DIAGNOSTIC TOOLS FOR IMPROVING EDUCATION POLICY PLANNING: A CASE STUDY ON DROPOUTS IN EARLY SECONDARY SCHOOLS IN CAMBODIA

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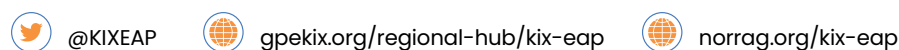
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ABOUT THE LEARNING CYCLE ON DIAGNOSTIC TOOLS FOR IMPROVING EDUCATION POLICY PLANNING

This case study is a result of the KIX EAP Learning Cycle "Diagnostic tools for improving education policy planning". Facilitated by the UNESCO International Institute for Educational Planning (IIEP), this professional development course ran from 20 September to 11 November 2022. Across 8 weeks, this Learning Cycle enabled participants to identify system bottlenecks for improving education policy planning, with a special focus on the use of diagnostic tools for system performance analysis. 14 national teams from 13 countries took part in this Learning Cycle: Cambodia, Georgia, Kyrgyz Republic, Lao PDR, Maldives, Moldova, Mongolia, Pakistan (Balochistan), Pakistan (Sindh), Papua New Guinea, Sudan, Tajikistan, Timor Leste and Yemen.

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LIST OF ACRONYMS AND ABBREVIATIONS

CPD	Continuous professional development
DOEYS	District Office of Education, Youth and Sport
DOP	Department of Planning
EMIS	Education Management Information System
IIEP	International Institute for Educational Planning
MoEYS	Ministry of Education, Youth and Sport
NEP	NGO for Education Partnership
OUI	Open University Institute
POEYS	Provincial Office of Education, Youth and Sport
PRESET	Pre-service training
SABER	Systems Approach for Better Education Results
TEC	Teacher education college

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EXECUTIVE SUMMARY

Introduction

Cambodia's lower secondary school completion rate has shown only a very slight increase since the beginning of the 2019 Education Sector Plan (ESP) implementation. Likewise, the dropout rate has been on the rise, reaching 18.6%, 3.2 percentage points above the baseline. Therefore, school dropout was identified as the most significant and applicable interest of analysis to the country, specifically at the lower secondary education level in the administrative area, Sihanoukville in Preah Sihanouk Province, where the dropout rate was the highest in the 2019–2020 school year in Cambodia, at 36.3%. The 2019–2020 ESP and the MoEYS (2018) report produced prior to the Learning Cycle served as relied-upon data sources to address the issue.

Data Availability

Data on the completion rate and the dropout rate at the lower secondary educational level were analysed and disaggregated by province to compare the 2017/2018, 2018/2019 and 2019/2020 cohorts as well as by gender. Data collected through various means were used, including the grade 3 assessment (2006), the PETS survey (2004), which was a small-scale research survey conducted by a group of teacher educators in a school in Kandal province, and a research study by the NGO Education Partnership (NEP), to examine the constraints and challenges related to the topic. In addition, a variety of qualitative research papers were used to investigate the issue.

Examining Level Completion

Using the available data, including repetition rate, teaching hours, dropout rate by gender, loss of school days and the education level of teaching staff, among others, indicators related to levels 1 and 2 of the International Institute for Educational Planning (IIEP) Education Policy Trees were identified and examined. Based on the analysis, pathways through the decision trees were selected to reflect the different constraints of the education system, and potential root causes were identified, as follows:

(i) Teacher-related constraints:
- Teacher absenteeism
- Limited instructional contact hours between teachers/ students
- Low teaching skills (24.2% with a bachelor's degree and 1.5% with a master's degree at the national level)

(ii) School and family-related factors:
- Children forced into the workforce (especially in rural areas)
- High internal migration
- Grade repetition
- School violence (85.7% of young people aged between 15 and 25 years old faced school violence)

Potential Policy Options

Potential policy options promising to address the constraints uncovered by the analysis were identified. One option could be to strengthen the school support committee by involving the parents and the community in setting up a warning system to prevent dropout and hiring social workers at school to provide counselling to families and teachers. Additionally, in response to the teacher-related constraints, a recommendation was put forth to use the Systems Approach for Better Education Results (SABER) framework to analyse the Cambodia Teacher Policy Action Plan, to promote continuous professional development (CPD), to strengthen the implementation of Teacher Professional Standards at schools and to continue with teacher education through the development of the 1 TEC approach, strengthening PRESET and upgrading academic qualifications and pedagogical skills. In the face of socioeconomic issues, a final suggestion was given to provide scholarships to children and connecting parents to social support (cash transfer).

In the end, policy options were prioritised to focus specifically on the issue of school violence. Policy options that could have the potential to make direct changes regarding the dropout/push-out issue of the country are as follows: (a) adopt strict forms of punishment and specific discipline; (b) build a school violence reporting mechanism; (c) create a bullying prevention committee to share data/evidence with students, parents and school personnel and (d) display posters and/or signs about the punishment for bullying at school.

FACTORS AFFECTING DROPOUT AT THE LOWER SECONDARY EDUCATION LEVEL IN CAMBODIA USING THE IIEP POLICY TREE

Introduction

This knowledge report aims to analyse the root causes of dropout at the lower secondary level in Cambodia using the UNESCO International Institute for Educational Planning (UNESCO IIEP) policy tree[1]. Based on a study of the low completion rates in primary and lower secondary schools conducted by the Department of Policy, MoEYS, in 2019, the high dropout rate, of 50.56%, accounts for the low completion rate. The study identifies other key factors that contribute to low completion rates, such as dropout mobilisation, repetition, overage, poverty, ethnicity and disability (Department of Policy, 2019).

Therefore, school dropout was identified as the most significant and applicable interest of analysis to the country, specifically the lower secondary education level in the administrative area, Sihanoukville in Preah Sihanouk Province, where the dropout rate was the highest in the 2019–2020 school year in Cambodia, at 36.3% (see Figure 1 below). The critical analysis of dropout is more significant and applicable to Cambodia's current challenging situation.

The completion rate for lower secondary schools registered only a very small increase since the beginning of the Education Sector Plan (ESP) implementation. In three years, it has advanced just 1.6 percentage points, to settle at 48.1%. In other words, less than one in two young people aged up to five years above the intended age group for lower secondary complete this cycle. As with other secondary education indicators, female students present higher completion rates than their male peers. The gap between these two groups is 10.3 percentage points. The gap has increased since 2017/18. As of 2020/21, the completion rate of boys reached just 43.1%. One of the possible factors affecting completion and survival rates is the early dropout of students in lower secondary schools.
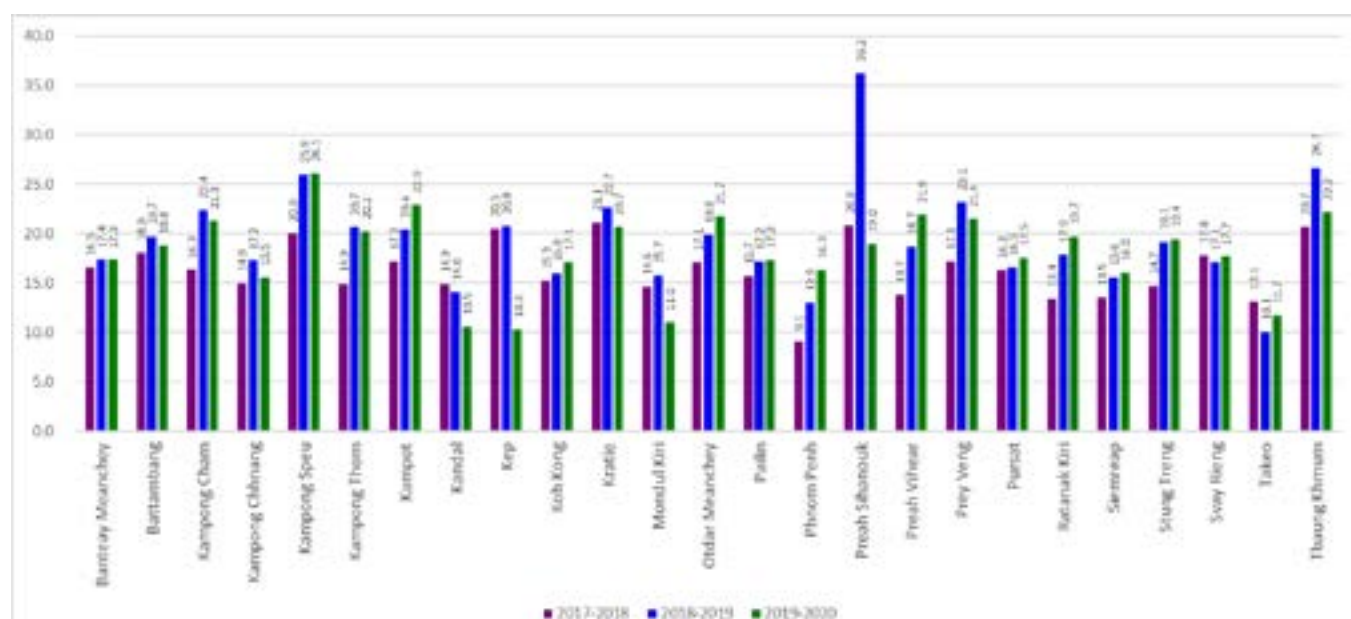
Source: MoEYS (2022, p. 35)

1   A PowerPoint application that facilitates discussion among education planners to prioritise issues to include in the education sector plan (ESP) design based on challenges identified in a sector analysis

Despite the crucial strides achieved in the second half of the previous ESP, dropout is again on the rise. By 2019/20, the rate had reached 18.6%, 3.2 percentage points above the baseline. Although both boys and girls suffered losses, young boys continue to abandon lower secondary school in a higher proportion than young girls, registering a dropout rate of 20% in 2019/20 and 19.2% in 2020/21 (MoEYS, 2022). The dropout data are collected and calculated by the Education Management Information System (EMIS) Department.

However, the dropout data often differ at different levels because the population data are usually reported differently among the Provincial Office of Education, Youth and Sport (POEYS) and the District Office of Education, Youth and Sport (DOEYS,) schools and villages. Data integrity is a large problem in Cambodia although much investment has been put in place to improve the EMIS. It is also important to note that most departments in MoEYS have a planning section responsible for collecting data directly from the Provincial Education Department and other relevant sources. Most key data collections in MoEYS include the Annual School Census by the EMIS Department; the Planning Department's bi-annual data collection by the Personnel and Finance Department; and the tri-annual data collection conducted by the Planning Department, Primary Education Department, Secondary Education Department, Early Childhood Education Department and Non-formal Education Department.

Examining Level Completion

Using the available data, including repetition rate, teaching hours, dropout rate by gender, loss of school days and the education level of teaching staff, among others, indicators related to levels 1 and 2 of the IIEP Education Policy Trees were identified and examined. Based on the analysis, pathways through the decision trees were developed to reflect different constraints of the education system (see Figure 2 below).
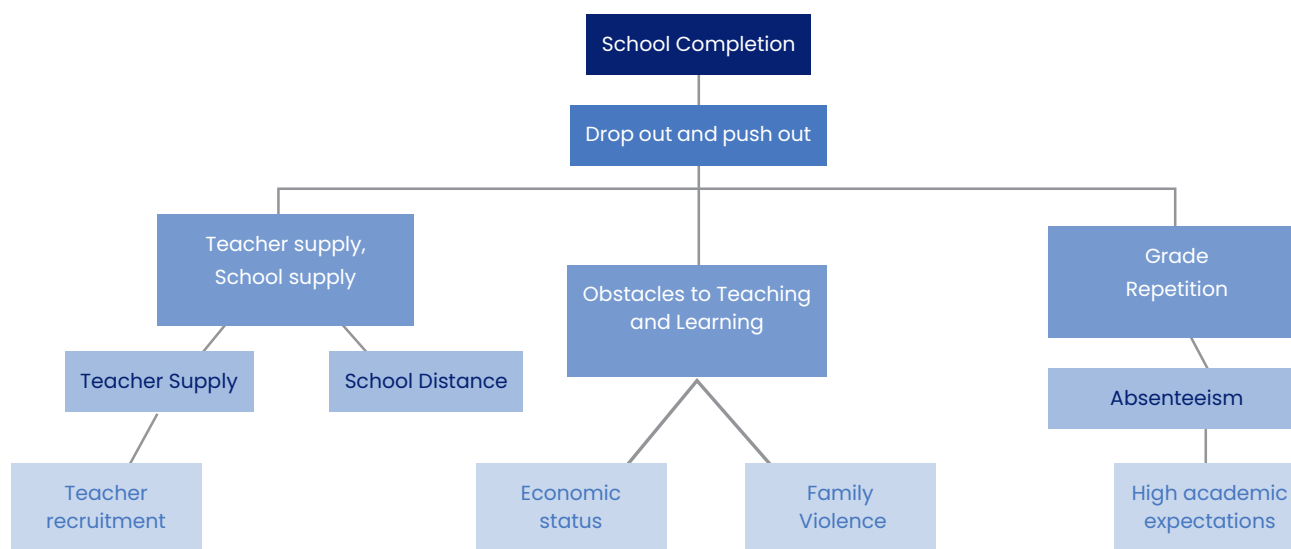
Constraints of the Education System

The decision tree process identified potential root causes affecting the education system in Cambodia. Those constraints need to be re-examined, and a solution must be found to deal with them.

Teacher-Related Constraints

Teacher Behaviour. An unpublished small-scale research survey in the Kandal province conducted by a group of teacher educators to examine the factors impacting dropout in a school showed that teacher behaviour and teaching performance influenced the dropout rate. The study showed that when teachers blamed students in class, those students felt ashamed and dropped out. Teachers play a critical role in the learning process, and their classroom behaviour is an essential dimension in a student's educational experience. Some of the challenges teachers face in the school environment in which they operate include poor infrastructure, lack of teaching aids, crowded classrooms and geographical isolation. However, effective teachers can make a difference in students' lives even under challenging circumstances, such as good teaching practices related to class preparation, assigning homework and classroom management. Also, in the data collected through the grade 3 assessment in 2006, teachers reported working approximately 30 hours per week, mainly in classroom teaching (Benveniste et al., 2008). These estimates roughly concur with the data collected in primary schools in the PETS 2004 survey. In this case, an average teacher reported spending 8.2 hours per week in class preparation and planning and other administrative duties (with a median of 7 hours).

Teacher Absenteeism. A research study by NEP found that at least 50 days of the 186 total days per academic year are lost for various reasons. The findings showed that too much of

Figure 2. Policy Tree on Different Constraints of the Education System

Source: Authors (2022)

the school year is lost in Cambodia through additional official school holidays, teacher absences and decreased contact hours due to shortened teaching sessions. International research clearly shows that the classroom teacher has the most impact and influence on student learning outcomes at the school level (Obilor, 2019).

In Cambodia and similar countries, qualified substitute teachers are rarely available, and their absence implies a significant loss. Students not only miss out on an opportunity to learn, but time is also taken away from engaging in productive activities at home. The loss of school days because of teacher absenteeism further compounds the existing challenges posed by a short school day. Limited instructional contact hours constrain opportunities for academic achievement. Perhaps more importantly, repeated non-attendance reflects poorly on a school's reputation, demeans the intrinsic value of education in the eyes of the community and may induce student absenteeism. Teacher absences appear to be negatively correlated with student performance in mathematics and language tests, albeit these correlations are minimal. Nonetheless, it is worth highlighting that loss of instructional time appears to have negative consequences on student learning (MoEYS, 2018).

Teacher Skills. Principals and teachers are the two main actors in the education system who can positively impact students' outcomes. Presently, the challenge in the education field is teachers' lack of competency. Lack of pedagogy and lack of teaching method are the main inhibiting factors in transmitting knowledge to students. A mid-term review report in 2021 indicated a high percentage of students performing 'below the basic proficiency level'.

Moreover, based on the EMIS, in 2019 the education levels of teaching staff were as follows: 1.8% had received only primary education, 18.4% had obtained lower secondary education and 54.2 % had attended an upper secondary school. This low-level education of teaching staff undoubtedly affects the quality of education and increases dropout.

Table 1. Education Levels of Teaching Staff (National, Rural and Urban)

Area	Education level of teaching staff						Totals
	Primary	LS	US	Bachelors	Masters	PhD	
National	1,651 (1.8%)	17,217 (18.4%)	50,808 (54.2%)	22,657 (24.2%)	1,377 (1.5%)	10 (0.01%)	93,720
Urban	388	4,062	10,991	7,246	803	4	23,494
Rural	1,263	1,315	39,817	15,411	574	6	70,226

Table 2. Education and Pedagogical Training of School Staff by Province

Province	Education Level of Teaching Staff						Education Level of Non-Teaching Staff						Teaching Staff without Pedagogy Training					
	Primary	L.Sec.	U.Sec.	Graduate	Post Graduate	PhD	Primary	L.Sec.	U.Sec.	Graduate	Post Graduate	PhD	Primary	L.Sec.	U.Sec.	Graduate	Post Graduate	PhD
Banteay Meanchey	106	797	2,217	1,553	93	0	39	180	357	310	52	0	3	9	32	43	1	0
Battambang	249	913	2,704	2,942	271	20	56	242	573	726	152	9	18	26	31	22	3	0
Kampong Cham	175	1,385	2,441	1,728	107	4	81	506	701	423	67	1	4	23	15	25	9	0
Kampong Chhnang	54	467	1,581	1,419	64	1	10	125	274	287	44	0	0	1	27	32	0	0
Kampong Speu	100	846	1,772	1,494	95	1	32	181	287	311	60	0	0	12	18	54	5	3
Kampong Thom	129	670	1,996	1,546	122	0	29	136	285	335	43	0	0	2	13	29	3	0
Kampot	83	799	2,303	1,482	73	0	30	161	448	309	50	0	1	3	17	20	3	0
Kandal	274	1,343	2,870	2,611	201	0	52	318	488	548	107	3	1	5	10	22	2	0
Kep	0	23	266	177	10	0	1	5	43	45	3	0	0	1	1	0	0	0
Koh Kong	13	186	783	215	2	0	0	41	96	42	7	0	0	3	17	10	0	0

Province	Education Level of Teaching Staff						Education Level of Non-Teaching Staff						Teaching Staff without Pedagogy Training					
	Primary	L.Sec.	U.Sec.	Graduate	Post Graduate	PhD	Primary	L.Sec.	U.Sec.	Graduate	Post Graduate	PhD	Primary	L.Sec.	U.Sec.	Graduate	Post Graduate	PhD
Kratie	36	625	1,635	376	24	0	9	119	203	60	13	0	2	1	38	24	3	0
Mondul Kiri	59	210	577	87	4	0	11	9	27	16	5	0	0	0	0	0	0	0
Otdar Meanchey	111	340	903	276	11	0	30	73	187	53	6	0	5	7	7	7	4	0
Pailin	12	75	366	210	6	0	1	7	44	39	4	0	0	0	0	0	0	0
Phnom Penh	345	1,254	3,330	3,742	563	8	53	173	349	433	159	3	11	7	18	13	1	0
Preah Siha-nouk	44	179	948	449	38	0	4	21	147	89	11	0	0	1	0	3	0	0
Preah Vihear	96	312	1,353	384	33	0	41	88	136	73	11	1	0	1	3	2	1	1
Prey Veng	252	1,338	2,028	2,138	96	1	91	513	597	649	75	2	1	6	24	24	2	0
Pursat	62	632	1,608	782	55	1	15	206	323	150	41	0	0	3	4	2	0	0
Ratanak Kiri	69	320	774	259	8	0	16	32	51	38	5	0	1	2	16	6	0	0
Siemreap	180	737	3,136	1,736	153	1	69	255	904	445	84	1	2	9	24	62	14	0
Stung Treng	62	276	901	173	4	0	11	47	96	35	5	0	0	10	34	5	0	0
Svay Rieng	54	479	1,865	1,290	59	0	28	157	484	283	19	0	3	4	22	30	0	0
Takeo	122	802	3,039	2,392	130	1	32	270	863	555	51	0	3	2	27	21	6	0
Tbaung Khmum	109	586	2,039	1,107	64	0	42	181	417	231	43	0	2	37	56	48	0	0
Whole Kingdom	2,796	15,594	43,435	30,568	2,286	38	783	4,046	8,380	6,485	1,117	20	57	174	454	504	56	3
- Urban Area	631	3,098	9,077	8,698	1,108	15	145	598	1,362	1,301	362	9	16	19	44	27	5	0
- Rural Area	2,165	12,496	34,358	21,870	1,178	23	638	3,448	7,018	5,184	755	11	41	155	410	477	51	3

The main challenge in students dropping out is those students' inability to learn and to perform tasks in school in response to teacher instruction. The lack of knowledge in learning affects students' attendance in school, and consequently, they decide to drop out. Other related challenges could be the insufficient number of teachers with content mastery and student-centred pedagogical skills, including the following: 1) the subject matter and pedagogical preparation of teachers in pre-service not matching student needs, 2) the low education qualifications of secondary school teachers, 3) few incentives to attract qualified individuals to teaching and motivate good performance and 4) not enough professional development opportunities for teachers and teacher educators to enhance their skills and career development.

Family-Related Factors

Along with school-related factors, factors related to family also contribute to student learning outcomes. Traag and Velden (2008) pointed out that success at schools relies not only on differences in students' characteristics but also on their family backgrounds. This is because family-related factors contribute to student learning and school dropout. Pov (2019) defined family-related factors as socioeconomic status, parental education, parental migration, parental involvement, family structure and child labour. Furthermore, several studies conducted in developing countries have found that children from poorer households are at the highest risk of dropping out of school because they need to be involved in labour work to support the expenses of their families (e.g. Adam et al., 2016; Balfanz & Byrnes, 2012; Branson et al., 2014; Brown & Park, 2002; Chugh, 2011; Filmer, 2000; Hussain et al., 2011; Koepke et al., 2011; Nolan et al., 2013; Petrick, 2014; Quinn, 2013; Tas et al., 2013).

Families in Cambodia spend nearly 9% of their annual family income on education. Employment is chosen over education because this way the children can help support the family. Low-income families need children for the workforce to increase the family income. In traditional family structures in Cambodia, young people are expected to contribute to the household (UNICEF, 2020). In rural areas, farming is the primary revenue source for households, and extra help is needed in rice cultivation. Some children work in the street begging for money, selling goods or scavenging, for example. Students'

frequent school absence can be due to the distance between home and school, prioritising earning money over schooling to assist their family or low academic performance (UNICEF, 2020).

The family situation pushes the whole family, including the child, to migrate to another city or even another country to look for new opportunities. Migration within Cambodia and across national borders can significantly impact the education and employment prospects of those who migrate and their families (UNICEF, 2020). Apart from this, if the parents' educational level, especially that of the father, is high enough, they are more likely to understand the importance of education and thus send the children to school or support them as much as they can to make sure that the children stay in school. Moreover, if educated, parents can also help their children learn at home, so they can improve and learn better at school. Parents and schoolteachers need to work together on the children's education, specifically ensuring regular communication between parents and teachers about the learning situation.

The results of Pov (2019) showed that only one family-related factor significantly predicted dropout status for grade 8: parental involvement in their children's schoolwork. This finding added a new perspective to the dropout literature in Cambodia (e.g. Keng, 2004; No & Hirakawa, 2012; No et al., 2012, 2016) in addition to private tutoring participation. Parental involvement in their children's schoolwork refers to the time parents spend daily helping their children with their homework. In some research conducted, this participation varied by grade. Parents of grade 8 students tended to be more involved in helping their children learn at home than parents of grade 7 students. Previous studies in Cambodia did not find this factor to significantly influence the odds of dropout or student achievement. Most of these studies indicated parents' educational level as the main contributing factor to dropout or achievement (e.g. Keng, 2004; No & Hirakawa, 2012).

Over the past decades, a large body of the dropout literature has suggested that the impacts of parental education on dropout rates were exclusively focused, while only a few studies investigated the relationships between parents' involvement at home and achievement or school dropout incidences. In this regard, the current study's findings were consistent with those of Alexander et al. (1997), Bridgeland et al. (2006), Nguon (2012) and Rumberger et al. (1990). Parental home-based resourcing, in this case, refers to the time parents spent helping with their children's school-related work, especially homework. Several studies suggested that parental involvement in home-based activities, such as homework assistance, tended to be lower and appeared to be less significant for pupils at the secondary level (Campbell & Uto, 1994; Ho, 2003; Tam & Chan, 2009; Tett, 2004). These studies' findings are consistent with those of the current study conducted at the secondary level.

In this regard, student achievement possibly explained how parental involvement in homework supervision decreased the likelihood of dropping out of school. The results showed that there was a significant relationship between parental involvement in homework supervision and achievement (r = -.14, p < .01). Higher-achieving students have been found to have lower risks of dropping out of school (e.g. Finn et al., 2005; Hardre & Reeve, 2003; Janosz et al., 1997; Jimerson et al., 2000; Lamb et al., 2004; Rumberger, 1995; Rumberger & Lamb, 2003; Stearns et al., 2007; Traag & Velden, 2008; Williams et al., 1993). Therefore, the empirical results of this study suggest that regardless of parents' social backgrounds, their involvement at home is crucial to their children's academic success and can reduce the probability of children dropping out of school. Parents should consider allocating sufficient time at home to help their children with their school-related work so these students can stay on track.

School Violence

According to UNESCO (2019), 'school violence produces devastating consequences for the victims. Unsafe learning environments not only undermine the quality of education for all learners, negatively impacting 'pupils' academic achievement, but they can also lead the victims to drop out of school'. Today, we classify the form of school violence into two types: corporal punishment and bullying.

Firstly, corporal punishment is a common occurrence that happens at every school level. In the context of Cambodia, every parent used to give the teacher the right to punish their child when they misbehave. In Cambodia, there is a saying, 'When I entrust my child to a teacher, all I ask is to get back the eyes, skin and bones'. According to the education law of 2007, corporal punishment is prohibited under article 35. However, UNICEF (2018) stated that 30.5% of teenagers still receive corporal punishment in poor urban communities.

Secondly, bullying is not a new issue and remains to be addressed. According to stopbullying.gov (2022), 'Bullying is unwanted, aggressive behaviour among school-aged children that involve a real or perceived power imbalance'. Bullying has become a serious problem and is a significant concern at every school level. It comes in many forms, including physical bullying, sexual bullying, psychological bullying and cyberbullying (UNESCO, 2019). UNESCO (2019) showed that 8.6% of students received physical bullying, 6.8% psychological bullying, and 18.4% sexual bullying. Other research by UNICEF revealed that 41.8% of adolescents believed that victims of bullying are usually children with physical or learning disabilities, 25.3% of students felt that the bullying happened based on the victims' socioeconomic background, 17.7% of the incidents on ethnic discrimination and 15.2% on gender discrimination.

Additionally, digitalisation brings cyberbullying into consideration. In total, 85.7% of Cambodians between ages 15 and 25 have faced and/or are currently in danger related to online violence, cyberbullying and digital harassment. Moreover, 68% of parents stated their child experienced inappropriate content, 56% believed that their child would receive negative influences, 47% fear cyberbullying and 34% are concerned about their children's well-being on social media (The ASEAN Post, 2019).

POLICY OPTIONS

School Environment

According to PISA-D, an inclusive environment is vital for students to feel safe and welcome at school. The students' sense of belonging also plays a crucial role in measuring an inclusive environment. In total, 93.6% of the students feel that they belong at school, while 11% expressed that they experience feeling lonely at school. Moreover, principals and teachers are important stakeholders in creating a positive climate at school. From the principals' perspective, 93.2% of students in school whose principals agreed or strongly agreed that more special classes are needed for students who lag behind, 88.8% of students who have repeated a grade learn that they must try harder to succeed. The teachers of 15-year-olds, on the other hand, expressed views that were in contrast with the goal of promoting inclusiveness in education. They agreed or strongly agreed that 99% of students with disabilities should be taught in special schools and that 85% of the students who are behind should have been held back or that 98% of students who lag behind should be placed in special classes. All in all, principals and teachers showed positive attitudes towards inclusion. However, several principals and teachers also indicated that grade repetition is needed for low-ability students and that low-ability students should be placed in special classes, which counters the goal of promoting inclusiveness in education (PISA-D/2018).

Grade Repetition

When children cannot progress to the next grade academically, they may need to repeat that year. The PISA-D Cambodia report identified that students who repeat a grade are more likely to leave school early and that boys are more likely than girls in Cambodia to repeat a grade (MoEYS, 2018). In the 2018/19 school year in Kratie, for example, 3% of boys in lower secondary school were repeating a grade compared to slightly more than 1% of girls. The statistics are similar to those in Battambang and Phnom Penh. Taniguchi and Hirakawa's (2016) longitudinal study in Cambodia identified repetition as a key reason for leaving school early as students became disengaged and were old enough to potentially earn a wage. While grade repetition has been linked to an increased likelihood of leaving school early, it is important to note that automatic promotion to the next grade is not necessarily a solution. Researchers found that in India, the policy of automatic promotion, which was used as a policy initiative to combat high numbers of pupils leaving school early, may have further contributed to placing students at increased risk of leaving early. This is because academically unprepared students are less likely to receive the support they require to meet academic expectations. These students fall further behind and can have greater levels of academic frustration. Consequently, they may be at higher risk of leaving school early.

Addressing School Violence

To tackle school violence, specifically school bullying, school personnel and the school itself play a crucial role in ensuring that students at school are free from bullying. Firstly, teachers function as the guides in the classroom and make sure that their students are well behaved. To prevent bullying, teachers should have in place strict punishments and specific disciplinary actions for bullying. They must create a safe and peaceful learning environment and also ensure that not a single student faces bullying. Teachers must take a stand against these actions and not ignore them. Moreover, the teacher should report cases of bullying to the appropriate school committee if the issue is too overwhelming to resolve in class. Secondly, the school staff's responsibility, especially the principal, is to mentor the team, address bullying incidents in schools and deliver a safe and supportive environment for students. Further, a bullying prevention committee is also helpful when sharing summaries of data/evidence with students, parents and school personnel. Lastly, a supportive network at school is also important in preventing bullying, such as installing cameras at places where incidents are likely to happen. Also, posters or signs detailing the repercussions for bullying should be displayed in schools and communities. All stakeholders, including parents, caregivers and communities in general, should also work collectively to provide and ensure a safe environment for students.

Strengthening the Capacity of the School Management Committee to Support Students' Learning and Detect Early Signs of Dropout

Parents' and the community's participation in children's education is critical. Building the capacity of the members of the school management committee is important, especially to increase knowledge of school-related policies and setting up an early warning system to prevent dropout from happening. Teachers will then be equipped with the capacity to identify children who are at risk of dropping out. They can provide this information to the school management committee and social workers at school to counsel the family and to identify the key issues that teachers can support them with to help children remain in school. Therefore, MoEYS should invest in the deployment of social workers or collaborate with the Ministry of Social Affairs to send social workers to support the school.

Providing Scholarships and Social Protection

The Government and MoEYS must provide scholarships for living and study expenses to disadvantaged students and connect parents to social support (cash transfer), income generation activities and employability.

Ensuring Teachers' Accountability for Students' Learning Outcomes

Policy implementation would ensure that schools and teachers are actively accountable for the students' learning. The implementation of school-based management may be one of the approaches to reinforcing teachers' accountability to students' learning. Robust performance management linked to teacher professional development should be in place in the schools.

Establishing an Early Warning System to Identify Dropout Risk

MoEYS should find better mechanisms that allow teachers, schools and local communities to work together to detect the symptoms leading to dropout among students and take timely actions. A dropout prevention tool kit should be developed and adopted. Using technology for tracking students who are likely to drop out is another option. So far, school information systems (SIS) have been implemented in 265 upper secondary schools, and school tracking systems have been piloted in some schools. These systems store and track all student data and decentralise the job details to assign to all teachers via App/Web. The data in these systems allow teachers and administrators to manage their classrooms and run their schools, respectively. Parents can also easily communicate and monitor their children's performance real time via the SIS Mobile App. Over 60 categories of reports in compliance with MoEYS's regulations have been designed to support the schools. There are more functions with which the SIS can support schools, including having real-time data on dropout rates, repetition rates and teacher shortages. MoEYS should scale up the deployment of SIS in primary schools and lower secondary schools or at least in schools that are vulnerable to high rates of dropout.

Ensuring Effective Recruitment and Deployment

In the long term, MoEYS should have better recruitment policies and strategies to select competent and committed teachers. The teacher development policy must be revised so that competent teachers are deployed in disadvantaged and remote areas.

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