



PEIC

PROTECT EDUCATION IN INSECURITY AND CONFLICT
حماية التعليم في ظروف النزاع وانعدام الأمن

ATTACKS ON EDUCATION: ADDRESSING THE DATA CHALLENGE

PEIC SEMINAR REPORT
15 -16 June 2015
Doha, Qatar

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PEIC Seminar Report
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INTRODUCTION

Conflict and insecurity are depriving children and young people of their right to quality education. An estimated 36% of out-of-school children are living in conflict-affected areas.¹ Millions more youth are missing out on meaningful opportunities for learning and skills development in these contexts. Not only are education systems impacted by the general destruction and danger that conflict brings or the climate of fear it creates, but they also become targets. A growing body of research, including the recent Global Coalition to Protect Education from Attack (GCPEA) publication *Education under Attack 2014*, demonstrates that attacks on learning facilities, students and education personnel by both armed non-state groups and state armed forces are a widespread tactic of war – and one that has adverse consequences for the communities directly affected, as well as the wider systems of which they are a part.

Both the *Education under Attack 2014* study and a number of other publications and advocacy initiatives have emphasized the need for improved and continuous collection, aggregation, analysis and sharing of information related to attacks on education in situations of conflict and insecurity. This information is critical, not only for triggering and informing immediate responses and raising public awareness, but also for purposes of strengthening accountability and improving the prevention of future attacks. Data collected over time are key to understanding patterns of attacks and informing efforts to stop them; the aggregation of data to give a global perspective can also be an important tool for advocacy and may help to encourage political and resource commitments to improve prevention and response. The past several years have witnessed improvements in the collection and use of data on attacks, but gaps and challenges remain.

The following report summarizes presentations and discussions during the PEIC International Seminar ‘Attacks on Education: Addressing the Data Challenge’, held on 15-16 June 2015 in Doha, Qatar. The seminar aimed to advance understanding and share knowledge about the challenges facing data collection and analysis related to attacks on education and how these challenges might be addressed. Implications for a specific PEIC initiative to develop a Global Data Service, tasked with driving a process of collection, analysis and dissemination of information for use by a wider body of organizations, were also considered throughout the seminar. Bringing together multiple perspectives on the issue, the event provided a forum where practitioners and researchers from the fields of education, child protection, public health, forensic psychology and criminology were able to exchange their expertise and experience in data collection and analysis, and generate conclusions and recommendations to help guide the way forward, not only for PEIC but also for others.

¹ UNESCO, Education for All Global Monitoring Report 2015 – Education for All 2000-2015: Achievements and Challenges (Paris: UNESCO, 2015).

MAPPING THE TERRAIN

The seminar began with a mapping of existing processes and tools for collection, analysis and dissemination of data on attacks on education. Participants with relevant expertise provided short overviews of different initiatives in practical terms and using specific country examples, laying the foundation for subsequent discussion of their strengths and limitations.

UN Monitoring and Reporting Mechanism (MRM) on Grave Violations against Children in Situations of Armed Conflict

The Security Council has had a mandate on children and armed conflict since 1999, with a framework that includes a number of Security Council resolutions and tools for addressing the following six grave violations:

- Recruitment or use of children by armed forces or armed groups
- Killing or maiming of children
- Rape and other grave sexual violence against children
- Attacks against schools and hospitals
- Denial of humanitarian access to children
- Abduction of children

Tools for addressing these violations include the UN Secretary-General's annual report to the Security Council on children and armed conflict – the latest one covering 23 country situations and including an annexed list of parties to conflict (both armed groups and armed forces) responsible for committing one or more of the six grave violations; a country-specific MRM where such parties are listed; a Security Council Working Group on Children and Armed Conflict which reviews reports and formulates recommendations; and time-bound action plans agreed through dialogue between listed parties and the UN to end violations, which include concrete activities to be undertaken in order to be de-listed.

A party is listed in the annex of the Secretary-General's annual report when one or more of five of the six violations (recruitment or use, killing or maiming, sexual violence, attacks on schools or hospitals, or abduction) has been documented in line with the guidance provided in relevant Security Council resolutions. Once listed, a formal MRM is set up in the country, and is responsible for monitoring and documenting the six grave violations and reporting on them to the Security Council on a regular basis via the Secretary-General's report, individual country-specific reports and confidential quarterly updates; it is also tasked with advocacy and dialogue.

The MRM consists of a Country Task Force (CTFMR), co-chaired by the highest UN representative in the country (i.e. the Special Representative of the Secretary-General in peacekeeping or special political mission settings where there is a Department of Political Affairs or Department for Peacekeeping Operations Mission, or the UN Resident Coordinator in countries without a UN peacekeeping mission) and the UNICEF country representative. Members of the CTFMR include both UN agencies and international and local NGOs; while there is interaction in many cases, the process does not involve the government.

Since Security Council Resolution 1998 was issued in 2011, making attacks on schools and hospitals a trigger violation and providing clearer guidance about what constitutes an attack,

the focus on collecting data on attacks on schools within the MRM seems to have increased. SC Resolution 1998 (2011) made it clear that ‘attacks on schools and hospitals’ is an umbrella term for attacks, or threats of attack, on physical infrastructure but also protected persons in relation to schools or hospitals, and that while only these subcategories could be trigger violations, the MRM should also report actions that impede children’s access to education, including military use of education facilities.

In order for attacks on schools to trigger listing, there needs to be evidence that they are ‘recurrent’ – i.e. ‘it should be established that a party to conflict has committed such attacks or threats of attacks several times during one reporting period; this excludes single, isolated incidents or the random conduct of an individual acting alone. The concept of “recurrent” connotes a multiple commission of such acts’.²

Data collection is incident-based and includes concrete information such as where and when an attack occurs, the immediate impacts in terms of damage or destruction, the number of children impacted, the perpetrator (if known), and the means used to carry out the attack. In 2014, the UN issued a *Guidance Note on Security Resolution 1998* which is intended to provide further clarity around definitions and give clearer guidance regarding the types of information to collect so as to encourage more consistent monitoring and reporting.

Examples from Nigeria and Israel and Palestine were presented to the group to illustrate the process of data collection on attacks on education by the MRM and the challenges faced in very different settings. In Nigeria, where the situation in the northeast has only very recently been called an emergency, the UN has a very light footprint and there is no UN mission, humanitarian cluster system or formal human rights monitoring – which makes it particularly challenging not only in terms of access but also in terms of avenues for referral or response when documenting violations. A CTFMR has been convened and trained to collect information, with sub-groups, comprised mostly of civil society organizations, established in conflict-affected areas. They are also trying to establish an alert mechanism whereby civil society organizations, schools, school associations, government, media, and community members have a channel for reporting information to the MRM, which is then tasked with further vetting that information. Access for MRM partners to areas where attacks are occurring is extremely restricted, however, which makes it difficult to verify incidents. The task is further complicated by the significant risks for monitors who may be suspected by both sides of spying.

In Israel and Palestine, voluntary reporting on violations has been undertaken by a Working Group on Grave Violations against Children since 2010. Both attacks on schools and denial of humanitarian access to education are monitored. The Ministry of Education plays a key role in data collection; focal points in schools (usually, head teachers) have been trained by UNICEF and given a reporting template for reporting information. Information is collated at the school level, then sent to the district level and up through to the Ministry. The Ministry passes the information to Save the Children for a first level of data cleaning (i.e. detecting and correcting errors) and verification, after which it is shared with UNICEF for a second round of verification and entry into the MRM database. Because the MRM is not a formal structure, it does not have dedicated staffing or budget, which makes it difficult to go out to the field to verify information – although it does still manage to verify a significant number of incidents. Data are only able to be released every quarter because of the time it takes for information to be collected, cleaned, verified and entered into the database, which complicates its use for rapid response by Education Cluster partners – although the same 30-40 schools repeatedly constitute about 90% of attacks.

² Office of the Special Representative of the Secretary-General for Children and Armed Conflict, *Protect Schools and Hospitals - Guidance Note on Security Council Resolution 1998* (New York: Office of the Special Representative of the Secretary-General for Children and Armed Conflict, 2014). <https://childrenandarmedconflict.un.org/publications/AttacksonSchoolsHospitals.pdf>

The inflexibility of project funding also poses challenges for response. More than anything, however, the use of MRM data for advocacy and effective response to stop attacks is impeded by the broader political context.

The Education under Attack Study

Education under Attack is a global study of threats or deliberate use of force against students, teachers, academics, education trade union members and government officials, aid workers and other education staff, and against schools, universities and other education institutions, carried out for political, military, ideological, sectarian, ethnic or religious reasons. UNESCO published the first two volumes of the study in 2007 and 2010, and GCPEA has since taken over production of the study, releasing the latest version in 2014.

Education under Attack 2014 covered the period from 2009 through the first half of 2013 and looked at attacks on all types of educational institutions, students and staff at all levels of the education system around the world that fit with the agreed definition of an attack. It also looked at military use of schools and universities. The study used several different types of source, including UN and NGO publications (e.g. SG annual reports on CAC, situation reports, country studies, cluster advocacy briefs) and online media reports, primarily in English and French but also in Spanish. Information requests were sent out to field offices of GCPEA member organizations and key informant interviews were conducted with human rights researchers and field-based staff of UN agencies and NGOs. Online media were trawled using the same sets of key words for a wide number of combinations of possible search terms. In-country researchers were commissioned in a small number of countries where the situation was particularly complex or the accuracy of available information was particularly difficult to assess.

Some of the challenges encountered in preparing the latest volume included the exponential expansion of information available (which had not been anticipated in the design of the project), grey areas in terms of fit with agreed definitions, and the lack of standardized use of terms and indicators across organizations reporting attacks on education. While the layers of review and differing approaches among members of the Coalition made the process of producing the final version more labour intensive, the result was a very well-reviewed and much stronger data set.

The report was intended for a general audience, as well as relevant actors, and the language used was deliberately pitched at the lay reader so as to raise awareness about the scale and nature of the problem in the hope of increasing pressure to stop attacks and support response. In terms of monitoring its impact, this has not been done in a formal way – although it would be very useful to build such assessment into the project the next time around so as to have a better idea of who reads the report and how it is used. Media coverage of the last report was minimal, partly because it is difficult to get such coverage but also because the press releases did not have a strong news story or angle; this was in part due to the fact that the report could not describe change over time or the current scale of attacks in a precise way because of changes in definitions and scope and because of the differences in definitions used and types of information provided by agencies collecting data on attacks. Ideally, the research should be set up in such a way as to ensure that a clear and precise news angle will emerge, and the launch of the report should target the wider public via the media, as well as relevant actors.

GCPEA is embarking on preparation of the next volume, *Education under Attack 2017*, and is factoring lessons learned into planning and resourcing for the study. There is recognition that key messages should be thought out from the start and that thematic elements commissioned should reinforce these messages. It may also be useful to think of building in a process for monitoring the impact of the study, although attribution is obviously a considerable challenge.

Field Research

Recent work undertaken by the Columbia Group on Children in Adversity with funding from PEIC was presented to illustrate the value of in-depth field research for obtaining a more complete picture of what is happening in a given context. The Program on Forced Migration and Health at the Columbia University Mailman School of Public Health and the Columbia Group for Children in Adversity have been involved in applying public health methods to child protection issues and human rights monitoring, and specifically to the issue of grave violations against children – for example, conducting sensitivity analyses of the MRM to compare the number of MRM-reported incidents against the number of incidents that are actually taking place. The aim of this specific project with PEIC was to develop a cost-effective, efficient and reproducible non-population-based methodology that could enumerate attacks on education within a given recall period in a particularly-affected region, characterizing their frequency and type, and could easily be replicated elsewhere to enable better data collection and analysis.

The study was carried out in the South Kivu province of the Democratic Republic of the Congo (DRC) and in Mogadishu, Somalia, working closely with education authorities, international agencies and civil society groups in both contexts. Key actors with privileged knowledge of attacks (from 54 different organizations in the education and child protection sectors in South Kivu and from 26 organizations or groups in Mogadishu) were identified and interviewed using interview guides that allowed for a qualitative review of what happened in addition to the collection of more quantitative indicators such as the name of the school attacked and the date of the incident. The researchers then used purposive sampling to determine a subset of reported attacks for verification (which involved interviews with on-site informants in the case of South Kivu, and a combination of on-site informant interviews and searching news archives for reports by reputable media sources in the case of Mogadishu). In DRC, for example, the verification rate was approximately 80%. Most reports that were not able to be validated fell outside of the recall period, while in several cases it was not sufficiently clear that they fitted the definition of ‘attacks’; only one reported incident seemed not to have actually occurred. While 238 incidents of attack or military use of schools were reported in South Kivu during the recall period, the MRM had only about half this number listed for the same year over the entire country.

Counting Out-of-School Children

In its work to reduce the number of out-of-school children worldwide, Educate A Child (EAC) collects, analyses and uses data to monitor access and retention and to better understand and address the obstacles to completing an education that children are facing. Their commitment is to influence the enrolment and retention of at least 10 million out-of-school children by 2015/16. In reaching this goal, EAC uses a partnership model, providing co-funding to implementing partners with established education approaches and on-going interventions within communities where they work. For its monitoring and evaluation work, which is a key component of the programme, EAC draws upon these partners to collect data on an ongoing basis. They use an online system whereby partners can upload data themselves using EAC guidance regarding the collection and submission of data. Validation controls are built into the system, but EAC does additional data cleaning in conversation with partners and regularly conducts field visits to see where students are and how information is being collected.

EAC has 41 projects in 36 countries. Priority countries are identified on the basis of having large numbers of out-of-school children, as well as partners with a demonstrated track record of successful interventions in these countries. Of the countries in which EAC is currently working, a substantial number are in some way experiencing the effects of conflict or insecurity (whether because they are or have been sites of violence, or are hosting refugee populations from neighbouring countries). A lack of institutional capacity, issues related to the consistency, quality,

accuracy and timeliness of EMIS use, and population movement in the case of refugees and IDPs are some of the data collection challenges faced.

At present, EAC's data collection does not have the level of detail required to be able to show correlations or causal links between enrolment and retention issues and attacks on education in areas of heavy incidence – although there may be some more qualitative information that comes through in technical reports. Each additional piece of data collected has a cost implication; however, collecting metrics that might help to give a clearer sense of the impacts of attacks or finding some way to link the EAC database with PEIC's future database may be something that would be of interest to partners working in affected contexts and could be viable assuming additional resources are available to do so.

Global Terrorism Database

Managed under the auspices of the National Consortium for the Study of Terrorism and Responses to Terrorism (START) centre, the Global Terrorism Database (GTD) is an open source, incident-based database that captures information on terrorist events around the world from 1970 onward, including more than 140,000 incidents to date. The GTD crawls thousands of publicly available sources daily using an automated search string process to filter out over two million sources, which are then culled further by a machine learning model to about 2,500 daily reports that need to be reviewed manually by a team of experts. Information is collected on at least 45 variables for each case, with more recent events including information on up to 120 attributes so as to capture more nuance.

The database relies primarily on media sources and a given incident needs to have at least one fairly strong international media source to be included, although this can be supplemented by other types of source. Validity scores are assigned to indicate the quality of the different sources substantiating an incident. Entries in the database are updated as needed if and when new or revised information becomes available. The GTD employs approximately 12 senior staff, 10 hourly staff and 20-40 interns to complete the work of reviewing incidents and coding and entering data into the database.

The definition of terrorism used by the GTD has evolved since the project of data collection began in 1970 in light of divergent opinions on what constitutes a terrorist act. For events from 1998 onward, the original definition used has been parsed into three parts and coded accordingly so that users can select only those cases that meet their own definition. In keeping with the original definition, each incident has to be an intentional act of violence or threat of violence by a non-state actor and, in addition, two of the following three criteria also has to be met for inclusion:

1. The violent act is aimed at attaining a political, economic, religious, or social goal;
2. The violent act includes evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) other than the immediate victims; and
3. The violent act is outside the precepts of International Humanitarian Law.³

A more expansive approach has been taken to include cases where there is not enough information to distinguish definitively between terrorism and insurgency or where there may be doubt that the incident was truly a terrorist act, although users can exclude these cases from their searches. It should be noted that the database does not include state-sponsored attacks or criminal acts.

³ Global Terrorism Database, 'Data Collection Methodology': <http://www.start.umd.edu/gtd/using-gtd/>

The GTD does include 'educational institutions' as a target variable, and might be a helpful source for future data collection and analysis of attacks on education. While information about attacks on students and staff would be captured when these incidents occur in the immediate vicinity of education institutions, on school transport or during a school trip, such attacks would otherwise be coded as attacks on civilians and may be more difficult to identify.

Behavioural Analysis of Attacks

Analysis of patterns in perpetrators' behaviour was also highlighted as a potentially valuable tool for better understanding and using data on attacks on education. Dr Margaret Wilson presented her work in this field, which focuses on patterns in different forms of terrorist attacks, and most recently has looked at the behaviours associated with educational institutions as terrorist targets. The methods of behavioural analysis that she uses, including Multidimensional Scalogram Analysis (MSA), reveal patterns that can have important policy implications; a better understanding of what a group's activities include and how they might be changing over time can provide information on how to anticipate, prepare for, respond to and potentially even prevent attacks.

Small Arms Survey

The Small Arms Survey is a global centre, based at the Graduate Institute of International and Development Studies in Geneva, Switzerland, that generates evidence-based, impartial, and policy-relevant knowledge on all aspects of small arms and armed violence and serves as a resource for governments, policy-makers, researchers, and civil society. It hosts the Secretariat for the Geneva Declaration on Armed Violence and Development, a diplomatic initiative that seeks to achieve measurable reductions in armed violence and improvements in human security.

In the context of its work on small arms and armed violence, the Small Arms Survey has recently begun looking at attacks on education. It has become interested in the dynamics of violence and education because of links to its work on the Geneva Declaration, and has started to examine the kinds of data that are available regarding attacks. Using the GTD and *Education under Attack 2014*, Small Arms Survey researchers have undertaken analysis and proposed a framework for better understanding the phenomenon of attacks that disaggregates data and looks at it across four dimensions: frequency, targeting, repertoire (i.e. situating attacks on education in relation to other types of violence in which an armed group engages) and purpose. The proposed framework has been applied to analysis of Boko Haram attacks in Nigeria.

As part of this work, the researchers developed their own 'Attacks on Education' database, which includes seven datasets: the Attacks on Education Incidents Dataset, by armed conflict and year (2008-2013); the Repertoire Dataset (2008-2013), compiled from annual reports of the Secretary-General on children and armed conflict; the Attacks on Secondary and Tertiary Dataset (March 2011-December 2014); *Attacks on Education – Pakistan Dataset* (March 2008-December 2014); *Attacks on Education – Honduras Dataset* (2007-2013); *Attacks on Education – Colombia Dataset* (2007-2013); *Attacks on Education – United States Dataset* (2001-2011). These datasets were compiled using media reports, national statistics, civil society reports and MRM data reported by the Secretary-General. While there is considerable overlap with *Education under Attack* in terms of scope, the database uses a broader definition of attacks on education, also including incidents of violence against students, personnel and education institutions not carried out by armed groups or armed forces, or individuals associated with armed groups or armed forces (such as rampage shootings at schools or universities by lone actors).

Humanitarian Technology

Humanitarian information and communication technologies have the potential to strengthen the collection, analysis and use of data regarding attacks on education, including by facilitating the work of UN and NGO partners on the ground as well as the sharing of that information at global level. Although largely untested for monitoring attacks on education, there are some promising examples of the use of new technologies in relation to child protection issues and the documenting of human rights abuses.

Possible applications range from the use of digital data collection and information management tools, and the analysis of aerial imagery of infrastructure and activity around schools, to the mapping and visualization of data using GIS tools, and the development of crisis maps or other crowdsourcing tools that enable a defined group of users to contribute information about attacks. Use of new technologies for monitoring and reporting may help to complement existing methods for gathering, verifying and analysing data on attacks and could enable collection or verification of data from areas that might otherwise be hard to reach for security or other reasons. They might be used as a means of receiving alerts that trigger further investigation into a particular incident or locality. They also stand to make data more readily available in near 'real-time' and to enable better visualization of data that facilitates analysis of patterns and trends for preparedness and prevention.

New technologies can also enable the sharing of information with policy-makers and practitioners in ways that make the agenda more readily understandable and facilitate their work on this issue. For example, Watchlist on Children and Armed Conflict and the Permanent Mission of the Principality of Liechtenstein developed a smart device application on the UN's Children and Armed Conflict agenda 'to provide policy-makers and those seeking to influence them with readily available key documents and appropriate language on child protection issues in order to increase the agenda's impact'.⁴ Another project is now underway to build a mobile version of the Guidance Note on Security Council Resolution 1998 so as to make it easier for field-based colleagues to have information readily at-hand on how and what to report in relation to attacks on schools and hospitals.

⁴ Smets, Eva, Dornig, Swen, Koller, David and Blanchard, Brooke. Children and Armed Conflict – Mobile Application (New York: Watchlist on Children and Armed Conflict, 2012). <http://lucid-berlin.de/CAAC/>

DEFINING THE DATA CHALLENGE

After having laid out different means of collecting and analysing data on attacks, seminar participants considered the strengths and weaknesses of available tools and approaches and the ways in which these different methods might be brought together. Pros and cons of the MRM and the *Education under Attack* process were elaborated in detail, as these have been the principal sources or aggregators of attacks data over the last several years, but advantages and disadvantages of other approaches were also discussed.

Identified strengths of the MRM process include the higher threshold of verification it employs (i.e. UN verification), which gives the data more weight with certain audiences and for certain uses; the fact that it has a strong mandate and clear reporting obligation to the Security Council, which puts pressure on the UN to monitor violations and provides a clear political pathway for use of data; the obligation of the UN to use its resources to do this work and the cooperation and division of labour within CTFMRs that results; and the experience and expertise accumulated in terms of data collection and verification.

However, the MRM remains quite narrow in terms of its mandate and covers only a subset of countries and of violations. Whether or not a country is listed depends on demonstrating a 'recurrent' pattern of UN-verified attacks; but this language is open to interpretation and the decision about whether to list a country remains ultimately a political one – which means that monitoring and reporting are neither mandatory nor resourced in several contexts where attacks are known to be occurring. Access issues in high-intensity conflicts make it very difficult to verify incidents in certain areas, which may result in an under-reporting of attacks. Because 'attacks on schools and hospitals' includes various sub-violations, it is comparatively more complicated to monitor than other violations and more training is needed for actors involved on the ground. At present no shared database exists and different CTFMRs are using different templates, formats and indicators, which creates problems for consistency and accurate categorization of incidents across contexts. Also, there are significant delays in the reporting of information, which complicate its timely use by responders on the ground.

Among identified strengths of the *Education under Attack* process were the comparatively broader scope covered (i.e. attacks on education and military use at all levels of the education system in both conflict and non-conflict situations) and the volume of information able to be gathered and honed to give a more accurate sense of the global scale of the problem. Because the report was produced by a coalition, multiple perspectives were brought into the review of the document, which strengthened both the data set and the quality of the report overall. The study also provided an ordinal scale of severity/frequency and a comprehensive set of figures and citations that could be used to inform other research.

While comprehensive, the process of data collection and analysis for *Education under Attack* has a number of drawbacks. Because the definitions and processes used have changed from one report to another, because of increases in the availability of online sources, and because of increased attention to this issue and improved monitoring and reporting, it is very difficult to identify or analyse trends. Also, the scale of severity used is complicated by the difficulty of putting a hard figure on how many attacks occurred; the current scale includes both the number of incidents and the number of targets or victims, as well as the number of facilities used for military purposes. The report is produced once every several years, which means global data are only available periodically, and, given the vast and increasing quantity of available information,

it has become incredibly labour intensive to trawl retrospectively through multiple years' worth of reporting.

Participants pointed to the value of doing the kind of surveillance undertaken by Columbia University and PEIC in DRC and Somalia, which lends a combination of depth and coverage that gives a much better understanding of what is going on behind the figures reported by the MRM or *Education under Attack*, for example. Using new technologies, such as a mobile application for digital data collection that could expedite the process of collecting, cleaning and analysing data, was also cited as an area worth exploring (particularly in reference to the MRM) – although the associated risks and challenges (e.g. ensuring the security of data providers and data itself, the reliability of information collected, the availability and quality of mobile and internet networks) need to be considered carefully. The GTD was identified as a valuable source of information on attacks, although the definition and target variables used mean that it will only capture a percentage of attacks on education. Participants suggested that collaboration with EAC might be explored further to work on collection of data on the impacts of attacks. Furthermore, they felt that the deeper analysis of patterns of attacks and patterns in the behaviour of perpetrators that innovative methodologies and tools might enable would help to give a better conceptual understanding of the issue and have important implications for prevention and response measures.

Participants also identified a number of more general challenges for data collection, analysis and use, including:

- verification of information (both in terms of process and standards – which are necessarily linked to the purpose or use of data);
- gaps in coverage (whether of a particular type of incident or target, or of a particular context) and information (regarding longer-term impact as well as perpetrators and motives);
- delays between the initial collection of data and its availability for use;
- sound determination of trends (especially when definitions and indicators have changed over time and sources have multiplied);
- the politics of data and the security risks for sources as well as victims;
- incentives for reporting (e.g. showing data providers that the information they share actually goes somewhere and has an impact or elicits a concrete response to encourage their continued participation in monitoring);
- use of different indicators and definitions by those involved in monitoring attacks;
- comparison across countries;
- the sheer volume of information available; and
- the resource implications of more and better data collection and analysis.

CONTEMPLATING TEMPLATES

In identifying possible solutions to some of these challenges, participants considered the kinds of information that should be collected and the possibility of moving towards the use of standardized templates by different organizations monitoring attacks on education. This would help to improve the quality of data and enable more reliable comparisons over time and across countries.

Even within the MRM, for example, there are discrepancies in the way data are presented or categorized from one country to another, particularly in the Secretary-General's annual reports and in responses to requests for information; some CTFMRs combine numbers of attacks on schools and hospitals, while others use the term 'attacks on schools' to include all attacks on education and incidents of collateral damage, which can introduce inaccuracies when aggregating or comparing data. The Guidance Note on SC Resolution 1998 is gradually helping to create convergence in the use of definitions and indicators, but there is no standardized template or database design used across MRM countries.

The example of the database used by the MRM in Palestine was presented to give an idea of what might be possible in terms of indicators and use of the template for data collection and analysis. It was suggested that the definitions agreed in the Guidance Note and in *Education under Attack 2014* could be used as the basis for developing standard indicators that would capture both incident details and impacts. Templates could either be printed and used in the field or developed into applications for phones and tablets that would facilitate their use. A conversation would be needed among key partners to see whether agreement might be reached to use a core set of common indicators (in addition to whatever additional information individual organizations might want to collect), but there does seem to be interest, at least among some partners, in better systematizing data collection on this issue.

DEBATING DATABASES AND DATASETS

Particularly with PEIC's idea of developing a Global Data Service in mind, participants considered what might be needed in the way of databases and datasets and what, in an ideal world, a global database would look like – how it might feed off, contribute to and communicate with other data collection systems and processes, which process and standards of verification it would use, what variables it would include, and whether it would be publicly accessible. It was agreed that a global data service should use available datasets in addition to undertaking its own complementary research. The importance of compatibility with other systems such as EMIS or MRM databases was emphasized, as was the value of two-way partnerships with users of the service to encourage information flow and the sharing of data collected at field level using secure and confidential means. Market research to assess the needs and priorities of potential end-users was suggested as a key step in the process of developing such a data service.

Specifically, regarding the MRM, participants saw value not only in the MRM using data from a global data service, but also in consistently sharing data with the service (beyond what is publicly available via SG annual reports or country reports). However, CTFMRs may be reluctant to share data with a global initiative for a number of reasons, including the political sensitivities of information and the nuanced understanding of the context required to accurately interpret such information.

Participants also discussed the different purposes of gathering data and its potential uses, and agreed that these should be factored into decision-making about what a global database collects and how it is verified. The idea of assigning validity scores to the types of sources used and/or the level of verification was also mentioned, so as to allow for maximum inclusivity or coverage and, at the same time, enable users with different needs to set their own criteria for verifiability. For example, in Nigeria, the MRM qualifies information by level of reliability into three categories: alert, documented, UN-verified; given challenges of access, this allows them to use information about reported incidents even if it does not have the weight of UN verification.

A global data service should seek to collect incident data of both a quantitative and, where available, more qualitative nature on the full range of attacks, as well as impact data (both immediate and longer term). Regarding impact data, which is less straightforward to monitor, one option might be to integrate EMIS data into the database so as to get more information about school closures and enrolment and attendance rates from one year to the next (both for affected schools and those in their vicinity). Eventually, it would also be interesting to collect information on responses to attacks, but it was agreed that this should be done once the work on attacks data is better established. Being able to map the locations of incidents and to be able to use indicators to map different layers of information that would enable visual analysis of data and help to show patterns and trends would also be an important function.

There was some debate around the question of whether to make a global data service's database and datasets publicly available, selectively restricted, or completely restricted, and a number of concerns related to the security and confidentiality of sensitive information were expressed. One suggestion was to grant access to certain kinds of information or analysis on a selective basis, with a case-by-case review by some type of ethics committee. While allowing public access to datasets was thought to be problematic for reasons of security and confidentiality, the point was also made that selective access could be problematic politically. Another option might be to have a version that could be publicly shared that would not include details of a sensitive nature (such

as names of victims) or source, provided that standards and processes of verification for inclusion are made clear. The point was made that it is important to think through not only sensitivity of the content of the database but also potential misuses or misrepresentations of the data.⁵

⁵ For example, one of the challenges the GTD has faced is the misrepresentation of data by some users; this is likely due to inexperience in working with data. Changes in the GTD's collection methodology have resulted in a significant increase in the number of sources and reports and therefore in the number of terrorist incidents the GTD has captured. Without controlling for the difference in collection techniques, the increase in sheer numbers of incidents could give the impression that terrorism had increased dramatically; while a substantial portion of the shifts are representative of legitimate change, some unknown portion is also likely reflective of collection techniques. Potential misrepresentation will be a challenge for attacks on education as well in that, for example, what looks like an increase or clustering may not necessarily be accurate, specifically in terms of breaking an incident down into several violations which may give the impression that there is more activity on the event level than there actually is. The Global Data Service is also likely to face similar challenges in terms of increased volume of information. Awareness of these kinds of things should inform database design, while accurate trend analysis can be facilitated by using the same methods and indicators over time and controlling for different generations of collection techniques.

DOING THE DATA ANALYSIS

A number of considerations for the analysis of information on attacks on education were discussed, with attention focused principally on the contextualization of data and the challenges of combining and coding data. Participants also looked at the potential contributions of new technologies and approaches to data analysis.

The discussions emphasized the importance of situating attacks data in the broader political and social contexts in which these attacks are occurring, of having more qualitative kinds of information to be able to better categorize their nature and understand possible motives (which may differ from one area to the next or one type of attack to another within the same country), and of being able to observe patterns that cannot be separated from a deeper understanding of context. Figures that are dissociated from this more nuanced understanding are of little value for prevention and response, beyond helping to demonstrate scale, and can lead to problematic interpretation and use of data.

Several options for contextualizing data were identified, particularly with a view to how this might be done by a global data service. It was agreed that some of this context might come from indicators within the database, some might come from analysis of the data itself, and some might come from additional research or expertise. Using in-country partners as a first level of contextualization, perhaps with a set of guiding questions or principles that would elicit a more nuanced picture, and drawing upon relevant experts and analysts (e.g. political, legal, security) for a second layer of analysis was proposed. Participants also felt that it would be useful to provide some sort of framing for each country in online country profiles and in any publications or other products of the data service that helps to give a key for reading the data. This framing should consider the interactions between education and conflict (e.g. to what extent, if any, has education been a driver of conflict) and give a picture of the education system in affected areas (e.g. disaggregated enrolment and retention statistics). It should also identify the key internal and external actors involved in operational response.

Participants additionally considered some of the challenges of coding data and combining datasets and databases, and distilled implications for the design of a global database. Discussions underscored the value of getting partners to use the same approach, with compatible definitions and indicators, and of developing a culture of consistency among main providers of information to simplify the coding of data and reduce error. Variables need to be separated out and very specific definitions of these variables need to be articulated to help ensure that people come to the same conclusion about how to code the data for a given incident. The use of different reports and data sources and the judgment calls required make the coding of data time-consuming and potentially complex, and training in coding the data should be a priority.

In terms of the design of a global database, it may take some time to iron out coding because different information is being taken from different sources. More information than may initially be needed should be incorporated, as it will be much harder to add later on. Constructing both the database and templates for reporting should involve a trained social scientist with expertise in developing questionnaires, and problems that might arise should be anticipated in the process (e.g. avoiding categorical variables). The importance of piloting was also emphasized.

The potential for new technologies and new approaches to be employed in the analysis of data was also explored. The feasibility of automated data mining (both of online reports and social media) was considered, but given the financial and human resources involved in such a

process, it was suggested that it might make more sense to start by looking at how a global database could draw on data from the GTD (which is already using this more elaborate data mining process), in addition to other sources. Participants also flagged mobile data collection tools as a promising means of making data more immediately available. Furthermore, bringing new lenses and perspectives to the analysis of data that enable the interrogation of certain kinds of data in different ways – such as methods that enable a deeper understanding of patterns in behaviour or analysis that considers specific thematic issues – was identified as a priority; these methods may help to illuminate things that might not otherwise be seen, with implications for strengthening prevention and response.

CONCLUSIONS AND RECOMMENDATIONS

In convening practitioners and researchers from different fields and organizations with a variety of expertise, 'Attacks on Education: Addressing the Data Challenge' provided a unique opportunity for knowledge sharing and reflection on current processes of data collection and analysis, as well as for charting potential solutions. The discussions touched on a number of complex issues, ranging from challenges of coverage, verification and disparate use of definitions and indicators to questions about purpose and impact. While these issues do not lend themselves to quick or easy solutions, the seminar discussions suggest that bringing together different approaches and methods for data collection and analysis may help to address identified challenges and deepen understanding in ways that can help to improve prevention and response.

Two-fold in its purpose, the seminar was also an invaluable source of learning for PEIC as it begins to develop its Global Data Service, the aim of which will be to collect, analyse and make data available for use on an ongoing basis by the range of actors engaged in protecting education in situations of conflict and insecurity. Seminar participants offered the following recommendations to PEIC regarding the development and design of this data service:

- The Global Data Service should: have a clear mission and vision, based on an agreed theory of change; seek to fill identified gaps; understand and respond to the needs of partners so as to encourage their buy-in and continued use of the service; and continuously monitor its impact to ensure effective use of resources.
- Collaboration with existing processes or data sources, such as the MRM, the GTD, the Small Arms Survey and the Education Cluster, should be prioritized; a two-way flow of information should be sought; and a move towards the use of standardized templates, definitions and indicators should be encouraged. Symbiotic partnerships both at country and global level will be key to the successful functioning of the data service.
- The data service should seek to contribute new, more in-depth kinds of data collection and analysis, and to develop and support the use of new tools and methods for data collection and analysis (e.g. surveillance, behavioural analysis).
- A phased approach should be taken: the concept and process should first be tested for a smaller number of countries that represent the full range of complexity of violations and in which willing partners are able to be identified, and then refined as needed before expanding to cover all countries in which attacks are occurring. Setting up the coding of data correctly and consulting the right people to make sure that important avenues for expanding in the future are not closed off inadvertently will be vital.
- Consideration should be given to potential political sensitivities and challenges; developing and maintaining the independence and objectivity as a global service will be of critical importance both for use of the service and willingness of partners to contribute data.

ANNEX I: SEMINAR AGENDA

PEIC International Seminar

"ATTACKS ON EDUCATION: ADDRESSING THE DATA CHALLENGE"

Venue: Grand Hyatt Hotel, Doha, Qatar

15-16 June 2015

AGENDA

Monday 15 June 2015: Identifying the Problems

09.00-09.30	Welcome and Introductions <ul style="list-style-type: none">• Welcome (Fahad Al Sulaiti, Deputy CEO Education Above All Foundation)• Introductions (All Participants)• Opening Remarks (Mark Richmond)
09.30 -10.45	Session 1: Mapping the Terrain (Chair: Margaret Sinclair) <ul style="list-style-type: none">• MRM process (Laurent Dutordoir [via Skype], Mera Thompson)• Education under Attack process (Brendan O'Malley, Jane Kalista, Mark Richmond)• Field research (Cyril Bennouna)• Counting out-of-school children (Richard Ashford)
10.45 -11.00	Coffee Break
11.00-12.30	Session 2: Mapping the Terrain continued (Chair: Brendan O'Malley) <ul style="list-style-type: none">• Global Terrorism Database (Omi Hodwitz)• Imperial College London (Margaret Wilson)• Small Arms Survey (Jovana Carapic [via Skype])• Humanitarian technology (Swen Dornig, Jane Kalista)
12.30-13.30	Lunch

13.30-15.15	Session 3: Defining the Data Challenge (Chair: Omi Hodwitz) <ul style="list-style-type: none"> • MRM: strengths and weaknesses • Education under Attack process: strengths and weaknesses
15.15-15.30	Coffee Break
15.30-17.00	Session 4: Defining the Data Challenge continued (Chair: Richard Ashford) <ul style="list-style-type: none"> • Other approaches: strengths and weaknesses • Making connections
17.00-17.30	Session 5: Reflections on the day (Chair: Mark Richmond)
20.00	Dinner

Tuesday 16 June 2015: Towards Viable Solutions

09.00-09.10	Housekeeping matters
09.10-09.30	Recap of Day 1/Day 2 in prospect (Mark Richmond)
09.30-10.45	Session 5: Contemplating templates (Chair: Mera Thompson) <ul style="list-style-type: none"> • What data do we need? • How do we get what we need?
10.45-11.00	Coffee Break
11.00-12.30	Session 6: Debating databases and datasets (Chair: Margaret Wilson) <ul style="list-style-type: none"> • What do we need? • How do we get what we need?
12.30-13.30	Lunch

13.30-15.15	Session 7: Doing the data analysis (Chair: Margaret Sinclair) <ul style="list-style-type: none"> • Contextualising the data • Combining the data
15.15-15.30	Coffee Break
15.30- 17.00	Session 8: Doing the data analysis continued (Chair: Swen Dornig) <ul style="list-style-type: none"> • New perspectives, new lenses • Challenges on the horizon
17.00-17.30	Session 9: Conclusions and recommendations (Chair: Mark Richmond) <ul style="list-style-type: none"> • Key outcomes
17.30	Closure of the Seminar
20.00	Dinner

ANNEX II: PARTICIPANT LIST

PEIC International Seminar

'ATTACKS ON EDUCATION: ADDRESSING THE DATA CHALLENGE'

Doha, Qatar

15-16 June 2015

External Participants:

- Brendan O'Malley – Education Journalist/Researcher
- Jane Kalista –International Education Consultant
- Mera Thompson - UNICEF: MRM processes
- Laurent Dutordoir - UNICEF: MRM processes (by Skype)
- Jovana Carapic - Small Arms Survey (by Skype)
- Omi Hodwitz - Global Terrorism Database
- Cyril Bennouna - Columbia University
- Swen Dornig - German Institute for International and Security Affairs
- Margaret Wilson - Imperial College London
- Matthew Hall - Independent Consultant
- Sabrina Meddour - Qatar Red Crescent

Protect Education In Insecurity & Conflict (PEIC)/Education Above All (EAA) Participants:

- Mark Richmond (PEIC)
- Margaret Sinclair (PEIC)
- Nermine Anis (PEIC)
- Richard Ashford (Educate A Child M&E)
- Lubna Al Attiah (EAA Outreach)
- Maxime Decooman (EAA Outreach)
- Luma Diab (EAA Outreach)

Invitees unable to attend:

- Diya Nijhowne – Global Coalition to Protect Education from Attack (GCPEA)
- Gary Risser - UNICEF



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