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IssueBriefs

Education & Early Childhood Development (ECD)

Critical Links

Education is fundamental to child well-being and contributes to reducing poverty and inequalities. Higher levels of education among mothers promote healthy and health-seeking behaviour and are therefore associated with a reduced probability of children dying before their fifth birthday, and with a reduced risk of maternal death. Young children who are prepared for school are better equipped to learn, more likely to stay in school and more likely to succeed, with higher future earning capability. Young people's knowledge of reproductive health can help reduce the risk of HIV and sexually transmitted infections.

School readiness is a proven strategy to improve the economic and social development of a society. Various studies show its benefits and return on investment, in terms of reduced education costs, increased human productivity and income, and benefits to society. Effective early childhood development (ECD) programmes reduce education costs by improving the internal efficiency of primary education: fewer children repeat grades. Every added grade achieved in school leads to higher eventual earnings. A citizenry that can earn more can better contribute to the economic growth of a country. Overall, the benefits to society of sound ECD programmes outweigh the costs by five to seven times.

School readiness should be embedded within holistic child development, which encompasses verbal and intellectual skills and knowledge, social abilities, and health and nutritional status. Studies show that poor educational performance, reduced years of schooling and lower incomes as adults can all be associated with stunting in young children. Children therefore derive the greatest benefits when ECD programmes are holistic, integrating psychosocial and school readiness interventions with health and nutrition interventions. Holistic development is essential for children's preparedness for school and their ability to participate in different learning environments. The strong link between holistic child development and school readiness underscores the importance of integrated, multi-sectoral ECD programmes that unite health, nutrition, education and protection, guaranteeing all children a strong start to life.

Interventions that start from prenatal care and nutrition of mothers up to the age of two years have the greatest impact on stunting. Children who are stunted are more likely to grow into adults who are less educated, poorer, and less healthy. Interventions to support psychological development after this critical period are also effective.

Education: progress and disparities

Indonesia has made remarkable progress towards the Millennium Development Goals (MDGs) on universal primary education and gender equality. Indonesia's primary school net enrolment ratio (NER), primary survival rate, and literacy rate amongst young people 15-24 years of age are well over 90 per cent. The country has achieved gender equality in women's literacy, primary and junior secondary education, and has nearly achieved the gender equality target in senior secondary education. In tertiary education, the ratio of girls' attendance to that of boys was 96 per cent in 2010.

Geographic disparities in NERs are still marked, more so at secondary level. The following analysis of enrolment uses data from Susenas 2010, which show some differences with administrative data (Box 1).

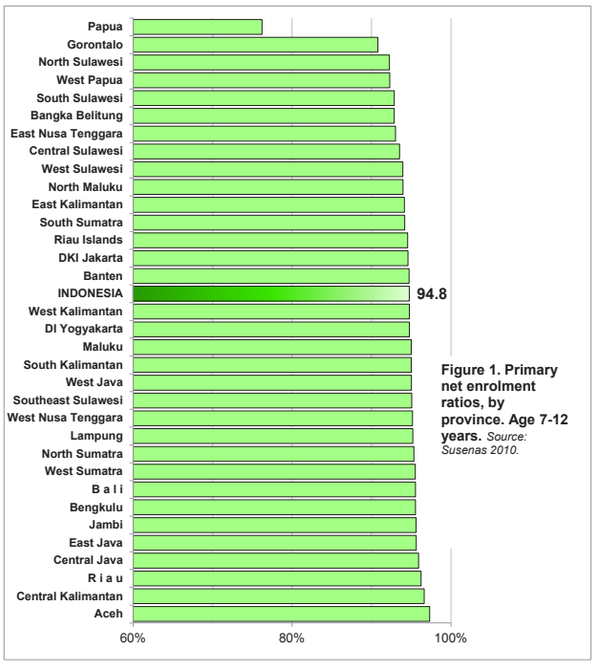


Figure 1. Primary net enrolment ratios, by province. Age 7-12 years. *Source: Susenas 2010.*

Gender differentials are generally lower than the urban/rural differential (Figure 3). There is little or no difference in primary NER. At junior secondary level, the gender differential is slightly in favour of girls (by 2 per cent), whilst at senior secondary level, it is slightly in favour of boys (by 6 per cent).

Overall, the enrolment patterns confirm the need to accelerate action in the rural and eastern parts of the country at all levels.

Box 1. Net enrolment ratios

- At province level, Papua needs special attention, as it has the lowest primary NER (Figure 1).
- Junior secondary NER is 68 per cent nationally according to survey data, but 75 per cent according to data from the Ministry of Education and Culture. Some eastern provinces are well below the national average (Figure 2).
- At senior secondary school level, survey data show NER at 46 per cent for children aged 16-18 years enrolled, whilst the Ministry data show this to be 56 per cent. The worst performing provinces are mostly in the eastern part of the country.
- Rural and urban disparities increase as children move up the system, in favour of urban children (Figure 3).

The 2010 census results show higher numbers of out-of-school children than previously estimated, with geographic and urban-rural disparities greater than gender disparities (Box 2).

The majority of children who are out of school left school during the transition from primary to junior secondary school. Around 20 per cent of enrol in junior secondary school. In contrast, 85 per cent of junior secondary graduates continue to upper secondary schools.

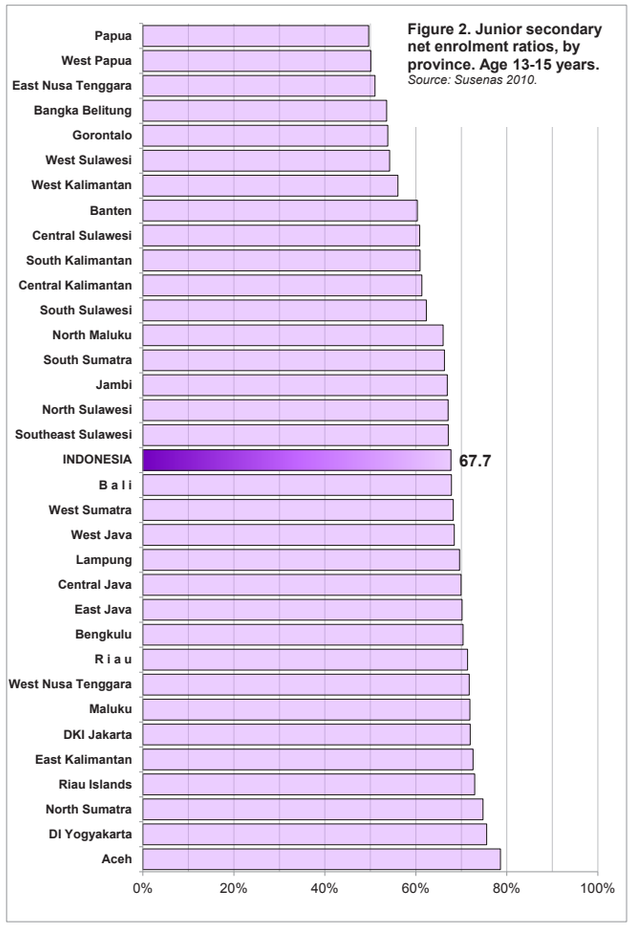


Figure 2. Junior secondary net enrolment ratios, by province. Age 13-15 years. *Source: Susenas 2010.*

Dropout rates in primary education are highest in the first grade (37 per cent). The rates are lower thereafter, but rise again in grade 6 (Figure 6). In the same school year, the dropout rate for junior secondary education is relatively low (1.8 per cent across Indonesia). However, this goes up in some eastern provinces (e.g. around 6 per cent in East Nusa Tenggara).

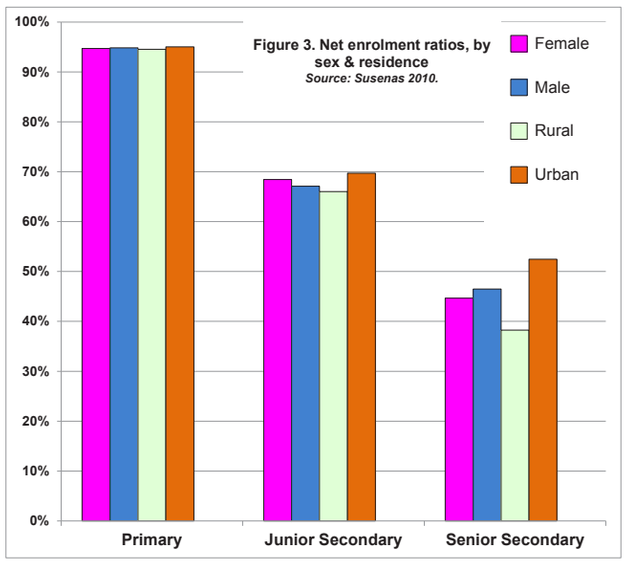


Figure 3. Net enrolment ratios, by sex & residence *Source: Susenas 2010.*

The quality of primary and secondary education needs attention across all levels and provinces. Out

of 65 countries assessed by OECD's Programme for International Student Assessment in 2009, Indonesia ranked among the 13 countries in the last quintile for the three categories assessed (reading, mathematics and science).

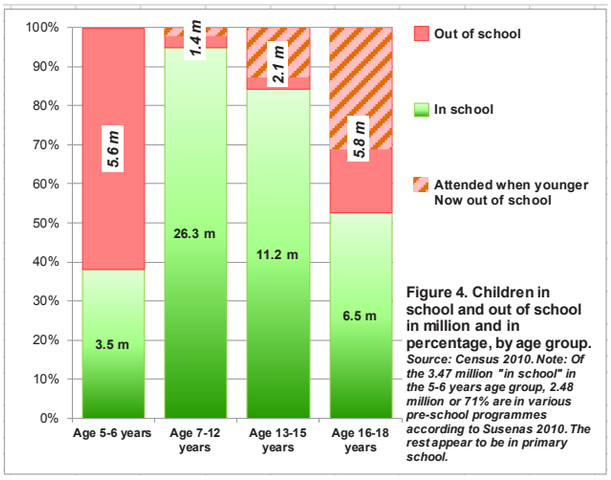
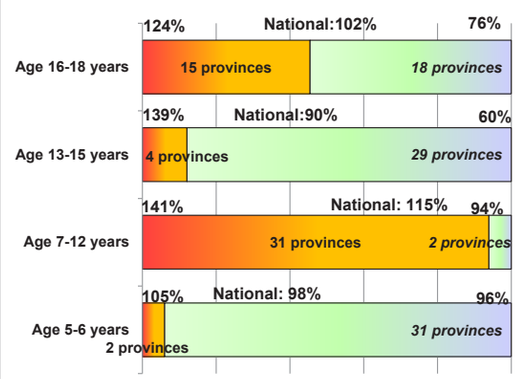


Figure 4. Children in school and out of school in million and in percentage, by age group. *Source: Census 2010. Note: Of the 3.47 million "in school" in the 5-6 years age group, 2.48 million or 71% are in various pre-school programmes according to Susenas 2010. The rest appear to be in primary school.*

ECD: diversity & disparities

Indonesia has diverse ECD services. These range from formal preschool and kindergartens serving children aged 4-6 years to non-formal playgroups and childcare centres, serving children aged 2 to 6 years not served by formal programmes. Community-based services such as Posyandu (village integrated services post) focus largely on health and nutrition, and *Bina Keluarga Balita* (BKB), another community-based programme, focuses on parenting education for mothers of young children, which centres on Pos PAUD.[1] Programme outcomes appear to be generally positive. A study on school readiness in six districts in Indonesia showed that ECD programmes had helped to develop psychosocial and cognitive competencies to make children ready for school, providing participation in those programmes was at least one and a half years.

Figure 5. Gender differentials* in out-of-school children at each level, national & province. *National and provincial values in gender differential are indicated above each bar. 33 provinces. Source: Susenas 2010.*

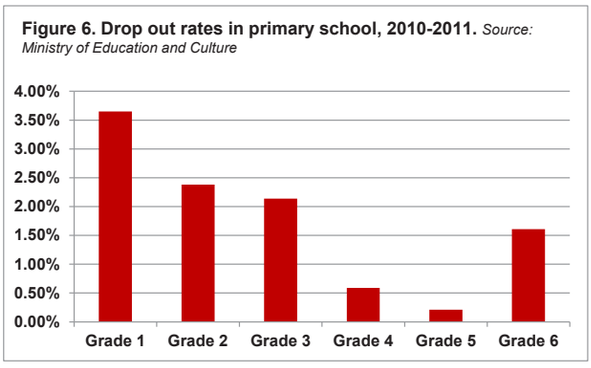


*Out-of-school rate for girls divided by out-of-school rate for boys

Box 2. Out-of-school children

- Over 3.5 million children aged 7-15 years were out of school in Indonesia in 2010. Of this number, 1.4 million children were of primary school age and 2.1 million of junior secondary school age, with about equal numbers of girls and boys. If children of senior secondary school age are also counted, 9.3 million children were out of school. A significant proportion of these out-of-school children had some experience of attending school (Figure 4).
- Central, East and West Java account for 42 per cent of Indonesia's out-of-school children in the age group 7 to 15 years. West Java alone accounts for 21 per cent of the country's out-of-school children in this age group. In terms of percentages, some eastern provinces are higher.
- Gender differentials amongst out-of-school children vary by level and province (Figure 5). At ages 7-12 years, a greater proportion of girls are out of school compared to boys. In the 13-15 years age group, the proportion of boys who are out of school is 10 per cent more than that of girls.
- The proportion of children who are out of school is greater in urban areas than in rural areas: 6 and 4 per cent respectively amongst urban and rural children aged 7-12 years; 18 and 14 per cent respectively amongst urban and rural children aged 13-15 years old.

Figure 6. Drop out rates in primary school, 2010-2011. *Source: Ministry of Education and Culture*



Children who use pre-school/ECD services do so relatively late. Susenas 2010 data show that 19 per cent of children aged 3-4 years old were enrolled in ECD programmes, compared to 27 per cent of children aged 5-6 years of age.

The access to and quality of ECD services is highly unequal. Some 62 per cent of 3 to 6-year old children had never participated in any early childhood education or preschool programmes. In 2009, the proportion of urban children attending some form of ECD programme was twice that of rural children. Whilst some cities such as Yogyakarta are able to provide ECD services for 60 per cent or more of children aged 3-6 years old, Indonesia has relatively few ECD facilities. This explains partly why parents tend to send their children to school early: some 72 per cent of six year olds are already registered in the first grade of primary school.

[1] *Pos Perkembangan Anak Usia Dini*: Early Childhood Education Post, a centre for a variety of non-formal early childhood education/ECD programmes, combined with Posyandu and BKB.

Barriers

The cost of schooling is one of the barriers that prevent children from accessing and completing education. Including transportation, the costs of sending a child to primary school is about half or more of household income for those below the national poverty line. Uniforms can account up to one-third of total costs for rural primary schools. Fees of different types may account for 20 per cent of household education expenditure, and more so for urban primary schools. When the child moves up to junior secondary school, household education expenditure goes up, with transportation costs increasing by as much as three times. Even if parents can afford the fees, social pressure to conform (appearance of clothes, ownership and display of consumer goods, etc.) may cause a child to drop out. Parents may also believe that the returns to secondary education are relatively low, compared to the extra costs involved.

The poor quality of education is rooted in the teaching learning process. Only 27 per cent of primary school teachers are qualified. This proportion rises to 76 and 84 per cent respectively at junior and senior secondary levels. Efforts to raise teachers' qualifications began in 2006 with certification of in-service and pre-service teachers. By December 2011, some 1.2 million teachers had been certified, out of 2.9 million, including those from religious schools under the Ministry of Religious Affairs. A recent study, however, showed that teacher certification and formal qualifications have not yet had an impact on student performance. Certification of teachers alone appears to be insufficient to improve education quality. The delivery of teaching – in other words, classroom and pedagogical skills – appear to be more important. Teachers, therefore, need to be periodically re-certified and assessed in this area. One effect of teacher upgrading and certification has been to double teacher salaries and make the teaching profession more attractive to qualified candidates. This in itself is important.

Teacher absenteeism and demotivation are barriers, especially in remote regions. A study found at least 37 and 26 per cent of teachers absent from schools at the time of the survey in Papua and in West Papua respectively. Absenteeism was highest in the most remote areas. Living conditions, transportation difficulties, delays in salary payment, lack of accountability amongst teachers and the low capacity of local school authorities to monitor teacher performance and behaviour all contribute to demotivation and absenteeism. To counter this, the government has established an incentive system for teachers working in remote locations, including a financial allowance.

Poverty, combined with the low educational level of families, may push a child out of school and into child labour. Indonesia has some four million children engaged in child labour. Almost two-thirds of out-of-school children engage in some productive activity. One quarter of out-of-school children in the 10-14 years' age group have less than four years of education, which means they will grow up to be functionally illiterate adults. These figures underscore the importance of expanding and accelerating efforts in second chance education and in providing other services that enhance children's life options. Comparison of 2009 and 2004 surveys show that child labour has not decreased.

Children who work have a 30 per cent lower probability of attending school than those who do not. In Indonesia, child labour is largely a rural and agricultural phenomenon. Working, however, does not necessarily eliminate a child's opportunity to obtain a formal education. Some 87 per cent of children in employment (aged 7-14 years) also attend school, but lag behind their non-working counterparts in terms of grade progression.

The quality of ECD services needs improvement. There is no regulatory framework for monitoring quality. The numbers and quality of staff are inadequate, and the distribution favours the cities. Preparatory training of staff is short and financial incentives are limited.

Institutional and other constraints form barriers to having holistic integrated ECD programmes. The collaboration between various government agencies at district level is not optimal, making it difficult to have an integrated approach. Local authorities and communities are often not aware of the importance of having ECD services that integrate psychosocial simulation and early learning with health, hygiene and nutrition interventions. In 2010, only 12 per cent of ECD services for children 3 to 6 years of age were able to provide an integrated approach. Preschools and kindergartens that teach reading and writing generally predominate.

Opportunities for action

Education stakeholders need to promote education for all children in the community, and not only for those already in school. Many parts of Indonesia are now implementing good practices related to School-Based Management, which aims to make schools accountable to communities for delivering good quality education services. However, school-based management approaches need to combine with community-based mechanisms that continually monitor children's school attendance, ensure their

progress to higher education level, and identify children out of school or those at risk, so that appropriate action can be taken.

Strong community-based information systems and follow-up mechanisms are needed for monitoring children's schooling status. The lack of good data for planning and targeting is one of the greatest impediments to increasing access to education, especially for disadvantaged children. Local authorities only have data on children in schools, but not on children who are out of school. Complementing school-based systems with community based information systems would enable schools and communities to work together, identify children at risk and those who have dropped out, and take appropriate action, such as providing transport for children from remote villages. Innovative examples of community-based information systems already exist, for example, in Polewali-Mandar, West Sulawesi. Such systems would require relatively small investments from district budgets but the returns would be worthwhile.

Social assistance programmes need to target out-of-school children and adolescents. *Bantuan Siswa Miskin* (BSM) provides scholarships for poor students, and *Bantuan Operasional Sekolah* (BOS) provides school operational grants. Both these programmes are school-based and are yet to reach out-of-school children effectively. Improved mechanisms for reaching such children should be established at central or local levels, so that out-of-school children can return to school and benefit from school-based social assistance. For example, local governments can fund back-to-school programmes out of the district budget (APBD). It is also worth noting that conditional cash transfer programmes such as PKH [2] do not address the issue of transition from junior to senior secondary school.

Second chance or alternative forms of education should be promoted, with due attention to quality and relevance. This includes life skills education to equip adolescents with the required knowledge and skills to manage risks, reduce vulnerabilities and enhance labour market opportunities.

Efforts to improve teacher quality should focus on teachers' comprehension of subject matter, re-certification, periodic assessment and training for pedagogical skills. Thus far, the emphasis has been on upgrading qualification rather than on competencies. The budget for in-service training needs to be increased. Teacher quality is also important in improving access to basic education. For example, teachers are not adequately trained for the early grades of primary school. Under the "One-Roof" school (*Satu Atap*) approach, the teachers must have the ability to teach at both primary and junior secondary level. In small schools, multi-grade teaching requires specialized skills, which teachers often lack.

Improving education in regions that have fallen behind will require adapting education policies and strategies to local socio-cultural contexts. The high repetition in early grades of primary school in certain provinces is attributed, amongst other reasons, to children who are more used to their local language, rather than the Indonesian national language. There is also the issue of how to reflect Indonesia's rich and diverse cultures in the curriculum. A third issue is the low priority for education in certain cultures, such as conservative societies in Java that favour early marriage for girls and give preference to boys' education. Teacher supply, distribution and management, particularly in remote regions, cuts across all these issues. Initiatives such as competitions, increased supervision, and performance-based allowances or non-monetary rewards may be effective in increasing teacher motivation and reducing absenteeism.

The multitude of ECD programmes and stakeholders require strong policy coordination. Districts will need to adhere to national policies and principles for Holistic-Integrated ECD. Advocacy needs to focus on the critical links between ECD and educational outcomes, and on the importance of combining nutrition with psychosocial interventions.

More investment is needed in ECD, so that the poorest children are able to benefit from holistic integrated ECD programmes. Indonesia has increased education spending impressively: education expenditure in 2011 was one-fifth of government spending and 3 per cent of its GDP. However, the 2009 investment in ECD was only 2.1 per cent of the education budget, compared to an international benchmark of 4 to 5 per cent.

As part of Indonesia's social protection schemes, ECD programmes in the poorest districts should receive a subsidy for every child enrolled. ECD programmes are largely absent or underfunded in poor communities. Yet children in these poorest communities are the ones who would benefit the most from ECD services, which mitigate the impact of poverty on child development. Central and local governments should therefore support ECD in these poorest communities. The conditionality should be that the subsidy only goes to a holistic programme with nutrition, school readiness and p sychosocial interventions.

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2 PKH: *Program Keluarga Harapan*, a conditional cash transfer programme

Integrated ECD at community level will require building on existing services. Communities already have services based on Posyandu for health and nutrition interventions targeted towards young children, and BKB /Pos PAUD for early childhood education and parental education. In practice, the volunteers providing these two services may be the same, but they play different roles at different times, which makes it easier to integrate the nutrition and psychosocial components at community level.

ECD should be implemented as a continuum until the age of eight years. District services that provide the volunteers with training (health, local family planning, and education offices) should work together to ensure integrated training for and effective targeting of the various interventions, and to ensure a smooth transition from PAUD to primary school. This will require addressing the related issues of early learning, language of instruction, preparation of "pre-school" teachers and those teaching early grades.

Districts will need to revitalize and motivate the community volunteers, since volunteerism by itself may not be sustainable in the long term. Innovative mechanisms to incentivize the volunteers have been successful in certain districts such as Mamuju in West Sulawesi, where training for volunteers in income generating activities was combined with district government support for credit mechanisms. The government's move to register qualified volunteers as district-level contract workers provides an important incentive.

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