Fostering a culture of resilience in the youth: Methodological Support Modules for teachers

The Partners for Resilience in Guatemala are dedicated to the education of girls and boys, especially in areas vulnerable to disasters; for it is the future generation that must be handed the tools of resilience: the ability to anticipate, to respond and adapt to, and to jointly address the disaster risks in their communities. Therefore, together with government agencies, the PfR have developed four Methodological Support Modules and an Educational Materials Kit, which address the concept of said resilience as well as the elements of the innovative joint approach of the Alliance in Guatemala. These modules and the kit are part of the National Base Curriculum of the Ministry of Education, and as such will be distributed throughout the country.

The four Methodological Support Modules and the Educational Materials Kit focus upon the concept of resilience and the innovative approach of the Partners for Resilience (PfR), which combines Disaster Risk Reduction (DRR) with Climate Change Adaptation (CCA) and Ecosystem Management and Restoration (EMR), together abbreviated as DRR/CCA/EMR. The Educational Materials Kit consists of six complementary didactic materials that support the Modules.

The Partners for Resilience in Guatemala see the youth as an opportunity to sow in fertile soil the seed of a vision of resilience, taking advantage of the teachers’ potential of being the necessary agents of change within the formal educational system. Initially the Partners for Resilience set up an educational campaign within its areas of influence, as part of their national programs. However, the Modules and the Kit have been converted into a tool that is institutionalized by two ministries, the Ministry of Education (MINEDUC) and the Ministry of Environment and National Resources (MARN), and two state secretariats, the Executive Secretariat of the National Coordinator for Disaster Reduction (SE-CONRED) and the National Council for Protected Areas (CONAP). As a result of its official endorsement, this program will be extended throughout the country for the benefit of the rural youth, increasing long-term sustainability. Its link to the National Base Curriculum (CNB) and the validation by the teachers and district supervisors of MINEDUC ensured that the Modules and the kit have not been perceived as an extra load for the teachers, but more as a complementary tool in their work.

1. Download the Methodological Support Modules and Educational Materials Kit from http://lac.wetlands.org/moduloseducativos (Spanish)
2. For more information on the innovative integrated approach of DRR/CCA/EMR, see: Partners for Resilience (2011) A new vision on community resilience http://lac.wetlands.org/pfrvision
3. The Partners for Resilience PfR in Guatemala consists of Red Cross, Red Cross Red Crescent Climate Center, CARE and Wetlands International, and the local partners Guatemalan Red Cross, Cáritas Diócesis de Zacapa and Asociación Vivamos Mejor.
The initiative went further than merely handing over the tools. In addition, 119 teachers of the final three grades of the primary level (students ages 9-14 approximately) from fifty-five schools in the five departments where PfR\(^4\) works, were trained in their application. In addition to their effectiveness with youth, the methodologies of the modules have been proven to be suitable for adults as well. Under the guidance of Wetlands International, in 2015 PfR will monitor and evaluate the impact of the modules with the trained teachers.

This case study describes the process of the development, validation, and implementation of the four Methodological Support Modules and the Educational Materials Kit. This document may serve as an orientating guide for those interested in replicating and/or adapting the experience.

**Fostering a culture of resilience in the youth**

The entirety of the materials aims to provide the pedagogical and methodological tools that contribute to bolstering the Guatemalan youth’s resilience within the formal educational setting. They were especially intended for those living in highly vulnerable areas with few resources and with high levels of malnutrition. Even so, they can be applied to other groups as well, such as adolescents and adults of other rural and urban areas.

For communities to endure in the long run, with these tools, the PfR are looking to education to strengthen their resilience. Fostering a culture of resilience in the youth is a process that requires the commitment of key actors within and outside of the formal education system: MINEDUC authorities at central level, district supervisors, school directors, teachers, as well as parents, students, and the communities in general, and other institutions of the country with mandates regarding the themes of risks, climate and environment.

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4. The intervention area of Partners for Resilience consists of the departments of El Quiché, Sololá, Zacapa, Chiquimula and Izabal.

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*The Methodological Support Modules are a valuable contribution to the Guatemalan youth; they address a topic that is current and acute within the National Base Curriculum. They modules were developed by engaging in a participatory process that involved risk management specialists of different institutions, without compromising its pedagogical mediation, which makes the material easy to use and appropriate for the intended learning.*

Carlos Alejos
Action Line One, Disaster Risk Management (GRRD) Governance System
Ministry of Education MINEDUC
**Antecedents and organizational framework**

The Partners for Resilience have been developing different activities in Guatemala since 2011, mostly focused on environmental education at the schools of the communities where they are active. These include lectures, workshops, field visits, the reproduction of materials, and the formation of school committees. From these activities arose the need for a more structured concept. Therefore, to increase the impact of the modules, and moreover, to stimulate the reach of the message of PfR's integrated approach, by the end of 2012 Wetlands International proposed to develop guides and to design materials that would facilitate the work of the teachers in rural areas. The partners decided to incorporate this proposal into their program in Guatemala and into the coordination with the country's governing bodies with which they were already working.

As a part of these coordinated efforts, the Methodological Support Modules and Educational Materials Kit became one of the commitments of the Action Plan of the Strategic Inter-institutional Agenda (AEI), promoted by PfR. The Agenda was institutionalized by MARN, SE-CONRED and CONAP by way of a Letter of Understanding. Furthermore, MINEDUC and the MARN together form a Bi-ministerial Table for the implementation of a shared mandate regarding education and climate change within the framework of the National Climate Change Policy. Committee of the Partners for Resilience, the next step was to develop the terms of reference of the expected products. A very specific profile for consultants was drawn up: experience with similar initiatives, pedagogical and mediation ability as well as verifiable knowledge of DRR, ACC and ERM. The selected consultancy team consisted of staff from the NGO Defensores de la Naturaleza. A timeframe of 10 months was decided upon to complete the process. To provide direction to the consultants' team, a Small Committee was set up, with representatives of each member of the Partners for Resilience: CARE Guatemala, Guatemalan Red Cross and the Red Cross Red Crescent Climate Center, Cáritas Diócesis de Zacapa and Wetlands International, with participation of the PfR Coordinator as well.

It was agreed that the institutions to validate the Modules and the didactic support materials, would be the appropriate government institutions with which the Partners for Resilience were already in extensive collaboration within the joint framework of the AEI. During initial meetings, the three institutions confirmed their interest in and support for the initiative and requested that MINEDUC was formally invited as well, to ensure the future implementation of the tools, particularly in the teachers training processes being considered in the municipalities of PfR intervention. Therefore, benefiting from the fact that MINEDUC and MARN were already collaborating through the Bi-ministerial Table, the opportunity was seized upon to add SE-CONRED and CONAP to that platform, for them to, respectively, guide and approve the production of the materials to be developed with the support of Partners for Resilience.

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5. Read more on the Strategic Inter-institutional Agenda (AEI), watch the video or download the case study from http://lac.wetlands.org/aei
The methodology instilled by the consultancy team considered a first phase for the recompilation of material with the Partners for Resilience, with the governing bodies and with other external actors. This phase looked to take advantage of similar experiences and tools previously obtained. From this first information compilation phase rose the idea of including a section for “Other materials” in the modules, to provide the teachers with extra support.

- Within the framework of the Small Committee agreements the following points concerning the development of the material were decided upon, and consequently supported by the four government institutions: The material should be created considering the reality of the rural schools: conditions of high vulnerability, few resources and with high levels of malnutrition.

- It should be aimed at the final three grades of the primary level (students of the ages 9-14 approximately), taking into account the existence of many multi-grade classes in the municipalities of intervention by the Partners for Resilience.

- An Educational Module (as they were originally called), would basically be subdivided into two sections:
  
  1. One theoretical and conceptual, giving relevance to the theme, relating it to the rural context as closely as possible;
  2. and a practical part with activities at the disposal of the teacher,

- The first three modules, dedicated to disaster risks, climate change and ecosystems, were initially developed and structured in such a way that they could be used separately one from each other (meaning that the teacher would have the liberty to use them in the order deemed most convenient).

- The fourth module, with resilience as its theme, is considered technically complicated and educationally even more challenging, and was the last to be developed. The teachers were requested to review it only after having completed the first three with their students.

- The contents of the Modules (texts and illustrations) would be proposed by the consultants team, revised by the members of the Alliance and afterwards validated with the governing bodies.

- The modules would be accompanied by an Educational Materials Kit (board games, cards, posters etc.) that would complement them and make their use more attractive and dynamic.

- Being a pilot, the technical staff of the Partners for Resilience and the consultants team would train the district supervisors (formerly known as Educational Supervisors, or CTA) of MINEDUC and the teachers in the application of the Modules in the municipalities and schools engaged by the Alliance. These workshops were held in the departments of Zacapa (8 schools in 1 municipality), Chiquimula (3 schools in 2 municipalities), El Quiché (7 schools in 4 municipalities), Izabal (9 schools in the town of El Estor) and Sololá (28 schools in 2 municipalities), allowing for replication in other areas supported by initiatives from the government and other actors with similar objectives.

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6. System in which one teacher covers two or more grades simultaneously.
Validation process
The original drafts and proposals of the Modules and of the Kit were approved thus:

• The feedback given at the first revision by the Small Committee was based on the expertise of each partner respectively:
  
  - for the DRR Module, Cordaid/Cáritas Diócesis of Zacapa, Red Cross and CARE-Asociación Vivamos Mejor (AVM) provided inputs;
  - for the CCA Module the contributions of the Red Cross Red Crescent Climate Centre were incorporated;
  - for the MRE Module it was Wetlands International that supervised the technical matter;
  - the Resilience module was the most difficult to conceptualize in terms of content, and brought about varied contributions from the partners and from PfR Coordination, including from their headquarters.

• A second version, in which the observations of the Small Committee had been incorporated, was shared with the governing bodies. It was agreed that the revising groups consisted of technical staff experts in the matter and persons of the education and awareness raising units of the institutions. Also, each entity assumed leadership in the themes most related to their institutional mandate: SE-CONRED on disaster risk reduction, MARN on climate change adaptation, CONAP on Ecosystem Restoration and Management, and MINEDUC as the pedagogical coordinating body.

• Two approval workshops were held at central level with wide participation of the four government institutions, as well as various focal meetings with either some, or all four participating. During these meetings, the corrected versions were presented, doubts were cleared and additional material was requested where necessary. Prior to each of the workshops and meetings the material was delivered to all participants so that the inputs would be more precise and propositional. During the workshops groups worked with the facilitation by the consultants and support from the Partners for Resilience.

I have implemented the Modules. They are a necessary tool for teachers, because they are related to the CNB; the nice thing is that they propose activities for each content.

Gloria Roxana Véliz
Teacher of 3rd and 5th grade, primary Official Rural Mixed School, Sunzapote, Cabañas, Zacapa
Structure of the modules
The basic structure of two sections (theoretical and practical) set up for the Modules, evolved during the process of the revisions and validations towards the following final structure:

- **Module teacher’s manual**: aimed at the teacher with recommendations concerning the most efficient use of the material

- **Relation between competencies and contents of the National Base Curriculum (CNB)**: a request made by MINEDUC which required quite some creativity from the consultants team, so each theme covered by each module is easily connected to the intended subject and achievement indicators of the fourth, fifth, and sixth primary grades.

- **Basic concepts**: with a selection and prioritization of themes supported by MARN, SE-CONRED and CONAP, the theoretical basis is presented with many illustrations (photographs, graphs, tables), increasing in complexity.

- **Putting them into practice**: this rather novel section of the material describes the aim of each of the ten educational activities. These are presented with increasing complexity according to the theoretical contents. They include playful investigation and analysis, reflection, artistic and conservation activities, among others, and were designed and/or adapted for each module. They suggest links to other subjects of the CNB (integrated topics) to the teacher, and include a list of necessary materials (easy to get hold of in the classroom or at school), present the clearest and specific instructions as possible, a space for revision (strongly requested by MINEDUC) and suggestions of variations on the tasks at hand.

- **Bibliography**: with references to where the contents were found or adapted from in each module.

- **Annexes**: includes examples and additional information cited in the activities.

- **Other resources**: publications and additional websites at the disposal of the teacher should he or she wish to remain up to date with the theme.

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8. In Guatemala, primary education is formed by two cycles obligatory for the population between 7 and 14 years of age. The first is basic education and the second is complementary education. The contents that are taught in primary are legally established in the National Base Curriculum (CNB), which defines about 80% of what should be taught at national level; the other 20% is reserved for local and regional contents. The CNB defines areas and sub-areas, as well as the competencies that the students must acquire per cycle and grade; it also makes achievements indicator proposals to verify if the student has indeed reached the competencies per grade. For more information: http://cnbguatemala.org
The initiation of the modules allowed for the construction of an inter-institutional cooperation model for the development of environmental education in Guatemala. It captured the sustainability principle as established in the National Base Curriculum (CNB) in the materials. For CONAP, this initiative is extremely important because it stimulates the use of the modules as sources for the encouragement of transformation, which help us to become part of the solution of the environmental problems.

Ana Luisa De León
Environmental Education Advisor.
National Council for Protected Areas (CONAP)

Table 1. The set of Educational Materials Kit

The Educational Materials Kit was developed last, although many ideas had already been discussed while the modules were being seen to. It consists of 6 different materials, being:

- **Board games** in snakes-and-ladders form with different questions that cover the themes of the modules. These allow the teachers to present the contents in a playful and participatory manner.

- **Posters** with the most relevant graphs of each module and the texts in adequate sizes so they help the teacher to explain the contents.

- **Signs for safe evacuation routes**. These can be used in the implementation of action plans based on the risk maps.

- **Vocabulary cards** with the most important terms of each module, complementing the learning through analysis and discussion. They can also be used in mime games.

- **Figures** to create different stories with the alumni, which are fun and encourage the development of language, artistic expression, stimulate creativity and collective creation processes.

- **Cards with practical actions** that promote positive actions and can be used for different activities of analysis, discussion, daily life application, among others.

Photo: Cáritas Diócesis de Zacapa
Graphic design and its approval

The graphic design of all the material was a crucial theme, the relevance of which was not spotted initially. It became of such importance that delivery times were seriously adjusted, leading to the extension of the consultancy term, initially planned for ten months, to a period of almost two years. It was a challenge to come to a mutual understanding with regards to the pedagogue’s expectations and the designer’s proposals. Although the process was not easy, the result was surprisingly and widely accepted by Partners for Resilience and the four government institutions. All the design elements went through a careful selection and validation process, from the graphic style (tones and colors appealing to an infantile public), well-selected and identifiable photos (with localities and context of the country as requested by the revisers of the government), icons designed for sections and tables (Did You Know That..., Integrated Topics). Particularly MINEDUC requested special attention to the themes of gender and multiculturalism, including equal representations of boys and girls and the different ethnicities of the country. CARE made a very particular suggestion for the icons of reflection of the educational activities: include icons with styled silhouettes in the forms of girls and boys (originally it only included boys).

The consultants team and Wetlands International have endeavored from the outset that the initiative would not end at merely publishing the material; this was supported by the Small Committee and the four institutions. Therefore, and also to test the modules in the field, two types of workshops were proposed: training the trainers (technical staff of the Partners for Resilience) and workshops with the teachers of the schools in the PfR areas. The basic methodology was to present them with the modules, to practice the educational activities with them and to obtain their feedback and suggestions for follow-up. An evaluation was conducted both prior to and after the workshops to try to measure the impact of the efforts. The workshops were organized through the District Supervisions of MINEDUC, to ensure the participation of the teachers.

It would have been difficult for the consultants team to build the confidence in the target audience, to create the enabling work environment and to set up the adequate logistics, without the support of the local partners whose knowledge of the dynamics in each municipality and school was instrumental.
RESULTS

The detailed validation of the material implied that each module has on average some twenty revisers shared between the Partners for Resilience and technical staff of the four government institutions. The process was sufficiently complex; there was much consensus to be built concerning the content and the execution, resulting in the process taking more time than originally foreseen, but the collective construction ensured that the material was widely approved and actually is considered as a tool with national impact, more than just an isolated proposal of the PfR program. As mentioned previously, the Bi-ministerial Table on climate change was made up of only representatives of MINEDUC and MARN; the Partners for Resilience facilitated the expansion of this coordination body with SE-CONRED and CONAP so they could finally give joint rulings for the institutional endorsement of the material.

From its outset up until its application in the field, the process achieved an effect that is difficult to attain, and which is expected to serve as an example to other initiatives and in other areas: civil society strengthened the public institutions, joining mandates that are established in national policies and regulations, and leveraging government competencies that regularly exceed their capacities. Furthermore, due to their inclusion as a product of the Strategic Inter-institutional Agenda (AEI) and its Action Plan, the Modules and the Kit contributed to the adoption of the innovative approach of DRR/ACC/ERM within the institutions and its implementation with a view towards integrated development.

Within SE-CONRED it has been a valuable opportunity to participate in the revision of the module on risks in cooperation with the other institutions, as it allowed us to homologate the new approach to DRR: moving away from an approach more disaster-centered and focused on the emergency, toward risk reduction and the factors that determine it. This way we seek to stimulate the reduction of vulnerabilities and the strengthening of community resilience.

Rolando Déleon
Responsible for Public Policies, Direction of Integrated Risk Management
Executive Secretariat of the National Coordinator for Disaster Reduction

Field application

Taking the materials to the field also had its challenges yet simultaneously proved to be highly satisfactory. The objective of subjecting the trainers of the Partners for Resilience to theory-practice training workshops was to enable them to hold more efficient workshops with the teachers; and furthermore, to provide guidance during the implementation of the modules in the schools that they regularly attend. So from talks, fairs and other activities of environmental education (sin detriment to their importance) that the local partners organized in a disconcerted way, they needed to improve coordination with the formal educational system and the local partners themselves would become “ambassadors of the integrated approach” that the PfR promoted in each space possible. The modules and the kit were converted into their tools for daily use. In two training of trainers workshops the opportunity arose to work with twelve technical staff and/or volunteers of the Partners for Resilience. At the initiative of CARE, District Supervisors of MINEDUC from the first workshop were included, a highly effective practice that Cáritas Diócesis of Zacapa applied in their second workshop as well. This helped with the organization of the workshops for teachers that followed in their respective jurisdictions.
Table 2. The Modules in action: training and application in Cabañas, Zacapa

The local PfR partner Cáritas Diócesis of Zacapa organized trainings and activities for boys and girls of eight schools in the municipality of Cabañas, Zacapa, using the four Methodological Support Modules. They were held in a dynamic and educative manner, facilitating learning, encouraging interaction and increasing knowledge. The playful tools and activities that each module presents allow for a simpler explanation and appropriation by the boys and girls.

During a total of sixteen workshops that were held in Zacapa, El Quiché, El Estor and Mazatenango (with teachers from Sololá) under the direction and support of the local partners, 119 teachers from fifty-five schools of the final grades of the primary level were innovatively trained in teaching. The teachers had the opportunity to become acquainted with the material, to implement the educational activities and to provide ideas for possible adaptations or modifications necessary at their schools.

Replication at national level
Aside from the results at local level, the impact at national level coordinated by the technical teams of MINEDUC, MARN, SE-CONRED and CONAP was so strong, that these agencies requested the Partners for Resilience if these materials, which were considered official, could be introduced to other departments of Guatemala. In response, PfR handed the final versions of the materials over to MINEDUC so it could publish additional editions, using its own institutional budget.

Moreover, the methodologies of the modules have been applied to other target audiences, amongst which the adults of rural communities and university students. The modules also were shared through the District Supervisors of the department of Sololá, which generated an interest in the replication in their respective districts, for which additional trainings are planned.

Table 3. Application of the Methodologies to adults and university students

The Partners for Resilience have implemented the modules in the areas of communication and information with the Local Coordinators for Disaster Reduction (COLRED) and the women of the communities of the municipalities of Santa Catarina Ixtahuacán and Nahualá, in Sololá. The Methodologies created an environment of trust that facilitated dialogue and the exchange of experiences.

At the Community Festival “Women and their Contribution to Disaster Risk Reduction in the Community”, held for a week in ten communities of the micro-watershed of the Mazá River in Sololá and with participation of 926 women and 248 men, CARE methodologically used the modules. As a dynamic to break the ice, the activity “Learning from the past” from the DRR module was used, highlighting the backdrop of the community’s history, thus emphasizing the feelings, life experiences and response to the different events. Also to demonstrate the importance of communication and information before, during and after a disaster, the game “Who is better informed” from the DRR module was played. Furthermore, in order to facilitate the reflection on the complementarity between the different elements of nature and human being, the activity “Travelling through the ecosystem, I come across...” from the MRE module was done. One reflection was that the participating women recognized that it is them who (invisibly) administer the natural resources.

Similarly, with students in their final year of Medicine of the Universidad Rafael Landívar, the activity “Room for adaptation and mitigation” of the CCA module was done at a workshop on Basic Formation for an Integrated Approach. The students reflected upon the vulnerabilities, risks and actions that improve the situation in the communities.
Almost three years since the start of the process in 2012, the task is far from completed. The Partners for Resilience, under the leadership of Wetlands International, will continue to monitor and evaluate the impact of the modules, assisted by the trained teachers and the main consultant that designed them. Among the objectives are the collection and documentation of life stories of the boys and girls that the material has reached to demonstrate from first hand any changes in those children, showing its effective contribution to the formation of resilient communities.

**LESSONS LEARNED**

As was to be expected when taking part in an initiative this complex, a number of lessons were learned by the Partners for Resilience, from the beginning all the way until its implementation in the field; both internally and from the cooperation with external actors they had the privilege of dealing with:

- By playing the youth become involved in the learning process and their affinity with their surroundings is strengthened. This way the girls and boys become initiators of development, they become aware and contribute to the conservation of the environment.

- The modules were a good opportunity for the common use of the five partners' concepts and perceptions and helped to understand the jargon used by the governing bodies better.

- The process of feedback and revision of the materials requires time which should be taken into account in any type of planning; a lot was learned about the institutions' own dynamics in terms of communication and follow-up; the result will be officially endorsed material that can be implemented in other themes and in geographic areas with distinct levels of vulnerability.

- The consensus-building process with the institutions is much more efficient and productive if the material is already graphically designed (and does not merely consist of texts); it is recommended to take this into account in other similar initiatives. It is not enough to have just a team consisting of high level technical staff and well-skilled designers: the pedagogical mediation is a challenge in substance and form.

- The collective construction between the institutions and Partners for Resilience also contributed to one of the PfR principles: creating an enabling environment for institutional resilience9. It is highly recommended to be ensured of the backing of all necessary shared opinions at governmental level.

- The fact that the training workshops for teachers were organized by the District Supervisors of MINEDUC with the local partners’ support, thereby making use of the knowledge of the local dynamics, proved to be one of the success factors. All this was articulated with open and fluid communication with the central levels of MINEDUC.

- To ensure that the material will remain valid after the change of government following the 2016 elections, the four institutions proposed that the editable material is handed over to mid-level technical staff so the logos can be changed, and so there won't be a need for the new authorities to redevelop or discard the material.

- Although the material was designed for students of the final three grades of the primary level in rural areas, it is highly adaptable to other publics (pre-primary, basic, adult, community level – see Table 3) and to more urban environments. An attempt was made to address the multiculturalism of a country such as Guatemala and it is hoped that a possible evolution of the material will bring this goal even closer.

- The Methodological Support Modules for teachers have not only been converted into a flagship product of the Partners for Resilience in Guatemala, but have also become a concrete example of products delivered under the umbrella of the Action Plan of the Strategic Inter-institutional Agenda (AEI), which increases its credibility at ministries and two state secretariats.

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The educational activities of the modules are adapted to the work that we do with adults; they enable us to analyze their conditions of vulnerability and to identify solutions in a creative and participatory manner.

Abdías Chávez
Development Facilitator
CARE Guatemala

Photos: Arabella Samayoa