
Final Report

Community Impact Study of International Youth Preparedness Program ("The Pillowcase Project")



 **Global Disaster
Preparedness Center**

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Executive Summary

The Pillowcase Project is a school-based disaster preparedness education program first implemented in the wake of Hurricane Katrina in 2005 by American Red Cross volunteers in Louisiana, before being rolled out in 7 countries across the world. Originally designed for children aged 8 to 11 (grades 3--5), it provides key preparedness messages combining coping skill exercises, a textbook and a pillowcase (used as a grab bag).

This Impact Study examines two applications – in Mexico and Australia – to identify how successful the program has been in enhancing children’s preparedness and in fostering communication between students and their households, teachers and peers. Though the two contexts are different, the Impact Study aimed to identify commonalities in the way the program was received, while also highlighting some of the specific findings, recommendations and opportunities for cross-learning.

“Learn”: The Pillowcase Project has clearly enhanced the knowledge of students around preparedness

In both countries, students demonstrated a strong acquisition of the key steps for preparing emergency kits, even thinking outside the box, suggesting items not included in the original exercise. In Australia, The Pillowcase Project was particularly successful in building the students’ stress management skills, using the “Breathing with color” technique¹, while students in Mexico also demonstrated a clear understanding of different hazards.

Overall, the only two limitations identified in the study relate to confidence levels and targeting. Despite a clear improvement in their preparedness skills, Pillowcase students in both countries do not feel more responsible for preparing for emergencies, considering it a “grown-up” problem. Regarding targeting, the program was also rolled out in Grades 1 and 2 in Mexico, and younger students (aged 6-7 years old) showed confusion between future risks (such as slowly rising water levels) versus sudden-onset emergencies (such as house fires or earthquakes).

“Practice”: Children in The Pillowcase Project know what to do in emergencies but don’t prepare

The discussions and surveys clearly showed that students know how to pack emergency kits and grab bags, act in response to specific situations and manage their (real or imagined) fears around disasters. The Pillowcase Project has clearly led to a change in behavior in response to emergency situations. In Australia, students could confidently explain what they would do in different scenarios to manage stress, and more than half have used the “Breathing with Color” technique outside of the classroom. And in Mexico, students from Grade 3 onwards demonstrated a strong ability to apply life-saving tips for house fires – while students not taking the course suggested actions that could place them at further risk.

However, gaining these important skills have not made the Pillowcase students more confident or proactive. Children who have not taken the Pillowcase course consider themselves equally prepared to students who did. And while all students received a pillowcase (in Australia) or a grab bag (in Mexico) to store emergency items at home, these kits are not in place. A full third of the Pillowcase cases / bags are currently neatly folded away, rather than used as an emergency kit. In Australia, the remaining pillowcases

¹ The “Breathing with color” exercise helps students handle stressful circumstances by combining deep breathing and thinking about specific colors to manage fear.

are just as likely to be used to sleep on as they are to store preparedness items; while in Mexico the grab bags are more likely to be used for after-school activities (to carry clothing and snacks) as they are to store emergency items.

“Share”: Children are sharing what they know, but parents aren’t giving them due credit

Household preparedness planning suffers from two fundamental weaknesses. Firstly, households are not taking preparedness seriously, except where they have recently experienced emergencies: less than half of all respondents have an emergency preparedness kit at home (41% in Australia; 33% in Mexico) and these kits are essentially enhanced first aid kits. Secondly, despite the Pillowcase students clearly demonstrating their ability to prepare grab bags, manage their stress or take life-saving steps, most parents only entrust their children with very limited tasks, such as calling emergency services or following their parents’ orders.

At the same time, the Pillowcase information *is* reaching parents, as confirmed by both students and the parents themselves. Slightly more than half of all households in Australia (54%) feel more prepared than 3 months earlier (i.e. prior to the Pillowcase course), and among those, 71% credit the Pillowcase session for their increased awareness of preparedness. One parent in Australia summarized this contradiction quite well: *“The Pillowcase Project prompted us to get an emergency plan... but we don’t have one yet.”*

There is, however, a notable exception to this household inertia: following the Sept. 2017 earthquakes, most parents in Oaxaca took serious preparedness steps ahead of the next tremor, with many taking into account their children's packing tips. When parents clearly see the need for preparedness, the children’s advice suddenly proves very valuable.

Recommendations moving forward:

The rich discussions throughout the Impact Study with parents, teachers and Red Cross instructors led to many suggestions on how to further enhance the impact of The Pillowcase Project in the future. Most of these recommendations fall under one of two categories: (1) expanding the audience; and (2) expanding the timeline of The Pillowcase Project.

“Expanding the audience” refers to both students and adults. Participants suggested reaching out to all Primary students – from Grades 1 through 6 – by customizing the key Pillowcase messages according to each age group’s specific learning abilities. But they also made the case for formally recognizing the role for teachers (as critical partners for educating students on preparedness) and the broader school staff (as key resources to reduce risks and respond in emergencies) in The Pillowcase Project, while also reaching out to households.

“Expanding the timeline” requires rethinking The Pillowcase Project as a yearlong engagement strategy within a lifelong learning cycle. It would factor in additional training for instructors and teachers at the beginning of the school year, introduce parents and students to the goals of the program, increase the frequency of classroom sessions for each age group, and include the entire school community (with school staff, teachers, students and parents) in locally-appropriate preparedness activities, such as risk fairs, drills or artistic events around preparedness.

1. Introduction

“The Pillowcase Project” is a school-based Disaster Risk Reduction Education program launched by the American Red Cross in the United States in 2005. Through a 60-to-80-minute lesson to primary school students, the project covers three core components: learning about a local hazard, practicing preparedness actions, and decorating a pillowcase as an “emergency go-bag.” Articulated around a framework of “Learn, Practice, Share,” the pillowcase acts as a catalyst for youth to discuss key messages on preparedness and share this learning with families and communities:

- ✓ **Learn:** recognize basic information about the causes of emergencies, as well as how to stay safe when one of them occurs.
- ✓ **Practice:** practice in simulated activities that reinforce and experience the information received to be ready in an emergency situation.
- ✓ **Share:** Encourage the school community to disseminate what they have learned so that everyone knows how to stay safe in an emergency situation.

With support from the Global Disaster Preparedness Center (GDPC), the American Red Cross and the Walt Disney Foundation, The Pillowcase Project has since been implemented by six other National Red Cross Societies: Australia, Hong Kong, Mexico, Peru, the United Kingdom and Vietnam. The methodology was customized to each of the different contexts, reflecting the specific mandate of each National Society, its areas of expertise and other Disaster Risk Reduction Education curriculum already being provided.

This Impact Study focuses on two contexts – Mexico and Australia – and “examines how The Pillowcase Project fostered communication between participating students and their households, teachers, and peers and the effects of the shared learning on overall community preparedness. The study allows for the review of assumptions about the impact of The Pillowcase Project and child-centered preparedness education more broadly on the awareness and sharing of preparedness actions among children and their social networks.”²

² *Terms of Reference: Pillowcase Program Impact Study*, American Red Cross.

2. Framework of Analysis

2.1. The customizations of The Pillowcase Project

The Impact Study examines a common classroom-based disaster risk education (DRE) methodology customized to two different national contexts (Australia and Mexico), albeit with different timeframes and learning objectives. In both countries, the activities were primarily implemented by Red Cross volunteers supported by a small Pillowcase coordination team.

2.1.1. The Pillowcase Project objectives in Australia

In the case of Australia, the mandate of the National Society is narrower than that of the American Red Cross: it focuses on general risk education, as opposed to hazard-specific risk education (which in Australia is assigned to government emergency services). Therefore, The Pillowcase Project methodology in Australia was modified from the original **'Learn, Practice, Share' model** to a **'Think, Act, Share' model**. These components are understood as:

- ✓ **Think:** the Red Cross encourages students to think about what makes something an emergency so in the future they can identify one in a broad range of circumstances.
- ✓ **Act:** the Australian Red Cross practices the “breathing with color” activity with students, emphasizing taking action and packing an emergency kit before an emergency happens, rather than learning protective actions to be used during an emergency.
- ✓ **Share:** The share component is the same as in the original model: Encourage the school community to disseminate what they have learned so that everyone can stay safe in an emergency situation.

As a result, the learning outcomes in the Australian methodology are:

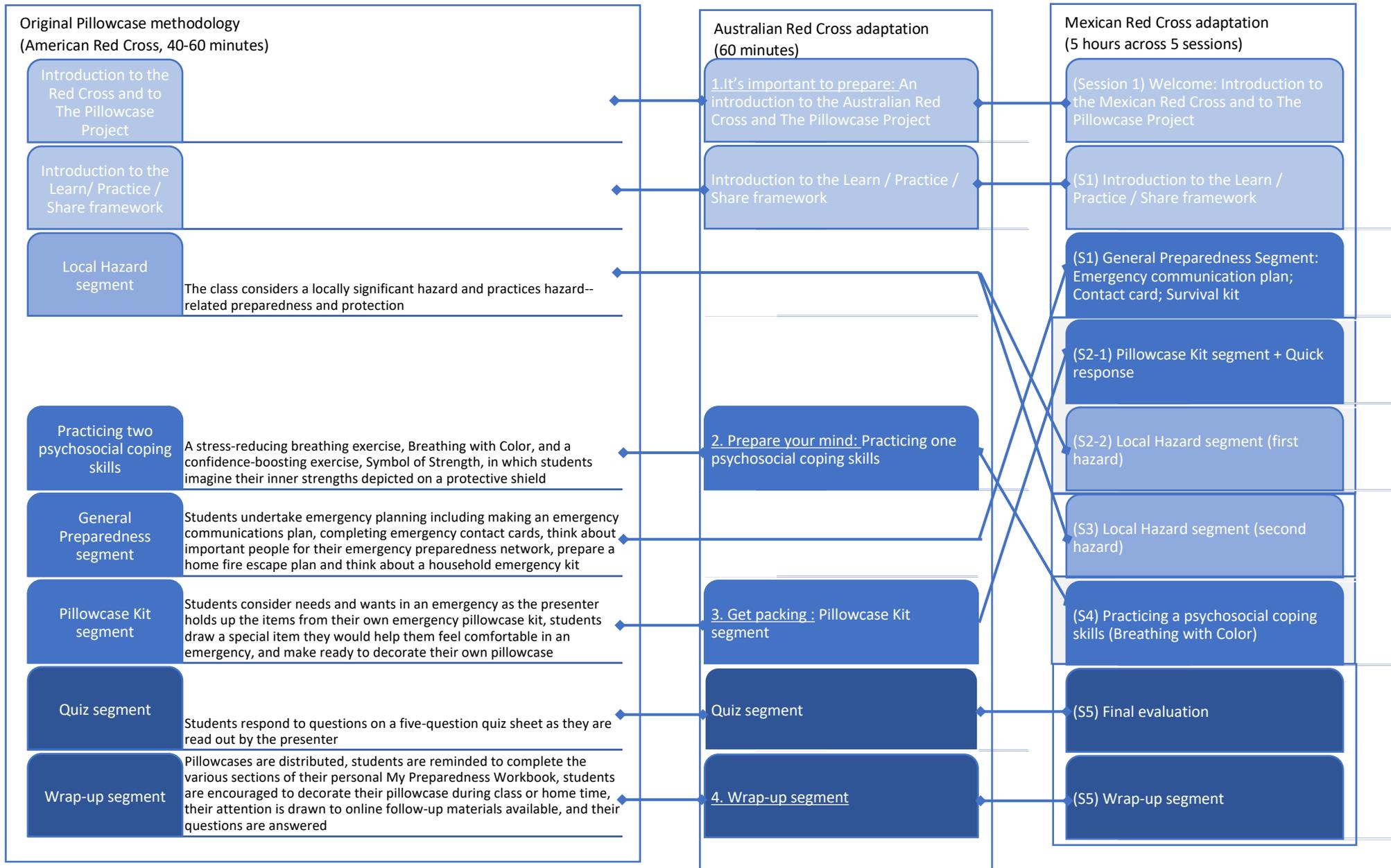
1. Students are able to explain why it is important to prepare for emergencies;
2. Students can identify the emotions they are experiencing and use their own breathing to self-regulate those emotions;
3. Students can identify the difference between need and want items in an emergency kit and justify the selections in the own kits;
4. Students can identify the situations in which they would have time to grab their emergency kits;
5. Students use their knowledge to act as advocates for emergency preparedness in their homes and communities.

2.1.2. The Pillowcase Project objectives in Mexico

In Mexico, The Pillowcase Project has also been adapted, primarily to be implemented over a longer timeframe, with 1-5 sessions (of 60-90 minutes each) in the classroom and additional exercises that are carried out by the students with the help of their teachers. This project allows for progressive relationship-building with the school teachers, school administration and parents. In addition, according to The Pillowcase Project coordinators³, the Project itself has been utilized as an entry point into Mexican schools to introduce other Red Cross classroom-based risk education, such as road safety and health initiatives. So, while The Pillowcase Project sessions may last one month, the overall engagement of the Red Cross can continue for longer periods of time – up to 6 months.

³ Interview with Fernando Amezcua, Fátima De León and Sebastián Gutiérrez, Mexican Red Cross, 6 September 2018

Chart 1: Customization of the Pillowcase Project methodology:



In the Mexican Red Cross' Pillowcase Training Manual⁴, the Mexican Red Cross identifies 5 objectives for the project:

- Four learning objectives:
 - Explain to girls and boys the concepts of natural hazards and emergencies, as well as preparedness measures;
 - Help girls and boys identify the risks specific to their community to reduce the impact on themselves and their families;
 - Build the resilience of girls and boys;
 - Help families understand how to act when confronted to emergencies, through girls and boys.
- One academic objective:
 - Demonstrate the importance of emergency and disaster preparedness curricula integration in the basic educational requirements in Mexico.

The adaptations to The Pillowcase Project methodology are summarized in **Chart 1** (previous page).

2.2. Methodology for data collection

2.2.1. Guiding questions for the study

Disaster Risk Education (DRE) initiatives aim to **provide disaster risk reduction (DRR) knowledge** that translates into **day-to-day practices**. The Pillowcase Project is also built around this dual goal, i.e.:

- Students **conduct** specific actions in preparing for and in response to emergencies; and **communicate** and **demonstrate** these actions to others (whether in a classroom setting or at home).
- Parents/guardians demonstrate increased **knowledge** (being aware of key actions) and **skills** (practicing those actions) resulting from their children's efforts to communicate key DRR messages.

However, different studies have shown that classroom DRE often has mixed results in achieving both goals, i.e. the acquisition of specific habits around DRR (such as identifying the importance of home emergency plans, or knowing correct DRR safety steps) does not usually translate in actions at home.⁵ For instance, FEMA has shown that only 15 per cent of children in the US who recognized home safety plans as important actually completed such planning with their parents.⁶ Keeping this challenge in mind, the Impact Study will aim to provide answers to 8 questions⁷:

[Learn / Think:]

1. *Has The Pillowcase Project enhanced the knowledge of students around preparedness?*

[Practice / Act:]

2. *Has The Pillowcase Project led to the adoption of Pillowcase emergency kits?*
3. *Has The Pillowcase Project led to behavior change in emergency situations?*
4. *Has The Pillowcase Project led to increased confidence and a sense of responsibility among students?*

⁴ El Proyecto "Mi Funda de Almohada": Guía de Implementación, Mexican Red Cross, 2018.

⁵ See Child-centered disaster risk reduction, BNHCRC, 2015.

⁶ Idem.

⁷ A first set of 10 questions was outlined by the consultant, then revised based on the data from the first round of field visits in Chihuahua.

[Share:]

5. *Has The Pillowcase Project led to increased confidence of parents in their children's abilities?*
6. *Has The Pillowcase Project led to an increased sense of preparedness within households?*
7. *Has The Pillowcase Project led to increased preparedness actions within households?*
8. *Is there evidence of an enhanced sense of community togetherness through preparedness? Is there any evidence of community-level impact?*

2.2.2. Research principles

Initial discussions with key Pillowcase Impact Study stakeholders⁸ helped identify principles for the data collection process. The recommendations were for the data collection methodology to be:

- **Light touch (non-invasive):** It is critical to respect the teachers' workload and accommodate for the limited availability of parents and students during the study. The period of October to December 2018 corresponds to active teaching periods both in Australia and Mexico, though the school calendar is different.⁹ This implies also respecting the teaching environment. Children may not understand why an unfamiliar adult shows up and asks about an activity that would have been completed several weeks (or months) prior. The activities were conducted by the consultant in close coordination with trained Red Cross instructors, whenever possible the same one who conducted the original Pillowcase Project session in any given classroom.
- **Participatory:** The Pillowcase Project was designed as a participatory approach, focused on involving all stakeholders: school children participating in The Pillowcase Project modules; teachers observing the process; parents invited to complete preparedness actions; and Red Cross instructors (whether volunteers or staff). All stakeholder groups were given the opportunity to contribute to the discussion. At the same time, the outreach to parents proved particularly challenging. Where necessary, one-on-one interviews with key informants (with parents, but also teachers and Red Cross volunteers) aimed to fill gaps in the data collection.
- **Qualitative data:** Based on the findings of similar impact studies¹⁰, on the interests of the Australian and Mexican Red Cross and on the methodological constraints to conducting large-scale sampling of students and parents, the Impact Study emphasized qualitative data, with the triangulation of data from a limited sample of quantitative questionnaires. This helped flag best practices, recommendations from a range of stakeholders and areas of opportunity for future iterations of the project.

⁸ Program managers from GDPC, Australian Red Cross and Mexican Red Cross.

⁹ The Australian school year ends mid-December, making this period a very busy time with end of year reports and the rush to complete the curriculum. In Mexico, the school year starts in late August, meaning the first Pillowcase activities for 2018-2019 took place in September-October, meaning the Impact Study will include classrooms that received the session in 2017-2018.

¹⁰ For instance, *Evaluation of Survive and Thrive: Final report to the Country Fire Authority*, Towers, B., Perillo, S., Ronan, K., Bushfire and Natural Hazards Cooperative Research Centre.

2.2.3. Tools for data collection

At the beginning of the project, the consultant reviewed relevant Project documents, existing research and impact evaluations of child-centered preparedness; background documents detailing the purpose and design of The Pillowcase Project; project documents related to the customization / adaptation of The Pillowcase Project in the Australian Red Cross and the Mexican Red Cross; and studies and evaluations conducted on The Pillowcase Project. The complete bibliography is listed at the end of the report.

Based on this Desk Review and previously-tested tools, the consultant designed questionnaires and interview templates for four groups of stakeholders involved in the project: students, teachers, the parents / tutors and the program implementers (Red Cross trainers). These tools are:

1. Student-focused questionnaire

The data collection process in schools started with a questionnaire to students who participated in the Pillowcase session(s). The questionnaire is designed to be administered several weeks after the Pillowcase course, to measure the learning outcomes rather than the memorization of key messages. In the case of Mexico, the questionnaire was administered 3 to 6 months after the course, given the Mexican Red Cross Pillowcase calendar. Following an initial trial run of the questionnaire in Chihuahua, Mexico, in early October 2018, the questionnaire was reviewed to better align with the specific outcomes of the study.

See Annexes 1 (Australia) and 6 (Mexico) for the surveys.

The School Preparedness Quiz

1. Who is responsible for preparing for emergencies? (Include several answers if needed)

2. I can explain to adults at least four things that should be included in an emergency kit.

3. I have explained to my parents or my family what should be included in an emergency kit.

4. The grown-ups in my house know what I have packed in my Pillowcase.

5. I feel prepared for an emergency.

6. I know how to prepare my mind for an emergency, so I don't feel worried or scared.

7. My family knows how to prepare their mind for an emergency.

2. Student “Snap” exercise: Group discussion and observation;

Once the questionnaire forms were collected, a short 20-minute activity was conducted with students to measure their recollection of key messages from the Pillowcase activities.¹¹ Given the adaptations to the methodology in each country, the exercise was modified for each context, with the Australian version focusing on mindfulness and on creating an emergency kit, while the Mexican version focused on concrete steps following a locally-relevant hazard (the scenarios were customized to the specific hazard relevant in each school). The exercise can be summarized as follows:

1. Students form small groups of three or four and are told that there is a sudden emergency that they have to respond to (three scenarios were used depending on contexts: flooding, earthquake and/or house fire).
2. Groups are given five minutes to discuss all the actions they need to take.
3. Students explain their proposed actions (originally students were asked to act out their response, but this option did not prove feasible with larger groups and was dropped).
4. The facilitator then asks each group to comment on what they heard and adds questions as needed.

See Annex 2 for Australian version (English) and Annex 7 for Mexican version (Spanish).

¹¹ Adapted from *Learn, Practice, Share: A Comparative Review of The Pillowcase Project*, David Selby & Fumiyo Kagawa, Sustainability Frontiers, 20 July 2016, p. 86.

3. Household survey

A take-home questionnaire for parents/guardians has been used throughout the implementation of the program in Australia. This quiz serves to measure parents' *intent* (what they say they would like to do in terms of preparedness). Building on this first questionnaire, the Impact Study household survey focused on *actual measures taken*, using the same format. It looked at actions taken at home – by the children or by the parents with their children – to prepare for emergencies following the child's participation in the project. The parents' survey was distributed prior to the school visit and collected from students by the teachers or by the Red Cross team. Given the challenge in collecting sufficient responses, an online survey tool was developed and used in both countries (with the same questions), though additional responses were only received from two schools in Australia.

See Annex 3 for Australian version (English) and Annex 8 for Mexican version (Spanish).

4. Focus group with parents on emergency planning at home;

Over the course of 30-minute focus group discussions, parents were asked to share takeaways from the project.

- In Australia, the discussions took place 1-2 months after the Pillowcase Project course.
- In the case of Mexico, the sessions only took place in the State of Oaxaca, six months after the completion of the Pillowcase course, i.e. with parents of students who would have taken the course in March-June 2018.

See Annex 4 for Australian version (English) and Annex 9 for Mexican version (Spanish).

5. Focus group discussions with teachers and Red Cross Pillowcase facilitators.

Among audiences more familiar with the Pillowcase Project – specifically the Red Cross Pillowcase facilitators and school teachers – the Impact Study included sessions for more thorough brainstorming on the implementation of The Pillowcase Project, with recommendations on taking the process forward. In Australia, given the logistical constraints to meeting the Red Cross Pillowcase volunteers and the school teachers in group settings, one-on-one interviews were also conducted in person and via phone. In Mexico, a plenary session was organized with Red Cross instructors in each state, but the discussions with teachers only took place in Oaxaca.

See Annex 5 for Australian version (English) and Annex 10 for Mexican version (Spanish).

2.3. Field implementation of the data collection

Australia:

The Impact Study, conducted in Australia from October 28th to November 16th, 2018, was composed of interviews with Australian Red Cross Headquarters staff (October 28th) and Red Cross volunteers and staff in Dubbo (1 Nov.), Perth (6-9 Nov.) and Adelaide (12 Nov.). Visits were organized in six schools across three states, reflecting the diversity of sizes, environments and contexts covered by The Pillowcase Project in Australia.

Table 1: List of schools included in the Impact Study (Australia):

School (coding reference & school name)	Date Pillowcase conducted	Date visited for Impact Study	# Students surveyed & interviewed	# Teachers interviewed	# Parents interviewed	# Parent survey responses	
						In person	Online
DUB: Hermidale Public School (Dubbo, NSW)	11 September 2018	30 October 2018	7	0	0	0	0
STJ: St Joseph's Primary School (NSW)	12 September 2018	30 October 2018	27	2	1	6	0
HEL: Helena College (WA)	21 March 2017 & 28 August 2018	8 November 2018	27	1	3	8	1
USW: Upper Swan Primary School (WA)	8 November 2017 & 23/24 October 2018	8 November 2018	25	1	2	3	20
SWC: Swan Valley Christian College (WA)	7 December 2017 & 19 September 2018	9 November 2018	52	1	2	2	6
KAN: Kangarilla Primary School (SA)	6 November 2018	13 November 2018	13	2	0	4	0
Total:			152	7	8	23	27

Among the 152 students included in the Impact Study, a total of 11 were not present when the original Pillowcase course was offered (9 from the two Year 4 classrooms in Swan Christian College; 2 from Kangarilla) but were present during the Impact Study. Their answers are included as "NP" (not present) in a different color in the charts below, for reference.

In addition to the interview of 7 teachers and 8 parents, the Impact Study included interviews of 5 staff members involved in the project and 6 Red Cross volunteer instructors.

⇒ **See Appendix 1 for the list of locations and context of the schools included in the study.**

Mexico:

The Impact Study was conducted over two periods, before and after the trip to Australia. A series of meetings took place with the Mexican Red Cross project staff in Puebla (July 26-27) and in their headquarters in Mexico City (Sept. 27th & Oct. 2nd) to discuss the context of the operation and design the Framework of Analysis.

Visits then took place in six schools across three states, aiming to reflect the diversity of sizes, environments and contexts in which the program was implemented, though the selection is neither statistically random nor representative. In addition to the school visits, group interviews were organized with Red Cross volunteers and staff from the Red Cross branches in each State.

Table 2: List of schools included in the Impact Study (Mexico):

School (coding reference and school name)	Date Pillowcase conducted	Date of Impact Study visit	# Students surveyed & interviewed ¹² (Pillowcase trained + not trained)	# Teachers interviewed	# Parents interviewed	# Parent survey responses (paper) ¹³
DEL: “Juan Rulfo” Primary School, Delicias, Chihuahua		Oct. 18th, 2018	22 (5 ^a) + 31 (6 ^a)	0	10	0
CHI: “Marie Curie” Primary School, Chihuahua, Chihuahua		Oct. 19th, 2018	0+ 21 (1 ^a) + 14+ 8 (2 ^a) + 9+ 11 (3 ^a) + 11+ 9 (4 ^a) + 13+ 10 (5 ^a) + 16+ 8 (6 ^a)	0	9	14
CUAU: “Constituyentes de 1857” Primary School, Cuauhtemoc, Chihuahua		Oct. 19th, 2018	22 (6 ^a)	0	10	30
LEO: “Ignacio Ramirez” Primary School, León, Guanajuato	Sept. 2018	Nov. 29th, 2018	16 (1 ^a B) + 26 (1 ^a A)	0	0	0
SIL: “Constituyentes de 1857” Primary School, Silao, Guanajuato	Sept. 2018	Nov. 29th, 2018	19+ 14 (3 ^a +4 ^a)	0	0	10
OAX: “27 de septiembre” Primary School, Santo Domingo, Oaxaca, Oaxaca	June 2018	Dec. 10 th , 2018	18+ 2 (2 ^a A+2 ^a B) + 21+ 1 (3 ^a)	3	44	45
SAL: “Obrero Mundial” Primary School, Espinal, Salina Cruz, Oaxaca	June 2018	Dec. 11 th , 2018	23+ 6 (2 ^a A) + 25+ 1 (2 ^a B) + 14+ 4 (3 ^a B) + 15+ 5 (4 ^a A) + 12+ 5 (4 ^a B) + 0+ 19 (5 ^a A)	15	6	20
		Total:	327 (took the course) + 124 (absent) = 451 students	18	79	119

In addition to the interview of 18 teachers and 79 parents, the Impact Study included three focus groups with Red Cross instructors (one per state): 24 participants in Chihuahua; 13 participants in Guanajuato; and 6 participants in Oaxaca.

⇒ **See Appendix 1 for the list of locations and context of the schools included in the study.**

¹² Some students in each classroom were not present the day(s) of the Pillowcase session(s), either because they did not attend school that day, or because they were in another school at the time. Therefore, the totals for the different classrooms tend to be slightly lower than the totals presented here, as the answers for students not present were tallied separately.

¹³ Note: As in Australia, an option was given for parents to answer the survey online. However, no responses were received using that medium.

3. Impact of The Pillowcase Project on students

Students provide first-hand data on the effectiveness of the Project, particularly as it relates to the acquisition of key preparedness messages, the ability to communicate those messages and the interest for such messages following the participation in the classroom activities. Direct engagement with these students helps determine (1) if recipients of the Pillowcase sessions remembered the key messages around preparedness and know how to use them (**acquisition of knowledge**); (2) if they are sufficiently confident to use that knowledge when needed (**self-efficacy**), and (3) whether the information from the course is being *shared* outside of school (**sharing**).

3.1. Acquisition of knowledge & application in emergency scenarios

The Pillowcase Project provides key messages in four areas: understanding the Red Cross and the importance of preparing; understanding preparedness actions, particularly around emergency kits; understanding life-saving actions and knowing how to apply them in emergencies (based on locally relevant hazards); and understanding psychological coping techniques, specifically around breathing exercises. The Impact Study focused on the latter three:

3.1.1. Knowledge of preparedness actions

Knowing what to pack

In both Australia and Mexico, the Red Cross instructors placed a lot of emphasis on actions that students can take ahead of an emergency and, through the students, encourage immediate preparedness actions at home. This is covered in the introduction to the concept of household preparedness planning (with emergency contacts and key networks), the “Needs versus wants” activity¹⁴ and the use of the pillowcase itself, with its list of important items that children are invited to draw on the case. In addition to the questionnaire, the Impact Study used a scenario where students were asked to explain to adults how to prepare their home ahead of a forthcoming flood. Their answers provided a good level of their understanding of what to pack in an emergency kit and the students’ current levels of preparedness (whether students have a preparedness kit ready).

In Australia¹⁵, students successfully listed most of the items discussed in the “needs” versus “wants” exercises:

- In all five schools, the students actively participated and listed between 8 and 25 items, well beyond the level of detail from the “needs versus wants” activity.
- None of the “wants” items were mentioned (television, bed, toaster, computer), demonstrating a clear understanding of the purpose of the exercise.
- Students recalled the exact items discussed weeks earlier in the “Needs versus Wants” activity, using the terms “toiletries”, “something special” or “medicines”. Every group mentioned water, examples of non-perishable food (such as canned food and muesli bars), medication / first aid kits, a valuable item, a teddy bear.

Overall, the students showed an interest for the topic and a clear understanding of the exercise. They also demonstrated an ability to think outside the box, listing items not included in the original exercise

¹⁴ The “needs versus wants” activity uses 20 cards that students organize and prioritize. The “needs” cards – representing the items to be packed for emergencies – include: torch, medicine, pen and paper, pack of cards, blanket, toiletries, sunscreen, water, something special, mobile, food, batteries, first aid kit, change of clothes, radio.

¹⁵ The simulation exercise was conducted in 5 classrooms: Hermidale, St Joseph’s, Kangarilla and both classrooms in Swan Christian College. In two schools (Helena College and Upper Swan), the simulation exercise was not conducted with the children due to time constraints.

that could prove relevant under different circumstances. These include money, a life jacket in case of flooding, fuel for the car, money, passports, hand sanitizer or student-specific medical needs (such as an asthma puffer).

In Mexico¹⁶, the students showed a broader range of responses, largely correlated to their age:

- Among 5th and 6th graders, the different classrooms provided a comprehensive list of key actions from The Pillowcase Project, but not to the extent of the Australian students. Overall, their responses could be summarized by this answer from a student in Chihuahua: *“the family has to grab a survival kit with a flashlight, a change of clothing, important documents, a few toys, warn the neighbors and go to a shelter.”* Several students mentioned the importance of canned food, a first aid kit and water, as well as the need to move to higher ground.
 - o Students also referenced the importance of staying informed (via FM radio) and of informing others. As one student noted: *“parents should call the school authorities to get everyone out of school and warn the neighbors”*.
- Among 3rd and 4th-grade students, answers were similar, though with greater diversity from one student to the next. These younger students were also more explicit in how they would use the pillowcase in such a situation: *“if we’re at school, we should go to the shelter before the flood reaches and take the [grab] bag that they [the Red Cross] gave us with clothes, important documents and water.”* Or, as another explained: *“I would grab the [Red Cross emergency] bag to prepare it: canned food, flashlights, a change of clothes, toys, blankets, pillows, a radio, medication, a life vest, a telephone, batteries.”*
- Among the 5th graders that did not take the course but that were exposed to an earthquake in 2017 (in Oaxaca), most answers related to physical relocation: staying calm, grabbing some food and water and moving to higher ground (with several references to life vests and boats). One student referenced taking important documents. Interestingly, answers then focused on the need to be cautious of flood-related risks, such as cars being dragged away by floodwater, underwater electric cables or windows breaking under the pressure of floodwater, consistent with images on televised news segments and movies, which the students indicated were important sources of information.
- With 1st- and 2nd-graders (6- and 7-year-olds), the level of knowledge was much lower. Some students offered reasonable answers as to the actions they would take in response to the progressive rise of flood water, such as keeping the family together and moving to a shelter. However, in the four groups interviewed, the students did not offer concrete preparedness actions in response to a rise in floodwater.¹⁷ Many responses were creative, with students identifying the need for submarines or helicopters. Other responses showed confusion with responses to sudden-onset emergencies, such as house fires or earthquakes: students suggested quickly leaving the home and calling emergency services (two actions critical for home fires) and staying calm and not running (taught as part of earthquake preparedness).

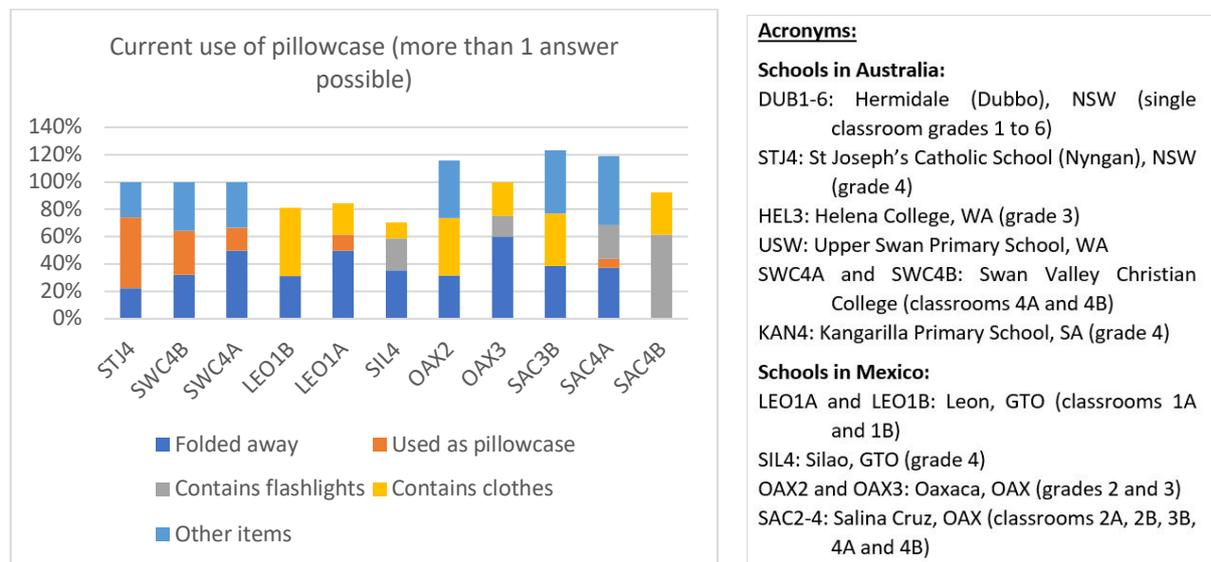
¹⁶ The simulation exercise was conducted in 12 classrooms that participated in the Pillowcase session (roughly 2 classrooms per grade from 1st to 6th grade), plus an additional classroom of 5th graders in Oaxaca that had not taken the course, for comparative purposes.

¹⁷ As always, there are exceptions. One 2nd-grader in Oaxaca offered a detailed response reflective of The Pillowcase Project learning: *“We should take the [grab] bag and put all the things we need: food; water; blankets, clothes; fruit; toothpaste; toothbrush; alcohol for first aid.”*

Application of knowledge: Packing emergency kits

The Pillowcase Project aims to ensure that students and their households have a preparedness kit ready, with the students helping to raise awareness as to the importance of the kit. Overall, most students consulted on the topic stated that they knew where their pillowcase is currently located and offered detailed answers as to how they were using it. However, for most respondents, the pillowcase is not currently used for preparedness:

- In Australia (first three classrooms), where the use of an actual pillowcase was retained for the activity, a full third of students interviewed use their Pillowcase bag... as a pillowcase!
- While the response rates vary from one classroom to the next, overall averages are similar across both countries: roughly 1 in 3 students (35% in Australia; 36% in Mexico) have kept their pillowcase / grab bag folded away, followed by pillows (in Australia: 34%) or clothes (in Mexico: 29%), followed by a mix of items, some of which are critical in emergencies, such as flashlights¹⁸.
- While “clothing” is one of the most common answers in Mexico, it appears that this is because many students use the bag on a daily basis, for after-school activities in particular, since many of the respondents also stated that they kept snacks (fresh fruit and sandwiches) in their bag.



In summary, older students (3rd-graders upwards) who participated in the Pillowcase session demonstrated a good understanding of the importance of emergency kits, and how to prepare them, particularly when compared to similarly-aged students that did not take the course. This is in line with the original age group targeted by The Pillowcase Project. However, planning ahead with emergency preparedness kits appears to be too complex for 1st- and 2nd-graders, whose answers indicated a focus on short-term, immediate actions. Overall, students understand how to prepare grab bags, but do not currently have them ready at home.

¹⁸ The question related to flashlights was only asked in Mexico, after it started to appear that this was the most relevant item that demonstrated that the bag is being used as an emergency bag.

3.1.2. Taking life-saving actions in response to an emergency

This component is part of the original Pillowcase Project content, but is not included in Australia, given the more limited mandate of the Australian Red Cross on preparedness actions.

In Mexico, The Pillowcase Project curriculum includes key actions that students should take when faced with locally-relevant hazards. The Impact Study looked specifically at the knowledge of different age groups in response to house fires and earthquakes:

House fire

In response to this hazard, the Pillowcase session references a combination of the following 5 steps: getting out as soon as possible and not taking anything along; covering one's mouth with a wet cloth; getting down to the floor and crawling to avoid smoke; getting outside and going to the meeting point; and calling (or asking an adult to call) emergency services. Looking at responses by grades:

- Among the 5th- and 6th-graders in Chihuahua, all 4 classrooms referenced at least 4 of the 5 steps, usually leaving out the meeting point. Several students also suggested checking that exit doors are not hot (which could indicate the presence of fire on the other side). One student also mentioned the need to roll on the ground in the event his clothes caught on fire. The majority of students were aware of the emergency number (911). Among students who were not present for the course, answers focused on leaving the house but also on taken items that should be taken out of the house (first aid kit and food and water).
- Among 5th-grade students in Oaxaca that did not take the course, the answers indicated the need to stay calm; covering mouth and nose with a wet cloth; and going in to the fire to see if anyone is still inside or anything of value that could be saved – thereby potentially putting them in harm's way. Getting out as soon as possible was not referenced by a single student, nor did anyone mention the importance of leaving everything behind.
- Among the 3rd- and 4th-graders in Oaxaca and Guanajuato, responses focused on getting a wet rag to cover mouth and nose; getting down and crawling out; and calling emergency services. However, several students also mentioned trying to turn the fire out using fire extinguishers, water or dirt or going to a window to get fresh air.
- Finally, among 1st- and 2nd-graders in Guanajuato, the students suggested trying to turn the fire out and calling fire services. However, only a small minority of students were able to state which number to call, with two of the three classrooms unable to come up with "911" as a response.

Overall, students were missing three of the activities included in the Pillowcase manual: a meeting point in the event of an emergency; an evacuation plan; and a mapping of hazards at home.

Earthquake

In Oaxaca, the September 2017 earthquakes had a severe impact on the state and on levels of preparedness. For that reason, a third scenario was used in the Impact Study, for schools in Oaxaca. The exercise focused on identifying items that could fall in the event of a quake; keeping calm at all times; staying away from falling objects; and reaching the meeting point.

- Among 2nd- and 3rd-graders, the responses focused on staying calm, not shouting, not pushing and reaching the meeting point. No reference was made to potential risks (falling objects) and seems aligned with the messaging from the schools in their (post-September 2017) earthquake simulation exercises.
- Among 4th-graders that took the course and 5th-graders that did not, answers were similar: covering the head with one's arms; staying away from falling objects; looking for cover from something strong (table, corner); getting out in a calm manner; gathering at the meeting. It is

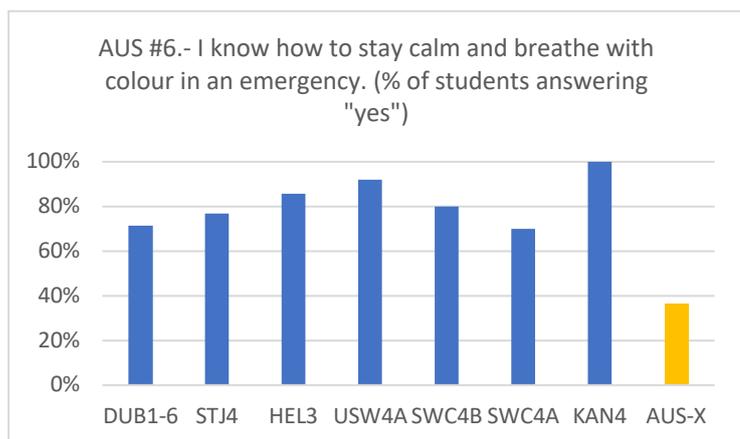
not possible to indicate any change that could be attributed to The Pillowcase Project. Over 80% of students mentioned having discussed earthquake preparedness with their parents following the September 2017 earthquakes, while the percentage falls to less than a third when discussing other hazards, and schools conducted regular simulation exercises after the earthquake.

In summary, in pre-disaster contexts, emergency response actions are critical for all ages, but too much information – or information on too many types of emergencies – seems to confuse 1st- and 2nd-graders. Older students (3rd-graders onwards) acquire the information well, but only students from ages 10 onwards (4th-graders) *and* who participated in the Pillowcase session were able to fully demonstrate the actions to be taken. In post-disaster contexts (Oaxaca), there were no clear differences among audiences on earthquake preparedness, and it seems the Pillowcase sessions should be embedded as part of broader school preparedness activities (i.e. floods, fires, etc.).

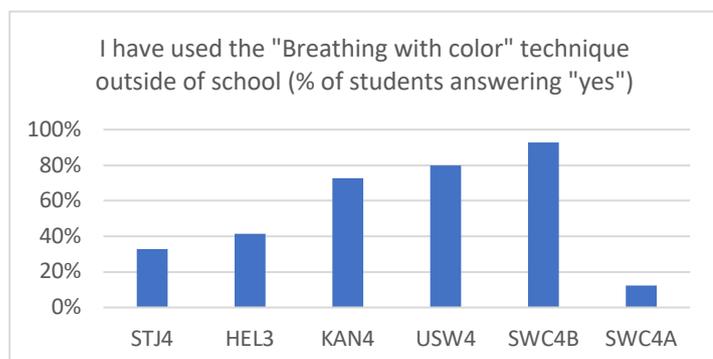
3.1.3. Responding to stressful situations:

Psychosocial coping skills are part of the original Pillowcase Project content, with two main activities: ‘Breathing with Color’ and ‘Symbol of Strength’¹⁹. These activities were used in some schools in Mexico, along with a simulation exercise based on penguin colonies to highlight physical security and mental readiness. However, the only documented use of coping skills in stressful situations collected during the Impact Study was in Oaxaca, and even there remained relatively marginal. Not enough data was available to include this aspect in the analysis for Mexico

In Australia, the ‘Breathing with color’ activity is undoubtedly the one which has been the most successfully embraced by Pillowcase participants, with more than 80% of students considering that they would be able to use the technique in an emergency. This is particularly remarkable when compared to the responses of students who did not take part in the Pillowcase session: despite Australian schools teaching other breathing and mindfulness techniques, the rate of adoption of breathing techniques by children who have not participated in the Pillowcase activity (“AUS-X” in chart) is only 1 in 3.



This finding is further confirmed by the actual application of breathing techniques by students in stressful circumstances. Overall, in 6 classrooms across Australia, 144 students were asked if they had used the “Breathing with Color” technique outside of the classroom, with 78 students (54%) responded that they had.



¹⁹ ‘Symbols of strength’ is not referenced in this study. It refers to an activity where students imagine inner strengths depicted on a protective shield.

It is interesting to note the wide variance of adoption rates from one school to the next and even from one classroom to the next: students overwhelmingly adopted the breathing technique in their day-to-day lives in one classroom of Year 4 students in Swan Christian College (SWC4B), while in the other classroom (SWC4A), students overwhelmingly stated that they had not used the activity – it would seem that, more than the exposure to risks in a given location, the learning environment in a given classroom is a better predictor of the uptake of a preparedness technique.

The students' confidence in responding to stressful situations was confirmed during the exercises.²⁰ Children referenced a range of actions that they (or others) could take to reduce levels of anxiety:

- Staying calm and using breathing exercises (all groups);
- Sharing comforting words with those who have been affected, telling them that everything will be alright;
- Telling affected people to close their eyes and think about things that make them happy.
- Calling emergency services (police or ambulance) and warning people that help is on its way;
- Moving away from the site of an accident to avoid future risks;
- Providing a range of emergency items, such as blankets, food, water and money for the affected passengers.

As with the emergency preparedness activity, these responses highlighted that students not only would use the concrete skills they learned (breathing with color), but also understood the purpose of the exercise and suggested additional actions, indicating an ability to customize their response to the event. Perhaps even more remarkable than the response rates are the stories that the children tell, which deserves its own sections – see **Box 1** next page for an overview of some of the children's stories.

This is not to say that the Breathing with Color activity is universally adopted by all students, with roughly 1 in 5 students responding that they are not comfortable using it. As one student put it: *"it doesn't really work for me but apparently it works for some people."*

²⁰ A more thorough simulation exercise was conducted on stress management in three schools (Hermidale, St Joseph's and Kangarilla). Students were asked to discuss what they would do if confronted to a scenario where they came upon a bus accident with shocked passengers sitting by the side of the road.

Box 1: How students use the Breathing with Color skill taught in The Pillowcase Project.

Helena College:

- "When I was down south, we were all standing outside, and the power went out. When I went to bed that night, there was no power and there was a fire near us and I used the breathing.
 - o How did you feel?
 - o A bit more calm.
- "There was a fire close to our house and we were already scared, and I calmed down doing the breathing exercise because my family didn't really calm us down.
 - o Did it help?
 - o It helped a lot.
- "It was when I was in hospital and the doctor told me I had to stay overnight so I was a bit anxious what medicine they were going to give me, so I did the breathing exercise and I calmed down.
- "My step-sister and I were really scared because my dad got the barbecue on fire and we were both in corners of our room and we were really scared. So we both went to my bunkbed and we both started breathing and we calmed down.
 - o Did it help or not, the breathing?
 - o Yes, it really helped, I forgot all about it. And then we had the engine come over and we were able to go on the firetruck.
- "I was on a plane and I didn't feel well, and I spewed [threw up], which was really sad, then I was really stressed out that I was going to spew again because it made me feel so dizzy. When I breathed in and breathed out, it made me feel much better.
- "When I went to the hospital for an operation, last time I woke up in the middle of the operation. So, I took five deep breaths and it made me feel better.
- "The first time that I rode my motorbike I felt a little scared that I would fall because it was a really high one. And then I did the breathing.
- "I went to hospital because I was racing up to 180 and I was really scared I was going to stay there that night and when I was doing the breathing, I was much calmer.
- "When I was younger there was a giant storm, I heard lightning and I was really scared so I did the breathing activity.

Hermidale School:

- "If you're breathing, just by breathing you're focusing on something different and not on what just happened."

Upper Swan Primary School:

- "I got evacuated by a fire there was an electricity power fire and I got freaked out. So, when I got to my house, I used that [breathing with color technique] and after like 5 minutes I calmed down and went to the evacuation.
- "My family got robbed so I was a little scared and I used Breathing with color and it helped me to calm down.
- "I was on vacation and there was a hurricane and I also used it in a bushfire here. It helped me stay calm, not really think about it.
- "We have this person in my family who was being really rude, so he moved away and just decided to ignore us. The parents had a fight and my grandma almost fainted, so I got really really freaked out, so I just used that [breathing with color].

Swan Christian College:

- "We were playing basketball game – they were smashing us because we were the youngest team and they were taking free throws, so I used it to calm down.
- "When my brother annoys me, I use the breathing with color.
- "It was during lock down practice in school and they told me (the teacher) to breathe with color.
- "There was a fire at my house and I told my dad to breathe with color
 - o Did it work?
 - o Yes
- "I tried it when my mother put the oven on fire and I used it stay calm.
- "There was an earthquake and there was a crumbling building when I was on holidays in Indonesia, so I used it.
- "There was this place where I had to sing, and I was a little nervous on the way in the car ride there.
- "I stepped on a big lizard twice the size of me and it tried to bite me.

Mexico:

Oaxaca Primary School:

- In our house we have a cellar that is very scary. We even heard noises there once. I used the breathing and I wasn't scared any more.
- I couldn't sleep on my own and the color that scares me the most is black, and my favorite color is green. I started thinking in green and little by little the fear left me.

3.2. Self-efficacy

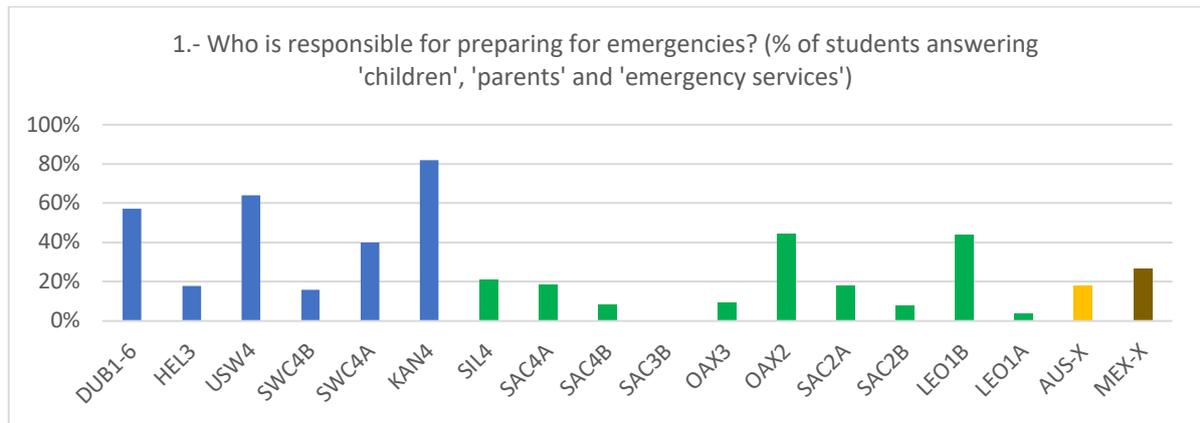
Self-efficacy, i.e. the process to “foster children’s beliefs that they can improve their own emergency preparedness”, is a core objective of the Pillowcase Project.²¹ It goes beyond the knowledge of the actions that help prepare for an emergency, to include confidence in the ability to accomplish them on one’s own. This study looks at two components of self-efficacy:

- Do children taking the Pillowcase course consider that they have a role in preparing for an emergency?
- Do children taking the Pillowcase course feel ready in the event of an emergency?

3.2.1. Self-perceived role of children in preparedness:

The first question in the survey asked students: “Who is responsible for preparing for emergencies?” Three answers were offered, with the possibility to provide multiple answers: Children; Grown-ups; and Emergency services (represented by a Firefighter icon).

Color code:	
■	Participating classrooms in Australia:
DUB1-6:	Hermidale (Dubbo), NSW (single classroom grades 1 to 6)
STJ4:	St Joseph’s Catholic School (Nyngan), NSW (grade 4)
HEL3:	Helena College, WA (grade 3)
USW:	Upper Swan Primary School, WA
SWC4A and SWC4B:	Swan Valley Christian College (classrooms 4A and 4B)
KAN4:	Kangarilla Primary School, SA (grade 4)
■	Control group in Australia
AUS-X:	students surveyed but who did not take part in The Pillowcase Project
■	Participating classrooms in Mexico:
LEO1A and LEO1B:	Leon, GTO (classrooms 1A and 1B)
SIL4:	Silao, GTO (grade 4)
OAX2 and OAX3:	Oaxaca, OAX (grades 2 and 3)
SAC2-4:	Salina Cruz, OAX (classrooms 2A, 2B, 3B, 4A and 4B)
■	Control groups in Mexico (students surveyed but who did not take part in The Pillowcase Project):
SIL-4X:	Silao, GTO (grade 4)
OAX-X:	Oaxaca, OAX (grades 2-4)
SAC-5X:	Salina Cruz, OAX (classroom 5X)
MEX-X:	Consolidated responses for Mexico



Overall, of the 305 students in this sample, only 26% of students who participated in the Pillowcase session consider that preparedness is everyone’s responsibility, falling short of the expected outcome from The Pillowcase Project objective.²² Looking at the responses across 18 classrooms, the responses are very mixed:

- Only in the two smallest schools in Australia (Hermidale (HER1-6) with 7 students across grades 1 to 6 and Kangarilla (KAN4) with 11 students) and in Upper Swan Primary School (USW4) did the majority of students consider that everyone was responsible for preparedness – Emergency Services, Grown-Ups **and** Children.

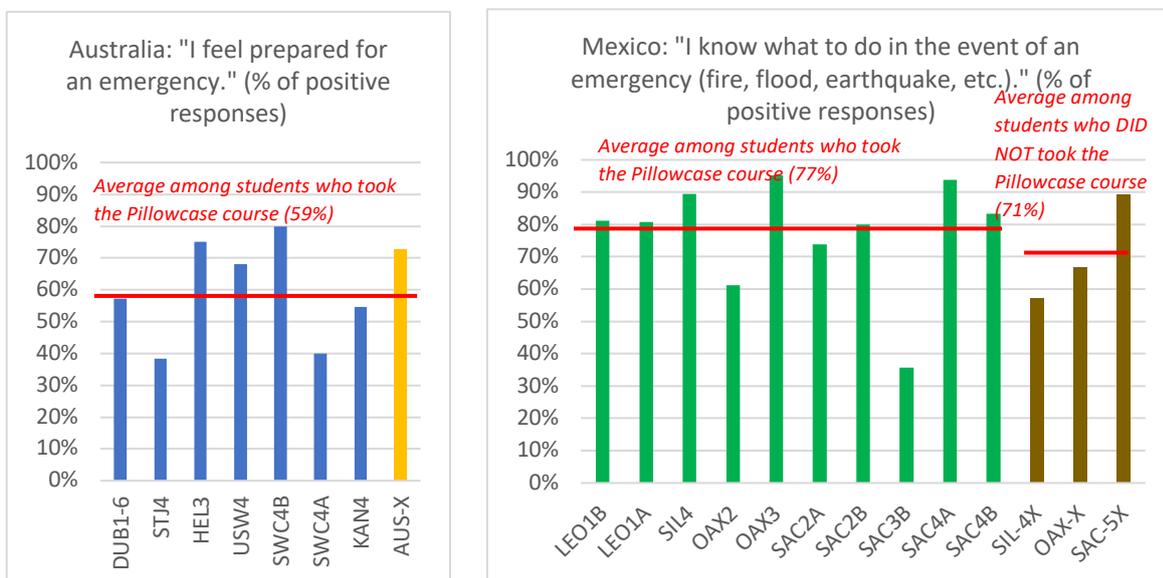
²¹ See *The Pillowcase Project Educational Standards Report: An overview of program components that support curricular standards for grades 3-5*, American Red Cross, 2016

²² The rate differs per country, with only 17% of students in Mexico considering preparedness is everyone’s responsibility, while 40% in Australia answered so. However, even 40% remains low for a program emphasizing student self-confidence.

- In the fourteen other classrooms, the majority of students consider that preparing for emergencies is the responsibility of adults (specifically Emergency Services **and** Grown-Ups) rather than children.
- For comparative purposes, the responses from students who did not participate in The Pillowcase Project are provided in yellow for Australia (11 responses across three classrooms) and brown for Mexico (52 responses across 12 classrooms): the Pillowcase session did not lead to an increased sense of responsibility among students.

3.2.2. Sense of empowerment

Based on the questionnaire and the discussions with the students, the self-perception of one’s ability to act in the event of an emergency also showed mixed results. Only 3 in 5 students (61%) answered that they agreed with the statements “I feel prepared for an emergency” (wording in Australia) or “I know what to do in the event of an emergency (fire, flood, earthquake, etc.)” (wording in Mexico, to reflect the focus on specific hazards), meaning that a full 2 out of every 5 students that took the Pillowcase course does not feel fully equipped to respond.²³



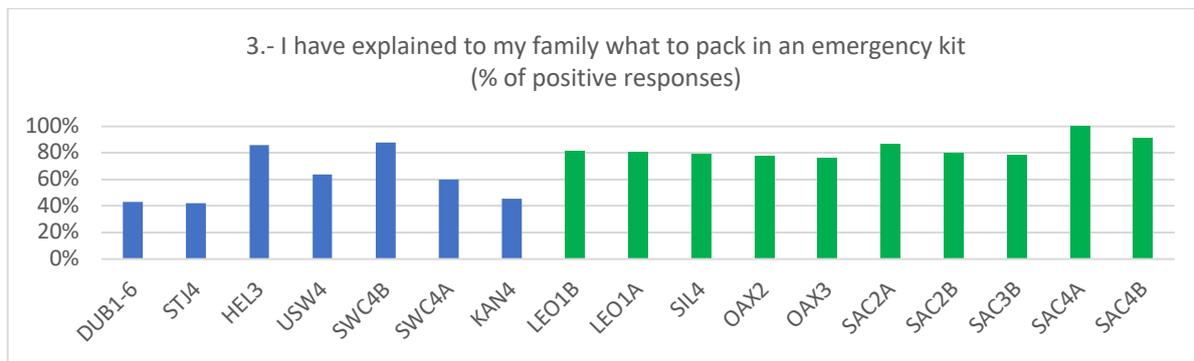
For comparative purposes, among students who did not participate in the Pillowcase course, between 57% and 89% of students (yellow and brown bars in charts) answered that they **did** feel prepared, despite **not** having taken the course (i.e. comparable to the responses of students participating in the course). These responses imply that students who have not taken the Pillowcase course consider themselves equally prepared, if not more, than those who have. One possible explanation from other Red Cross preparedness programs is that people trained in preparedness courses often discover their lack of knowledge on the subject, and therefore feel less prepared when they realize the multiple steps they would need to take, despite now being better informed. This could offer an interesting avenue for further research.

²³ It is important to note that the responses vary a lot from one classroom to the next (ranging between 38% and 80% of students who feel prepared, and a standard deviation of 18%).

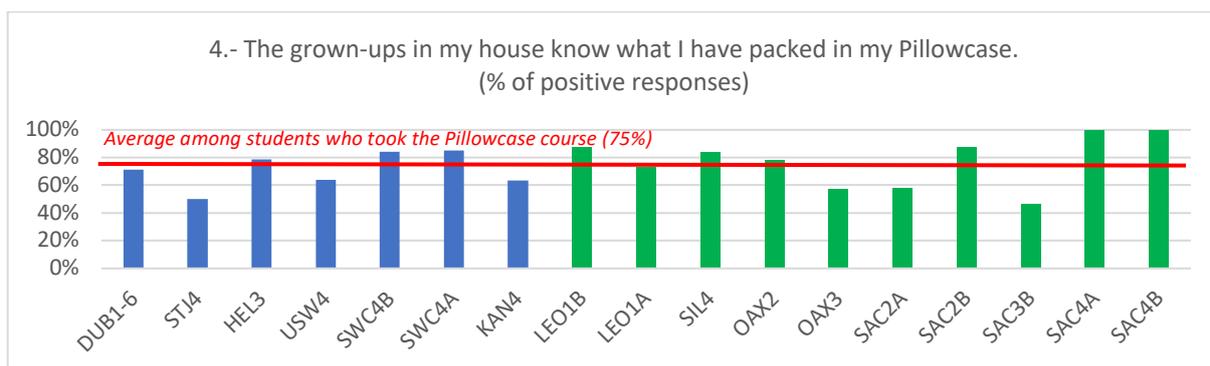
3.3. Sharing of knowledge

3.3.1. Communicating about “Get packing”

The Pillowcase Project is designed on the premise that students can act as a powerful conduit for household information and action. However, from the Impact Study consultations, there seems to be substantial differences from one classroom to the next in relation to the sharing of the information around the emergency kit / grab bag. In Australia, roughly 2 out of 3 students (65%) claim to have shared with their families what to pack in an emergency, with the answers falling to 42% in the rural areas of NSW. The rate is much higher in Mexico, with 4 of every 5 students claiming to have explained to their parents what to pack. One hypothesis that could explain this consistent difference between the two countries is that the students in Australia received a pillowcase while the students in Mexico received a grab bag, which may show a more practical application of preparedness to parents.



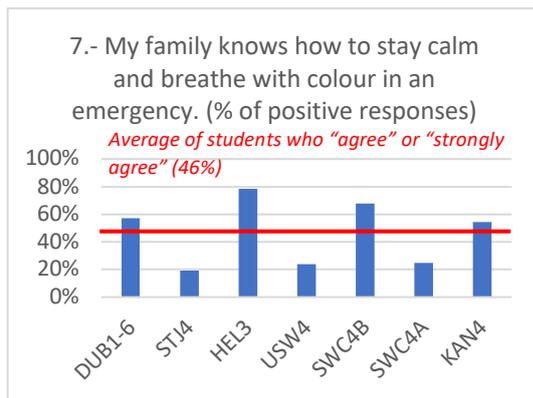
This high rate of self-proclaimed sharing should be taken with some caution, given the responses in the packing simulation exercise conducted in 4 classrooms in Australia, where students listed the actual preparedness items they would include. When asked whether they had shared with their families the longer list of items identified in the exercise, the results fell from 55% (survey responses) to 21%. It can therefore be incurred that most students shared a more superficial content with their families, rather than the longer list of items as presented in the Pillowcase session.



On the following question in the survey, 3 out of 4 students (75%) answered that grown-ups in their house know what they currently have in their pillowcase.²⁴ However, as pointed out in section 5.1.1., in one out of three cases, the pillowcase has nothing inside and is folded away, and in most cases, it is not used as an emergency preparedness bag.

²⁴ This does not include the responses from Kangarilla, as the pillowcases were just in the process of being handed over to the students to take home once the drawings were completed.

3.3.2. Communicating about “Breathing with color” (Australia)



In Australia, with significant differences from one classroom to the next, roughly half of students (46%) claim that their family members know how to stay calm and breathe with color in an emergency. **While this is not an insignificant rate, it still indicates that half of the children surveyed have not discussed the “breathing with color” technique at home, despite using it themselves as a stress management tool.** This response rate was consistent with the more in-depth discussion following the stress management simulation exercise.

Key findings: Engagement with students

- ☑ Students are very proficient in packing for emergencies, particularly when compared to students who did not participate in the session. The only students who struggled were younger children in grades 1 and 2 (in Mexico).
- ☑ Students also understood the purpose of the emergency preparedness exercise and went beyond the original list to identify other items that could be relevant.
- ☑ Pillowcases are a very valuable educational tool but are not currently used as “grab bags” for emergencies, as most students have either packed them away or use them in their daily activities. The bags distributed in Mexico lead to a higher rate of exchanges with parents, but do not translate in increased preparedness packing.
- ☑ In Mexico, Pillowcase students were well versed in key actions in response to house fires, particularly when compared to students who did not take part in the course. Again, the main limitation was with younger students in Grades 1 and 2, who confused different messages.
- ☑ When exposed to a recent emergency, such as earthquakes in Oaxaca, there is no noticeable difference among respondents, given the exposure of all children to earthquake preparedness messaging. However, Pillowcase students still show greater preparedness for other hazards.
- ☑ In Australia, students overwhelmingly (>80%) feel they can use the Breathing with Color technique. Most students have already used the Breathing with Color technique in a stressful environment.
- ☒ Students in both countries consider that preparing for emergencies is the responsibility of adults and that they do not have a direct role to play (74% of students assign the responsibility for preparedness to adults).
- ☒ There is no correlation between participating in a Pillowcase session and feeling prepared. The opposite may be true.
- ☒ Demonstrating the extent to which students have shared the information with their families is difficult: 71% of students say the grown-ups know what they currently have in their pillowcase – but in many cases that pillowcase is either empty or used for daily activities.

4. Impact of The Pillowcase Project on parents / tutors

Household members are the secondary (indirect) beneficiaries of The Pillowcase Project, i.e. the audience targeted by the “Share” component of the project. The Pillowcase Project methodology places a lot of importance on the engagement process between the students and adult family members (whether they be parents, grand-parents, siblings, uncles, aunts, tutors or guardians²⁵), as they ultimately determine whether preparedness messages reach households.

To measure how successful the project has been, questionnaires were sent out to the families of students and focus group discussions and interviews were conducted with parents. These two tools aim to determine (1) current actions taken by households in the event of emergencies (**household preparedness levels**); (2) whether adults have noticed a change in their children’s awareness and actions (**roles of children in preparedness**); and (3) whether the sessions in classrooms have led to any changes in the students’ homes (**impact of The Pillowcase Project on household preparedness**).

Box 2: Note on the application of the data collection methodology:

As explained in Section 4.3., the data collection methodology combines household questionnaires and Focus Group Discussions (FGD). However, the implementation of both tools proved challenging:

- In Australia, only 23 questionnaire forms were returned by parents / tutors, out of a potential total of 150 families (i.e. number of students in the classrooms consulted) – a paltry 15% response rate. In comparison, 119 forms were collected in Mexico from a potential of 358 students (33% response rate). This limited response rate raises questions as to the best way to collect information from households in future monitoring efforts, at least in the Australian context.
 - o To address this gap, an online survey was forwarded electronically to the parents in both Australia and Mexico: a total of 27 responses were received from two schools in Australia (i.e. slightly more than with the paper form), but none were received in Mexico. The following section only includes responses from the four schools where there were at least 6 responses from parents (paper and/or electronic).
- In Mexico, focus group discussions were conducted in 3 schools in Chihuahua and 2 in Oaxaca (none in Guanajuato), with a total of 79 participants. In Australia, the limited participation of parents made it impossible to organize formal FGD sessions. Instead, interviews were conducted with individual parents in St Joseph’s Catholic School, Helena College and Upper Swan Primary School. These more detailed responses are used to triangulate the findings from the questionnaires.

²⁵ The Australian Red Cross is very cautious to always refer to “Grown-ups” or “adults” when engaging with students in the Pillowcase session, so as to reflect the diverse family situations that children may find themselves in, for instance when guardians or other family members (grand-parents, uncles or aunts, etc.) have responsibility for the children. However, as part of the Impact Study, to the knowledge of the consultant, all responses to the questionnaires and all participants in the Focus Group Discussions were the parents (and overwhelmingly the mothers) of the Pillowcase students, so the terms “adults” and “parents” are used interchangeably in this section.

4.1. Household preparedness levels

The first question in the household survey aims to understand what parents understand by “household preparedness” and which actions they take. Their responses offer a baseline for levels of preparedness, to be compared to any additional actions taken in recent weeks (i.e. since the children participated in the Pillowcase session).

The first component of household preparedness is **having an emergency kit**. In Australia, where a kit-specific question was included, roughly 40% of households have emergency kits at home. However, what respondents understand by “emergency kit” ranged between two extremes:

- On one end of the spectrum, ‘Emergency kit = First Aid kit’: for nine of the fourteen parents who detailed the content of their emergency kits, these kits were essentially basic or advanced First Aid kits
- On the other end of the spectrum, ‘Emergency kit = Comprehensive lock-down and survival kit’: for two parents in Helena college and one in Kangarilla their emergency kits were much more comprehensive with a combination of: First aid kits; batteries; torches; candles; matches; masks (for fire); safety glasses; snacks; whistles; bushfire protective wear; bush fire safety book; and / or important papers.

In Mexico, the Focus Group Discussions revealed two contexts: households that have not been affected by a recent emergency (i.e. parents from 3 schools in Chihuahua); and those affected by the September 2017 earthquake (i.e. parents from 2 schools in Oaxaca). In Chihuahua, roughly 1/3 of respondents indicated having basic First Aid kits and the same ratio has important documents ready for emergencies, roughly in line with the percentages in Australia.

In Oaxaca, on the other hand, almost all parents have comprehensive grab bags ready, often developed with the participation of, or initiated by, their children:

- *“Outside the house we have drums where we keep blankets, raincoats, rolls, sanitary towels - we did all that with the children because it was my daughter's idea. It was her idea to get things out of the house in a place where they do not get wet [and can be reached in case of a disaster].”* (Mother, Oaxaca City)
- *“My kit has a lamp, important family papers, essential medication, a change of clothes for each member, a light blanket, a water container and canned food. There is always a spare cell phone charger in the backpack.”* (Mother, Salina Cruz)

Interestingly, one of the main take-away from the earthquake experience is the importance of cell phone chargers as part of the kit, even though it has not yet been added to many preparedness lists:

- *“My son told me that it was important to have the important documents in a bag, and the lamp and emergency batteries to charge the cell phones and have them always loaded.”* (Mother, Oaxaca City)
- *“When the earthquake happened, the children stayed in the house because there was a flood in my mother-in-law's house [and we had to go help her]. The children were left without light. The children looked for chargers to charge cell phones.”* (Mother, Oaxaca City)

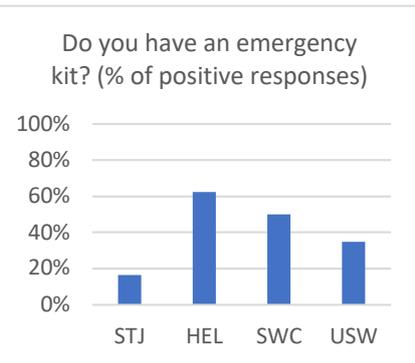
Acronyms:

Schools in Australia:

STJ: St Joseph’s Catholic School, NSW
HEL: Helena College, WA
USW: Upper Swan Primary School, WA
SWC: Swan Valley Christian College

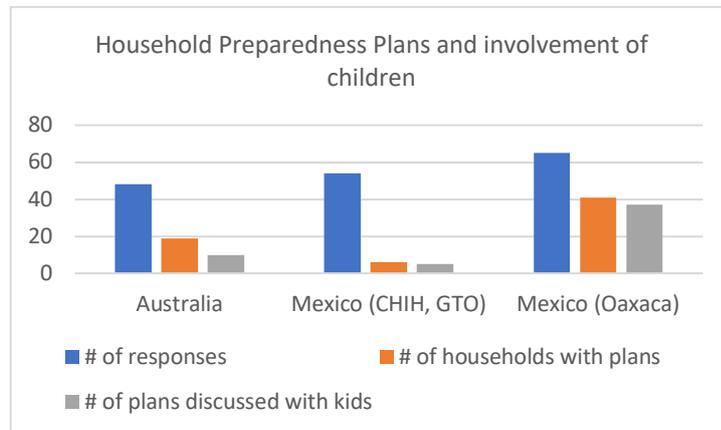
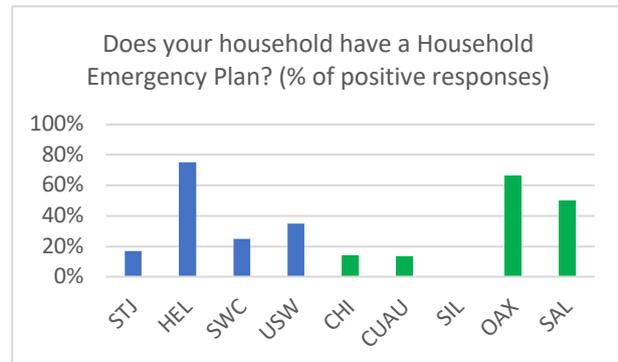
Schools in Mexico:

CHIH: Chihuahua, CHIH
CUAU: Cuauhtémoc, CHIH
SIL: Silao, GTO
OAX: Oaxaca, OAX
SAL: Salina Cruz, OAX



The Focus Group Discussions also indicate a wide range of preparedness levels, even among survivors from a recent disaster. For instance, in one group, 10 of 25 parents (40%) have a full set of clothes for every family member ready in a suitcase, but in another group of 25 parents only 1 parent has full sets of clothing ready for an emergency, with another having done it but eventually decided she needed to use the clothes.

The second component is **emergency planning at household level**. Again, there is a direct correlation between schools where at least half of families have an emergency plan in place and the recent occurrence of an emergency: bushfires in the proximity of Helena College (HEL) in the previous years; and the Sept. 2017 earthquakes that affected both Oaxaca City (OAX) and Salina Cruz (SAL).



This correlation also appears for the involvement of children in household preparedness planning: only 20% of households surveyed in Australia, and 10% in Chihuahua and Guanajuato, have had discussions with their children about a plan for disasters; but 57% of households have discussed preparedness planning with their children in Oaxaca.

In Australia, when respondents mention having a “Household Emergency Plan”, they usually refer to evacuation plans and where to meet:

- *“In a [bush] fire evacuation we would all get in the car including our dog and go to our family or friends house.”*
- *“Where to exit the house. Where to meet.”*
- *“Not a plan as such but we have practiced exit routes in the event of fire – and not for a very long time! Discussed the Pillowcase when it was brought home.”*
- *“If the house is on fire or roof falling in, we meet at the mail box and call for help once we are all safe outside.”*
- *“Evacuate in bushfire threat situation. If we are hurt, they run to neighbors or can call 000.”*
- *“How to behave, what they might be feeling and seeing and how we would get to safety.”*
- *“Discussed what to do in the event of an emergency.”*

Others focus on having a grab bag:

- *“Do not take any other items except the pillow cases.”*
- *“Time nearing to pack a box of sentimental items to grab in the event of a bushfire.”*
- *“On the fridge, we have a list of what to take in case of an emergency.”*

Box 3: Australian Red Cross RediPlan

As a reference, the Australian Red Cross developed its “RediPlan” to guide households in developing an emergency plan with four steps:

1. “Get in the know”: collecting critical information on risks and resources;
2. “Get connected”: meeting neighbors and local services providers, expand your community;
3. “Get organized”: getting insurance, planning for different scenarios, identifying the most important items;
4. “Get packing”: survival items; recovery items; and copies of 11 critical documents.

In non-disaster areas of Mexico (Chihuahua and Guanajuato), respondents referenced generic actions as constituting their plan:

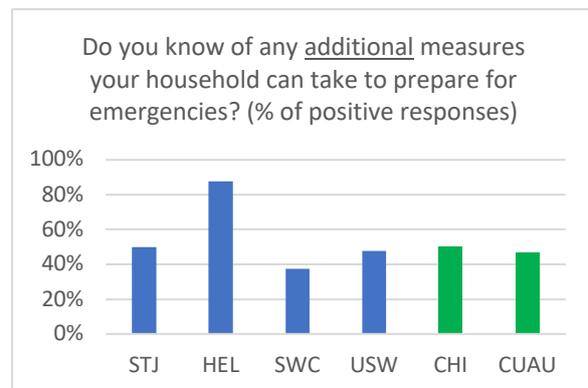
- *“Stay calm and find a safe spot.”*
- *“Be careful of windows, walls, doors and electric plugs.”*
- *“Stay informed via radio and television.”*
- *“Keep important documents in plastic bags.”*
- *“In an emergency, exit in an orderly manner using the marked evacuation routes in public places.”*

In Oaxaca on the other hand, where the families have lived through a recent earthquake, the “household preparedness plan” is closely based on their experience, i.e. earthquake related. Some of the more representative responses are:

- *“In an earthquake, no yelling, no running, no pushing, go to a safe location.”*
- *“In an earthquake, go to a safe location in the house;”*
- *“What steps to take in an earthquake.”*
- *“Where to meet in the event of an earthquake.”*
- *“If someone is outside of the house, meet at the meeting point and each one knows what to do.”*
- *“Discuss the emergency bag and the tasks assigned to each member in the family.”*

However, discussions with parents in Oaxaca also revealed some serious gaps in their planning. In one group, only four of 25 parents (16%) have a list of emergency numbers and none of the parents could recall the number for Civil Protection, responsible for emergency response. When it was suggested to use the same number as police and fire services (911), one mother answered: “but they never answer!”

The third component relates to **household awareness of gaps in their preparedness**. More responses were received on what families *should* be doing to prepare than on *current* preparedness actions: while roughly a third of households have emergency plans in any given school, more than half indicated (additional) preparedness actions they should be taking.



Findings from both Australia and Mexico indicate a correlation between current levels of preparedness²⁶ and the awareness of additional measures that should be taken²⁷:

- Among "non-prepared" households (without neither plan nor kit), only 40% in Australia and 32% in Mexico referenced additional measures they could be taken;
- Among "prepared" households (with a plan or a kit, or both), 77% in Australia and 67% in Mexico suggested further actions they could take.

This correlation indicates that households that have taken more preparedness actions also are the ones more aware of additional preparedness actions they should take. Rather than being content with their current level of preparedness, more prepared households are more likely to consider their current level of preparedness to be insufficient. **In other words, awareness of emergency risks increases both the likelihood of taking concrete preparedness actions and the sense that there is still**

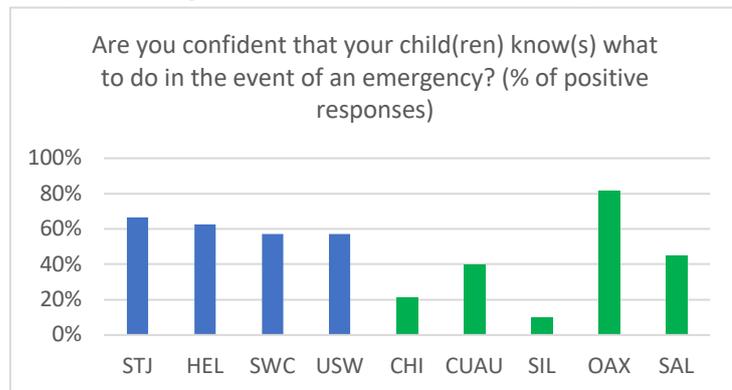
²⁶ Questions 1 and 2 in the Australian survey; question 1 in the revised Mexican survey.

²⁷ Question 6 in the Australian survey; question 3 in the revised Mexican survey.

more that can be done. Unfortunately, the main factor leading to increased risk awareness is the exposure to a life-threatening situation, over which the Red Cross has no control.

4.2. Role of children in preparedness (according to adult household members)

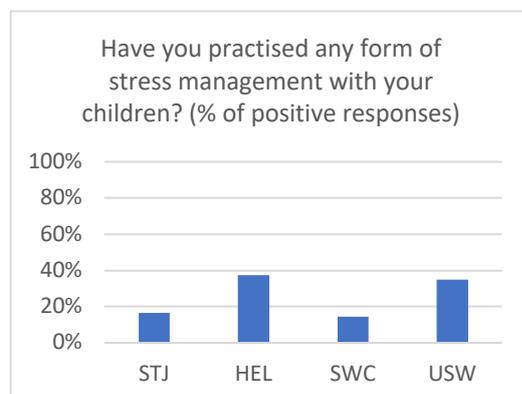
Roughly half of parents trust that their children know what to do in the event of an emergency, with the lower percentages coming from urban areas of Mexico with no history of disasters (Chihuahua, Cuauhtémoc and Silao). However, when parents do consider their children capable, the actual steps they expect them to accomplish are limited to:



1. Contacting emergency services (000 in Australia, 911 in Mexico) or relatives. This is the most common expectation in parents' responses.
2. Following parents' orders: *"They are only required to listen to us, assist us or contact 000. I'm confident they will do this in an emergency."* In Oaxaca: *"Faced with an earthquake, children should stay calm and follow the indications of mom and dad."*
3. In Oaxaca specifically (OAX and SAL), parents mentioned their children knew to stay in a safe location during an earthquake and they know where the exit is.

However, the other half of respondents considers their children would not know what to do. The reasons are related to:

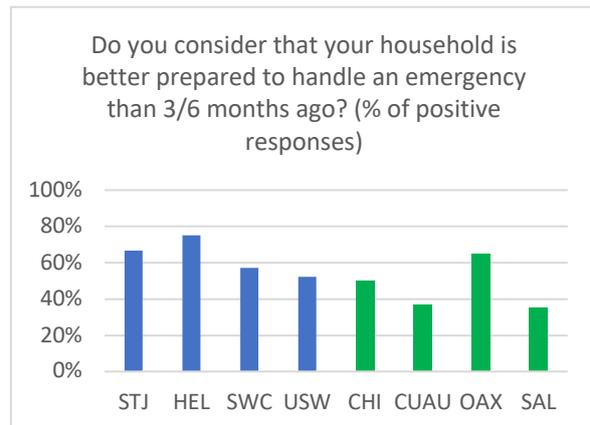
1. The fear that an emergency would provoke. As one Australian parent explained: *"No – I am confident in his understanding of it in theory, but as a child who has not yet lived through an emergency I am prepared for his fear / panic in reality."* Another asked: *"Are kids ever ready?"*. In Salina Cruz, a mother who lived through the earthquakes asked: *"We are more aware of what could happen but are we prepared? Emotionally, I don't feel so. Because we already lived something, we are predisposed. And as much as we can tell ourselves 'stay calm, stay calm', the nerves take over."*
2. The dependence on parental guidance: *"They will look to you for guidance: probably not prepared enough."*
3. Insufficient discussions at home: *"We haven't talked about emergency situations for a while."* *"Haven't practiced in our own home."* *"We have spoken about emergencies but probably have not done enough practice for it to sink in."*



In Australia, despite recognizing that panic could be an important factor for some of the respondents, "stress management" is not as widely disseminated as the other preparedness activities, only 13 of the 44 respondents (29%) have practiced stress management techniques – such as breathing with color – with their children. *This rate is much lower than the 46% of students who express confidence that their family know how to use the breathing with color technique.*

4.3. Impact of the Pillowcase Project on household preparedness

Both the survey responses and the Focus Group Discussions highlighted the diversity of situations across schools and across households. As explained above, two thirds of households do not have any measures in place for emergencies, and roughly half of respondents consider their children do not know what to do in the event of an emergency. However, 54% of households in Australia and 47% in Mexico indicate that their situation has improved over the last three/six months²⁸. Has The Pillowcase Project anything to do with this increased sense of preparedness?



Why do households feel better prepared?

In the State of Chihuahua, despite having limited awareness of emergency preparedness overall, 19 households (roughly 40% of respondents) do feel more prepared than they were six months ago. The reasons given are diverse, but for roughly a third of households, the Red Cross course is the reason they feel better prepared:

- *“yes [we feel more prepared], because they participated in the Red Cross Youth [activities]”;*
- *“because of the information provided by schools and in Red Cross courses;”* and
- *“because everything that my daughter learned in school she does at home.”*

In the State of Oaxaca, 55% (35 respondents) declare feeling more prepared. However, their increased sense of preparedness is attributed primarily to the fact that they have already lived through an earthquake (65%). As an illustration of how living through an earthquake has improved their sense of preparedness, a mother explained: *“When the earthquake happened, I yelled to the kids: ‘kids, get up!’ And at the same time as I am shouting, I am picking up the baby, without losing my calm because I am alone with them. The only thing I did was to get out of the house. And at that point I heard that many people were shouting that they couldn’t find the keys. We have always been cautious to always keep the key on the door.”*

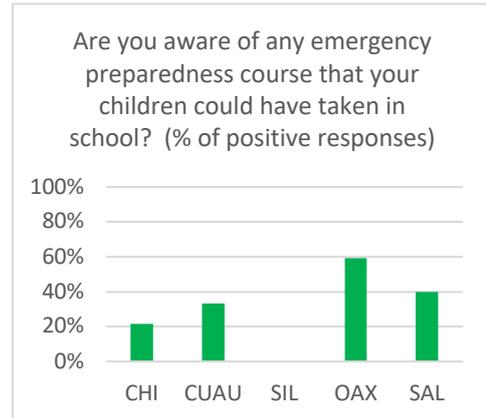
The other reasons mentioned why parents feel their children are more prepared has to do with the increased access to information in the media following the earthquake (19%) and the courses in schools (16%):

- *“Every day they receive guidance and because of the training they receive.”*
- *“They receive information through school and at home we talk about it [disaster preparedness] because of the earthquakes.”*
- *“Because we’ve had little practices for earthquake simulations at home.”*

²⁸ The timeframe for this question is different in Australia and Mexico: in Australia, students participated in the Pillowcase sessions over the previous quarter, while in Mexico many schools conducted the activity in June 2018, i.e. 6 months before the Impact Study.

Are families aware of the Pillowcase project?

In Mexico, the Impact Study looked specifically at the awareness that parents have of school-based preparedness programs. Roughly a third of parents in the State of Chihuahua (CHI & CUAU) and 59% in the State of Oaxaca (OAX & SAL) indicated being aware that their children took such courses, but of those, only 3 parents in Chihuahua (20%) and 6 in Oaxaca (24%) explicitly referenced the Red Cross or The Pillowcase Project in their responses. In short, most parents did not recall their children having received the Pillowcase sessions in school. This being said, in the Focus Group Discussions, when shown the actual pillowcase, the great majority of parents (roughly 90% in most groups) recall seeing their children with the case – but not linking it to household emergency preparedness.



In Australia, 21 survey respondents explained why they felt that their household was more prepared, of which 15 (71%) directly referenced the Pillowcase Project and/or the Red Cross as the reason for the increased sense of preparedness:

- *“The Red Cross pillowcase made us have the discussion again.”*
- *“This pillow case program did encourage more family conversation.”*
- *“Pillowcase project prompted us to get an emergency plan” [BUT does not have one]*
- *“Emily remembers the idea of putting it in a pillowcase”*
- *“Our Year 3 has his pillow slip in his room and talked to everyone about how to get what we need and get out.”*
- *“Because of the knowledge that was gained from the Pillowcase Project incursion.”*
- *“Yes, as we took the opportunity to discuss emergency plans again with our children, and this project reinforced those plans in an easy-to-understand way for our children”*
- *“The Red Cross incursion has helped Elise’s understanding and served as a reminder to us that we need to frequently consider emergency plans.”*

One of the parents went into further detail as to why she was happy about the project: *“This was an excellent initiative. One of our daughters in particular gets very distressed when prepare for bush fire season and finds deciding which of her toys to put in “her” box traumatizing. This has helped provide focus and perspective and I think has eased the issue. Thank you for organizing it.”* At least for this parent, The Pillowcase Project proved very appropriate in addressing the fear and panic often associated with emergencies (and mentioned by other parents as to a reason why they do not think their children would cope).

Have families changed their preparedness based on children’s input?

In Australia, when questioned further in the small group discussions, the parents explained that the Pillowcase *did* raise their awareness of actions towards preparedness... but that this awareness has not translated into action (yet):

- *“I think the program is good because even if we haven’t made any changes since then, but it just makes the children aware. It was approached in a way that she was talking about it, she was happy to talk about it when years ago, when we did the fire drill she was in tears and we had to tell her that it was just a practice – it was really traumatic for her...”*
- *“We didn’t change anything. It did make me think that we should do more. I remember when I was a kid, we used to have a family meeting and we sat down and worked out an action plan. My parents had emigrated from overseas so we didn’t have any family so they wanted to make*

sure that if something happened to them or if there was an emergency we would know what to do. That pillowcase thing kind of made me do it, but as happens, life goes on and you leave it for later...”

- **“It was thought-provoking but as far as translating into action, not at this stage.”**
- *“The pillowcase offers an opportunity, a visual recognition of the things they can do for themselves. In the event of an emergency we would all be running around: “The house is burning down! The water is rising!”. It did make me think we should really have the conversations about the types of things that they would be comfortable being in control of and give them the authority to do so.”*
- *“As a parent it was a good reminder of the kind of things that I need to do [to prepare for emergencies] – so just the other day I found the birth certificates and I put them aside – I’ve started to put aside. Same for medication, I need to prepare something.”*

In Mexico, despite the limited awareness by parents overall of classroom training, the Impact Study highlighted that a lot of information is reaching families through the children, reflecting the key messages from The Pillowcase Project. In the non-disaster context of Chihuahua, answers included:

- *“In case of a fire, my kid says that you should touch the door. And if it is hot, it’s because there is a fire outside. And you have to breathe lower because at ground level the air flow is better. And my other kid, the smaller one, jumps on the ground yelling: ‘The door is hot!’”*
- *“My son would find things and put them in there, like band-aids, paracetamol - the children tell us that it is to have handy, in case we’d have to leave quickly.”*
- *“My daughter has it [the pillowcase] empty but she put the first aid kit inside and she has it hanging in her room.”*
- *“We should put in the First Aid kit everything that he [her son] thinks will be necessary.”*
- *“[My child has told me that] We should all know the emergency numbers.”*
- *“Last year they had a fire drill [in school] I think, and they came home with a lot of doubts. So we sat down to talk about them: whether it could happen at home; what would we do if it did; what they talked about what to do at school; where to go to.”*

In the post-earthquake context of Oaxaca State, the examples were even more specific:

- *“Outside the house we have drums where we keep blankets, raincoats, rolls, sanitary towels - we did all that with the children because it was my daughter’s idea. It was her idea to get things out of the house in a place where they do not get wet [and can be reached in case of a disaster].”*
- *“My son told me that it was important to have the important documents in a bag, and the lamp and emergency batteries to charge the cell phones and have them always loaded.”*
- *“The first aid kit was my son’s initiative – after the earthquake he took charge of the emergency kit.”*
- *“After the Red Cross activity, my son explained what he put inside [the grab bag].” “And did you change anything in your emergency kit?” “Yes, I added a first aid kit.”*

How could The Pillowcase Project further enhance household preparedness?

Given the high level of engagement of parents and their interest in findings ways to enhance their levels of preparedness, the consultant documented their recommendations for the future. Overall, when asked how the Red Cross could help them to prepare, parents suggested 5 main activities:

1. **Organizing workshops and drills for both parents and children.** This was by far the most oft-cited suggestion and was mentioned in every single group. As parents discovered how much their children actually know, they realized how beneficial it would be for them to participate in a Pillowcase session jointly with their children, ideally combining it with a joint drill.

2. **Peer-to-peer learning**, for both students (older students teaching younger grades) and parents (sharing experiences from their work in previous years).
3. **Follow-up from the Red Cross after the Pillowcase session**, reaching back to the students and parents to remind them of the importance of preparedness – most parents recognize having seen the Pillowcase preparedness resources, but would welcome a reminder.
4. **Provide more resources** for both parents (i.e. RediPlan in Australia) and children.
5. **Support community emergency plans** connecting schools and homes.

The transcription of a sample of parents' suggestions is detailed in [Box 4](#) below.

Box 4: In their own words: What parents suggest could be done to enhance household preparedness:

Organizing joint workshops and drills:

- *"The school runs a bushfire preparedness activity at the beginning of the school year and it is quite popular. The school has its bushfire preparedness activity and they present their plan. It could be a natural linkage for Red Cross. I think it could be well received in this community. Not at the same time, but around the same period. Perhaps the school could nominate a couple weeks **as parents are very interested about what to do for their own homes rather than the actions that the school would take to for the students.**" (Helena College, Australia)*
- *"Organize a workshop with topics immediately applicable, for children and parents at the same time, so that they interact at the same time so that they complement each other. They absorb information differently." (Delicias, Chihuahua)*
- *"Now that we are here [at the school], we could have our children with us and interact with them on the topic of preparation we are discussing." (Chihuahua, Chihuahua)*
- *"Organize joint drills in the school [with students and parents] – even though not all the parents would come." (Cuauhtémoc, Chihuahua)*
- *"[Preparedness activities could be included] as part of the school fair." (Cuauhtémoc, Chihuahua)*
- *"[Organize] workshops for kids and parents and we could bring out grab bag and conduct a simulation together – pretty much everyone could participate." (Oaxaca City, Oaxaca)*
- *"Drills with teachers, with parents, with the wider community." (Oaxaca City, Oaxaca)*
- *"More courses. There needs to be for, say, Barrio Espinal and its surrounding schools, a course, a fire drill. Here we have the refinery, we had the quake, and we have the beach: what to do in case of a tsunami." (Salina Cruz, Oaxaca)*
- *"Drills could be done with schools. What to do. In an emergency, moms run for their children and collide with the other moms who are arriving at the same time." (Salina Cruz, Oaxaca)*
- *"We need courses for dads and children. Or a parent association that coordinates those activities. There is no [parent association] here." (Salina Cruz, Oaxaca)*

Peer-to-peer learning

- *"To set up a brigade of children and the older children teach the younger children and they are passed on generation after generation." (Delicias, Chihuahua)*
- *"You could certify a group of dads and they teach them to other dads, even to other schools." (Delicias, Chihuahua)*

Follow-up from the Red Cross after the Pillowcase session:

- *"If the kids came home with a sheet of paper perhaps a week after the [pillowcase] incursion, if there was an email with a link with videos. We're all really busy and papers can get lost so maybe a link with a video and some online resources would help to support that message." (Helena College, Australia)*

Provide more resources:

- *"I think this community [of parents] would be pretty keen on it [REDiPLAN session] because of where we are and because it is high risk." (Helena College, WA)*
- *"There are children who are very intuitive and helpful and this type of program catches a lot of attention - my son wanted to be a firefighter since he was 10 years old - that's missing: workshops, courses that call the attention of children and that take advantage. Courses that teach them to have that kind of practice." (Delicias, Chihuahua)*
- *"Provide interactive videos for kids." (Oaxaca City, Oaxaca)*

Support community emergency plans (school & home):

- *"Agree to external meeting points." (Oaxaca City, Oaxaca)*
- *"Communication between teachers and parents [on what to do] after an earthquake: how each will be organized, what will be the meeting points." (Oaxaca City, Oaxaca)*

Key findings: Discussions with parents / tutors

- ☒ Overall, the preparedness level of households is quite low, with roughly a third of households having a first aid kit and, in Mexico, a copy of important documents. Only 1 in 6 parents have had discussions with their children on preparedness planning. This rate is much higher in areas where families have recently experienced an emergency, such as the 2017 earthquake in Oaxaca.
- ☑ The awareness of emergency risks increases both the likelihood of taking concrete preparedness actions and the sense that there is still more that can be done, i.e. behaviors at household level can change and have changed substantially following recent emergencies.
- ☑ Parents are generally aware that a preparedness activity took place in school, largely thanks to the pillowcase / grab bag that their children brought back, with the preparedness-related drawing...
- ☒ ... however, parents largely underestimate their children's abilities in emergencies: while roughly half of parents say that their children would know what to do in an emergency, the actions they have in mind are limited to contacting emergency services and / or relatives.
- ☑ Parents sense that their preparedness has improved over the last few months, and for a substantial proportion of parents (almost three quarters in Australia), the Red Cross course has been a significant reason for this increased readiness...
- ☒ ... yet no immediate action has been taken by the parents – despite a commitment to do so.
- ☑ When asked what could motivate them to take action, parents expressed interest in accessing more courses on preparedness, either through the school or directly with the Red Cross. These could take the shape of drills, peer-to-peer learning, information sessions, RediPlan sessions (in Australia) or community emergency planning exercises.

5. The Pillowcase Project according to teachers

Due to the one-off design of The Pillowcase Project, any repetition of key preparedness messages to students relies entirely on initiatives by of the teachers. To help determine the level of engagement of the teachers, the consultant interviewed them in 8 of the 14 schools where the Impact Study activity was conducted.²⁹ The discussion focused on the implementation of the Pillowcase Project and the teachers' perspective on the broader impact of the initiative.

In Mexico (i.e. Oaxaca), the teachers were extremely positive about the program, in part given the strong impact of the September 2017 earthquakes on their schools. Their comments reveal the lasting impact this event has had on the children and can explain their enthusiasm. As one teacher explained: *"They say the children are used to it [tremors] and it's not true. A few days ago, the ceiling fan started to make ugly sounds and they thought it was a tremor when it was just the fan going 'takatakataka'. And the children shouted 'it's an earthquake.' Now, now, stay calm, it's just the fan. The children rushed under their chairs. What we should do is have regular drills."*

Their comments also reflect common interests with The Pillowcase Project and indicate an interest in being more involved: *"It was motivating to see the children take their grab bags, showing them at home, as small promoters. It gave the child the opportunity to be a spokesperson for the family and look for ways to prevent [emergencies], how to care for others; for me it was very beneficial to see the children engage. I would just suggest that they [the Red Cross] give more importance to the teacher and show them how to act." "The sessions were good because it taught them what things they can bring in their grab bag."*

5.1. Linkages to the national curriculum

Strong connection to the national curriculum

In Australia, teachers agreed that The Pillowcase Project closely built on the Australian teaching curriculum and were very happy with the linkages to their own courses. As one teacher explained: *"I thought the presenter was good, the interaction of the students was good, the questions were good – generally when there is a boring activity the children are not very engaged and don't ask many questions. I think having the aids of the pillowcase case were really good for the age group. Having the concrete materials helps to actually show them what they have to prepare and it gave them something to take home. I quite enjoyed it. They had enough time sitting down having a chat with the children and then the questions and then getting along with the activity. I didn't think it would require any improvement. The children were talking about it the following week. The parents were also saying that it was a good activity." (Teacher, WA)*

One of the retired teachers who imparted the Pillowcase session as Red Cross volunteers went further: ***"After working as a teacher for 35 years, I find the program most valuable, directly connected to the New South Wales curriculum. If you have someone who does not understand the school curriculum, it is difficult. But if you can link between the Pillowcase program with say geography or science objectives, well this is what it is about."***

²⁹ Due to logistical constraints, it was not possible to interview teachers in Hermidale, Australia, or in the states of Chihuahua and Guanajuato, Mexico. The interviews of teachers only took place in 6 schools across 3 states in Australia and 2 schools in Oaxaca, Mexico.

In Oaxaca, where the program was implemented in all primary grades from 1 through 6, the teachers underlined the strong connections of The Pillowcase Program to Grade 3 and Grade 4 national curriculum:

- *"It's in the subject of natural sciences where we cover "life and health". We see which organizations are dedicated to health programs. We cover which actions to take in case of disasters and preventive measures in first and second [grade]; and in third and fourth [grade], the topic falls under natural sciences and in fifth and sixth the same. Third and fourth [grade] would be where there is more relevance. In first and second [grade], they are smaller, the terms could be more complicated. Using games, we can introduce them to the subject. The other grades cover both theory and practice."*
- *"I had the first grade students [when the Pillowcase session took place] and some students could not understand the theory: first aid kits, first aid, understanding different situations. But when they shifted to exercises, the children became more involved and left very happy with their little bag, something that had not been done. They were very impressed."*

Prepare the students ahead of the Pillowcase sessions

The main concern that was raised by teachers and Pillowcase instructors alike is the fact that the course is a one-time session that is not necessarily linked to the activities that the students cover in the classroom just before or after. This issue can be solved through some planning from the teacher's side:

- *"We could tie it [the Pillowcase content] in with a unit of work – like science, natural environment, like health, keeping ourselves safe, history, geography, what disaster happen in different areas."*
- *"I feel that [the Pillowcase Project] fits in well with other things we are doing, including the Health and Safety activities. The kids reacted well, though they were very focused on the decoration of the pillowcase. It could be added on to another science course, on natural disasters for example, but it would depend of whatever topics we are addressing at the time. We can always make it fit [in other courses]."*
- *"It links very well in Year 3 with Health and Literacy and Humanities and Social Science. But it depends on the additional input that the teacher does."*

Expand to the whole school

Perhaps the best compliment provided by teachers is their interest in expanding the messages and approach to the entire school, rather than limiting it to specific classrooms. As one teacher in New South Wales explained: *"Could it be a whole-school approach? Kinder to 6th grade, so there is continuity and all kids are on the same page. You could probably carry out the same Pillowcase activities for different age groups, like the "needs vs wants", which is hands on, they can see and discuss."*

In almost the same terms, a teacher in Oaxaca explained: *"The program is very good. The only thing is that we wanted to see how it could be expanded to the whole school. The small ones may be our priority but the bigger ones have to have that information too. It is important to know what we are going to do and what our function will be in that case. We listen, we see, they also left us some posters with some points. But the ideal would be to give it a sequence in which it is more continuous so that we are more capable, because we are in a seismic zone and the space does not allow us to engage with the children so easily."*

Teachers in both countries were curious to know whether The Pillowcase Program could become a lifelong learning process for Primary students. For another teacher in Oaxaca: *"If there is follow-up and there is continuity, we reach our goals, we reach higher percentages of achievement. But if we*

only make small brushstrokes, the purpose is lost and the activity does not stay. Between what was done in the previous cycle [2017-18] to what is being done today [2018-19], we already have continuity.” The practical aspect of the course was also emphasized: “The important thing is to put it into practice. As days go by, things are forgotten.”

A Year 4 teacher in Western Australia who previously taught Year 5 students summarized it in this way: “It is very integrated in Year 5 [curriculum], science and space, looking at bushfire, it helps to make it more exciting. In geography we look at the impact of bushfires and how people respond; what triggers bushfires; bushfire recovery in consultation with DFES; firefighters speak to the kids. Year 4 does not directly tie into disaster preparedness. In Year 2 and Year 3 they know the basics: 000, stranger danger, resiliency building in the health program. **[The Pillowcase Project is] a good thing for their age, and it is good they have something every year.**”

Box 5: Embedding The Pillowcase Project into regular teaching

One teacher in Western Australia has taken this commitment to link to the broader curriculum to the next level.³⁰ Her approach is worth quoting in full:

*“Your project is fantastic, but I think it depends on how much the teacher wants to put in preparing for the project. Otherwise, it remains as a standalone thing. **I think it is useless as a standalone so I try to build a course around it** with the books by Jacqui French and Bruce Whitely³¹ so that the children read about disasters. I do these book studies prior of the Red Cross coming out [for the Pillowcase session]. I always try to build it around learning outcomes: literacy/reading through children’s books; geography of areas; health, as an emergency measure; building their own emergency signs. Out of our 10-week term, I spend 6 to 8 weeks building up to [the Pillowcase session]. I ask the students to present what they have learned. We discuss having a radio and some of the frequencies for emergencies. We discuss even emergency numbers. Parents have told me that students have looked into the pantry for the food to be stored. They prepare care parcels. Key messages include the fact that you can replace TVs but not lives. Every year I use the same books but tweak the content of the session. [Following this process,] I find that the children have very rich question for the Pillowcase instructors. The kids need the prior knowledge to be able to take the full learning from the session. I encourage all of my kids to take the information home and get the missing information. Some students will take it home and get the information while others won’t. Depends on the interest of students and parents.”*

5.2. Linkages to household preparedness

The inclusion of parents in preparedness workshops is a recurring theme across the different discussion groups (with parents; teachers; and instructors). The concern that the messages were not reaching the parents was raised by teachers across both countries. One teacher in Australia raised a concern as to how the forms were shared: “I wonder if the kids did share at home. The papers probably should have gone home at the same time as the pillowcase – they kept the pillowcase in school to finish coloring them. If we send the bag home with the note in the bag, it would probably have raised more attention. Even if we took a little more time to finish coloring the same day, we could send everything back together.”

³⁰ This teacher participated in The Pillowcase Project but her classroom is not based in one of the schools included in the Impact Study. She is one of the stakeholders contacted via phone to gain a more comprehensive understanding of The Pillowcase Project in Australia.

³¹ Australian authors of children’s books on natural disasters such as “Flood” and “Fire”:
<http://www.jackiefrench.com/flood> .

Teachers all insisted that schools offer a clear entry point for preparedness messages to the family, in line with the original assumptions of The Pillowcase Project. As one teacher in Australia explained: *“With the programs that the Red Cross supports, meaningful for the children, they take them home and that’s how we win the parents. Given the topic, they are interested and if the children are interested, they tell their family. The mother gets the information to the father, and from the father it reaches the rest of the family.”*

However, they also agreed that the current set-up of the program did not do enough to involve parents in the process. As one teacher in Oaxaca put it: *“It would be good to organize a workshop or a meeting with the parents and the children, as well as us [the teachers]. A general discussion so that we all know what to do. Something dynamic, in which we run, throw ourselves to the floor. It would be better remembered than projecting [slides] or giving brochures, something that would last all morning.”* While recognizing the difficulty in engaging parents, the teachers believe it is important, particularly in Oaxaca: *“You could show short films, organize fun activities that parents can also participate in. We lived through it [an earthquake] and even then, there are many actions that we have to take. [In families] in a disaster there is chaos, a psychosis.”*

A teacher also underlined how preparedness should build on traditional communal activities in Oaxaca: *“focus on the community: the ‘tequio’, the ‘guelaguetza’³² require the participation of all, not as in capitalism – how much is it worth with an exchange of money – but the voluntary contribution of all. It is very important to recover this state, in particular for preventing damages – parents must get training, but not saying ‘if they pay me, I go, and otherwise, no’. First of all [they should consider] the safety of children.”*

Some teachers in Oaxaca also suggested constituting formal preparedness teams: *“It could also allow us to form brigades of parents to promote what to do in case of a disaster. Some 5-6 years ago there was a parents’ brigade. But when the training stopped, the brigades dissolved.”*

5.3. Linkages to other organizations

Other organizations also work on preparedness, and teachers see the benefit of such multi-institutional partnerships, especially following the experience of the earthquake in Oaxaca: *“It would be good if it extends first to sixth [grade], involving the other instances – municipality, [neighborhood] committees – with students, teachers and parents. A brigade with different profiles, each with well-defined responsibilities, becomes practical and functional. With such connections, it would be possible to work in the classroom as well as outside the classroom. You could involve the staff, with the theoretical part, and then you could ensure the learning with practical applications.”*

³² Indigenous nahuatl and zapoteca practices still in use in Oaxaca:

Tequio: unpaid collective work that every neighbor of a town owes to their community. ([Source: Wikipedia](#))

Guelaguetza: system of mutual cooperation maintained among neighbors, especially for harvests or in the construction of houses. ([Source: Wikipedia](#)).

Key findings: Discussions with teachers

- ☑ Teachers have enthusiastically embraced The Pillowcase Project and endorse the program's model of "student ambassadors" to encourage greater household preparedness. The program is successful in gaining the students' attention.
- ☑ Many teachers would like to be given a more formal role in The Pillowcase Project. The alignment with the national curriculum is relatively straightforward in both countries, but the teachers suggest they could do more to ensure that students are ready for the session, for instance through prior reading or related science classes. Some teachers have already taken the initiative to adapt their classroom sessions accordingly.
- ☑ Many teachers suggested expanding the program to other age groups, to cover all Primary students and repeat key messages every year. They see this as the only way to ensure the messages are not forgotten.
- ☑ Parents should also be involved more deliberately, if only to inform them of the program's objectives. This would help contextualize the information that reaches them via their children.
- ☑ Other organizations also approach the schools for preparedness-related activities. Teachers see benefits in connecting these different initiatives to ensure greater continuity.

6. The Pillowcase Project according to Red Cross facilitators

The last audience critical for assessing the impact of The Pillowcase Project are the individuals providing the Pillowcase sessions to the children, i.e. the Red Cross volunteers. Key informant interviews were conducted with 12 Red Cross instructors in Australia and Focus Group Discussions were organized with the instructors in each of the three Mexican states where the Impact Study was conducted.³³ The main difference between the two countries relates to the profile of the instructors: the majority of instructors in Australia are retired teachers, with substantial teaching experience; while in Mexico, the majority of instructors are volunteers from the Youth Department, ranging from 14 to 25 years of age.

6.1. Effectiveness in transmitting preparedness messages to students

6.1.1. Australia: well targeted and well received

In Australia, most Red Cross volunteers confidently explained the linkages between the Pillowcase methodology and the Australian curriculum. Overall, the Red Cross instructors were overwhelmingly positive about the approach. One volunteer concluded that it was *“one of the better programs I’ve seen in our schools, really well linked to the curriculum. I’ve seen a lot of other presentations that are not as well linked.”* When asked what could be done to improve it, another volunteer explained: *“If we are getting a good result, no point in changing the program. At this stage, it’s working, why change it?”* Another volunteer, a retired schoolteacher, explained it succinctly: ***“The Pillowcase is a process that works. It is sequential (it gets the children thinking), it is relevant (applies in other situations) and it has its little reward at the end (the pillowcase).”***

All questions related to the transmission of knowledge to students got unanimously positive responses among all Red Cross volunteers consulted. The Pillowcase Project is credited with transmitting the preparedness messages in a simple and captivating way. Some comments from Red Cross instructors are worth quoting here:

- *“The children have really taken the project on – they were ecstatic.”*
- *“I think it is really good, the kids love it, they understand it.”*
- *“I think it’s exceptional because it is honing into kids aged 8 to 10 where they are listening in and are excited to tell it back at home with the adults. The strength is that kids know where to keep their pillowcase.”*
- *“The children are just so engaged for the whole hour, which is really fascinating from a teacher’s perspective. They don’t talk about other things.”*

These responses are clearly in line with the findings of the student questionnaire and exercises (outlined in section 5.1. above), which showed that the students remained engaged and capable of stating the key messages of the activity.

Teachers proved very receptive

One of the initial concerns in rolling out the program was the workload of the teachers, potentially leading to a reluctance to take on the program. Upon review, the Impact Study discussions highlighted that, to the contrary, the Pillowcase methodology – which is built around Red Cross volunteers – actually relieves teachers from having to take on another activity. As a Red Cross instructor explained: *“The Australian curriculum is so full, they [the teachers] don’t have the capacity to go and get new things or learn new things. That is why the Pillowcase is such a good resource: trained instructors come in to provide the session, it is not something new that they have to learn.”*

³³ The Focus Group Discussions included 26 participants in Chihuahua, 10 in Guanajuato and 6 in Oaxaca.

This was echoed by a facilitator in Western Australia: *“What I love with Pillowcase is that it is so easy to deliver – we don’t need to set up whiteboards, or TVs, or others. I think the teachers appreciate that they don’t have to deal with the hassle to set up.”*

The personal interest of the teacher plays a critical role in their commitment to the program and ultimately its success. As a Red Cross instructor explained: *“It is really valuable for local teachers [who live in disaster-prone areas]. The value may not be as clear for teachers who are not from the area. I’ve had teachers who’ve lost their home. It is about personal understanding.”*

One of the volunteers in NSW, a retired teacher, actually encourages teachers to take concrete follow-up actions after the session: *“I leave a master of the old Needs & Wants with the teachers and they have been quite keen to use the cards – they can use them again for discussions in the classroom. It helps facilitate the continuation of the concept.”*

A course targeting the right age group

The suggested age for which the Pillowcase session is best suited has been a topic of debate. For one volunteer, *“if [the session took place] in an older class, it would have to be a different program. I don’t think it would be appropriate for 5th / 6th grade. I think we hone in on the right age for the kids. Prior to that (1st and 2nd grade), I think the kids are too young. I just don’t think the pillowcase would be right, to choose what to place in it.”*

Another instructor mentioned that there was *“definitively a difference: Years 3 and 4 are so open and very impressionable, they are sponges to take information in. As they get slightly older, they tend to get more influenced by their peers and change the way they engage in open sessions. So breathing with color is more difficult, we would need activities that are more engaging. The books were too simple for Years 5 and 6 – the coloring of the pillowcase is too simple, you need to find activities that are more challenging and engaging – they are quite capable to look at the different activities.”* But a Red Cross volunteer suggested that *“all sessions work for all groups – maybe with my teaching background I can adapt it. Needs & Wants for older groups works as well.”*

A course providing life skills beyond preparedness

One volunteer, a retired teacher, mentioned that *“students use the skills in other areas, like public speaking. It links to academic and school life. It becomes significant for them so they attach importance to the activity. The Needs versus Wants activity is also relevant [beyond the scope of emergency preparedness]: if I don’t really need something, then maybe I don’t need to nag my parents about it.”*

Two volunteers (in NSW and SA) referred to the broader relevance of the methodology for daily emergencies. In particular, they mentioned domestic violence as a real risk for some of the students, for whom the breathing exercises could prove particularly beneficial.³⁴ Another volunteer commended the Pillowcase approach because *“it helps you get a sense as to how you feel emotionally.”*

³⁴ Domestic violence is not considered in The Pillowcase Project. This being said, it does seem worthy of further research in relation to the Pillowcase Project, particularly given the noticeable discrepancy between the 78 students who claimed to be using the “Breathing with color” activities outside of the classroom, of which only 22 felt comfortable sharing their stories in an open setting. Though there could be a number of reasons for which a 9-year-old child does not wish to share a stressful story publicly, it is likely that at least some of the stories are not disaster related and could provide important information on broader use of the Breathing with Color technique in high stress situations.

At the same time, one instructor suggested that the Pillowcase did help to touch on some of the concerns if given sufficient space: *“it is important to hear the stories that matter the most for the children. When we focus on the special items, it is important to hear what is the most important, particularly in recovery to hear what they lost. 9 times out of 10 the parents don’t know about these items [that are important to students] and it is usually related to a memory of something.”*

6.1.2. Mexico: Considerable efforts to adapt to different contexts and age groups

In Mexico, the program was equally well received by the instructors. As one volunteer explained: *“The positive impact was that most of the children paid close attention to the project. Some were really interested and really thought that ‘this is something I have not seen and I want to learn more’ or ‘I want to make sure to remember this’.”*

A big effort to customize the tools to different risks

The main characteristic of the program in Mexico is the effort that the instructors have put in customizing it to the needs of the school.

Firstly, the discussions revealed the **wealth of activities** that fall under the umbrella of “The Pillowcase Project”: while the teaching methodology is built around 5 modules (see section 4.1.2. above), the volunteers also use additional activities that are detailed in the Pillowcase manual and have added icebreakers, leading to roughly 15 distinct activities.

Secondly, although the types of activities implemented were very similar in all three states, the **implementation varied from one school to the next, depending on the risk environment** and the time available. For instance, in one school in Guanajuato: *“about 3 months before [the Pillowcase session], there was a shooting [in front of the school], and the director asked us if we could include a simulation of what to do in such cases. The shooting was outside the school, but the bullets would reach inside and the children were scared. And what we did was to tell the parents: keep calm; crouch; do not run outside; wait for the person in charge of the evacuations takes them to the meeting point, for example in the yard.”*

Thirdly, the instructors make a **conscious effort to assess the students’ knowledge**. A volunteer in Guanajuato explained: *“We ask the children what they would do for different risks, to identify what they believe, or that their parents tell them or what they see in movies. Many times, parents don’t have the custom of talking about prevention at home. So children are left with what they see in movies.”* Given this assessment of knowledge, they tap into their “expanded Pillowcase toolkit” of 15 activities. For instance, as one volunteer explained: *“What really surprised me is that the third graders did not know what to do in the event of a fire. Some told us that they should run out, all the while throwing clothes to try to put out the fire. No one had explained what should be done in that case. From there we added a simulation. First: stay calm. Identify where the fire started and try to find the evacuation route. Put a wet cloth on your nose and mouth, covering everything. Try to get out lying on the ground and crawling if nothing is in the way.”*

This effort to contextualize to local levels of knowledge proved particularly important in Oaxaca, given the state-wide emphasis placed on preparedness after the September 2017 earthquakes. While volunteers in the states of Guanajuato and Chihuahua tried to ensure the children knew the most basic messages, the volunteers in Oaxaca were faced with very highly informed children. As one volunteer put it: *“The children were more active and had knowledge from their family: ‘My dad or uncle or a family member told me that I have to do that.’”* Another explained: *“On the subject of disaster backpacks, the children were very participative, and even told me that I was missing. For example, I told them about the [important] documents and a child told me: ‘where are the cleaning items’ and I realized: ‘oh yes, it’s true’. Or, ‘where is the medication, I need to take my medication’. The*

children were very participative and knew a lot about the subject. **They already practically knew everything on the topic.**"

Customizing the methodology to different age groups

As the program was rolled out for a broader range of age group than originally designed for, the instructors put significant efforts into making the sessions relevant for all students. In Oaxaca, one instructor explained that with children from 6 to 8 years old: *"We take them [the activities] and customize them, based on our [Youth Department] icebreakers. For example, we explain the topic to them and using the "hot potato" game we ask the children how to prevent risks."* Another added: *"we do the same thing with emergency numbers, firefighters, Red Cross, police. We teach it with another game, just like the "hot potato", we ask them a question: "what is the number of the Red Cross?" And whoever answers [correctly] gets a lollipop."* Overall, the goal is to make the process *"more interactive, I feel that a child learns more while playing than when we explain what it consists of."*

Despite these efforts, the Impact Study indicated mixed results in providing key messages to younger students (1st and 2nd grade). It seems this can be explained at least in part by the lack of guidance as to the amount and types of messages that 6-year-old students can retain. The instructors recognized they did not have age-specific learning objectives: the sessions were adapted given the context of each school and the solutions that the individual instructors identified.

Connecting with children

A strong emphasis is placed in Mexico in connecting with children, taking them away from the scholarly environment and teaching methods. As a volunteer in Guanajuato explained: *"The way adults engage with children, the way children pay attention to teachers is different to the way that they see us [Red Cross volunteers]. The teacher sets the rules. With us, we're younger, we engage more because we throw ourselves to the ground, we play with them. The teachers didn't do that. We bent down, we knelt, we jumped, we tried to make it as engaging as possible so that they would pay more attention."*

6.2. Impact of The Pillowcase Project in household and community preparedness

The current format of The Pillowcase Project doesn't include a formal mechanism for feedback from families to the Red Cross.³⁵ However, the volunteers did indicate that they had noticed differing levels of engagement from the students and schools, seemingly correlated to recent exposure to hazards. One volunteer in NSW pointed out that from her experience the program did quite well in specific hazard contexts: *"in [location 1], a bushfire had happened a few weeks earlier. The deputy principal was so grateful, she thought it would be very helpful to help calm the children and provide information for the families. In [location 2], a tractor caught fire close to their homes, so all the children had a reference point. Very enthusiastic children. In [location 3], a tiny little school, it was very enthusiastic. The area is very dry. All kids got in, it was really fantastic, with good participation. Small schools are well out of town. They seem to be more aware of bushfires, floods, whatever. They seem to understand more about the little project. The message seems to be bigger for them."*

Another volunteer shared her experience in implementing the Pillowcase sessions *after* an emergency, within the Red Cross's recovery activities in NSW: *"Fires happened during the school vacation, nobody had Pillowcase training, and the request came from the school. Students could really relate to the*

³⁵ The Australian Red Cross does send out an evaluation form with the pillowcase and which needs to be mailed back by parents or guardians to the Australian Red Cross headquarters. It has had a very low response rate.

project: 'yes now we know we have to take the information we need, not what we want'." Once the program got under way, the community's response showed it worked: "We covered grades 3-4 and 4-5. But parents were upset, asking why we did not cover the whole school."

The evidence of household actions in response to the Pillowcase session shows interesting – yet anecdotal – responses from households, as illustrated by this comment from a volunteer in WA: "On the second day, a parent told me how great the project was and that she would be buying her other children pillowcases so that they can have a family activity."

In Chihuahua, the volunteers provided different references to the Pillowcase messages being shared inside and outside of the classroom. Two volunteers pointed out "that the children understood the topics very well and that they shared their knowledge with siblings, cousins and friends, and their family"; while another pointed out that "the biggest impact was the way the children who took the training helped those in other classrooms to know what to do during the general drill." With their families, they pointed out: "the excitement of the children when you tell them what they have to do and the excitement to go home and talk with their parents about everything they learned."

However, the same volunteers also identified the lack of connection with parents and teachers as a key weakness of the project: "The greatest difficulty is on the side of the parents. Since they do not follow up or do not take this issue very seriously." "Some of the parents of the children do not show interest even though the child is very interested."

The solution, for these volunteers, is training targeted to parents: "The program is well suited to children, the only thing missing is that teachers and parents pay more attention [to preparedness] and help children follow up on activities. Build communication between parents, teachers and children, at the time of the training." "The program is fine - I would not change anything, just that more training is needed for teachers and parents." "I think that The Pillowcase Project is very good but it needs to integrate the parents a little more to what the project is, we also have to train the teachers."

6.3. Opportunities moving forward

Given the passion and in-depth knowledge that the Red Cross instructors provide, it is worthwhile to summarize their suggestions for The Pillowcase Project moving forward. They can be grouped under six headings:

6.3.1. Reaching out more deliberately to parents and guardians

Interestingly, when asked whether parents were engaged, volunteers brought up numerous suggestions on how to reach out more systematically following on the Pillowcase sessions, some of which they were already implementing.

In Australia, the instructors use additional resources: "We offer to the school a newsletter that they can include to tell the parents how to be prepared for emergencies. We send them home a little booklet back with the Pillowcase, it's specific to South Australia. We'll be sending postcards with additional actions on how to prepare for emergencies: 5 or 6 actions on how to prepare that will replace the booklet, to go on the fridge." One volunteer in NSW explained her **tips to ensure the preparedness leaflets reach the parents:** "What I have done, I got Hercules snap-lock bags, we put the envelopes in that, and the children put their Pillowcase in it, so that the letter gets home for the parents [at the

same time as the pillowcase].” Another Red Cross instructor in WA explained: “At the end of my lessons, I say a couple things: I ask them to show their parents the pillowcase, tell them about it, and ask their parents what they would do in the event of an emergency.”

Two of the volunteers mentioned (separately) that parents get tired of receiving forms and that it would be better to **engage via the Parents and Citizens (P&C) groups** to reach out to the parents. This option was also mentioned during the parent consultation in Helena College. Another Red Cross instructor mentioned that The Pillowcase Project could also rely on Volunteer parents where no such P&C groups exist.

In addition to their current outreach actions (which do not seem to be outlined in any of the Pillowcase guidance tools), the Red Cross instructors suggested ways in which they could **amplify the key messages with the parents**:

- *“Perhaps we could have it a formal part of the session to discuss how they [the students] would share the message and who to share it with. Maybe at 6 weeks send out another set of flyers. Not a feedback but a continuous engagement.” (instructor, WA)*
- *“Pillowcase is great as it is, but perhaps there could be follow-up activities, for instance with the puppets [show for parents], where they [the students] get involved. Parents may tell us that there are no disasters. Children are not as closed off as the parents.” (instructor, NSW)*
- *“We also distribute letters – students take home some literature for further discussion at home. Usually the school takes photos and communicates on the activities. Sometimes we have links on the social media. We use the [school] newsletter or website or their display board to announce the participation of the Red Cross. We go to various days that Emergency Services might have an expo – we’re had our own little exhibit, exposing the community to our services. Then there is an evening with parents to discuss – going to a barbecue to provide some level of encouragement, attending a P&C meeting, presenting what Pillowcase is about.” (instructor, NSW)*

Another topic was the possible **linkage between The Pillowcase Project and the RediPlan course**, targeted at adults, but which could be offered to parents as a follow-up to the Pillowcase session in schools. An instructor in WA mentioned that the Rediplan fills a concrete gap in preparedness, especially given the feedback from the Impact Study consultation session with parents: *“RediPlan includes weather preparedness – warnings, forecasts, dangers. Parents in the consultation did not reference looking up weather forecasts. They didn’t mention ‘if we see a catastrophic weather forecast, we prepare to leave’. Another factor of resilience is how connected people are – who they would call in an emergency. If they know who they would call in an emergency, how well do they know their neighbors. There should also be a monitoring and evaluation mechanism after three months to see if they had taken action.”* The Red Cross has additional resources that complement the Pillowcase, but several instructors thought that the program was not taking sufficiently advantage of the opportunity created through the school sessions to promote other resources.

In Mexico, the instructors were equally generous in their suggestions on how to engage parents more directly. In Chihuahua, the first step suggested by the volunteers would be to **institute a joint training for students and parents** within the frame of The Pillowcase Project: *“I believe that in the future we can invite parents on a Saturday to present the information that their children will be taught. Subsequently, there should be a feedback mechanism with both the children and the parents.”* This suggestion could then lead to **joint drills**, as was suggested multiple times: *“we should include training for parents, a drill with parents and practice evacuation plans with the family.”* The third step would

be the **inclusion of preparedness topics in school fairs**: *“it could be improved by including a component to involve parents and wrap up with a project where parents, children and staff work together. A disaster prevention fair or a risk mapping exercise could be organized in the school.”*

The recommendations from Guanajuato state also emphasized the need for greater parent-student learning: *“[In the next parent meeting, we could] ask teachers for some time to explain to parents what we are doing with the children.” “A cultural day could be organized inside the school every two months, bringing parents and children together with recreational activities so that they stay informed. They could have presentations on a topic in which we have specialties. We did one once on safety and hygiene with Civil Protection and firefighters. It allowed parents to see what the children were learning in school. And the children explained to their parents in their own words what they were learning.”*

In Oaxaca state, the recommendations were very similar: *“Invite children and parents to take a course together, to interact and see how to work and plan [preparedness] activities together at home. It would be very good because from the very start the parents would be interested. And later, when the children receive the messages [through the Pillowcase sessions], they can give continuity and know where the information comes from.”³⁶*

Overall, the general sense seems to be that *“The course could be modified so that both the parents and the children would take the [Pillowcase] course. It would also help us not to have so much trouble to keep children focused.”*

6.3.2. Formally including the schools as key partners in the program

In both Australia and Mexico, the Red Cross instructors suggested formally including teachers as part of the process.

- In Western Australia, the instructors suggested that: *“we could ask the schools if the teachers could do a simple exercise to get feedback after the session. Evaluation session completed by the teachers. Maybe we could ask them to ask students a month after as to where their pillowcases are.” “It could be through a follow-up session: a teacher in one school said that she would organize a parents’ night. We could also encourage teachers to have a follow-up session for the students in class to ensure some of the key items are discussed at home.”*
- In Chihuahua, the Red Cross volunteer instructors recommended giving a clearer role to teachers, as part of the strategy to engage households and achieve joint preparedness plans. As one volunteer explained: *“the program is well suited to children, the only thing missing is that teachers and parents should provide more attention and help children to follow up on activities. That there be greater communication between parents, teachers and children, at the time of training.”* For another volunteer: *“I think that The Pillowcase Project is very good but it needs to involve the parents a little more, as to what the project is, so we also need to train the teachers.”*
- In Oaxaca, echoing the focus group discussions with teachers, Red Cross instructors recommended that teaching staff be engaged earlier as a way to ensure continuity in the preparedness process and the involvement of parents: *“We should implement a policy to sensitize school teachers and directors, because we’ve had to talk to them anyway as to the importance of implementing The Pillowcase Project activities in their schools.”*

³⁶ In Oaxaca, the instructors also referenced using the Disney [Timon and Pumbaa Safety Smart](#) videos as a way of teaching key safety messages that can also be used at home.

- In Guanajuato, the instructors also insisted on the critical role of the teacher: *“Take the teachers into account, let them also put it into practice, let them also discuss with their students, if they have experiences, keep them informed. So that they won’t assume that just because the course was given, the topic shouldn’t be addressed again.”*

To achieve this goal, the volunteers in Chihuahua suggest the project should *“develop material for parents and teachers to complement at home and in daily classes”, “change the dynamics to integrate and inform teachers and thus facilitate the arrival of information to family members”* and *“organize a training for parents and teachers”* prior to the first Pillowcase session.

Yet, the involvement of the school should not be limited to teachers. As a volunteer in Chihuahua put it, The Pillowcase Project should *“involve the entire school personnel, since they are the ones who spend more time in school”* and would be the first to take action to reduce risk and respond. The volunteers in Oaxaca suggested that the school preparedness plans should tie into communal and family emergency plans and should connect to local authorities.

Red Cross instructors also provided an additional reason for formally including schools in the Pillowcase: building on the unique access that the program has offered to the Red Cross with new schools, additional initiatives are either already being rolled out in those schools (such as Road Safety, Safer Access and Good Hygiene programs in Mexico) or are being considered (such as the In Search of Safety program in Australia, which targets teenagers in high schools).

6.3.3. Spreading sessions over longer time frames

The third recommendation is to review the Pillowcase calendar of activities, wherever possible. In Australia, the design is built around a single 1-hour session, which has been shown to be both positive (in that the expectations from the school remain low, thereby increasing access) and limiting (as there is only so much the students can remember in a single 60-minute session).

In Mexico, since there is more flexibility as to the time the Red Cross can request from schools, the instructors suggested formalizing a preparedness curriculum that would accompany the students throughout the school year. In Oaxaca, the volunteers suggested approaching the schools with a calendar of sessions: *“In this month, we will cover this topic. In the following month, we will touch on the topic of droughts, which goes hand in hand with the school calendar. That way, in a single month, we don’t have to cover so many topics, and it makes it a little more digestible. I would propose a [session] per month, throughout the school year, as follow up. In a single session, when we cover several topics of The Pillowcase Project, the children get overwhelmed. [If we space out the sessions,] we can also tell them ‘for the next session, you will have to finish the drawing of your house’.”*

In Guanajuato State, the feedback was similar: *“I really believe that this project has a great future. I would recommend that children take continuous training. The ideal would be to have several sessions, not all the same day, which is often caused by the limited availability of the school and of the volunteers. The first day, [we would cover] first aid in general; on another week, identify the topic of the sessions with the trainers: a session on fire; a session on floods; not limit it to one or two sessions. And once the topics have been covered, have a feedback session: from session one, what do you remember? Do you remember what to do in, for instance, floods? What would you do with important documents? In situations of risk, what should be done? The training continues over several sessions for better preparation, working in the school with different partners.”*

The volunteers pointed out that The Pillowcase Project should ultimately aim to institute a preparedness culture, year-long. The Red Cross would have to *“maintain a certain frequency in the [Pillowcase] sessions, so that the [preparedness] culture doesn’t get lost and you can sustain it and see if they have taken on the lessons, that they know what to do, that they take it out in class. At the beginning [of the school year] – they start in August – take a few days. And review it the following year [January].”*

6.3.4. Adapting the Pillowcase content to different age groups

In both Australia and Mexico, as mentioned above, instructors consider that the Pillowcase preparedness messages would benefit all age groups, with existing experience in doing so in Mexico.

In Australia, the program focuses exclusively on Grades 3 and 4 – yet many voices expressed interest in expanding the program. For instance, instructors suggested using individual Pillowcase activities (rather than the entire program as currently rolled out) for other age groups. One volunteer in New South Wales suggested formalizing the current practice of including all students (kindergarten through Year 6) in sessions in small schools, while including only Grades 3 & 4 in larger schools. As another volunteer explained, *“when we work in small schools [the Pillowcase activities] can be used for multiple age groups. Otherwise we would miss students and it is very difficult for teachers to split groups.”*

In Mexico, the process of introducing The Pillowcase Project for different age groups has already happened, and the instructors had many recommendations moving forward:

Grades 1 and 2: Less theory, more games

The current Pillowcase methodology – designed for Grade 3 and Grade 4 students – requires some significant adaptation, according to the volunteers who have used it with younger children. Most agree that **the content is too theoretical** for Grade 1 and Grade 2 students (6-7 years old):

- *“To work with young children, 5-6 years old, it is better to be more visual and hands-on. Show images, play games. We act out with the children.”*
- *“[For children 5-7 years old], a video could be made for children who do not know how to read or who have trouble understanding the manual directly, and this video would explain accidents. [It would be good that] certain Disney characters be included in this video.”*
- *“It depends on the age, doing the activities in a simple way like drawings. You crouch, you crawl, you talk to them using their language - get to their level and play, that they learn while playing.”*

Several instructors pointed out the challenge in maintaining order with younger children, as they **get distracted easily**. As one volunteer in Oaxaca put it: *“With smaller children, it is a bit difficult to teach them or to give them presentations. They are very restless, they don’t pay attention.”* The **number of key messages also needs to be kept to a minimum**: *“[With smaller children] you have to focus on the essentials, or else they get confused.”* *“The most difficult thing was to make understand how to do the drill in the way we showed them.”*

The instructors also pointed out the importance of leaving space for questions and clarifications: *“And for younger children, we explained ‘a hurricane is this’ and a child would ask ‘why?’. There was always the ‘why’.”* And as another volunteer explained: *“Another difficulty is explaining to children why things happen, why tremors, why there are floods, why there are fires.”*

The drawings were seen as a good tool for younger children, starting with the decoration of the grab bag. But volunteers suggested it could be used further, for instance to draw emergency situations, emergency services, etc.

Grades 5 and 6: Going further

With older students (11-12 years old) in Grades 5 and 6, the experience has been that the Pillowcase session can go further, which is in line with the Impact Study exercises with that age group. As explained by volunteers in Oaxaca: *“For children aged 8-9 they already understood what a hurricane was, an earthquake.” “With older children [children of 9 years], they do not like playing so much, more discussions, they have more comments on the topics.”* In Chihuahua, the instructors pointed out that the Pillowcase content needs to be modified to reflect that increased critical ability: *“sixth-graders felt that the activities were for young children because of the drawings.” “For sixth grade children, the content has to be adapted with age-relevant activities since they feel very old for these activities.”*

Even the children’s relationship to the grab bag was different. As one volunteer explained: *“Some [small] children were only interested in the backpack and left the manual. Young children saw the backpack as something to play with and the older children saw it as something to store things, books, etc.”*

6.3.5. Adapting the Pillowcase content to different audiences

Adapting the methodology to students with attention deficit disorder or other disabilities

In Australia, several interviewees mentioned differing learning abilities among students. One volunteer mentioned that *“in one school, they seemed to have a lot of children with learning difficulties, and the teacher seemed to rotate them”* to ensure that they stayed engaged. Teachers remain engaged throughout the Pillowcase session, and one of the ways they support the session is by accompanying the children with the greatest learning needs. This was also noted during the Impact Study sessions. One teacher in WA explained her role: *“Students have different learning interests – you have to monitor them a little more. Sometimes the students that you think will be interested in it are not interested so you have to spend a little more time with them.”* While there will always be different levels of interest and different abilities within a given classroom, there may be ways in which the Pillowcase sessions could factor this in. As the just-quoted teacher suggested: *“Before [Red Cross] teachers come out, you could ask to group students with shorter attention span. You have to spend a little more time with that particular group.”*

In Chihuahua, the Red Cross volunteers suggested that any review of the Pillowcase curriculum should reflect four audiences: *“For Grades 1 and 2: books with more images and basic messages; for Grades 3 and 4: more hands-on activities; for Grades 5 and 6: clear information and drills; and additional resources for children with certain disabilities (such as deaf and dumb).”*

While a one-hour classroom activity cannot be expected to address serious psycho-emotional issues, there may be options to include additional activities for students that remain relevant in other contexts, along the lines of the breathing exercises. The interviews brought up some suggestions, such as adding new interactive content (additional picture cards, videos of different types of emergencies) or adding side activities for different age groups or different learning speeds.

Factoring in psychological support needs

The instructors also indicated that they regularly come across students with specific emotional needs, and one volunteer in Australia did express that it did worry her, since the methodology brought up sensitive topics around household communication and wellbeing, but children were then left to their own devices (or to the support mechanisms of the school). Regarding the psychological coping exercises already included in the Pillowcase, the Impact Study highlighted how well they were received by students in Australia, and how easily the students had adapted it to their needs. However, as one volunteer in Australia explained: *“the ‘Breathing with colors’ can be a little difficult, some kids don’t want to do it.”* This is consistent with the findings from the activity with children (see section 5.3 above).

This is not to say that there is no solution. Often the instructors have additional skills that could come in useful in designing locally-appropriate content. For instance, one Red Cross instructor in WA has been involved as a grief & loss facilitator for children, as an instructor for a 12-week curriculum used in some Catholic schools in Australia. There may be opportunities to tie in additional sessions from other methodologies to address psychological issues identified as part of the preparedness discussions.

Adapting the methodology for teenagers and parents

Several instructors also suggested that The Pillowcase Project – or some customization of the messages – could also be used in high schools, as well as for the parents. As one instructor in Mexico explained: *“The manual at this time is for children, it comes with many drawings and everything comes as if it were a game. For a person of 17-18 years, seeing drawings is not so relevant, it would require changing both the vocabulary and the presentation of the manual. And for the parents it would be good to make it more specific, with the recommendations of what can be done.”* A similar suggestion to customize for High School audiences was offered in Western Australia.

In Oaxaca, an instructor pointed out that there already are connections to High Schools through their other Youth activities: *“Here in Youth [Department], we already have secondary school students and they want us to take it [the Pillowcase activities] to their school. Implement the same activities, but for older students, changing the activities, maybe more slides.”*

In Australia, the key challenge to expanding to other age groups would be the alignment to the Australian curriculum. This progressive introduction of The Pillowcase Project into State curriculum resources would require (1) approaching the educational bodies most closely aligned to preparedness topics, such as the Australian Geography Teachers Association (with whom the Australian Red Cross has an existing relationship); and (2) pitching the added value of The Pillowcase Project to key stakeholders in curriculum definition in their State. *“As one retired teacher explained, “it would be helpful from a teacher side if Red Cross got us volunteers who are [retired] teachers to align [the different Red Cross activities] with the New South Wales curriculum.”* This sentiment was shared by other retired teachers in other states, highlighting their interest to support this customization in their respective states. Red Cross volunteers could also provide one-on-one support or coaching for teachers interested in strengthening the linkages between their course content and preparedness activities.

6.3.6. Providing further training for Pillowcase instructors

Several Red Cross instructors with a teaching background (primarily retired primary school teachers in Australia) identified some pedagogical gaps among instructors who engage for the first time with 9-year-old students: how to ask students to be quiet; how to ensure that students go beyond the completion of the activities and truly understood the objectives of the Pillowcase session; repeating or getting students to repeat key messages; etc. Suggestions on improving the skill base included formal teaching technique training; coaching from more experienced instructors; pairing of teachers with non-teachers; or reaching out to teaching students who need to complete teaching hours before being certified as teachers, for them to deliver Pillowcase sessions. In Mexico, the (very young) Red Cross volunteers also identified the need for further training, both on the current methodology and on any future iteration of the project.

Suggestions on improving the skill base included formal teaching technique training; coaching from more experienced instructors; pairing of teachers with non-teachers; or reaching out to teaching students who need to complete teaching hours before being certified as teachers, for them to deliver Pillowcase sessions.

Key findings: Discussions with Red Cross Instructors

- ☑ Red Cross instructors love the Pillowcase Project, whether they are teenagers (as in Mexico) or retirees (as in Australia). They love the methodology and the resulting enthusiasm it generates in both children and teachers.
- ☑ The program's impact goes well beyond preparedness. They also help students manage stress and (in Australia) help teachers introduce mindfulness moments in their classrooms.
- ☑ The methodology is well suited for the targeted age group (8- and 9-year-old students), but with some adjustments many of the activities could be used with the other Primary students. In Mexico, the Red Cross instructors have already invested time and energy in customizing the tool to different age groups.
- ☑ Specific audiences would benefit from additional Pillowcase activities, for instance students with learning disabilities, with attention deficit disorder or with personal or psychological issues. This would also make the instructors' engagement with the other students easier.
- ☑ Instructors want the program to continue and their suggestions fall under six main categories outlining how the project could be enhanced.

7. Conclusions:

7.1. Overall impact of The Pillowcase Project

The purpose of the Impact Study was to examine how The Pillowcase Project fostered communication between participating students and their households, teachers and peers and the effects of the shared learning on overall community preparedness. To assess how successful the project has been in achieving these goals, the Impact Study examined the three components of the project: the understanding of risks by children (“Learn and Think”), their ability to take appropriate steps with that knowledge (“Practice and Act”) and, based on the first two, the resulting communication flows and practices at household and community level (“Share”). What has this study taught us?

7.1.1. Learn / Think

The program curriculum was designed with 8-to-10-year-old students in mind. Since the Mexican Red Cross has already piloted the project with other age groups, the study distinguishes between the responses from Australia and Mexico and, among the latter, between Grades 1 and 2 and those from Grades 3 to 6.

Australia	Mexico (Grades 3-6)	Mexico (Grades 1 & 2)
Has The Pillowcase Project enhanced the knowledge of students around preparedness?		
 Yes: In all five schools, the students were very engaged and listed between 8 and 25 items, well beyond the level of detail covered in the “needs versus wants” activity.	 Yes: In all six schools, the students referenced the items suggested in the Pillowcase sessions when asked to consider a flood scenario, while students who had not taken the course did not consider preparedness kits.	 No: In the four classrooms interviewed, younger students confused actions around pre-disaster preparedness with responses following sudden-onset emergencies, such as house fires or earthquakes.

It is worth noting that parents do not know what to pack for emergencies, usually limiting themselves to first aid kits and, in Mexico, important documents. Yet the children who have taken the Pillowcase course were able to outline the full range of items that should constitute an emergency kit, and even demonstrated the ability to go beyond the frame of the exercise depending on the context of the simulation.

The answers from post-earthquake Oaxaca are also revealing, as they show that parents have a much greater knowledge of preparedness and emergency packing following the 2017 disaster, confirming that it is possible to significantly enhance one’s knowledge of risks and preparedness in short periods of time when recipients see the value.

7.1.2. Practice / Act

The Pillowcase Project provides key messages around packing emergency kits (outlined above), but also on concrete actions for emergency situations such as breathing exercises (Australia), home fires (Mexico) and earthquakes (Oaxaca specifically). Rather than offering Multiple Answer Questions to measure the theoretical knowledge retained by students, the Impact Study presented them with different scenarios and examined when and how the students tapped into the resources provided in the Pillowcase session – knowledge in practice.

Australia	Mexico (Grades 3-6)	Mexico (Grades 1 & 2)
<p>Has The Pillowcase Project led to the adoption of Pillowcase emergency kits?</p>		
 <p>Partly: a full third of students interviewed had their case folded away, while another third use their Pillowcase bag... as a pillowcase! Only a third of the students surveyed seem to use their Red Cross pillowcase as originally intended.</p>	 <p>Partly: a full third of students interviewed had their grab bag folded away, while another third seems to be using it for extra-curricular activities (e.g. to carry snacks or sports clothes). The remainder uses the bag for a range of items, many of which are aligned with the original intent (e.g. flashlights).</p>	 <p>No: Planning ahead with emergency preparedness kits appears too complex for 1st- and 2nd-graders, whose answers indicated a focus on short-term, immediate actions.</p>
<p>Has The Pillowcase Project led to behavior change in emergency situations? (Australia: use of breathing techniques; Mexico: application of life-saving steps in response to a house fire)</p>		
 <p>Yes: the ‘Breathing with color’ activity is undoubtedly the most successfully embraced by Pillowcase participants, with more than 80% of students considering that they would be able to use it in an emergency – and 54% having already used it in their day-to-day life.</p>	 <p>Yes: the majority of Pillowcase students reference most of the 5 key steps in response to a house fire scenario³⁷, while the non-Pillowcase students did not.</p>	 <p>No: the younger Pillowcase students suggested trying to turn the fire out and calling fire services – and two of the three classrooms were unable to identify “911” as the number to call.</p>
<p>Has The Pillowcase Project led to increased confidence and a sense of responsibility among students?</p>		
 <p>Yes and No: With similar responses in Australia and Mexico, students did show increased confidence in talking about disasters, particularly as relates to the topics covered in The Pillowcase Project. At the same time, most students considered that preparing for emergencies is the responsibility of adults (specifically Emergency Services and Grown-Ups) rather than children; and only 2/3 of students feel they know what to do in an emergency <i>after</i> taking part in the Pillowcase session. The responses from students who did <u>not</u> participate in The Pillowcase Project were similar on these last two points.</p>		

As demonstrated in multiple studies³⁸, children tend to rank hazardous events, including natural disasters, as one of their major fears. This fear, intensified by news coverage of impactful disasters, is addressed through the Pillowcase Project by offering a space for discussing such perceptions. From that perspective, the program is highly successful, even if the study indicated that students did not demonstrate leadership in the process.

³⁷ The 5 points were: getting out as soon as possible; covering one’s mouth with a wet cloth; getting down to the floor and crawling out to avoid smoke; going to the meeting point; and calling (or asking an adult to call) emergency services.

³⁸ See for instance *Developing and evaluating effective emergency preparedness education programs for children and youth: Children’s Preparedness White Paper*, American Red Cross, not dated.

7.1.3.Share

The Sharing component from the Impact Study triangulated the information from the students (what they shared with others) and the families (what information did they receive from their children). Given the different context in Oaxaca, where the families significantly ramped up their preparedness actions following the September 2017 earthquakes, responses from that state were analyzed separately.

Australia	Mexico (Chihuahua & Guanajuato)	Mexico (post-disaster Oaxaca)
Has The Pillowcase Project led to increased confidence of parents in their children’s abilities?		
 <p>No: while 61% of respondents answered that they feel that their children would know what to do in an emergency, the expectations are limited to contacting emergency services and following the guidance of adults – i.e. not reflective of the children’s Pillowcase skills. And while Australian students proved very proficient in the ‘Breathing with color’ activity, only 29% of parents have discussed stress management with their children.</p>	 <p>No: only 24% expressed confidence in their children’s ability to conduct basic steps in an emergency.</p>	 <p>No: Even after living through an earthquake, only 63% of parents consider that their children know what to do. And for most parents, their expectations as to the types of actions their children would take are limited to a Sept. 2017-type earthquake, reflecting the numerous messages shared in media and TV.</p>
Has The Pillowcase Project led to an increased sense of preparedness within households?		
 <p>Yes: 54% of households feel more prepared than 3 months earlier (i.e. prior to the Pillowcase course), and among those, a whopping 71% credit the Pillowcase session that their children participated in for their increased awareness of preparedness.</p>	 <p>Partly: 43% of parents feel readier than 6 months earlier, and among those, roughly one third credit their children’s participation in the Pillowcase session for the increased awareness.</p>	 <p>No: The impact of the earthquake has led many households to reconsider their preparedness plans, but only 55% feel more prepared and, among those, the great majority (2 out of 3) credit this increased sense of readiness to the experience of surviving the earthquake, rather than any course that the children would have received in school (1 in 6).</p>
Has The Pillowcase Project led to increased preparedness actions within households?		
 <p>No: While parents commend the Red Cross for The Pillowcase Project and explicitly reference preparedness messages shared by their children, the majority of respondents has not taken concrete measures since.</p>	 <p>No: The overall preparedness rate in Chihuahua and Guanajuato is dismal, with only a third of parents having basic first aid kits (which constitutes their emergency kit), in spite of messages from students.</p>	 <p>Partly: In a context of increased awareness on the importance of earthquake preparedness, the input by students was considered very valuable by several concerned parents. However, it was not possible to measure the ultimate impact on household preparedness.</p>
Is there evidence of an enhanced sense of community togetherness through preparedness? Is there any evidence of community-level impact?		
 <p>Insufficient information: The Impact Study was not able to collect sufficient information regarding the impact of school-based preparedness activities on the broader community. However, several suggestions were made to engage with a broader network of partners.</p>		

7.2. Recommendations moving forward

The rich discussions with the parents, teachers and Red Cross instructors led to a series of suggestions to further enhance the impact of The Pillowcase Project in the future. While participants agreed that the program is highly successful in generating interest in preparedness among both students and their families, they considered that it still falls short in creating the necessary momentum for household and community preparedness. The program, they suggest, could further achieve its goals by expanding (1) its audience and (2) its timeline.

7.2.1. Expanding the audience of The Pillowcase Project

Throughout this Study, different suggestions were made to expand the program’s audience, whether looking at students – to include all Primary students from Grades 1 through 6 – or adults, to formally engage teachers, other school staff, parents and partner organizations. These suggestions are summarized here:

1. **Students of different age groups:** In its original design, The Pillowcase Project focused exclusively on 3rd and 4th grade students. However, in Australia, there is an interest to expand it to other age groups, adapting the methodology according to specific learning abilities at each age. The Mexican Red Cross has already taken important strides in testing such a model – quite successfully with 5th and 6th grade students, less so with 1st and 2nd grade students. One suggestion is that The Pillowcase Project could evolve into a **“cradle-to-graduation” program** (to quote the expression of an Australian Red Cross staff member)³⁹. In Mexico, the instructors have already shown in practice that all Primary students can benefit from the program... but that each age group has distinct learning abilities. The Pillowcase activities should reflect these differing learning abilities in the future if they are to be used more widely. [See section 6.1.2. “Mexico: Considerable efforts to adapt to different contexts and age groups”, which outlines the lessons from Red Cross instructors; and section 6.3.4. “Adapting the Pillowcase content to different age groups” for their recommendations.]

- a. Rather than generic outcomes applicable anywhere, The Pillowcase Project team in each country should identify concrete learning targets specific to each context, e.g. “% of 6-year-old students familiar with the ‘911’ emergency number and knowing when to call it”; “% of 8-year-old students able to apply the ‘drop, cover, roll’ earthquake tips in drills”; etc.
- b. Age-specific learning objectives are outlined in the detailed UNESCO/UNICEF guide: “Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries”, particularly its Section 8 (“Disaster Risk Reduction Education: Learning Outcomes”).

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Section 8. Disaster Risk Reduction Education: Learning Outcomes

Table 6. Four Indicative Examples of Learning Outcomes Progression

Generic outcome: Learners understand key disaster risk reduction concepts, their application to specific hazard circumstances, and their concrete applications in the local community	Generic outcome: Learners know of internationally agreed upon human and child rights and their implications for and applications in disaster scenarios
Agnes 4-7 Learners understand ideas of risk, danger and safety and are aware of hazards in the classroom and at home, and ways of being careful and staying safe	Agnes 4-7 Learners understand the difference between needs and wants and can recognize concrete examples of both
Agnes 7-11 Learners know about risks and dangers in the local community and environment and what they can do individually to reduce danger and stay safe	Agnes 7-11 Learners understand what a right is, know what rights they have as children, and can identify what basic rights are under threat in real or imagined disaster situations
Agnes 11-14 Learners understand the ideas of vulnerability and resilience and can apply them to specific potential hazards	Agnes 11-14 Learners can distinguish different categories of child rights and can understand how each category can be important and useful but also potentially under threat in different hazard situations
Agnes 14-18 Learners understand the interrelationships between disaster risk, hazard, vulnerability, resilience and societal capacity as manifest in the local and wider community	Agnes 14-18 Learners understand the content of the Universal Declaration of Human Rights and the Convention on the Rights of the Child and the implications and applications of the rights listed in local, national and global hazard and disaster situations
Generic outcome: Learners know of local, regional, national and international disaster response infrastructures and mechanisms	Generic outcome: Learners have the ability to perceive relationally and identify interrelationships and interactions within ecosystems and between nature and human society, between eco-systemic well-being (or lack thereof) and community wellbeing and development (or lack thereof)
Agnes 4-7 Learners know what to do and who to responsible at home and in school should a hazard threaten	Agnes 4-7 Learners acquire the ability to cooperate with others on tasks that cannot be completed without cooperation
Agnes 7-11 Learners know about risk reduction procedures that the community has ready should there be an impending hazard	Agnes 7-11 Learners acquire the ability to apply the notions of interdependence and inter-relationship to local ecosystems and their local community
Agnes 11-14 Learners know what disaster risk reduction mechanisms are in place locally, regionally and nationally, what steps will be taken should disaster threaten, and what their personal role is in the event of such an occurrence	Agnes 11-14 Learners acquire the ability to identify inter-relationships between nature and human communities
Agnes 14-18 Learners understand how international disaster relief works and know of the organizations responsible for its operation and of their presence locally, regionally and nationally	Agnes 14-18 Learners acquire the ability to look at the world systemically and to interpret phenomena, developments, issues and trends as manifestations of a complex web of often asymmetric relationships

³⁹ The Australian Red Cross is currently working on a “Journey Map” that examines this educational process as children grow up. The main challenge is ensuring any “whole-of-school” commitment remains consistent with its longer-term goal to move away from direct delivery of services (such as direct delivery of classroom sessions through trained Red Cross volunteers).

2. **Students with special needs:** The discussions with both teachers and instructors underlined the challenges in engaging students with specific needs, whether due to learning disabilities or difficult personal situations (parents going through a divorce; students observing or being directly victims of domestic violence; etc.). Based on the feedback from the Red Cross facilitators, The Pillowcase Project would benefit from a recognition of these related needs and identify how to address them when they arise. *[See section 6.3.5.: “Adapting the Pillowcase content to different audiences”]*
3. **Teachers & school staff:** A missing link in the Pillowcase methodology is the engagement of the school staff *before, during* and *after* the sessions. Both the Red Cross volunteers (see section 6.3.2. “Formally including the schools as key partners in the program”) and the teachers themselves (in section 5.1. “Linkages to the national curriculum”) expressed interest in formally engaging the school staff as part of the Pillowcase disaster risk education process, to strengthen linkages to the curriculum and for shared knowledge on reducing risks and responding to emergencies.
4. **Parents and tutors:** As discussed extensively in Section 4.3., parents and tutors have expressed increased awareness and interest for preparedness activities but have not taken actions... yet. Many of the parents spontaneously expressed a commitment to take concrete preparedness actions in the near future and have shown interest in being more directly involved in the Pillowcase process, parents directly, either via joint Pillowcase sessions for students and parents or through information sessions. The program also aims to get parents to trust the role of their child in emergencies – and communicating this to instill in a child a sense of confidence. This message – around the importance of a child’s role/voice in preparedness – could be further stressed via joint sessions. *[See section 4.3. “Impact of The Pillowcase Project on Household Preparedness” for the 5 suggestions of parents; and section 6.3.1. “Reaching out more deliberately to parents and guardians” for linkages to RediPlan and other projects.]*
5. **Partner organizations:** Teachers in particular underlined the benefit of multi-institutional partnerships, with the local government, local emergency services and other preparedness training institutions. Such partnerships would reduce the risk of overlap in the different trainings provided within schools and ensure better coordination in the event of an emergency. *[See section 5.3. “Linkages to other organizations.”]*

7.2.2. Expanding the timeline of The Pillowcase Project

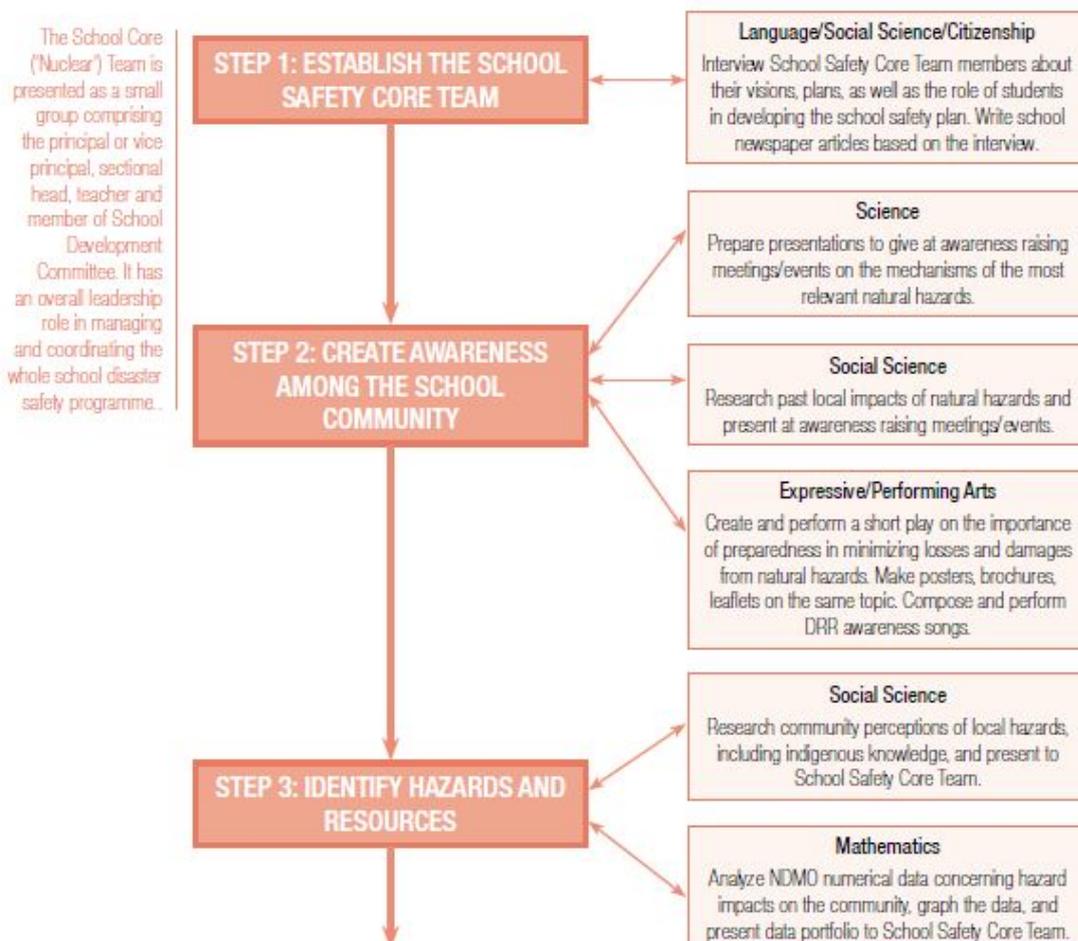
The Pillowcase Project was designed as a one-off 60-minute session – a single visit in each classroom. Envisioning The Pillowcase Project instead as a long-term partnership with schools, based on the success of the introductory Pillowcase sessions, would allow to distribute key preparedness messages over time.

1. **Planning regular visits in classrooms throughout the school year:** While the limited time commitment has proven crucial in the initial uptake of the program in new schools, all stakeholders (parents, teachers and instructors) in both countries suggested that the program’s impact would be greatly enhanced if it included multiple sessions/visits to ensure that the messages are retained and shared. Monthly (or quarterly) visits to each age group would allow to either expand the time allocated to The Pillowcase Project messages (as is currently the case in Mexico) or to introduce complementary Red Cross safety-related content. It would also include parents / tutors at the beginning and end of the school year, to introduce the initiative and invite household members to joint drills or preparedness fairs. *[See section 5.3.3. “Spreading sessions over longer time frames” for detail.]*

2. **Additional training for Pillowcase instructors:** Red Cross instructors recognized that they could benefit from further training, both on pedagogy and on content, ahead of the start of the program. Providing further training would be particularly cost effective if trained volunteers conducted multiple visits to a given school. [See section 6.3.6. “Providing further training for Pillowcase instructors” for detail.]
3. **Joint program induction for Red Cross instructors and teachers:** This could take the shape of a Pillowcase induction session at the beginning of the school year, highlighting the connections to the national curriculum and resources for teachers. [See section 4.1. “Linkages to the national curriculum” for detail.]
4. **Supporting a comprehensive school safety approach:** If designed as a long-term preparedness partnership with individual schools rather than as a one-off classroom session, The Pillowcase Project could act as a first step towards implementing the [Comprehensive School Safety Framework](#) (CSSF). Schools could use the sessions as risk education resources and add risk reduction activities towards their school-wide preparedness plan.
 - a. The UNESCO/UNICEF’s “Technical Guidance for Integrating Disaster Risk Reduction in the School Curriculum” chart below) offers valuable advice on connecting the curriculum to DRE activities and risk reduction actions. [See Chapter 8: “The Whole School Picture: Commingling DRR Curriculum and Safe School Management and Practice.”]

FIGURE 16.

A School Safety Plan Curriculum (exploiting the learning potential presented by the development and implementation of a school safety plan)



- b. The Red Cross Movement also has significant expertise in building school resilience. *See Box 6 for detail.*

Box 6: School preparedness resources aligned with the CSSF

The Red Cross has a wealth of preparedness resources available for schools committed to the CSSF. This is but a small sample of such resources.

Under Pillar 1: Safe Learning Facilities: *Not applicable (Pillar 1 relates to building codes and structural safety education, which falls outside of the realm of most Red Cross Societies' mandates.)*

Under Pillar 2: School Disaster Management:

- The IFRC's "[Protected School](#)" module looks at the hazards and risks of the physical infrastructure of the school and facilitates the implementation of mitigation measures

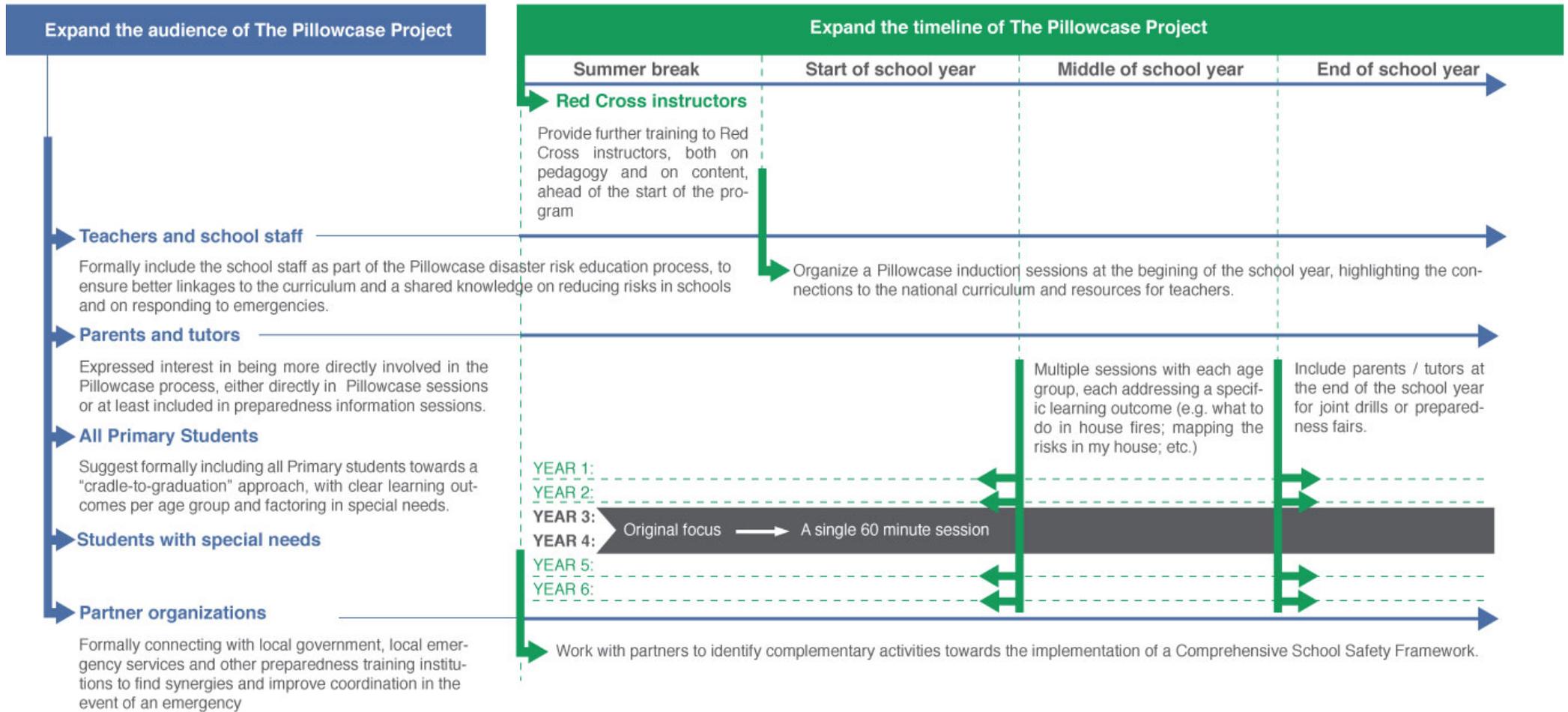
Under Pillar 3: Risk Reduction and Resilience Education:

- The [Pillowcase Project](#) targeting Year 3 and Year 4 students; and the [GetReady](#) book for younger age group (with coloring books designed for emergencies and shelters);
- The "[CUIDAR Framework](#)" that the Australia Red Cross and Prof. Briony Towers have participated in;
- The "[Risk Land](#)" board game developed by UNISDR and UNICEF and rolled out globally by the Red Cross. It is part of a broader range of [games](#) used by the Red Cross in schools (and elsewhere) to educate children on risk.

5. **Formal integration into national DRE strategies:** The final step in building a long-term strategy for The Pillowcase Project – and which both National Societies have been considering – is the formal recognition of the program as an important piece for disaster risk education at national level. Red Cross instructors are already building linkages between their sessions and the curriculum at school level. These efforts could help reach agreements with State-level ministries of education, taking advantage of the experience of the Red Cross arising from the Pillowcase pilot. Some volunteers suggested engaging with the Board of Studies and have The Pillowcase Project officially referenced in their State's curriculum. *[See Section 6.3.5. "Adapting the Pillowcase content to different audiences" for detail.]*

Chart 2: Overview of suggestions from participants

SUGGESTIONS FROM PARTICIPANTS MOVING FORWARD



8. Bibliography

American Red Cross, *Developing and evaluating effective emergency preparedness education programs for children and youth: Children's Preparedness White Paper*, Working copy, not dated.

American Red Cross, *The Pillowcase Project: Educational Standards Report: An overview of program components that support curricular standards for grades 3-5*, 2016.

Australian Red Cross, *Educating the Educators - Mapping of disaster resilience education resources against the Australian Curriculum*. Canberra, Australian Government, 2014

Australian Red Cross, *Emergency Services*, Oct. 2015.

Australian Institute for Disaster Resilience, *Curriculum Mapping: Disaster Resilience education in the Australian curriculum*, not dated.

Australian Red Cross, *Emergency REDiPlan: Four steps to prepare your household*, 2009.

Australian Red Cross, *Pillowcase Project Strategic Review* (PowerPoint), 2018.

Australian Red Cross, *Pillowcase Project Training: Presenter Handbook PowerPoint version 2*, Jan 2015.

Australian Red Cross, *Pillowcase Project Training: Presenter training PowerPoint version 2*, Jan 2015.

Australian Red Cross, *Pillowcase Project, Report for the Global Disaster Preparedness Center*, June 2015.

Australian Red Cross, *Pillowcase Project: Coordinator's Handbook version 3*, Nov. 2015.

Australian Red Cross, *Pillowcase Project: Coordinator's Handbook version 4*, Aug. 2017.

Australian Red Cross, *Pillowcase project: Presenter's Guide version 1*, Jan 2015.

Australian Red Cross, *Pillowcase Project: Presenter's Handbook version 3*, Nov. 2015.

Australian Red Cross, *Pillowcase Project: Presenter's Handbook version 4*, Aug. 2017.

Australian Red Cross, *Pillowcase Project: Trainer's Handbook version 4*, Nov. 2017.

Australian Red Cross, *REDiPlan preparedness program Years 1-3*, Nov 2012.

Australian Red Cross, *REDiPlan preparedness program Years 4-6*, Nov 2012.

Australian Red Cross, *REDiPlan preparedness program: Teachers' Notes*, Nov 2012.

Australian Red Cross, *REDiPlan: Get Ready Activity Book*, not dated.

BNHCRC, *Child-centered disaster risk reduction*, 2015. Available [here](#).

COAG, *National strategy for disaster resilience*. COAG, Canberra, 2011.

CRREC / IFRC, *Protected Schools*, Regional Centre of Reference in Community-Based Education for the Prevention of Disasters, not dated.

Crowley, J., Ronan, K., Mackay, A., Richardson, J. Spehr, C., Towers, B., *The Pillowcase Project: A Mixed Methods Evaluation*, not dated.

DRANSZEN, *Disaster resilience education in the Australian National Curriculum*. Canberra. Australian Government Attorney General's Department, 2013.

FRNSW, *School programs*, 2016. Available [here](#)

GADRRRES/UNISDR, *Comprehensive School Safety: A global framework in support of The Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector and The Worldwide Initiative for Safe Schools*. Geneva, 2015. Available [here](#)

Mexican Red Cross, *El Proyecto "Mi Funda de Almohada": Guía de Implementación*, not dated.

Mexican Red Cross, *Mi cuaderno de preparación: Aprende, Practica y Comparte*, Mexico City, January 2016.

Mexican Red Cross, *Pillowcase Implementation Report*, not dated.

Ronan K, Towers B, *Evidence-based practice, practice-based evidence: Moving towards scaled implementation in child-centered disaster risk reduction*. Bushfire and Natural Hazards CRC.

Ronan K, Towers B, Haynes K, Alisic E, Davie S, Petal M, Ireland N, Handmer, J, & Johnston D. 2015, *Building best practice in child-centred disaster risk reduction: Annual project report 2014-2015*. East Melbourne. Bushfire and Natural Hazards CRC, 2015. Available [here](#)

Ronan, K., Haynes, K., Amri, A., Towers, B., Alisic, E., Davie, S., Ireland, N., Petal, M., *Child-centred disaster risk reduction: can disaster resilience programs reduce risk and increase the resilience of children and households?* Australian Journal of Emergency Management, Volume 31, Issue 3, July 2016, Pages 49-58. Available [here](#)

Selby, D. & Kagawa, F., *Learn, Practice, Share: A Comparative Review of The Pillowcase Project*, Sustainability Frontiers, July 2016.

Towers, B., Perillo, S., Ronan, K., *Evaluation of Survive and Thrive: Final report to the Country Fire Authority*, Bushfire and Natural Hazards Cooperative Research Centre.

Towers, B., et al. (2016). *Disaster resilience education: a practice framework for Australian emergency management agencies*. Bushfire and Natural Hazards Cooperative Research Centre, 2016. Available [here](#)

UNESCO/UNICEF. *Towards a learning culture of safety and resilience technical guidance for integrating disaster risk reduction in the school curriculum*. Geneva, 2014.

UNESCO/UNICEF. *Disaster Risk Reduction in School Curricula: Case Studies from Thirty Countries*. Paris/Geneva, 2012. Available [here](#)

UNISDR, *Sendai framework for disaster risk reduction 2015-2030*. Geneva, 2015.

United Nations Office for Disaster Risk Reduction/Global Alliance for Disaster Risk Reduction in the Education Sector. *Comprehensive School Safety*. Geneva, 2014.

9. List of Appendices and Annexes

Appendices (pertaining to the implementation of the Impact Study):

Appendix 1: Description of the schools included in the Impact Study

Appendix 2: People interviewed

Annexes for Impact Study in Australia (in English):

Annex 1: The School Preparedness Quiz

Annex 2: “Snap exercise” with students

Annex 3: Parent / guardian questionnaire

Annex 4: Discussion with parents / tutors

Annex 5: Engagement with teachers and / or PP facilitators

Annexes for Impact Study in Mexico (in Spanish):

Annex 6: The School Preparedness Quiz / Encuesta escolar

Annex 7: “Snap exercise” with students

Annex 8: Parent / guardian questionnaire

Annex 9: Discussion with parents / tutors

Annex 10: Engagement with teachers and / or PP facilitators