making process. Further, while assessments are used to track performance and inform some administrative and pedagogical adjustments, these data are only known to the central and regional authorities and are not disclosed to the public. Comparisons over time or with other schools are neither mandated nor made public or disseminated. Thus, there is plenty of room to improve the accountability mechanisms in Bulgaria.

22. **SBM reforms have increased the efficiency of Bulgaria's education system, but have not enhanced many educational outcomes.** The per-capita financing reform implemented at the same time as the autonomy reform led to more school closures at the expense of higher dropout rates. Because the funding received by schools is based on the number of students enrolled, smaller schools tend to

close, increasing temporarily dropout rates. Bulgaria's school-age population is declining and more schools have closed, which has exacerbated school dropout rates (Schady et al. 2009). This reflects of greater efficiency because fewer teachers are needed to provide the same amount of educational coverage; the government saves money on salaries, training, and other investments. The Government of Bulgaria does classify very small schools in remote areas as protected schools, particularly for the Roma population, so that they are not closed. The impact of the reforms on school productivity is more mixed; there is currently no conclusive evidence that SBM reforms in Bulgaria have improved students' overall learning and achievement outcomes. Analysis for Bulgaria using methods of decomposition on 2012 PISA data shows that autonomy in resources has a small positive effect on PISA math scores in urban areas, but not in rural ones (Gortazar, Herrera-Sosa and Kutner 2014). Educational quality differs across schools and municipalities, a major issue that the Government of Bulgaria needs to address for better educational outcomes.

Case Study of Brazil

23. **Brazil's SBM initiative, *Plano de Desenvolvimento da Escola***, was implemented in 1998 to make schools more responsive to students and the community (World Bank 2009). Policymakers wanted to transform schools from rigid bureaucracies to dynamic environments to improve learning (Amaral Sobrihnhho & de Almeida Neto, 2001). The program was administered and financed by the World Bank, *Fundescola I* Project. The schools in the program identified their most serious problems and developed plans for addressing their needs. The project then provided funding to schools to support these goals. The project began with 401 schools in nine states and expanded to 5,600 schools in 2001 (Carnoy et al. 2008). The total amount of investment exceeded 1 million dollars. Most schools cited problems with academic achievement, grade failure, and dropout rates as priorities for intervention. Schools filled out a questionnaire to evaluate themselves and to develop a school plan that addressed two or three "efficiency factors" (Participative Management, School Climate, Parental Involvement, Human Resource Development), one of which had to be about effective teaching and learning. The government specified detailed pre-requisites for schools to be considered operational, and thus many of the funds were used to improve their infrastructure. In fact, schools spent around 30 percent of the PDE funds in buying electronic equipment, learning and teaching materials, and spending on teacher training (Carnoy et al. 2008).

24. **The program had an unanticipated demand on the part of local schools and municipal governments.** The program was well implemented and well received among schools and state secretaries of education. Schools developed their School Development Plans and many more of the original number of schools received resources to implement their plans. Schools with PDEs appeared to provide a positive learning environment. Teachers and principals reported that the process of preparing a School Development Plan helped them identify problems and use resources more efficiently. Teachers also seemed to have a better opinion of their schools' physical conditions, school improvements and relations with the principal and students than teachers in non-PDE schools (Carnoy et al. 2008). Parents reported preferring sending their children to PED schools, and students recognized positive changes in their schools and more involvement of their parents in their school matters.

25. **Available evaluations show mixed educational results, while the PDE improved passing rates, researchers have not found gains in student achievement** (Carnoy et al. 2008). Further, researchers have also found a positive relationship between PDE spending on teaching and learning materials and student gains for schools in the programs. Measuring gains in student achievement is tricky, as it requires an adequate comparison (control) group. Some of the more robust evaluations used data from achievement tests that measured Mathematics and Portuguese of a cohort of students in their transition between 4th and 6th grade. A cohort of students was tested at four points in time: April 1999, November 1999, November 2000, and November 2001. In addition to student information, data included detailed information on schools. Researchers tried to match the schools that participated in the program with schools of similar characteristics (Carnoy et al. 2008). Authors found no gains in achievement. This result is not very surprising due to the large percentage of funds used for electronic material. These results also suggest that schools were so deficient in terms of educational materials, that they put their money towards them; rather than for policies that focused on Portuguese or Mathematics. However, the resources were still insufficient to have an impact on learning.

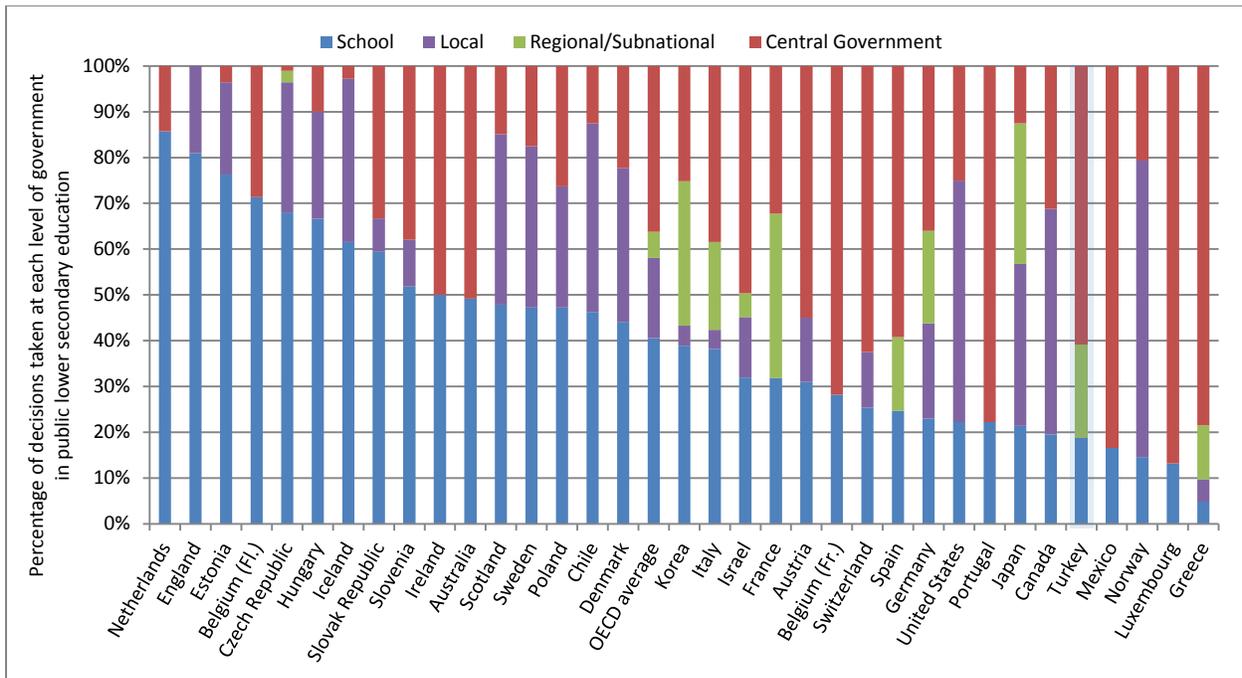
III. What has been Turkey's experience with SBM to date?

26. **Turkey has one of the most centralized education systems in the OECD** (Figure 2). With the exception of Mexico, Greece and a few smaller countries Turkey has the lowest degree of school autonomy across the OECD. Turkey has a national framework that places decision-making power at the central level. MoNE is responsible for Turkey's educational services under the framework of the Basic Law of National Education (UNESCO 2010). Since 1998, the central government has controlled decisions about resources, personnel management, and curriculum—including which textbooks to use and which subjects to teach (Gershberg 2005). Turkey is implementing education reforms to improve the equity and quality of education and is at the stage where reforms in school autonomy and accountability could yield significant returns.

27. **Turkey's Minister of Education, as the top-level official, must approve educational programs before they can be implemented (IBE 2010)**. Turkey's education system comprises central, provincial, and overseas institutions (IBE 2010). At the central level, multiple units and offices develop policy and monitor Turkey's education system.¹ MoNE's Provincial and Sub-Provincial Directorates oversee provincial education issues (IBE 2010). The governor appoints school principals through the sub-provincial director's office. School principals in Turkey are legally responsible for the administration, evaluation, and development of their schools. Turkish schools have a Teachers' Council, a Students' Council, and a School-Parent Association, which can support school administration and raise school funds.

¹ For example, the Board of Education is responsible for the curriculum and produces educational materials and research (IBE 2010). The National Council of Education is the top decision-making body of the MoNE; its mission is to develop and improve Turkey's educational system (IBE 2010).

Figure 2: School Autonomy, OECD countries



Source: OECD 2012

School autonomy in budget planning and approval²

28. **Overall, Turkey's schools exist in a highly centralized financial hierarchy, with limited financial autonomy.** Financial autonomy is defined as school-level actors having the authority to plan and manage school budgets, resources, and personnel. In Turkey, school funding is input-based and highly centralized. Principals in primary schools receive nearly all resources directly from the MoNE or from the Special Provincial Administration. The MoNE allocates recurrent expenditures to Special Provincial Administrations, which have to add 20 percent of their budget to the primary education budget in collaboration with Provincial Directorates of National Education. Some recent changes have seen the closure of a large number of Special Provincial Administrations and as result a strengthened role for Provincial/District Education Directorates. This has brought decisions on school budgets to a lower-level in those provinces. School stakeholders do not have the authority to make financial decisions. Primary school budgets cover funding for basic supplies, fuel, electricity, and water, but schools do not receive the funds directly nor are they allowed discretionary control over them as the central government controls primary school budgets and salaries (Köse and Şaşmaz 2012). However, primary school principals are able to manage parent-contributed funds for non-salary activities. Parents' funds are an important resource because schools can raise money through School-Parent Associations. In some cases, parents contribute up to 40 percent of the recurrent expenditures of public schools—a

² The analysis in this report refers to schools that receive public financing. This is the vast majority of schools in Turkey (97% of primary schools and 78% of general secondary schools in the academic year 2012/2013). An analysis of privately financed schools is beyond the scope of this report.

substantial component of their operational budget (World Bank, 2012). However, parents do not have official voice or oversight authority in the use of those funds. Also, parent and private donations are highly unequal across schools, since they depend on the social and economic conditions of households, creating disparities in school quality. Table 1 highlights this potential inequality based on the results from a small field study implemented by MoNE and the Ministry of Development. For secondary schools, the MoNE transfers all operational funds directly to the school and principals have more autonomy over schools' operational budgets. Principals manage all operational funds from public and private sources, while all teacher salaries are managed centrally. Nevertheless, secondary schools in Turkey can only use central government funds for pre-determined purposes.

29. For secondary schools, the MoNE transfers all operational funds directly to the school and principals have more autonomy over schools' operational budgets. Principals manage all operational funds from public and private sources, while all teacher salaries are managed centrally. Nevertheless, secondary schools in Turkey can only use central government funds for pre-determined purposes. As a result of these arrangements Turkey's decisions about resource management are highly centralized at the central and regional levels, far away from schools, in marked contrast with other OECD countries (Figure 3).

Table 1: Per-student school-family council revenues across primary schools in Turkey

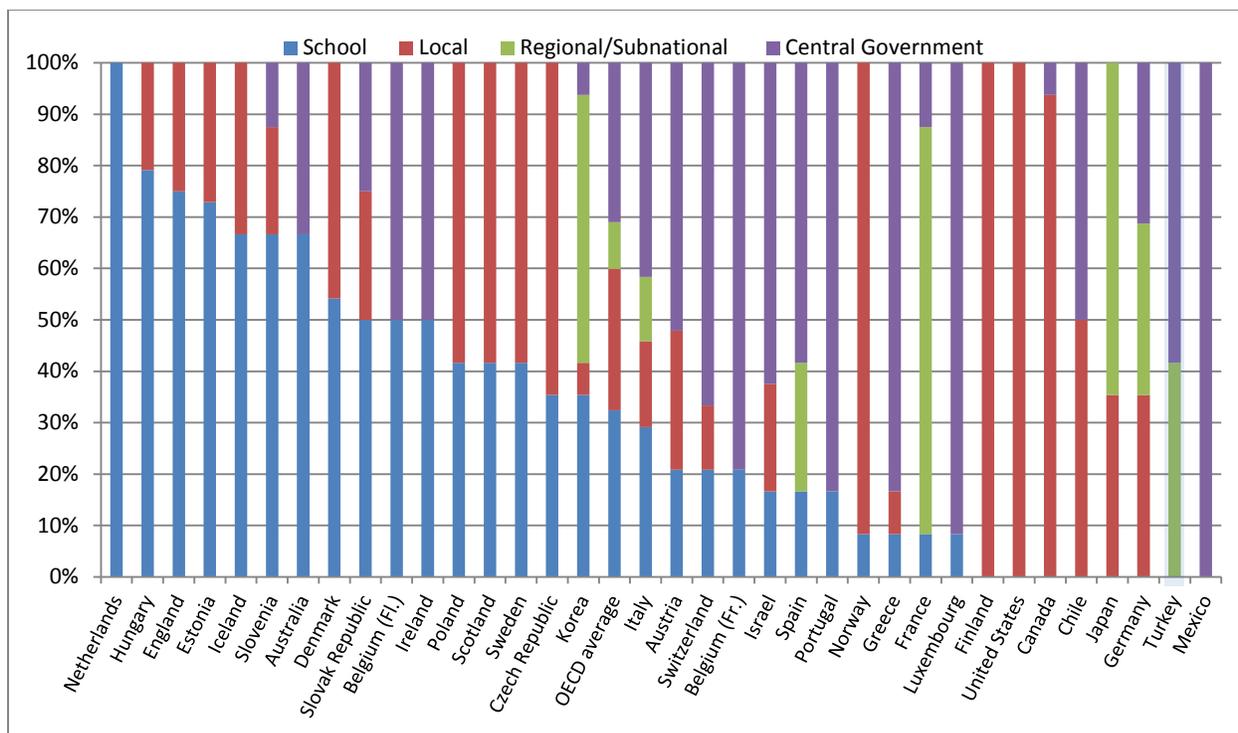
	Primary school (PS)				
	Çankaya PS	Atatürk PS (Altındağ)	Çalışkanlar PS (Çin Çin neighborhood)	Türkan-Azmi Köksoy PS (Batıkent)	Konutkent PS
School size (# of classrooms)	24	10	12	24	16
# of employees	11	1	4	4	6
School-family council revenues (approx.)	239,000 TL	28,000 TL	0	60,000 TL	70,000 TL
# of students	1,100	516	620	600	400
School-family union revenue per student	217.2 TL	54.2 TL	0 TL	100 TL	175 TL

Source: Field study conducted jointly by MoNE and Ministry of Development: Overview of Budgets of Selected Primary Schools, 2011-2012.

30. **Turkey's approach to education finance is input-based, while most European countries use per-capita financing formulas to ensure efficient and equitable allocation of public funding for education.** Per-capita financing (as opposed to an input-based system) brings efficiency gains in education systems because funding depends on the number of students enrolled, placing incentives for schools to reduce the number of classes, having larger class sizes, and for local governments to close schools where required. More advanced systems provide performance incentives to teachers based on value-added as measured by student attainment. Further, school principals limit their staff based on their budget. Per-capita financing improves equity as well. Local governments and schools with similar characteristics are funded similarly and schools with differing characteristics and with a different student body can be funded differently. For example, the funding formula adds weight for students with special needs, minority languages, socioeconomic disadvantages, or those in isolated locations. Overall,

the funding formula makes education financing more transparent because it shows how much funding local governments and schools get; it also improves accountability, because school principals are responsible for spending the school budget (World Bank 2013).

Figure 3: Levels of government at which school resource management decisions are taken, OECD



Source: OECD 2012.

School autonomy in personnel management

31. **Schools' autonomy in personnel management is greatly limited in Turkey.** The MoNE controls personnel expenditures and appoints, deploys, and fires teachers. Teachers are appointed as civil servants and deployed under centralized rules by the MoNE. Currently, teachers are paid by the central government and placed in schools based on a civil service examination. Teacher wages and benefits are determined by the central government rather than the school (IBE 2010). Schools do not have the legal authority to hire and fire teachers (or to provide incentives to attract good teachers) and school councils do not have the authority to fire the school principal. Hiring, promoting, and firing teachers are key decisions that principals make under a school-based personnel management system.

School-Parent Associations

32. **Turkey has School-Parent Associations, but their participation in school decisions is limited.** In 2005, School-Parent Associations were created to represent parents within the school system. School-Parent Associations are important because they raise funds to cover recurrent expenditures when central government funds fall short. These associations can accept cash and in-kind donations on behalf

of the school, organize social and cultural events, and rent out school facilities to generate revenue for the school. They can pay for up to 40 percent of a school's recurrent expenditures. The funds can be used to buy supplies or services in addition to helping pay for disadvantaged students to attend school. Central government funding is often insufficient, so it is vital that School-Parent Associations raise money for school supplies, infrastructure repairs, cleaning services, and non-school staff (Köse and Şaşmaz 2012).

33. Schools decide the extent of the School-Parent Association's involvement because these associations are not regulated. Principals maintain control over how to spend the funds and parents do not have legal authority to manage these funds. Parents can contribute money to the education system but do not have significant influence or ability to hold the school accountable. Even with these limitations, School-Parent Associations are a useful channel for parent participation, especially important as parents have otherwise limited involvement in the education system.

School and student assessment

34. A student assessment system is not yet in place in Turkey, although there are ongoing efforts to establish one. School and student assessments are important accountability measures to monitor the effectiveness of improving student outcomes, one of the primary objectives of SBM reforms. Turkey participates in the Trends in International Mathematics and Science Study (TIMSS) and PISA, but since Turkey is closer to an input-driven educational system, neither the MoNE nor provincial authorities are required to produce school or student performance reports and schools do not use or conduct assessments to make pedagogical or operational decisions. MoNE is planning to move in this direction with the establishment of a National Education Quality Framework (currently pending approval) under the remit of a new department for Quality Development. This would support the development of an education quality index for each school. In Turkey, student testing is limited to high-stake entrance exams to secondary (TEOG or Temel Eğitimden Ortaöğretime Geçiş) and higher education (LYS, Lisans Yerleştirme Sınavı), and results are used to screen students rather than to enable school or teacher accountability. An issue with the current system is that no formal channel exists for informing parents or the broader community about school performance, although the score that a student needs to achieve in TEOG to enter each school is made available, providing some limited information on differences in quality across schools. Nevertheless, schools are relatively unaccountable to parents. A regular student assessment system would help to compare schools and would help schools track student achievement. Parents would be able to choose a better school for their children by opting out of low-performing schools, increasing demand for better-performing schools. In turn this would incentivize poor-performing schools to improve.

Turkey's School Development Program grants

35. Turkey had a positive experience with elements of school-based management under the School Development Program. The MoNE implemented a pilot School Development Program (SDP) between 2010 and 2012 with financial support from the World Bank. Its purpose was to develop "students' learning environments in schools, in the districts most affected by the economic crisis and

where enrollment rates were low” (Köse and Şaşmaz 2012). MoNE representation at the sub-province level distributed one-time grants to selected primary and secondary schools in sub-provinces where enrollment rates were less than 90 percent. The SDP program had schools and sub-provincial directorates work as joint decision makers. The targeted schools had control over how to spend the funding in accordance with the project’s purpose, but the sub-provincial directorates approved the schools’ development plans before money was distributed. Schools could spend the grants on goods, services, or minor repairs.

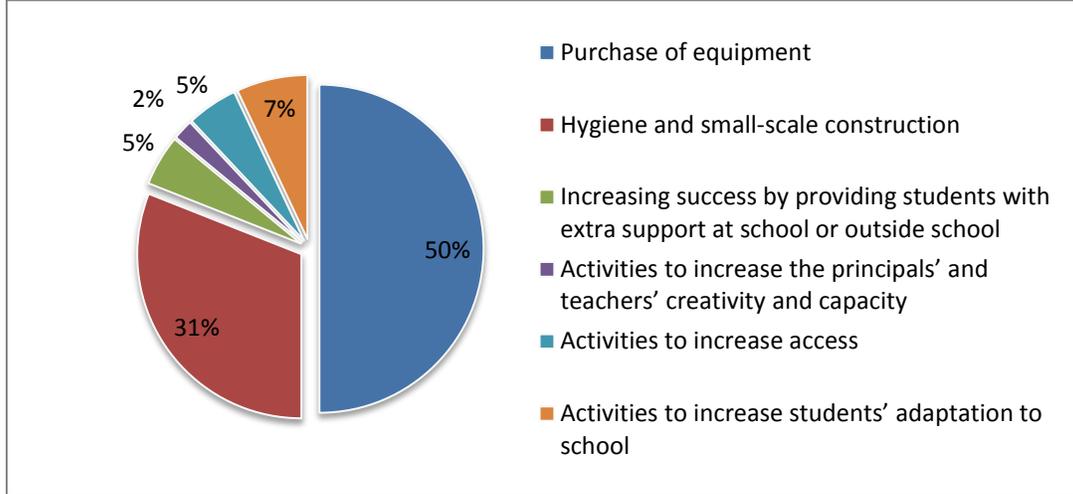
Table 2: Number of SDP grant-receiving districts and schools in Turkey, 2012

	SDP Plan	SDP Realization
Number of provinces	25	27
Number of districts	46	60
Total amount of grants allocated	€24,000,000	€31,595,170
Total number of recipient schools/institutions	2,710	3,671
Total number of recipient schools in basic education (pre-primary/ primary)	2,552	3,488
Total number of recipient schools in secondary education	158	175
Schools of DG for Secondary Education		131
Schools of DG for Religious Education		13
Schools of DG for Vocational and Technical Education		31
Total number of recipient informal education centers		8

Source: (Köse and Şaşmaz 2012).

36. **An assessment of the SDP found funds were used for relevant purposes.** An assessment concluded that 81 percent of the SDP grants were used to fund participating schools’ basic needs. Over 50 percent of the grants were used to buy equipment such as computers, furniture, and laboratory materials, while 31 percent of the grants were used for hygiene facilities and small-scale construction work. Most of the schools that used the grants for equipment bought technological equipment. Some schools used the money to buy goods and services to prepare students for the secondary school entrance exam.

Figure 4: Allocation of SDP grant expenditures in 60 Turkish sub-provinces

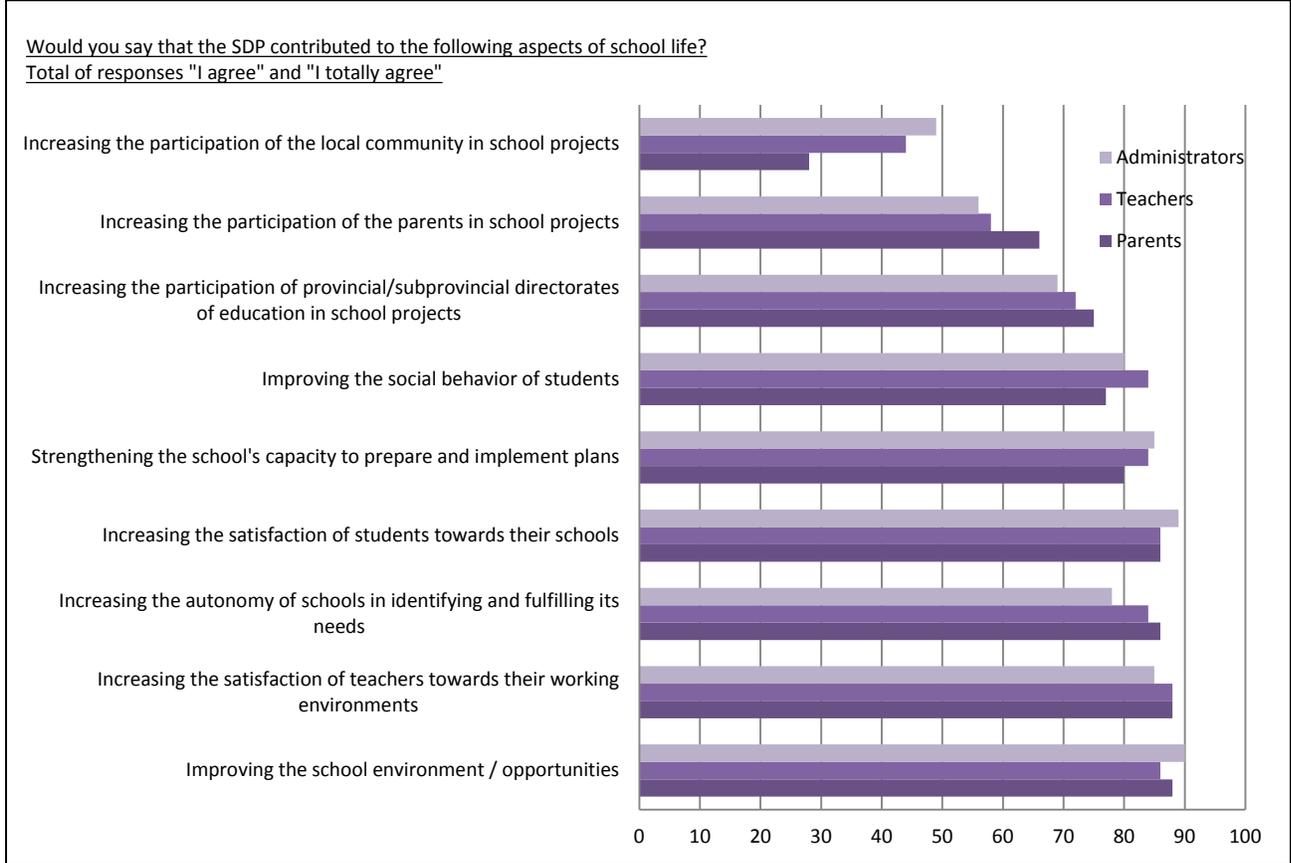


Source: (Köse and Şaşmaz 2012).

37. **The SDP was an important experience for Turkey, because it set a precedent for primary schools to have discretionary control over funds.** It may also be the first school-based management project in Turkey. The assessment interviewed beneficiaries and reported that teachers and students at schools that received SDP grants overwhelmingly agreed that the grants had improved their school environment. Communication also increased between schools and sub-provincial directorates, and relationships between stakeholders improved (Köse and Şaşmaz 2012).

38. Family and community participation in the education system, and the program indeed showed that there is great benefit from involving community stakeholders in the school management decision-making process. At the same time, the SDP was a weak SBM initiative because sub-provincial directorates approved school development plans prior to the distribution of funds. Nonetheless, the program is a positive example of a decentralization initiative because primary schools do not normally receive or use any public funds directly and secondary schools can only use public funding for pre-specified purposes. The SDP program also promoted the idea that school development programs should be based on needs assessments, and that monitoring and evaluation of school spending should be used and developed in advance. Finally, almost all parents, teachers, and administrators thought that the program contributed to an improved school environment and increased satisfaction with teachers and schools. The pilot did not lead to more participation of the local community, however, presumably because of the role of the provincial directorates (Figure 5).

Figure 5: Beneficiaries' perceptions of the SDP's contribution to aspects of school life in Turkey



Source: ERI 2012.

IV. Options for Turkey going forward

39. **Turkey's quality of education has improved significantly since 2003.** Turkey has demonstrated significant and consistent improvements in PISA reading, science, and mathematics scores since 2003. Overall, Turkey's performance on PISA 2012 is consistent with that expected given Turkey's GDP per capita. Moreover, this improvement happened alongside a significant expansion in access to education, supported by increased financing. This has also been accompanied by a reduction in the inequality of outcomes. Since 2003, inequality of outcomes in Turkey has decreased for all three PISA disciplines.³ In particular, in reading and science, while inequality was at similar levels to the OECD average in 2003, it is now at a lower level, and can be compared with top performers like Poland or Korea. Regarding Math, inequality of outcomes has also decreased significantly and is now close to the OECD average. This

³ Measured as the standard deviation of PISA scores.

progress is important, reflecting that secondary education in Turkey, now of higher quality, is being focused on a broader group of students.

40. Yet Turkey still needs to promote education reforms aimed at improving education quality.

The improvements in education outcomes have led to a substantial decrease in the share of illiterate and innumerate students since 2003 (World Bank 2013). Yet, on this measure Turkey still performs well below the Europe and Central Asia (ECA) and OECD country averages. SBM can increase demand for higher-quality education and ensure that schools provide children with an education that satisfies local priorities and needs. This note provides evidence that when local stakeholders have the authority to make school-level decisions, they are more satisfied with the school system. Given the large diversity of SBM reforms, Turkey should craft its own autonomy and accountability policy based on its national framework and priorities. In the next few paragraphs, we propose a few areas for “moderate” reform taking this context into account. We recognize this would not address all of Turkey’s constraints to improved education quality, but as a package these reforms would nevertheless make an important contribution to driving improvements in educational outcomes in the country. Broadly, the recommendation is to decentralize more decision-making to the school level including budget and improving accountability mechanisms. Turkey can always consider implementing more aggressive school-based management reforms if considered appropriate. Finally, while some of the proposed actions below are related to school-based management, others are broader and would benefit school-based management policies as well as the education system in general.

41. First, deepen budgetary autonomy. Schools in Turkey, particularly elementary ones, may work better if they are given more autonomy in the planning and management of financial resources, similar to the current status of secondary schools, where principals are given full control over non-salary expenditures. If schools have more control over their resources and are held accountable for their use, they may have incentives to address their most pressing needs and better deliver education services. With more budget autonomy, principals (or school councils if given more voice in budget preparation and implementation) would be able to buy school supplies, pay for services, and may even provide incentives to motivate good quality teachers that may help reduce inequality of learning across disadvantaged groups. Budgetary autonomy is often introduced alongside with per-capita financing principles that improve equity in education.

42. Second, improve financial equity through per-capita financing mechanisms. The current input-based financing system in primary education in Turkey is regressive in that it does not differentiate effectively the costs of educating the poor and disadvantaged, costs that often tend to be higher. A per-capita financing is a type of funding formula that provides a way to improve financial equity. Funding is determined according to the *number of pupils*, the main indicator in the formula, but pupils are differentiated according to characteristics that cause the costs of educating them to differ (e.g. grade/age, curriculum, location, minority language, social disadvantage). As a result, such a system directly addresses *equity* concerns by generating per student expenditures that better reflect the real cost of education in different places and for different student populations. Per-capita financing is a hallmark of countries with high-performing education systems. Per-capita financing enables budget autonomy to be meaningful.

However, a successful implementation of per-capita financing and accountability mechanisms requires the availability of data on education statistics and student performance through an Education Management and Information System (EMIS).

43. **Third, strengthen the Education Management and Information System (TEFBIS, by its Turkish acronym)⁴.** Data on education can help better inform policy decision-making and can help evaluate whether a policy has been successful or not. This requires an integrated information system where sound education statistics are used for planning and monitoring performance, and if this information is given back to schools and the community can promote accountability and facilitate school level planning. The current TEFBIS system may provide the basis for developing such a system. It could also be complemented in Turkey by introducing school based assessments in the country. There is the potential here to build on already existing pilot initiatives within MoNE such as the performance based pilot system being managed by the Strategy Department.

44. **Fourth, measure and report learning outcomes on a regular basis.** To become a high-performing country in education, Turkey needs to make its education system more accountable. To this end, Turkey should consider implementing a system for school and student assessment. This would be different from a system of examinations to assess individual performance such as the TEOG, where the stake for students is high since important placement decisions are taken on this basis. National student assessments would help government and citizens monitor student learning outcomes and maintain schools' accountability for their students' performance. This will create incentives for schools to address students' needs. In fact, if Turkey decides to implement an SBM reform, it will be worthwhile to invest resources to conduct an impact evaluation to track the effects on student outcomes. National assessments will provide valuable information for measuring the effects of any SBM reform.

45. **Fifth, make schools accountable and implement moderate decentralization in decision-making.** Turkey should develop a reporting system that gives parents easy access to information on the performance of schools and on their children's learning. Accountability could also entail providing information on school budgets and curriculum. Other options include involving parents and community members in a school council that holds the principal and teachers accountable for student learning. Finally, school accountability could be enhanced by increasing decentralization of decision-making. One way to do this is by empowering and improving the capacity of the School-Parent Associations, which would require modifying the 2012 regulation⁵. Ways to increase the role of the School-Parent Association or school councils include by allowing them to assist the school principal in the preparation of the budget, allowing them to supervise the implementation of the school budget (for which TEFBIS would be a useful tool), or participate in the preparation and approval of school budget. Introducing assessments, increasing the reporting system, and moderately decentralizing decision-making would improve local and national level accountability of schools and principals.

4 Türkiye'de Eğitimin Finansmanı Ve Eğitim Harcamaları Bilgi Yönetim Sistemi, known in Turkish as TEFBIS [Turkey Education Financing and Education Expenditures Information Management System].

⁵Okul Aile Birliği Yönetmeliği (2012) [Regulation of School-Parent Association (2012)].

46. **Importantly, the individual reforms should not be seen in isolation.** While several of the reforms would be beneficial if implemented in isolation (for example formula-based financing), several others are mutually reinforcing. For example, as we have discussed in this paper, budget autonomy without greater accountability is unlikely to work. And at the same time, increasing accountability through better results reporting without providing schools the tools to effect change through enhanced budgetary autonomy will also likely not work. For this reason the reforms above should be seen as a package.

47. **Timing and sequencing of the reform program needs careful consideration.** We have described above the broad elements of a reform program. The critical next steps would involve defining the details under each reform area and converting these into a concrete action plan for implementation. As reviewed in the note, many countries have first considered a pilot approach to generate evidence as a purposeful first step toward a national program. Such an approach, when coupled with a strong monitoring and evaluation component possibly including a rigorous impact evaluation can be powerful tools for garnering further public support for reform as well as making course corrections before launching a national program. This would also allow time for the more complex components of a national system, such as a new student and school assessment system to be developed and rolled out. Turkey could move in this direction, building on the lessons already learned from the pilot SDP program. As part of this, due consideration needs to be given to the process of consultation with key stakeholders, of formation and strengthening of key institutions such as School-Parent Associations, and of capacity building for effective administration, such as with school management for budget execution. All of these will be important elements for an effective SBM reform.

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Annex 1: Evidence from School-Based Management Reforms since 1995

Table 1: Evaluations and Impacts: Evidence of School-Based Management from the More Rigorous Studies since 1995

Study	Country	Program	Date of program	Year of study	Estimation / identification strategy	Limitations	Results
A. Randomization and regression discontinuity design							
No available evidence							
B. Instrumental variables and Heckman correction models							
di Gropelo and Marshall (2005)	Honduras	PROHECO	1999	2003	Heckman correction model; exclusion restriction: presence of potable water and community services	Not a solid exclusion restriction	Small changes in dropout rates; no effects on test scores
Gunnarsson et al. (2004) *	Several countries	Several programs	Several years	1997	Instrumental variables: principal's attributes and legal structure	Not a solid instrument	No impact on test scores; positive impact on parental participation
Jimenez and Sawada (1999)	El Salvador	EDUCO	1991	1996	Heckman correction model; exclusion restriction: government prioritizing targeting formula	Not a solid exclusion restriction	Increases reading scores and decreases absenteeism
Jimenez and Sawada (2003)	El Salvador	EDUCO	1991	Panel: 1996 and 2003	Heckman correction model; exclusion restriction: government prioritizing targeting formula	Not a solid exclusion restriction	Increases probability of students staying in school
King et al. (2003) *	Several countries	Several programs	Several years	Two points: 1995 and 1997	Instrumental variables: principal's attributes and legal structure	Not a solid instrument	No effects on test scores
C. Difference in difference and matching estimation							
Gertler et al. (2006)	Mexico	AGE	1996	Panel at school level 1998–2002	DD fixed effects; pre-intervention trends	Did not control for time variant unobservable effects	Positive impact on failure and repetition rates; no effects on dropout rate
King and Ozler (1998)	Nicaragua	ASP	1991 / 1993	Pseudo-panel: 1995 and 1997	Matching, panel data	No pretrend validation	<i>De jure</i> autonomy; no impact. Real autonomy (hire and fire teachers): positive impact on standardized test scores
Lopez-Calva and Espinosa (2006)	Mexico	AGE	1996	2003–2004	Matching, cross-section	No baseline data	Positive impact on test scores
Murnane et al (2006)	Mexico	PEC	2001	Several sources: 2000–2004	DD: more systematic check of equal trends between treatment and control groups	Not control for time variant unobservable effects	Positive impact on dropout rates; no effect on repetition
Paes de Barros and Mendonca (1998)	Brazil	Decentralization	1982	Panel, state level; 1981–1993	DD; no preintervention trends	Aggregation of data; no pretrend validation	Positive impact on repetition and dropout rates; no impact on test scores
Parker (2005)	Nicaragua	ASP	1991 / 1993	2002	Matching, panel data	No pretrend validation	Positive impact on test scores
Sawada and Ragatz (2005)	El Salvador	EDUCO	1991	1996	Matching, cross-section	No baseline data	Positive impact on test scores
Skoufias and Shapiro (2006)	Mexico	PEC	2001	2000–2003	Matching estimation with DD; one year preintervention trend	No pretrend validation	Positive impact on dropout, failure, and repetition rates

* School self-reported levels of autonomy
Source: Cited articles and Santibañez (2006).