Monitoring attendance during school closure and re-enrolment and attendance after school re-opening: A Guidance Note
UNICEF East Asia and Pacific Region, July 2020

This Guidance Note aims to provide an overview of entry points and means for monitoring the attendance and re-enrolment of students in the context of COVID-19 related school closures and re-openings. It is intended for UNICEF education staff, and education policy makers, planners and practitioners.

I. INTRODUCTION

The global COVID-19 pandemic caused an unprecedented education crisis. At the end of June 2020, schools were still closed in 116 countries according to UNESCO, interrupting the education of over 1 billion children. Prolonged school closures and secondary effects of the pandemic, most notably the negative economic impact, increase the risk of school drop-out among the most vulnerable children and threatens gains made in education access and participation over the years. According to recent research by the World Bank, 7 million students from primary up to secondary education could drop out due to the income shock of the pandemic alone, and the pandemic could
eliminate 16% of the investments that governments have made in this cohort of students’ basic education.¹

Marginalized and vulnerable groups, like girls, ethnic minorities, and children with disabilities, are at even higher risk of drop-out and will be more adversely affected by the school closures if corresponding off-setting mitigation actions are not taken.

Some of the key challenges/barriers to enrolment and attendance aggravated by COVID-19 include the following:²

- **School-related fees and costs**: School-related fees and costs can be a disincentive for disadvantaged families to enrol their children at school. Due to the economic impact of COVID-19, especially on the most vulnerable households, school-related fees and costs can constitute a significant obstacle to re-enrolment on school re-opening.
- **Child labour**: Child labour negatively affects schooling, especially of children of the poorest households. Due to the economic pressures resulting from COVID-19, children of disadvantaged families are likely to face increased pressures to work, negatively affecting their access to education once schools re-open.
- **Disabilities**: Limited understanding and negative attitudes towards disability result in children with disabilities being significantly less likely than their peers to attend primary school. Due to COVID-19, a major risk exists that children with disabilities enrolled in school prior to the crisis, will not return to school, exacerbating exclusion and isolation felt before the crisis. Parents of children with disabilities may also be concerned about the health risks of their children’s return to school.

In order to safeguard education sector investments and proactively prevent children from dropping out of school, education providers need to ensure timely and accurate monitoring of student access and attendance in distance learning programmes during school closures and their re-enrolment once schools re-open. During school closures, children require support to ensure their participation in distance education programmes. After school re-opening, children require support to re-enrol after the long break and to regularly attend during what are expected to be uncertain school schedules.

Systems for monitoring re-enrolment and attendance and tracking drop-outs and absences can play a crucial role in providing the information required to adequately support the most vulnerable students to continue their learning. In the context of COVID-19-related school closures and re-openings, these existing frameworks and systems will often need to be adapted and/or complemented to account for these new circumstances and requirements.

² See UNICEF (2019): Learning Against the Odds - Evidence and Policies to Support All Out-of-School Children and Adolescents in East Asia and Pacific
This Guidance Note aims to provide policy makers and programme managers with an overview on entry points and means for monitoring the re-enrolment and attendance of students during COVID-19 taking into consideration:

- phase of education response to COVID-19 (i.e. before or after school re-opening) and
- pre-existing or new enrolment and attendance monitoring systems (i.e. Education Management Information System: EMIS).

The Note provides additional resources and guiding questions adapted from UNICEF Europe and Central Asia’s forthcoming publication, Building Resilient Education Systems beyond the COVID-19 Pandemic: Considerations for quality inclusive education provision throughout the outbreak and recovery phases of the COVID-19 pandemic and UNICEF South Asia’s guidance, Monitoring learning continuity during COVID-19 school closures.
II. MONITORING ATTENDANCE IN DISTANCE LEARNING PROGRAMMES

Almost all countries, which closed their schools due to COVID-19, have established distance learning programmes to ensure educational continuity during school closures. These programmes vary widely depending on the country context, but generally range from take-home learning kits to sophisticated online learning solutions. During this time, the number of children planning and actually returning to school is likely to be unclear. However, opportunities exist to assess and increase the likelihood of individual students to return to school once schools re-open. Much will also depend on whether countries have registered-based EMIS or not. The below options should not be seen as exhaustive nor mutually exclusive; most countries will opt for a combination of these.  

COUNTRIES WITH REGISTER-BASED EMIS

Systems for tracking of students vary widely across the globe, but an increasing number of countries adopt and rely on register-based EMIS systems with data on individual students. Going one step further, some of these countries established ‘early warning systems’ (e.g. Montenegro, India, Maldives, Mongolia and Malaysia) over recent years, identifying children at risk of dropping out of school. These systems rely on a statistical analysis of former students, who already dropped out of school in the respective contexts, to estimate the risk of individual students currently in school to discontinue their education in the future.

Based on these assessments and ‘warnings’, school authorities are able to proactively respond and provide additional support to these at-risk children to pre-empt their drop-out and ensure their educational continuity. While the indicators for identifying at-risk children are specific and unique to the country context, common indicators include:

- A: Academic performance
- B: Behaviour
- C: Chronic Absenteeism
- D: Disability
- E: Entry and progression in education (late entry or repetition)

These ‘early warning systems’ have been successfully implemented and achieved significant decreases in drop-out and absenteeism. In the context of COVID-19, the data from register-based EMIS can play a crucial role in proactively reaching out to students and their families identified as at risk of drop-out and in that way address and decrease the risk of children not re-enrolling to school upon school re-opening. The same approach can also be applied for the provision of targeted

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3 See for example the case of India quoted in UNICEF/UNESCO (2016): Monitoring Education Participation
4 See UNICEF EAPRO (2020): Review of Education Management Information Systems (EMIS) that Track Individual Student Data
support to children participating in distance education to ensure and increase engagement and participation in distance education programmes.

Questions to consider:

- How will register-based EMIS systems be reviewed, adapted and strengthened to enable schools and local authorities to identify all children at risk of not re-enrolling when schools re-open?
- What new indicators will be included in register-based EMIS systems to cover a wide range of drop-out predictors, including non-engagement in distance learning, MHPSS risks, protection risks and overall socio-emotional risks due to the COVID-19 crisis?
- What guidelines will be provided to schools regarding absenteeism monitoring during distance learning?
- How will school absenteeism data be collected and reported and at which frequency during distance learning periods?

COUNTRIES WITHOUT REGISTER-BASED EMIS

In countries without register-based EMIS, the monitoring of attendance and children’s engagement can be integrated into distance learning programmes. Take home learning kits frequently include assignments, which completion could be recorded and monitored similar to attendance through for example paper- or SMS (e.g. Whatsapp/RapidPro) based systems. Online learning solutions frequently come with comprehensive attendance and achievement monitoring systems. With systematic collection, analysis and utilization of this data, teachers could focus their attention and support to students identified as struggling with regularly participating in these distance learning programmes. In countries relying on distance learning programmes without integrated attendance and monitoring mechanism (e.g. radio and TV programmes), assessment surveys are a viable alternative for monitoring attendance and engagement.

Assessment survey

Some countries in the region (e.g. Cambodia) are conducting surveys to assess student’s intention to return to school after school re-opening. Depending on the scope and scale of the respective surveys, these can also include questions on access to and effectiveness of distance learning programmes, the experience/impact of COVID-19 and vulnerabilities and barriers to re-enrolment. These surveys can range from informal to nationally representative efforts, data can be collected once or regularly, information can be quantitative or qualitative or a combination of both and technological solutions range from pen-and-paper to SMS (e.g. RapidPro/UReport) and phone calls (e.g. Interactive voice response (IVR)).

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6 Adapted of UNICEF (2020): Considerations for quality inclusive education provision throughout the outbreak and recovery phases of the COVID-19 pandemic (forthcoming)
7 IVR surveys use basic mobile phone technology to connect with respondents. A series of voice recordings guide the respondent through how to participate in the survey as well as the subsequent question and answer portion. UNICEF is utilizing IVR survey for assessing the impact of COVID-19 on the education system in Cambodia.
To prepare for school re-opening, possible questions to caregivers, children and young people include:

- Have your child/you continued distance learning from home? For how long?
- Are your child/you planning to return when school re-opens?
- Do your child/you face any challenges that would prevent you from returning to school?
  - Child/I need to financially support the family.
  - Child/I have missed out on several weeks of learning & will not be able to catch up.
  - Schools are unsafe to return to.
  - My primary school aged children were/I was not enrolled in school before.
- What extra support would your child/you need to return to school?

This type of assessment survey can provide a picture on intentions to return and expected re-enrolment on school re-opening by geographic areas (national or sub-national), population group (gender, economic background, disability, etc.) and can also reach children out-of-school pre-COVID-19. As such, the assessment can inform overall programme or geographic prioritization and targeting, but due to the sampling, will usually not be able to inform support to individual children intending or at risk to not return to school on school re-opening. If the survey focuses on marginalized/disadvantaged areas (or populations), results could be used to design programmes aimed at supporting and pre-empting the drop-out of a group or demographic of children. The programming is expected to have less specificity and more targeting error than the individual support provided through identification based on individual level data.

Findings on the specific vulnerabilities of children at risk of not returning to school could be combined with existing/other data sources (e.g. EMIS) to identify individual children at risk of dropping out and inform their support needs/programmes (see ‘early warning system’ above).

Questions to consider:

- How will engagement in learning be monitored throughout distance learning phases?
- How will school absenteeism data be collected and reported and at which frequency during distance learning?
- What guidelines will be provided to schools regarding absenteeism monitoring during distance learning?

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8 See UNICEF (2020): Monitoring learning continuity during COVID-19 school closures (internal, available on request)
III. MONITORING RE-ENROLMENT AND ATTENDANCE AFTER SCHOOL RE-OPENING

After school re-opening, the number of children returning to school might fluctuate for a variety of reasons. Different countries apply different approaches to school re-opening and even within countries approaches might vary from region to region or even school to school. Some countries rely on a phased approach, in which some grades (e.g. exam classes), students (e.g. children of essential workers) or geographic areas start classes ahead of others. Some countries rely on a blended approach, in which face-to-face education is combined with distance learning, while others rely on a combination of both - phased and blended approaches. In many countries, school attendance upon school re-opening will also not be mandatory for children with underlying health conditions or who do not feel safe or comfortable attending face-to-face classes. Due to potential new outbreaks of COVID-19, previously re-opened schools might temporarily close again. To accommodate for these new realities, attendance monitoring and student support systems in most countries will require adaptation in order to remain relevant and be able to respond to the increased risk of drop-out among students caused by COVID-19. Here again, the approaches will vary between countries with register-based EMIS and those without it.

COUNTRIES WITH REGISTER-BASED EMIS

Register-based EMIS with individual student data allow schools and education authorities to reliably compare current enrolment with enrolment pre-COVID-19 and to follow up on individual children not returning.

As different approaches of school re-opening will likely result in significant future variation in attendance, absenteeism and drop-out, collection of enrolment data alone will not suffice. Additional to enrolment, regular monitoring and recording of attendance and absenteeism is crucial. Attendance data need to be collected, monitored and analysed continuously and ideally in real-time. A census type EMIS (with school questionnaire/survey) will not be able to adequately detect and respond to spikes in future drop-out rates, for example resulting from school closures due to subsequent waves of COVID-19 outbreaks.

With continuous monitoring and recording of attendance data, schools and education authorities can reliably identify and follow up on children not regularly attending. To this end, schools can define protocols and thresholds on attendance/absenteeism, which triggers follow-up and response activities.

For efficient decision making, this data should be available in a disaggregated form at school level and ideally also to education authorities at a higher level. Data availability at school level allows school authorities to provide students with tailored support, while data availability at higher level allows education authorities to design targeted and/or universal support to students. Data on absenteeism and drop-out should be disaggregated by gender, age and vulnerability criteria to flag increases in both absenteeism and drop-out figures of particular demographic groups and to allow school and education authorities to respond adequately.

Countries already following an ‘early warning system’ approach also need to revisit and potentially adapt their EMIS to account for the impact of COVID-19 on students. Due to the COVID-19 pandemic’s primary and secondary impact on children’s socio-economic situation some of the
vulnerabilities might have shifted, potentially requiring revisiting the underlying vulnerability criteria and updating the children’s information in the EMIS system.

Based on an analysis of the impact of COVID-19 on children, countries with register-based EMIS and individual student data can add specific COVID-19 related questions/information to the existing tool and collect respective data when re-enrolling students. The data could include information on specific vulnerabilities resulting from COVID-19 (e.g. morbidity/mortality in the family). Updating existing data in the EMIS system addresses potential changes in the child’s welfare (e.g. socio-economic status).

Adjusting complex systems and collecting reliable individual student record/data (particularly around household income, disability status etc.) frequently poses challenges and faces limitations in practice. Depending on the complexity and efforts required for these changes, countries might opt for complementing the EMIS with another approach for the time of the pandemic rather than adapting the EMIS itself.9

Questions to consider:

- How will register-based EMIS systems be reviewed, adapted and strengthened to enable schools and local authorities to identify all children not enrolled and children at risk of dropping out after schools re-open?
- What new indicators will be included in register-based EMIS systems to cover a wide range of drop-out predictors, including non-engagement in distance and blended learning, MHPSS risks, protection risks and overall socio-emotional risks due to the COVID-19 crisis?
- How will education data be triangulated with health, social services, family mobility data, and NGO data to ensure that all out-of-school children are identified, including migrant and refugee children and children with disabilities?
- How will engagement in learning be monitored throughout distance and blended learning phases?
- How will school absenteeism data be collected and reported and at which frequency during distance and blended learning periods?
- What guidelines will be provided to schools regarding absenteeism monitoring during distance and blended learning?

9 India is for example implementing EduTrack to complement and increase the data quality of its EMIS (UNICEF/UNESCO (2016): Monitoring Education Participation)
COUNTRIES WITHOUT REGISTER-BASED EMIS

In countries without register-based EMIS or in cases, in which EMIS systems prove difficult to adapt to the new requirements, monitoring can be complemented and supported through distance learning monitoring systems and assessment surveys.

Aggregate EMIS

Countries implementing aggregate EMIS (i.e. without individual student data) can apply a similar approach of following up on children not re-enrolling or not regularly attending after school re-opening as described above for register-based EMIS systems in case individual students’ enrolment and/or attendance records are collected at school level.

On school re-opening and in the absence of a comprehensive ‘early warning system’, countries implementing aggregate EMIS systems can consider complementing existing data with information commonly linked to drop-out (see ABCDE indicators above) to support the planning of drop-out prevention programs.

Questions to consider

- How will aggregate EMIS systems be reviewed, adapted and strengthened to enable schools and local authorities to identify all children not enrolled and children at risk of dropping out after schools re-open?
- What new indicators will be included in aggregate EMIS systems to cover a wide range of drop-out predictors, including non-engagement in distance or blended learning, MHPSS risks, protection risks and overall socio-emotional risks due to the COVID-19 crisis?

Alternative attendance monitoring systems

In the absence of a register-based EMIS or in cases, in which adapting the existing EMIS is not possible within the given timeframe, countries might opt for establishing a simple additional mechanism for attendance monitoring during the pandemic.

Solutions for attendance tracking range from paper-based attendance tracking to SMS (e.g. RapidPro/EduTrack) and online solutions. These solutions come with specific advantages and limitations. Paper-based systems usually come with a time delay and challenges in transmission to higher levels, SMS based systems are usually not able to provide data on individual level and online solutions require dedicated hardware with the corresponding cost implications if these are not already available. Nonetheless, a system for monitoring and responding to absenteeism should be a priority of any back to school initiative in order to maximize re-enrolment and minimize drop-out.

Attendance monitoring and tracking needs to be continuous and ideally also provide additional information on background and vulnerabilities of children.

Questions to consider:

- How will engagement in learning be monitored throughout distance and blended learning phases?
- How will school absenteeism data be collected and reported and at which frequency during distance and blended learning periods?
• What guidelines will be provided to schools regarding absenteeism monitoring during distance learning and blended learning?

Assessment survey

Some countries in the region (e.g. PNG) are conducting surveys to assess student’s re-enrolment and attendance after school re-opening. Depending on the scope and scale of the respective surveys, these can also include questions on participation in distance learning, the experience/impact of COVID-19, school attendance, learning, vulnerabilities and barriers, teachers and the school environment and readiness.

As described above, the survey (if not implemented as a census) would be able to inform overall programming, but would not be able to identify and support individual children at risk of dropping out. Surveys can only provide a snapshot and complement, but not replace regular monitoring and tracking systems.

The information and data collected through such a survey is often not otherwise available to school and education authorities through their regular monitoring system and can provide valuable insights in the impact of COVID-19 on children. The collected data can provide additional information on the vulnerability of children and - complemented with individual student data - provide the basis of an ‘early warning system’ described above.
ADDITIONAL INFORMATION AND RESOURCES

General

- UNICEF et al. (2020): Framework for reopening schools
- UNICEF (2020): Ensuring an inclusive return to school for children with disabilities
- UNICEF (2020): Considerations for quality inclusive education provision throughout the outbreak and recovery phases of the COVID-19 pandemic (forthcoming)
- UNICEF (2019): Learning Against the Odds - Evidence and Policies to Support All Out-of-School Children and Adolescents in East Asia and Pacific
- UNICEF (2018): Improving education participation

Monitoring attendance in distance learning programmes

- UNICEF EAPRO EMIS Review Paper Series
  - UNICEF (2020): Review of EMIS that track individual student data: Malaysia
  - UNICEF (2020): Review of EMIS that track individual student data: Mongolia
  - UNICEF (2020): Review of EMIS that track individual student data: Timor-Leste

Monitoring re-enrolment and attendance after school re-opening

- For a comparison of data collection methods see for example UNICEF (2020): Monitoring learning continuity during COVID-19 school closures (internal, available on request)
- For an example of the utilization of RapidPro/EduTrack in monitoring re-enrolment and attendance see the case of Sierra Leone after Ebola (internal, available on request)
- GEC (2020): Education Key Indicators and Questions for Covid-19 Assessment
- Joint Education Sector School Needs Assessment in TTF (2020): Supporting teachers in back-to-school efforts – A toolkit for school leaders
TERMINOLOGY

The Education Management Information System (EMIS) is a system that manages education information. In different contexts, this system may be referred to by a different name. An EMIS can manage a wide range of data, including: student information (demographics, enrolment, discipline and other functional elements); instructional/learning information (assessment and achievement data, teacher evaluations, curriculum effectiveness data and other elements related to progression through school); longitudinal data; and business intelligence (financial and human resource data, strategic metrics, etc.).

The Early Warning System (EWS) is a tool that aims to identify students at risk of dropping out of school, based on the presence of ‘red flags’: specific factors that contribute to drop-out. Having identified them, the EWS then supports them to stay in school through strategies and interventions to meet their specific needs. It is a system that enables schools or education authorities to recognise a red flag warning at an early stage – before the student has dropped out and early enough to put in place appropriate support to keep them in school. In short, an EWS is a system that enables schools and education authorities to identify students with specific needs and support them in a timely and appropriate way.

Distance learning/education is defined as an education provided to students remotely without regular face-to-face contact with a teacher in the classroom. Distance education includes learning through take-home printed materials, Radio or Television programmes, and online.

Blended learning combines multiple modalities, including in-person student teaching and learning, the use of education technology applications and students’ interactions with online learning. In this case, education technology applications and online learning are some of the teaching strategies to support students reaching their learning goals. Blended learning can also include distance learning.

See UNICEF (2020): Review of EMIS that Track Individual Student Data: Summary Report
See UNICEF (2018): Early Warning Systems for Students at Risk of Dropping Out
Ibid
Ibid