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Community schools unfolded: *A review of the literature*

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Abstract

Community schools are quickly increasing in number, but there is no evidence whether they are more effective than traditional schools. No study has empirically compared community schools to other schools. This study reviews the literature on the effectiveness of community schools. We focus on their three main components: cooperation with external organizations, parental involvement, and extracurricular activities.

This review indicates that involving external organizations seems valuable in terms of social cohesion in neighborhoods. Parental involvement is particularly important for the educational development of lower socio-economic status families. Extracurricular activities positively relate to students' development in academic and social terms.

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1. Introduction

Community schools are an attempt to modernize education. Compared to traditional schools, they are considered better capable of accommodating students' needs. At the heart of the community school lies the idea that students' entire social environment accounts for their development. This approach differs from the traditional educational approach, where the school and in particular its educational component is the focus.

Community schools address education and growing-up in a broader way and the student is the center of attention. This is considered necessary given the current social challenges such as increased female labor participation and the concomitant need for child-care, the increase in migrant students, the need for increased cognitive demands in today's knowledge society, the increase in single-parent families, and levels of early school leavers that are deemed too high.

Community schools are highly valued as it is believed that traditional schools are not fully capable of dealing with challenges regarding raising and educating children. The main reason for this is that community schools can better respond to students' needs. Some community schools focus, for example, on counteracting disadvantages, others on all-day care, strengthening social cohesion or multifunctional buildings (Claassen, Knipping, Koopmans, & Vierke, 2008; de Blaay et al., 2007; Spee & Seuren, 2003).

Given their broadened approach, community schools are challenged by the expectation of providing more than traditional schools in terms of student support and development. Simultaneously, they cannot disregard the main goal of any school: the production of academic outcomes. Therefore, becoming a community school, implies a change in services and education quality (McMahon, Ward, Pruett, Davidson, & Griffith, 2000) which requires a new mindset regarding children, growing-up, education and the role of the school. There are considerable

differences in community school manifestations in local, national, and international terms: The set-up and therefore the effectiveness of a community school largely depend on environmental factors, particularly neighborhood characteristics and the student population. Obviously, community school characteristics are weighted differently in different circumstances.

Community schools seem appealing to educators, policymakers and the general public and this partly explains the rapid increase in their number. At the same time this increase is remarkable given that there is no evidence that community schools are addressing and tackling social problems better than other schools. Considering the knowledge gap on the one hand and large public spending on the other hand, insight in the effectiveness of community schools is needed. The empirical literature on community schools does not provide much insight in this respect. Literature focusing on community schools as a whole is mainly descriptive and advisory. Moreover, there is a lot of literature 'marketing' community schools. Most publications on community schools tell success-stories, a hint towards publication bias and differences in community school implementations hamper evaluations (Raffo & Dyson, 2007)[5]. No study has empirically compared community schools to other schools.

Given the above, the aim of this review – providing an overview of the international literature on the effectiveness of community schools – is approached by investigating the literature on the three main components of community schools: cooperation between schools and external organizations, parental involvement, and extracurricular activities. We consider these components for two reasons: First, community schools have never been tested on their effectiveness as a whole. Second, by focusing on components, this problem is solved, since the effectiveness of these components has been evaluated. Hence, by reviewing how these

[5] Raffo and Dyson (2007) focus on full service extended schools, which is the English manifestation of the community school.

components address the earlier mentioned social problems, we obtain insight in if and how community schools are effective. The literature includes not only causal and empirical but also descriptive studies.

With this study we contribute to the educational and more specifically to the community school literature in multiple ways. First of all, we clarify the community school-concept by focusing on the most common components. Secondly, by focusing on the components we provide more rigorous evidence than displayed in the literature so far. In fact, we examine if community schools work according to a *best evidence* method. Third, giving an overview on potential community school outcomes provides a starting point for causal studies on the effectiveness of community schools.

The paper is organized as follows: the second section describes some community school aspects from an international perspective; the third section looks at evidence on the different components; in section four we conclude and discuss the findings.

2. Common features of community schools

Community schools are established internationally in order to address social and educational problems (Dyson & Raffo, 2007). Due to institutional, cultural, and social differences, each country has its own idiosyncratic approach. This section points to different community school aspects that distinguish community schools or show similarities across countries. This is done along the following categories: focuses of community schools; the economic rationale of community schools; free school choice; and the community school components outlined above.

Many countries distinguish community school types based on their focus. Dutch community schools – known as ‘broad schools’ – have primarily been developed to counteract

deprivation. The same holds for the US, where the initial focus of community schools was the reduction of educational disadvantages. Particularly since the beginning of the 21st century, the Scottish and English governments increasingly wanted all schools to become 'broad' (Smith, 2004, 2005). Amongst other reasons, this is supposed to help increasing the labor participation of women. Similarly, in Germany the main motivation was providing day care. German community schools – referred to as 'all-day' schools – attempt to tackle educational and social problems by extending the time spent at school (Timmerhuis, Westerbeek, Studulski, Verheijke, & van der Burgwal, 20062006). Two types of community schools can be distinguished: *Open* community schools end at lunchtime, afterwards, a voluntary afternoon-program is offered. *Integrated* community schools provide education during the entire day (Timmerhuis et al., 2006). The latter prevails in higher social economic status (SES) areas (Boom, 2006; Claassen et al., 2008). In Sweden and France, extracurricular care in terms of all-day care, is traditionally more developed. High-quality affordable child care also represents a pillar of the English approach. This shows a strong economic rationale behind the community school approach (Claassen et al., 2008; Mortlock, 2007; Timmerhuis et al., 2006). In England, for instance, an objective is to stimulate parents in supplying paid labor; which is supposed to make those neighborhoods more economically prosperous and might attract another population (Claassen et al., 2008). The above suggests that compared to traditional schools community schools can be seen as more valuable from a non-financial perspective. This is because they have more benefits for parents and society than traditional schools and provide externalities for neighborhoods.

When investigating community schools internationally, freedom of school choice must be taken into consideration. In the Netherlands, parents can choose to which school they send their child (Executive Agency of Education Audiovisual and Culture, 2009), whereas in the US, living

in a neighborhood implies attending a school there. So, if community schools are better – or perceived better – this might impact neighborhoods as families move there. Such neighborhood effects are likely to differ based on whether there is freedom of school choice or not.

Finally, the three components considered in this study consistently underlie the community school idea in different countries: there is a broad general concept of community schools and common elements can be distinguished when we explore community schools across different countries. The English case illustrates how these are combined in community schools: so-called 'extended schools' are based on five pillars: high-quality affordable child-care, access and referral to specialized services, and community-access to school facilities, parent-support, and a varied range of activities (Claassen et al., 2008; Mortlock, 2007; Timmerhuis et al., 2006), reflecting the components. Due to institutional and social differences, countries differ in terms of weight given to different components. Additional remarks on community school characteristics in different countries are made throughout the subsequent sections.

3. Evidence on community schools and their components

This section elaborates on the three components and subsequently describes the effect(s) of cooperation with external organizations, parental involvement, and the effect of extracurricular activities in the context of community schools. Then, we elaborate one example on how the components can complement each other. For each subsection a table of studies referred to can be found in the Appendix. The empirical studies are listed alphabetically in the tables. In order to clearly distinguish empirical and non-empirical studies, and within the empirical studies the causal studies the empirical ones are marked by * the first time they are mentioned in the text,

the causal ones by **. We define causality as the result of experimental or quasi-experimental studies.

3.1 Cooperation between schools and external organizations

Community schools differ from traditional schools in their facility-configuration and cooperation with other services, in the sense that they "work not as isolated educational institutions, but as part of a network of other schools and community agencies supporting each other and pooling their resources in a sustained effort" (Raffo & Dyson, 2007, p. 270). A facilitating role is ascribed to the community schools. In these schools, communication with external organizations is more intense than in traditional schools and this may affect students, parents, teachers, and other parties involved. Generally, evidence on the effectiveness of networking and cooperation between schools and external organizations is sparse but suggests a positive impact (Dawson & Zunderdorp, 2002; Muijs, West, & Ainscow, 2010*; Spee & Seuren, 2003). To structure the discussion below, we focus on four aspects concerning community schools' cooperation with external parties: forms and aims of cooperations between schools and external organizations; outcomes of cooperation, the community as a cooperation partner; and problems that might arise in cooperation.

The aggregate of cooperation partners is a main characteristic of a community school manifestation. Defining community schools as the aggregate of facilities allows linking facilities to the probability of being a community school. Depending on the environment, different partners and facilities are appropriate partners. Welfare institutions, after-school care, and educational and recreational activity providers can be partners. Cooperation partners are found in schools, communities, societal, and governmental bodies (de Blaay et al., 2007). Often,

community schools put facilities at the disposal of the wider public allowing different groups from the neighborhood to be physically present in the school. This shows a main idea of the community school concept: involving people from outside the school in the school and make students play a role in their community. The community school idea is that there are reciprocal benefits for all community members and we can assume spillover effects on the community level. In the US, community schools are often the social centre of the neighborhood (Claassen et al., 2008*; de Blaay et al., 2007; Picard, Ruelens, & Nicaise, 2004).

Community schools pursue multiple objectives by cooperating with external organizations. Cooperation targeted at school improvement may broaden students' opportunities by sharing resources (Muijs et al., 2010). Scotland is a case in point regarding schools' cooperation with external organizations. The Scottish government wants community schools to be the norm. Education, health care, and social services are bundled in schools and cooperation with the local community and government are established, supposed to ensure an embracing approach for students at risk[6] (Claassen et al., 2008).

In this section, we examine the different potential outcomes which might result from cooperation with different actors. First of all, we look at test scores. Research shows that good quality relations between the school, the family, and the community increases attendance rates and contributes to a significant improvement of third graders' reading and writing results in standardized test scores (Epstein et al., 1997*; Blank, Melaville, & Shah, 2003). Studies examining the cooperation between schools and other organizations find smaller attainment-gaps between at-risk and non-at-risk students (Cummings et al., 2007*). Offering school-based health services relates to lower rates of drug use, better school attendance rates, lower dropout and course-failing rates, and a decrease in disciplinarily referrals (Kisker & Brown, 1996*). The

[6] In this context, risk refers to a high likelihood of poor developmental or academic outcomes (Werner, 1986).

latter reflect some of the above-mentioned challenges that community schools are supposed to tackle. Often, more than one school is part of community school, for instance primary and secondary schools can be closely linked. Such school-to-school cooperation can benefit students (Blank et al., 2003; West, 2010*), for instance, as networks between schools create and diffuse knowledge (Katz & Earl, 2010). This is one form of parent involvement which is described in more detail below.[7]

The community itself is a critical partner for community schools if they want to have an impact beyond education. This refers to the idea of establishing an environment, where the school becomes the social centre of a neighborhood. Due to more intense cooperation with the community, community schools are expected to strengthen social cohesion and improve the quality of life in their respective neighborhoods (Emmelot, van deer Veen, & Ledoux, 2006; Spee & Seuren, 2003). They not only affect education but how people live together (Middlewood & Parker, 2009), which is exactly why community schools should have an impact beyond the school level. From an educational outcome perspective, an evaluation of forty schools that connected their curriculum to the community showed improved grades in several subjects (Blank et al., 2003; Lieberman & Hoody, 1998*). Moreover, involvement between students and other residents builds social capital in neighborhoods and might entail neighborhood effects such as reduced crime, as the neighborhood is perceived as a common good. Overall, it seems that the stronger the public's engagement the more sustainable community schools are (Tagle, 2005). There are positive effects in terms of civic outcomes such as political participation of high school students' participation in school-based community activities (Niemi, Hepburn, & Chapman, 2000*).

[7] This example shows that the components overlap; cf. section 3.4.

Finally, there are potential pitfalls when schools cooperate with external organizations. For instance, if responsibilities are not clearly defined (Spee & Seuren, 2003). Another reason for failure of cooperation is that schools and external organizations differ in their views on children and education (Muijs, 2007*). However, as schools and external institutions aim at supporting child development, different organizations must consider each other as complementary rather than as competitors. Moreover, the degree of professionalization of the people involved must be considered: involvement of qualified social workers differs from volunteer-involvement. Finding the right partners is a challenge. An example are community schools in deprived areas in the UK which employ family workers and report a positive experience in establishing good relations to students and families. As they are considered independent of the school, trust is more easily established (Rose, 2008*). Moreover, a coordinator can be critical for the development and maintenance of community schools (Blank et al., 2003; Dryfoos, 2005). Parents are a critical partner in community schools, whose inclusion will be discussed in the next section.

3.2 Parent involvement in community schools

Community schools more intensely involve parents than traditional schools. In the context of community schools, we consider the following aspects: (1) how parents are involved; (2) outcomes of parental school-involvement, zooming in on student achievement; (3) different groups of parents; and (4) potential problems of parent involvement.

If community schools want to have an impact beyond the school, parents have to be involved in a first step. There are different ways to involve parents in community schools. In community schools, parents connect the school to the community. It might seem contradictory

that on the one hand a main objective of the community school is to unburden parents by offering day care and on the other hand, community schools attempt to more actively include parents. However, including parents in the educational process does not have to take place constantly and does not necessarily require physical presence in the school. It is more about the quality of their involvement than about the total time spent. Parents can come to the school or be more involved at home. Particularly when students get older, parent engagement shifts from school to home (Epstein & Dauber, 1991*). Parent involvement differs in importance given the circumstances. The latter is more important to increase performance (Harris & Goodall, 2008). We have to keep in mind that parental involvement is not obligatory.

The second aspect is the extent to which parent involvement can affect child development in terms of academic achievement. The overall impact seems positive: when schools deal with the challenges regarding family and community involvement, more students pass the achievement tests (Sheldon, 2003*). Considering the establishment of most community schools in low-SES areas and the increase in migration, it is interesting to see how critical parent involvement is when it comes to academic achievement of low-SES children. Parent involvement is a more accurate predictor of academic achievement than family income or SES (Henderson & Berla, 1994). Regardless of family income and educational level, if parents encourage learning, this relates to students being more likely to have high test scores, to be enrolled in higher-level classes, and to earn more course credits (Blank et al., 2003; Fan & Chen, 1999*; Henderson & Berla, 1994; Sui-Chu & Willms, 1996*). Furthermore, community schools aim at helping disadvantaged parents in supporting their children. This seems to be a good idea given that supporting low-income parents in rearing, interacting with their children in learning at home, and learning from each other has been found to make low income parents' children

perform as well as middle-class children (Cochran & Henderson, 1986*). To get back to all students, parental involvement seems to pay off in the long run as students' high school and college graduation have been found to be more likely (Eagle, 1989*). Students whose parents are more involved in school activities seem to have stronger connections with school (Thompson, Iachan, Overpeck, Ross, & Gross, 2006*). This can be related to less disengagement from school which in a later phase might entail dropout.

As we have seen, involvement differs amongst parental groups. If parents are more involved in education, they develop expectations and may represent role models for their children (Dyson & Raffo, 2007). In high-risk environments, parents themselves are likely to go to school when services (e.g. doctors, psychologists, and social workers) are provided (Crowson & Boyd, 1993; McMahon et al., 2000). This reflects the idea of the community school as the social centre of the neighborhood. However, due to language problems, ethnic minority parents might find it difficult to interfere in educational processes. On the other hand, higher SES-parents have more opportunities to be involved in education; despite having less time, they have more capabilities and may attach more importance to it. Clearly, community schools have to approach parental groups given their characteristics. Involving parents is particularly difficult in environments where traditionally parents have not been much involved in education or where they feel separated from schools and other institutions attached to the community school (McMahon et al., 2000). Constraints such as language problems might keep them from actively interfering in education. Moreover, not all parents want to or can be involved: parents might not attach much value to education or are not confident enough to interfere. Community schools have to account for these potential constraints. Furthermore, the community school can affect the family climate as it leaves less time to spend together as a family. On the other hand, they can

contribute to raising the quality of time families spend together, by trying to establish better relations between students, parents, and the school.

3.3 Extracurricular activities

A third component of community schools are extracurricular activities which are offered in community schools on a regular basis. This section investigates different aspects of activities: (1) characteristics of extracurricular activities; (2) the link between extracurricular activities and academic performance; (3) the value of extracurricular activities for low SES-students; (4) community schools' social contribution via extracurricular activities, and (5) problems regarding extracurricular activities.[8]

Extracurricular activities are structured programs providing supervised activities and often encourage students' cognitive and social development (Little, Wimer, & Weiss, 2008)[9]. Typical activities are sports (e.g. Broh, 2002*; McNeal, 1995*; Zarrett et al., 2009*), arts (e.g. Marsh, 1992*), journalism, vocational clubs (e.g. Broh, 2002), tutoring, mentoring, arts, technology, civic engagement, and activities promoting health (Little et al., 2008). In the literature, several terms appear: after-school programs (ASPs), out-of school programs, co-curricular or extracurricular activities. Here, the term *extracurricular activities* is used. Extracurricular activities are supposed to affect students in the long run (Gardner, Roth, & Brooks-Gunn, 2008*; Mahoney, 2000*; Zaff, Moore, Papillo, & Williams, 2003). For instance, activities can entail skill- and knowledge-gains which might increase future earnings (Aizer, 2004*). Moreover, children participating in activities at school are inclined to participate outside

[8] Extracurricular activities do not include extended school times, i.e. we do not discuss compulsory lessons given to all students.

[9] They carry out a narrative review of out of school activities.

(Spittle, O'Meara, Garnham, & Kerr, 2008*). From a school-policy perspective, arranging rather than enforcing participation significantly relates to participation rates (Niemi et al., 2000).

Mainly correlational studies refer to multiple outcomes of extracurricular activities such as increased self-esteem and perceived autonomy, reduced delinquency, and higher educational aspirations and achievements (Holland & Andre, 1987; Larson, 2000). Here, we focus on extracurricular activities in the context of academic achievement. Overall, extracurricular activity-participation and the concomitant interaction with adults positively impact educational outcomes, whereas time spent hanging out with peers shows a negative correlation (Jordan & Nettles, 2000). It is not surprising that spending more time in adult-guided learning activities correlates with higher test scores (Clark, 2002*; Zarrett et al., 2009*). Extracurricular activities and their impact on performance are controversial: one evaluation found significant improvements between pre- and posttests in reading and mathematics (Klein & Bolus, 2002*), another study revealed no significant effects on test-scores in mathematics, English, and science (James-Burdumy, Dynarski, & Deke, 2007**). A meta-analysis on after-school programs and summer schools aiming at supporting low-achieving at-risk students shows positive effects in reading and mathematics achievement (Lauer et al., 2006*). Another (non-causal) study only shows a significantly positive association of team sports participation with improvement in literacy scores whereas unstructured activities show small negative associations with attitudes towards literacy and numeracy. Participation explains two percent or less of the variance in achievements (Shulruf, Tumen, & Tolley, 2008*). A randomized trial examining short and long-term educational and employment impacts of an afterschool program including mentoring, educational services, and financial rewards aiming at improving high-school graduation and post-secondary school enrolment shows that beneficial educational outcomes quickly fade away.

Detrimental long-term outcomes for males suggest that extrinsic rewards eliminate intrinsic motivation (Rodrìguez-Planas, 2010**).

Recall that community schools often target low-SES students. The main rationale in offering activities is to give *every* child the chance to experience such activities. Opportunities which, mainly due to high costs, are usually restricted to children from relatively high SES backgrounds are accessible to everyone. Extracurricular activities in community schools are also a way to provide cheap childcare. The importance of providing extracurricular activities in community schools is apparent; given that, usually, students with high parental SES and educational levels are more likely to enroll (Holland & Andre, 1987; McNeal, 1995*). In this sense it can be argued that "after-school programs can provide low-income children with experiences more similar to those experienced by middle-class children" (Posner & Vandell, 1999, p. 877*). This is likely to impact their academic achievement as "among the typical after-school care arrangements poor children experience, ASPs appear unique in their ability to promote academic-related success" (Mahoney, Lord, & Carryl, 2005b, p. 820*). This is reflected in the finding that deprived students' regular activity-participation involving neighborhoods, schools, and community organizations, is significantly related to gains in standardized tests and decreases in behavioral problems (Vandell, Reisner, & Pierce, 2007*).

Another assumption is that extracurricular activities in community schools counteract problem behavior and promote health. In this context, another characteristic of extracurricular activities is to support children and adolescents by keeping them busy and active and promote health (Little et al., 2008; Story et al., 2003**). This is essential given that time spent loafing with friends better predicts adolescents' risky behavior and school failure than income, race or family structure (Blum, Beuhring, & Rinehart, 2000*). Extracurricular activity-participation

relates to fewer criminal arrests (Mahoney, 2000), lower incidences of juvenile crime (Goldschmidt, Huang, & Chinen, 2007**; Mahoney, 2000), less teen pregnancy, and drug use (Little et al., 2008; Vandell et al., 2007). An individual's social network's participation in extracurricular activities seems to contribute to reduce antisocial behavior too (Mahoney, 2000). For instance, extracurricular activity participation is significantly related to a lower chance of obesity (Mahoney, Lord, & Carryl, 2005a*). Moreover, Durlak and Weissberg's (2007*) meta-analysis on ASPs promoting personal and social skills, suggests that evidence-based programs towards promoting personal and social skills are successful in producing benefits in terms of improved feelings and attitudes, behavioral adjustment, and school performance, contrary to programs that do not use such procedures. This underlines the need for more evidence in this field. A causal study indicates that participants feel safer after school but show more negative behavior. Academic outcomes and homework completion were not affected (James-Burdumy et al., 2007**).

Finally, extracurricular activities entail problems. Time spent in activities implies less quality-time spent elsewhere, e.g. in daycare or with parents. Moreover, there might be negative outcomes in terms of academic achievement as extracurricular activities are done at the expense of homework or study time. Furthermore, comparing extracurricular activities is complex as they are diverse in composition and realization. Causal effects are hardly identified (Mahoney, 2000; Shulruf et al., 2008). Hence, the correlations described above have to be verified by causal research.

3.4 How do the components work together in community schools?

A question resulting from the focus on components is what we can expect from community schools combining these components. The expected added value of the community school is its holistic approach – represented by the components – towards children, education and growing up. Therefore, it is interesting to put the components in a wider perspective and to consider an example how they can effectively work together in community schools. An example is dropout, which reflects academic achievement in secondary education. The underlying assumption is that community schools can counteract disengagement from school before it translates into dropout. The European Commission (2011) strikes the three above-mentioned components regarding the prevention and interference in dropout. In community schools, the idea is that providing extracurricular activities and involving parents as well as external organisations are powerful in contributing to the reduction of dropout when they are combined. It seems that time spent in unstructured activities is more likely to entail dropout than time spent in structured activities. As community schools often involve easily accessible care institutions preventive actions can be taken and parents can be involved immediately. Moreover, family-school-community partnerships contribute to enhance student attendance, a predictor of early school leaving (Epstein & Sheldon, 2002, p. 308*; see also Archambault, Janosz, Fallu, & Pagani, 2009*). Higher levels of engagement and connectedness can result from extracurricular activity-participation and after-school programs (Cooper, Valentine, Nye, & Lindsay, 1999*; Eccles & Barber, 1999*; Larson, 2000; Mahoney & Cairns, 1997*; Thompson et al., 2006), yielding a reduction in dropout (Archambault et al., 2009). Mahoney and Cairns (1997*) argue that the benefits of extracurricular involvement in terms of reduced dropout rates are highest for the

weakest students, which makes the community school concept even more appealing as weak, in terms of low SES, students are particularly targeted by the community school.

4. Discussion and conclusion

The community school is a young concept and numerous activity-configurations are observed. In fact, there are no causal studies investigating causal relations of the effectiveness of community schools. It seems that community schools combine interventions and activities, which taken together can be labeled 'community school'. Attempts to evaluate their effectiveness run the risk that they are investigated as black boxes. Therefore, it is more constructive to focus on the effects of the three main components. Examining these components, the outcomes described above are mainly correlational. The components suggest a contribution to students', families', and communities' development. Another perspective is that community schools provide socio-economic benefits by bundling services and allowing more women to participate in paid labor.

Overall, it seems that community schools are more promising for low- than for high-SES students. First, in reality, some schools actively choose to focus on all students and community schools should focus on students from all strata. Otherwise, they might contribute to reproducing social and educational inequalities (Dyson & Robson, 2001). Second, for causal studies this implies that community school effects can best be examined at the margins. The effects are not likely to be equal(ly strong) for all groups of students.

Looking more critically at community schools, the increasing institutionalization of childhood implies less choice for student development regarding spending their out-of-school time. Development opportunities might be impeded from students if they (have to) spend the entire day in a supervised environment and cannot choose which activities to attend. Particularly

higher educated parents might oppose their children spending most of their time in school as they might attach more value to private institutions. Outside the school, students might get better-quality and a larger offer of activities. Voluntary activity-participation, might further divide low and high SES students.

Even though the above represents an extensive review, there are limitations. In fact, there is a lack of causal studies which has to be filled in order to be able to assess the effectiveness of community schools. Moreover, the literature reviewed is mainly written in English. This is not only due to the fact that international journals mainly publish in English but also due to the lack of attention to proper evaluation in non-English speaking countries. The American predominance is mirrored but evidence from one country cannot necessarily be translated to other countries (Reynolds, 2000). Moreover, even though the positive outcomes of components prevail, this must be considered carefully. Some results are based, for instance, on activities taking place outside the school; the impact in a community school might be different. Due to heterogeneous community school-populations, there might be different outcomes even with identical input. Furthermore, other components not discussed can be important in particular circumstances. The main limitation is non-availability of causal studies. Also non-described effects are likely. One example are within classroom effects in community schools: teachers and parents may act differently in community schools which may affect what is offered in the class room, which in turn could affect student outcomes and teachers.

Overall, the evidence on community school effectiveness is sparse, striking the need for 'good' evidence provided by further research. The diversity of realizations makes the attribution of effects difficult and strikes the need for empirical investigations. To derive conclusions,

longitudinal data must be used as causal effects are most likely to be visible in the long run (Claassen et al., 2008; Raffo & Dyson, 2007; Sanders, 1992, as cited in Blank et al., 2003).

Finally, community schools seem to contribute to families and communities in societies where academic performance is increasingly critical and where we witness a growth in required child care. Community schools seems capable to make schools not only a place for learning but for growing up and a place where students and other community members enjoy being.

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Appendix: Empirical (*) and causal (**) studies included in the review.

Table 1: School cooperation with external organizations

Study	Population & Country	Data & Method	Independent variable	Dependent variable	Findings
Claassen et al., 2008*	Primary schools; Netherlands	PRIMA-data, Case-studies; cross-sectional and longitudinal analysis	Community school attendance	Social-emotional and cognitive outcomes	No social-emotional effects. Some cognitive effects, but these cannot be attributed to the community school.
Cummings et al., 2007*	148 primary and secondary schools; UK	Case studies (17 projects) and comparators, National Pupil database Cost benefit analysis Survey pupils, parents, staff	Full service extended schools (FSES) attendance	Educational attainment	Positive impact of FSES-attendance on attainment in case study schools, particularly for students facing difficulties.
Epstein, Clark, Salinas, & Sanders, 1997*	Third graders; USA		Quality of relations between school, family, and community	Attendance rates; reading and writing scores in standardized test	Increased attendance rates. Good relations contribute to a small but significant improvement in reading and writing test scores.
Kisker & Brown, 1996*	24 school-based health centers; Cohort of students attending 19 schools and national sample of urban youth; USA	Self-reports on health care providers utilization, knowledge of health, drug use, sexual activity, contraceptive use, pregnancies, health status; Logit models	Presence of health centre	Access to health care, health knowledge, health status.	Increased access to health care and health knowledge. Inconsistent impact on health status and risky behaviors, i.e. small and insignificant.
Lieberman & Hoody, 1998*	40 elementary, middle, and high school, cooperative	Qualitative study, Field-visit, interviews with teachers, principals,	Integration of the environment into formal education	Student learning, connect and integrate what students learn to	Evaluation results show better performance on standardized measures of academic achievement in reading, writing, math, science,

	partnership of education agencies 12 states; USA	school district staff, students, community members, parents and former students; surveys amongst teachers and administrators		their surroundings	and social studies. Reduced discipline and classroom management problems; increased engagement and enthusiasm for learning and greater pride and ownership in accomplishments.
Muijs, 2007*	3 primary and 5 secondary 'Leading Edge' schools; North East England	Qualitative case studies	Extended schooling, Inter-agency work	Effectiveness of FSES	Varied views on the effectiveness of FSES, linked to the extent to which leadership shows commitment to FSES that focuses on pupils' benefits to pupils, and to the extent of distributed leadership within the school. Key challenges are communication and developing shared goals and understandings across different organizational cultures.
Niemi, Hepburn, & Chapman, 2000*	9-12th graders; USA	Nationally representative sample: National Educational Household Survey, 1996; Regressions	Participation in school-based community activities and voluntary community service	Political knowledge and discussion, participation skills, higher political efficacy, tolerance of diversity	Participation rates relate to student, family, and school characteristics. From a school-policy perspective, arranging rather than requiring participation is important. Participation seems to stimulate political knowledge and discussions with parents, enhanced participation skills, and higher political efficacy; not more tolerance of diversity.
Rose, 2008*	Two secondary schools; UK	Qualitative: 73 semi-structured interviews with students, (head-) teachers, parents, agency-professionals, school staff, local authority staff	Presence of school-based family worker	Student wellbeing	The results indicate a positive impact of family workers on ensuring that at-risk or disaffection students stay within the educational system and develop more positive attitudes towards schooling.

West, 2010*	Schools in declining inner-city and suburban area; England	Cross-case analysis of six case studies	School-to-school collaboration	Quality of learning	The study suggests positive outcomes. Shared leadership across all levels of the service is required, particularly at the local level.

Table 2: Parent involvement

Study	**Population & Country**	**Data & Method**	**Independent variable**	**Dependent variable**	**Findings**
Cochran & Henderson, 1986**	160 families containing a three-year-old child in 10 New York neighborhoods; USA	Summarizing an experimental program; average 24 months participation 1979-1981; Regressions	Program building family strengths and local resources	School outcomes, home-school communication, joint parent-children activities	Supporting low-income parents in rearing, interacting with their children, learning at home, and encouraging them to learn from each other in preschool made low-SES children perform as well as middle-class children.
Eagle, 1989*	Elementary and high schools; USA	Analysis conducted on the 1988 high school senior cohort interviewed for the High School and Beyond surveys being part of the National Longitudinal Surveys conducted by the National Centre for Education Statistics; Regressions	SES, parental attention, mothers' working patterns, family structure	Student achievement	Parental education and family affluence are critical to postsecondary attainment. Home environment has no independent influence on educational attainment. Controlling for social background factors, parental involvement during high school significantly impacts achievement. Students from single-parent backgrounds have significantly lower attainment controlling for background characteristics.
Epstein & Dauber, 1991*	171 teachers, 8 inner-city elementary and middle schools; USA	Survey; Pattern and cluster analysis	School programs of parent involvement	Teachers' attitudes and practices towards involvement parents	Teachers have positive attitudes about parent involvement.
Fan & Chen, 1999*	Primary and	Meta-analysis, 25	Parental	Academic	Parents' expectations are most

	secondary education; *Country not indicated*	studies, 92 correlation coefficients, Moderator analysis	involvement	achievement	strongly related to achievement, while parental home supervision has the weakest relationship.
Harris & Goodall, 2008*	Secondary schools; UK	Case-study, school data on student performance, behavior and attendance; 20 schools, n = 314; Identification of patterns and trends	Innovative work with parents	Student achievement	Social and economic barriers keep parents from supporting learning. Involving parents in school-activities is an important community function. In order to positively affect learning outcomes, parent engagement is more important in learning at home.
Ho-Sui-Chu & Willms, 1996*	24,599 eighth-grade students, their parents, and teachers 1,052 public and private (representative) middle schools; USA	National Educational Longitudinal Study (NELS) data; Multilevel regression analysis, hierarchical linear model (HLM)	SES, four types of parental involvement: (1) Volunteering and attendance at meetings of parent-teacher organizations, (2) home supervision, (3) discussion of school-related activities, (4) parent-teacher communication.	Academic achievement	Schools vary in (1) but not substantially in (2)-(4). Discussion of (3) at home is most strongly related with academic achievement. Parental participation at school moderately affects reading achievement and insignificantly affects mathematics achievement.
Thompson et al., 2006*	Grade 6-10; USA	13,207 students, 340 schools; HLM	Student, school, neighborhood characteristics	School connectedness	Stronger school connectedness per level (1) Student characteristics: among younger students, females, better performing students, more extracurricular activity-involvement, greater self-rated physical attractiveness, having more friends, two-parent families, and parents being more involved in

					the school. (2) School level: smaller, more racially homogenous schools, more students from relatively wealthy households. (3) Neighborhood level: greater percentage of non-US citizens.

Table 3: Extracurricular activities

Study	**Population & Country**	**Data & Method**	**Independent variable**	**Dependent variable**	**Findings**
Aizer, 2004*	10-14 years; USA	1998 wave of the National Longitudinal Survey of Youth-Child-Mother; Ordinary least squares (OLS), fixed effects estimation	Adult supervision after school	School attendance and behavior	Children without adult supervision are less likely to skip school, use drugs, steal or hurt someone.
Blum, Beuhring, & Rinehart, 2000*	Secondary students; USA	Add Health Survey, comprehensive school-based study of adolescents' health-related behavior, school administrators have been surveyed, students and teachers have been interviewed; correlations	Demographic factors and health-related behaviors	Risk behavior and school failure	Demographic factors influence behavior but do not cause teens to engage in high-risk behavior. For instance, time spent 'hanging out' with friends more precisely predicts risk behavior and school failure than income, race or family structure.
Broh, 2002*	12,578 high school students; USA	National Educational Longitudinal Study, 1988; OLS	Extracurricular activities	Academic achievement	Some activities improve others diminish achievement; interscholastic sport supports development and social ties between students, parents, and schools explain the positive effect

					of participation on achievement.
Clark, 2002*	Grade 1-2, college seniors, young adults; USA	Data collected 1984-1999	Out of school programs	Standardized test scores	Students spending at least 9 hours per week in adult-guided high impact learning activities, score at or above the 50th percentile in tests. Students spending three hours per week score at or about the 25th percentile.
Durlak & Weissberg, 2007*	Age 5-18	Meta analysis, > 70 ASPs, 526 studies	ASPs promoting personal and social skills	Personal and social skill development	Participation significantly related to improved feelings and attitudes, indicators of behavioral adjustment, and school performance. Programs using evidence-based skill training approaches are successful in producing benefits, contrary to programs not using such procedures.
Gardner, Roth, & Brooks-Gunn, 2008*	High school, young adulthood *n* = 11,029; USA	National Education Longitudinal Study; Linear Regression, Sobel test	Duration and intensity of activities	Educational, civic, and occupational success	Two-year activity-participation correlates with better educational and civic outcomes in young adulthood than one-year participation. Educational attainment mediates temporal measures of participation, young adult civic and occupational outcomes.
Goldschmidt, Huang, & Chinen, 2007**	age 5-12; USA	quasi-experimental, LA's BEST longitudinal data,; Treated: 2,331 students, matched non-participating	Participation in LA's BEST programs	Juvenile crime	Program-participation is significantly related to lower incidences of juvenile crime. Estimations suggest average savings of 2.50 US-dollars per dollar invested.

		sample of 2,331 students, same schools; comparison group: 1,914 matched students, attending non-LA's BEST-schools, 24 schools in total; Matching Growth modeling, survival analysis			
James-Burdumy, Dynarski, & Deke, 2007**	12 school districts, 26 after-school centers, elementary school students; USA	Experiment, random assignment to treatment/control group of interested students, National evaluation; 12 school districts, 26 after-school-centers, *n* = 2,308; 1,258 treated, 1,050 control; Estimation of intent-to-treat-effect	Participation in *21st Century Community Learning Centre* ASPs	Feelings of safety; academic outcomes, homework completion, behavior	Participants feel safer after school but revealed more negative behavior. There was no effect on test scores in math English and science and homework completion. No influence on parent participation.
Jordan & Nettles, 2000*	Grade 10-12 USA	National Educational Longitudinal Study 1988; 10,000-14,000 students; OLS	Participation in structured and religious activities, time spent in adult-interaction	School engagement, achievement	Significant positive ($p < .05$ and $p < .01$) effect on educational outcomes in grade 12. Time spent hanging out with peers significantly negatively ($p < .01$) related to educational achievement.
Klein & Bolus, 2002*	Elementary schools	Data from CTB/McGraw-Hill CAT-5 mathematics and reading comprehension tests in both the fall of 2001 and again in the	19 ASPs	Reading and mathematics achievement	ASPs correlate to highly significant improvements between pre- and posttests in reading and mathematics

		spring of 2002; Correlations, Regression, t-tests			
Lauer et al., 2006*	Low-achieving, at-risk K-12 students	Meta-analysis, 35 studies	ASPs and summer schools focusing on reading and mathematics	Achievement in reading and mathematics	Significant positive effects of programs on reading and mathematics achievement. No difference between ASP or summer school attendance.
Mahoney, 2000*	High-risk students; USA	Longitudinal, n = 695, annual interviews from childhood, end of high school, at age 20 and 24; Cluster analyses	Participation in extracurricular activities.	Antecedents and moderators in antisocial development.	Participation is associated with reduced dropout and criminal arrests among high-risk students. Decline in antisocial patterns depends on whether the students' social network participates in extracurricular activities.
Mahoney, Lord, & Carryl, 2005a*	6.3 to 10.6 years from an urban, disadvantaged city; USA	n = 439 longitudinal; four-step analytic strategy: (1) pattern-analytic approach, (2) evaluation of patterns with respect to potential selection influences; (3) evaluation of measuring differences; (4) MANCOVA	ASP participation	Child obesity and peer acceptance	Obese children have significantly less peer acceptance than non-obese children. ASP-involvement significantly relates to less obesity at follow up. Regardless if being obese or non-obese, ASP participation is significantly related to increased acceptance.
Mahoney, Lord, & Carryl, 2005b*	Disadvantaged students, age 6-10, grade 1 to 3; USA	Data collected twice in school-year from teachers, ASP staff, parent surveys; records on grades n = 599; Ecological and pattern analysis,	ASP participation classroom after-school care ASP engagement	Academic performance, i.e. grades and reading achievement, motivation	Comparing ASP-care, parent care, combined parent/self-sibling care, and combined other- ASP care-children revealed significantly higher ($p < .05$) academic performance and motivational attributes compared to the other care patterns.

		Fishers' Last Significant Difference, Multivariate analysis of covariance (MANCOVA)			
Marsh, 1992*	Two last years of high school; USA	Longitudinal N=10,000 High School and Beyond data; Correlations, multiple regression	ASP participation	22 post secondary outcomes, e.g. educational aspirations, homework, absenteeism	Controlling for background characteristics and second year results, participation had small significant positive relations with 17 of the outcomes.
McNeal, 1995*	735 public high schools; USA	US-representative longitudinal High School and Beyond-data (1980); *n* = 14.249; Logistic regressions	Extracurricular activities	Dropout	Participation in athletics and fine arts is significantly related to a reduced risk of dropout. No effect of participation in academic or vocational clubs.
Posner & Vandell, 1999*	194 African American and White children from low-income households, Third to fifth grade; USA	Monitorin of after-school arrangements, time-use interviews; Analyses of covariance (ANCOVA), least square means	After-school activities	Child development	Children in after-school times spend more time on academic and extracurricular activities, children in informal settings spend more time watching TV and hanging out. Evidence of transactional relations between after-school activities and child adjustment.
Rodrìguez-Planas, 2010**	Disadvantaged high-school students; USA	Randomized trial; differences in means using weights to adjust for non-response and sample design	After-school program including mentoring, educational services, financial rewards	High-school graduation and post-secondary schooling enrolment	Strong positive educational outcomes quickly fade away. Positive results are found for younger students. Detrimental long-term outcomes for boys suggest that extrinsic rewards are crowding out intrinsic motivation.
Sheldon, 2003*	82 elementary schools,	Data on the quality of schools' partnership	Quality of school, family, and	Performance in state achievement	In schools addressing challenges regarding family and community

	urban area; USA	programs, surveying school leaders on the quality and progress of partnership program; correlations, t-tests, regression	community partnership programs	tests	involvement more students pass achievement tests.
Shulruf, Tumen, & Tolley, 2008*	Large suburban, high school; Auckland, New Zealand	Data on student demographics, participation in extracurricular activities; Hierarchical linear regressions, robustness checks	12 groups of extracurricular activities and 66 individual activities in schools	Student achievement	Only participation in 'team sports' is significantly positively associated with improvement in Literacy scores. Participation in 'hobby' and 'nonspecific' activities show small negative associations with attitudes towards literacy and numeracy (respectively). In all cases, participation explaines two percent or less of the variance in student achievements.
Spittle et al., 2008*	Mean age: 7.9; Australia	Survey of 211 children and their parents; Frequencies, percentages, chi-square analyses	Children's participation in and outside out of school hours sports program	Parental intention for their children's sport-participation in- and outside the program	Most children participating in program also do sports outside. Parental intention for participation in program varies with respect to number of years attending the program and times per week a child trains its main sport.
Story, Sherwood, Himes, et al., 2003**	54 African-American girls, 8 to 10 years old, and their parents/ caregivers; USA	Two-arm parallel group, randomized controlled trial (12 weeks); Statistical comparisons concerning treatment group differences at baseline for demographic and	Participation in after-school obesity prevention program focusing on increasing physical healthy and healthy diet	Body mass index, percentage body fat, physical activity.	After 12 weeks, differences between treatment and control groups revealed that the treated girls (and their parents) intentions to maintain healthy behaviors, gained knowledge about proper diet practices, got a preference for physical activity.

		outcome variables, Poisson regression			
Vandell, Reisner, & Pierce, 2007*	Low-income students, 35 elementary schools (1,796 stds), 14 middle schools (1,118 stds); USA	Two-year study *n* = 2,914; two-level random-intercept HLM models	Regular participation in ASPs with intense relationship to neighborhoods, schools, and community organizations	Academic and behavioral outcomes, drug use	Regular participation is significantly related to gains in standardized test scores and work habits and a decrease in behavior problems. Reduced alcohol and drug use compared to students receiving less supervision; effect sizes: .47-.67.
Zarrett et al., 2009*	Grade 5-7; USA	Longitudinal Study of Positive Youth Development, quasi-experimental *n* = 1,357; Variable- and pattern-centered analysis	Sports and other activities	Indicators of youth development	Benefits of sport participation depend on specific combinations of multiple activities in which youth participated along with sports. Sports and youth development program yields positive outcomes.

Table 4: Combination of components

Study	**Population & Country**	**Data & Method**	**Independent variable**	**Dependent variable**	**Findings**
Archambault et al., 2009*	High school; French-speaking Canada	Longitudinal sample of 11,827	School engagement (behavioral, affective, and cognitive indices) separately and as a global construct	Dropout	Global engagement reliably predicted school dropout. Only behavioral engagement made a significant prediction in the equation. Confirmation of the multidimensional construct of school engagement, reflecting both cognitive and psychosocial characteristics
Cooper, Valentine, Nye, & Lindsay, 1999*	424 students, grade 6-12, one parent per student; USA	Survey; Correlations, Hierarchical Multiple Regression Analyses	Participation in homework, TV watching, extracurricular activities, other	Standardized achievement test scores, class grades	After-school activities are significant predictors of achievement. More time in extracurricular activities and other structured groups and less time in

			structured after-school groups, jobs		jobs and television viewing are associated with higher test scores and class grades. More time on homework is associated with better grades.
Eccles & Barber, 1999*	1,259 mostly European American 6th graders from 10 school districts; Michigan, USA	Longitudinal Michigan Study of Adolescent Life Transitions; ANOVA, regression analysis	Participation in five activity-types: pro-social (church and volunteer activities), team sports, school involvement, performing arts	Educational and risky behavior	Involvement in pro-social activities is related to positive educational trajectories and low rates of involvement in risky behavior. Participation in team sports is linked to positive educational trajectories and to high rates of involvement in drinking alcohol.
Epstein & Sheldon, 2002*	12 elementary, 6 secondary schools; USA	Longitudinal data on school rates of daily student attendance and absenteeism, specific partnerships implemented to increase/sustain attendance; correlations	Family-, school-, community partnerships	Student attendance	Family-school-community partnerships can predict an increase in daily attendance and/or decrease in chronic absenteeism.
Mahoney & Cairns, 1997*	2 middle schools, Sample of 206 boys and 186 girls, At-risk students; USA	Longitudinal investigation (1982-1983), interviews, school, school book information; Cluster analysis , growth curve analysis	Extracurricular activity-involvement	Dropout	Activity-involved students reveal lower dropout rates than non-involved counterparts ($p < .001$).

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