Amazon Assessment Report 2021

Chapter 32

Milestones and challenges in the construction and expansion of participatory intercultural education in the Amazon





Science Panel for the Amazon



About the Science Panel for the Amazon (SPA)

The Science Panel for the Amazon is an unprecedented initiative convened under the auspices of the United Nations Sustainable Development Solutions Network (SDSN). The SPA is composed of over 200 preeminent scientists and researchers from the eight Amazonian countries, French Guiana, and global partners. These experts came together to debate, analyze, and assemble the accumulated knowledge of the scientific community, Indigenous peoples, and other stakeholders that live and work in the Amazon.

The Panel is inspired by the Leticia Pact for the Amazon. This is a first-of-its-kind Report which provides a comprehensive, objective, open, transparent, systematic, and rigorous scientific assessment of the state of the Amazon's ecosystems, current trends, and their implications for the long-term well-being of the region, as well as opportunities and policy relevant options for conservation and sustainable development.

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Graphical Abstract



Tendency in some institutional contexts to develop standardized educational practices that respond to cognitive universals and homogenizing models to understand development and learning.



Recognitions of practices and knowledge developed by different communities of the Amazon.



Complementary training with pedagogic use of participatory intercultural tools (bird watching in collective territory).



Dialogic Learning, connected with territory, with symbolic languages and with different productive and technological needs.

Figure 1.A Examples of mainstream education's standardized practices (1), which can be overcome through intercultural education, including recognition of practices and knowledges (3), post-secondary education with intercultural tools (2), and dialogic learning connected to the territory (4).

Milestones and Challenges in the Construction and Expansion of a Participatory Intercultural Education in the Amazon

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Key Messages

- The peoples of the Amazon have immense wealth in terms of cultural, historical, and ethnic diversity, reflected in their worldviews, knowledge systems, ways of life, and relationships and interdependence with nature. Therefore, within the Amazonian context, intercultural education is an important means of facilitating encounters between diverse knowledge systems.
- Despite the significant knowledge that Indigenous peoples and local communities (IPLCs) possess, there is epistemic violence in the development of contemporary educational and capacity-building processes.
- Constructing participatory intercultural education implies that the parties can not only express their visions but are also open to other perspectives, knowledge systems, and practices. There is an urgent need to exchange experiences so that the strengthening of capacities generates inclusive learning spaces connected to the territory and in dialogue with symbolic languages.
- Creating intercultural education and linguistic policies might be achieved by strengthening local governance and political-administrative autonomy in the development of curricula, creating intercultural education proposals in the urban and rural Amazon; creating bridges between primary, secondary, and tertiary education; and designing participatory curriculum models with the possibility for technological innovation.

Abstract

Intercultural education and capacity building in the Amazon does not recognize, in general, the knowledge, practices, and resources that already exist in the region. Not only has Indigenous and local knowledge (offered by Indigenous peoples, but also by local communities) been systematically ignored, but there is also epistemic violence in the development of educational processes and in capacity-building processes. The Amazon's Indigenous peoples and local communities (IPLCs) have followed various paths in the construction of intercultural education. Challenges and lessons learned from these experiences are

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equally varied. This chapter highlights some significant experiences from the region, collected from different authors, that have been developed to build and expand upon participatory and dialogic intercultural education, starting with the problematization of the general educational system and the reflections that this problematizing view leads to. With the cases presented, we reflect not only on the importance of a participatory educational construction for IPLCs, but also that knowledge is a form of communication and political influence that can help in their struggles to guarantee their rights and governance.

Keywords: Amazon, climate change, land-use change, warming, moisture transport, drought, floods, climate models, climate variability, climate trends

32.1 Introduction

The countries of the Amazon have taken various paths to construct intercultural education. The challenges and lessons learned from these experiences are equally varied. This chapter seeks to highlight some significant experiences developed to build and expand upon participatory intercultural education in dialogue, starting with the problematization of the general educational system and the reflections that this problematizing view leads to. Additionally, this chapter contains brief reflections, through the presentation of case studies, on the role of local capacity-building in facing current problems, such as climate change.

According to Walsh (2009, p. 5), "Since its inception, interculturality has meant a struggle in which issues such as cultural identification, law and difference, autonomy and nation-state have been in permanent dispute. It is not surprising that one of the central spaces of this struggle is education, as a political, social and cultural institution: the space for the construction and reproduction of values, attitudes and identities and of the historical-hegemonic power of the State." In this framework, colonial-style educational systems have rarely aligned with diversity, understood as wealth and opportunity; on the contrary, the trend is towards sociocultural homogenization and curricular standardization.

The educational system in the Amazonian context is equally homogenizing. It does not always start from recognizing the diversity of knowledge, practices, and resources present in Amazonian societies. The asymmetry of the educational system can

be illustrated by the practice of teaching exclusively in the official language of the nation and the prohibition of other languages, and by the adoption of a standardized model of knowledge transmission (Freire 2005), which promotes national values above the deep knowledge constructed day-to-day through interaction with the territory.

From this perspective, according to Sepúlveda (1996), "interculturality cannot be considered as a simple communication or a transference of cultural content between two cultures, since this communication and transference is complicated by the social asymmetry in the relationship between the two. ... The logic of transference and instruction is quickly assimilated to the logic of power and to symbolic violence. As long as the discourse of one is restricted, there is a manifestation of greater legitimacy of the other, in which a monolingual and monocultural character is evident."

Within this framework, there is a necessity to strengthen intercultural education processes. Indigenous and local knowledge (ILK) is not always valued and treated with the rightful attention it deserves in the formal education systems of the various countries of the Amazon. This failure falls into the aforementioned epistemic violence.

This chapter is made up of seven sections. In the first section, Towards understanding intercultural education and capacity building in the Amazonian context, we introduce concepts of intercultural education and capacity building through a critical lens. In the second section, Diversity in intercultural education and capacity building, we explore the concept of diversity as a possibility and as a

condition to enrich intercultural educational processes. In the third section, Recognizing previous knowledge and education contexts to promote diversity, we reflect on the necessity to start with previous knowledge and experiences as a pedagogical resource that allows for the promotion of diversity. In the fourth section, Intercultural education in practice: Significant cases, we present six case studies where intercultural education has been implemented in the diverse contexts and countries of the Amazon. In the fifth section, Emerging reflections and identified needs, we reflect on the presented case studies to harvest lessons that nourish the construction and extension of a participatory intercultural education in the Amazon region. In the sixth section, we present the identified needs and the established recommendations, and finally, in the seventh and last section, we provide final conclusions.

During the public consultation, we received a significant number of new cases and experiences on intercultural education in the Amazon. Contributions have been fully included in the chapter and are found in Annex 32.1 in the format of responses to a questionnaire.

32.2 Towards understanding Intercultural Education (IE) and capacity building in the Amazonian context

Interculturality is usually understood as the construction of spaces for dialogue between different cultures and their equitable interaction to generate shared cultural expressions. This dialogue implies that the parties involved not only have the possibility to express their visions, but also have an openness to other perspectives, types of knowledge, and practices (Van der Hammen *et al.* 2012).

By placing this notion of interculturality in the Amazon, we find a great cultural and linguistic richness that reflects different worldviews and ways of interacting with the natural environment. Unfortunately, not all Amazonian countries have public policies that promote the development of Indigenous languages through public education, and in

the cases where there is a "Law of Languages," as there is in Colombia, there are few mechanisms that generate symmetric bilingual exchanges. (Alarcón 2007) attests that "it is assumed that Spanish should be studied and learned in order to access Western knowledge, science, and technology, without evaluating or analyzing the effects of these integrating processes" (see Chapter 12).

Each one of the nearly 400 distinct groups of Indigenous peoples (Llorente and Sacona 2012; COICA 2019; IACHR 2019) that inhabit the Amazon represent an immense wealth in terms of cultural, historical, and ethnic diversity, reflected in their worldviews, knowledge, ways of life, and particular relationships and interdependence with natural resources. Different communities and populations of the Amazon have coexisted with the territory and nature for many years and have established their lives and existence on notions of balance and interaction with the resources that allow them to survive (Rodríguez and van der Hammen 2000).

Hence, the Amazonian context constitutes a scenario in which the construction of intercultural education becomes an important setting for the encounter of diverse knowledge systems.

According to Walsh (2009), "since the 1980s, interculturality began to be understood in Latin America in relation to the educational policies promoted by indigenous peoples, NGOs and/or the State itself, with intercultural bilingual education (IBE). ... Since the 90s, there has been a new focus on ethnocultural diversity in Latin America, a focus that stems from the legal recognitions and an increasing need to promote positive relationships between different cultural groups, to confront discrimination, racism and exclusion, to make citizens aware of the differences and to train them to work together on the country's development and on the construction of a just, equitable, egalitarian and plural society." These normative processes of focusing on ethnic and cultural diversity have been designed and implemented in different ways in the countries that make up the Amazon, and, within them, intercultural education is a contested space that can be interpreted from different socio-political positions.

In Colombia, Indigenous education, initially at the hands of the Catholic Church, has undergone changes based on the social and political struggles carried out by different Indigenous organizations in the 1970s and 1980s, with the support of nongovernmental organizations and academics who expressed their concern for an education that defends culture and language. These stances served as input for the 1991 constitutional reform, which led to the ethnoeducation program (Decree 804 of 1995) by the Ministry of National Education (Molina-Betancur 2012).

During the eighties, in Ecuador, the most significant initiatives and proposals for Indigenous education were forged. "In response to the requests of the indigenous peoples of the highlands and the Amazon, the Ecuadorian State decreed, in 1988, the creation of the Indigenous Directorate of Intercultural Bilingual Education (DinBIE) and the Provincial Directorates of Intercultural Bilingual Education. In 1992, the National Congress approved the decentralization of the DinBIE. In 1993, the Bilingual Intercultural Education Model was made official, and in 2000 the educational directorates were organized by nationality, within the framework of the different IBE zone networks" (Vélez 2008).

The 1988 Federal Constitution of Brazil was considered a milestone in the process of recognizing Brazilian sociocultural diversity, thanks to the mobilization of the Indigenous movement, leaders of the black movement, and partners who fought for this recognition, at least in terms of documents (Fialho and Nascimento 2010). Recognition of sociocultural diversity entered educational spaces well before the federal constitution; however, it was only in the 1990s that the construction and implementation of affirmative policies and actions began to promote the recognition of these differences, having within their scope the social inclusion of minority and culturally differentiated groups occupying marginal spaces in society

(Fialho and Nascimento 2010). With the presidential decree of 1991, the Ministry of Education of Brazil became responsible for educational policy for Indigenous populations, in collaboration with states and municipalities, the latter being responsible for execution under the guidance of the ministry. In addition to this decree, the Law of Guidelines and Bases of National Education (Law N°. 9,394/96), Opinion No. 14/99 of the National Council of Education, addresses the National Curriculum Guidelines for Indigenous School Education and the National Education Plan (PNE) (Law N°. 10,172 of 9 January 2001).

The Peruvian Federal Constitution of 1993 recognizes the BIE (Bilingual Intercultural Education) as a fundamental right of Indigenous peoples, following the movement that occurred both in other Amazonian countries with the construction of their new constitutions, as well as international legislation, which increasingly advanced in recognizing the rights of IPLCs. The law on intercultural bilingual education, Law N° 27,818, requires the Ministry of Education to design a National Intercultural Bilingual Education Plan for all levels and modalities of national education, with the effective participation of Indigenous people (del Pueblo 2011). Also, following the progress of other Amazonian countries, Indigenous participation in universities has grown in the last decade, as have training courses for bilingual teachers (Espinosa 2017).

To explore the future of intercultural education, we will use three perspectives or lenses, as proposed by Walsh (2009), to understand various roles attributed to interculturality. The first is the relational perspective that refers to the contact and exchange between cultures, peoples, practices, and diverse knowledge systems, which occur within conditions of equality or inequality. The second perspective is a functional one that seeks acknowledgment of diversity and cultural differences in order to be included within the system. From this point of view, interculturality is functional to the system and does not include asymmetries or sociocultural inequalities as part of its work. The third perspective, critical interculturality, stems from

the acknowledgment that the difference is built under colonial and unequal schemes. From this point of view, interculturality is understood as a process built from the base, and that contrasts with the functional perspective to the extent that its purpose is the transformation of unequal structures.

From the critical interculturality perspective, it can be argued that the physical violence, contempt for, and denial of the various cultural expressions and thinking processes which occurred during complex colonization processes still reside in the memory of the peoples of the Amazon. This epistemic violence is understood by Belausteguigoitia (2001) as "the amendment, the edition, the blur and even the annulment of both the systems of symbolization, subjectivation and representation that the other has of himself, as well as the specific forms of representation and registration."

There are different examples in which it can be concluded that epistemic violence still persists in those spaces in which the inhabitants of the Amazon interact with their neighbors and with different institutions in their daily lives. One of them is the imposition of universal development and learning models for learners in schools with standardized curricula designed under hegemonic models that do not correspond to or dialogue with the knowledge systems, practices, and resources that the different groups build in their lives' domains.

Some examples of epistemic violence are presented in the framework commonly called capacity building. According to UNESCO^m, capacity building takes the form of training, technical assistance, orientation, and preparation through projects adapted to the specific needs of the beneficiary. Some priority issues for capacity building in the Amazon are governance, forest management, implementation of financial mechanisms, project design, climate change, education, and health, among many others. Community appropriation of these topics and processes involves the installation of training devices in which the achieved results and

indicators are favored over pedagogical and participatory processes.

Proposals that ignore local practices and knowledge, such as business plans, models for project formulation, and entrepreneurship with preestablished formats, are currently being brought to local communities. The challenge consists of the construction of pedagogical mediations with contextual relevance that favor the shared construction of meaning. For this, it is necessary to start with dialogic encounters that allow the identification and exploration of meaning and definitions that communities have built regarding the issues that training seeks to address.

32.3 Diversity in intercultural education and capacity building

Unfortunately, training frameworks and their daily practices do not always recognize the knowledge and practices that different social groups, such as Indigenous peoples, have built. ILK is rarely included in curricular proposals as an opportunity to strengthen the principle of diversity associated with students' subjective experiences.

There is a diversity of Amazonian inhabitants that are not included in intercultural education policies. This demands a shift from the concept that a particular education is required for certain population groups to a contextualized education that recognizes the uniqueness and diversity of each human being and allows the construction of intrinsic knowledge and connotations according to the experiences of each educational space.

Amazonian diversity, rich in cultural expressions, contributes to the development of roots and identity, which are fundamental principles in the construction of subjectivity mediated by the educational context. If we start from the fact that diversity configures the social reality in the Amazon to the extent that it is pluricultural, then the educational processes must be developed to approach

^m Taken from: https://es.unesco.org/creativity/fortalecimiento-de-capacidades

diversity as a value and as an educational challenge aimed at expanding and diversifying the pedagogical aspects and didactics framed in the teaching and learning processes that take place in the classrooms.

The concept of diversity in an educational context is occasionally understood from a reductionist lens associated with extraordinary situations in which students deviate from common standards or from the socially constructed figure of a "normal" student. This educational context often embodies a homogenizing educational model that develops strict curricula, identical methodological systems, and standardized systems of evaluation, all with the objective to train people using predetermined knowledge and behavioral patterns.

Thus, the concept of cultural diversity in the classroom refers to dynamic processes of knowledge construction that arise from the trajectories and vital frameworks of persons, and from the interaction between different people in terms of beliefs, values, experiences, cognitive learning styles, and interests, among other aspects. This then refers to the need to work on diversity in the classroom beyond a differential approach, which reduces the complexity of singularity to a category of static and crystallized cultural identity, which does not account for the needs of persons nor allow articulation of their experiences (Frieri and Agudelo 2019).

From this perspective, diversity is not understood as an exclusive exercise within the processes of educational inclusion — often assumed for the care of some population groups through what is known as a differential approach — but rather, it is assumed as a human characteristic, regardless of belonging to an ethnic population or vulnerable population group.

"In this sense, diversity resonates with the concept of singularity according to which each person, by virtue of his or her vital trajectory, constructs the meaning of his or her world, within the framework of social relations in which the connotations of their daily lives are constantly stressed and negotiated. Therefore, there are no persons more diverse than others, but rather, we are all diverse, and it is precisely there where the richness of meeting each other develops " (Frieri and Agudelo 2019).

32.4 Recognizing previous knowledge and education contexts to promote diversity

To recognize and dialogue with students' previous knowledge and the particularities of their educational contexts requires a permanent ability to characterize context; that is, the development of a lens and integral knowledge of the space and of the people with whom one interacts in that context. Reading context also requires a lens that acknowledges and respects the knowledge that students acquire through their day-to-day lives. In this respect, Cole (2017) states that "people develop cultural tools and cognitive skills associated with the domains of life in which these tools and skills are of central importance." Similarly, (Bruner 1997) proposes a cultural psychology that situates the emergence and functioning of psychological processes within day-to-day social interactions, and, symbolically, the events that people live out in their daily existence.

From these statements, the existence of one cognitive development model, one in which the subject increments their acquisition and utilization of knowledge as a function of one social and cultural reference framework (in this case, the Western framework constructed in industrialized societies), is questioned. Once questioned, the exploration of and openness towards different forms of knowledge construction becomes fundamental to the educational exercise.

32.5 Intercultural education in practice: Significant cases

The following significant cases from distinct Amazonian contexts provide evidence of the diversity of existing practices in the construction of intercultural education and capacity building. The cases were sent by different authors, invited to partici-

pate in the chapter, who live and/or have experience with Indigenous peoples and local communities in the Amazon region. The texts present the contexts in which the initiatives were created and in which important results and reflections were achieved.

32.5.1 Pedagogical and intercultural training in SENA, Vaupés: An approximation to cultural knowledge and practices.

Gloria Amparo Rivera - SENA (Colombia)

In Colombia, there are advancements in national jurisprudence on the recognition of cultural diversity, ancestral knowledge, and collective rights. There are also institutional policies that promote access to training in equal opportunities and attention to diversity. However, national administrations face difficulties in recognizing and incorporating them into national policies and programs.

In this sense, more efforts are needed to systematize, understand, recognize, and scale up successful examples of intercultural higher education. In particular, in the context of technical training, the conviction persists that Western technical and scientific knowledge is superior and must be brought to communities to help them achieve progress.

The National Education Service (SENA, acronym in Spanish) is an institution associated with Colombia's Ministry of Labor that offers technical and technological capacity building. This institution fulfills the national public function of investing in the social and technical development of workers, offering and executing vocational training for incorporating Colombians into productive activities. In fulfilling these functions, it also serves the Indigenous communities of the Colombian Amazon.

In this context, the need to develop a different approach that would address these populations arose, taking into account their cultural, environmental, and territorial features in compliance with Colombia's existing legal framework of recognizing the territorial, social, and cultural rights of ethnic groups.

Practice shows that technical solutions brought to ethnic communities are based on knowledge developed for certain contexts and conditions that involve developed infrastructure and access to capital for considerable investments, and generally neglect the great wealth of resources that Amazonian Indigenous communities living in and depending on the humid tropical forest have.

Based on the experience of SENA-Vaupés since 2013, it is important to consider access to capital as not only specialized human resources but also resources that allow, in a knowledge-based dialogue, the execution of structuring strategies between traditional knowledge and academic knowledge to achieve concrete actions. These include adjustments to curricular designs that link the context, the development of themes on collective rights, the revaluation of Indigenous languages, and the development of local research projects with a strong foundation in ancestral knowledge and practices. This makes it possible to link the cultural, environmental, and diverse potential of the Amazon at the local level.

SENA-Vaupés has strengthened its administrative, formative, and pedagogical capacities in 5 basic steps:

- An agreement with Indigenous communities regarding the necessity for training or other complementary services.
- Strengthening the pedagogical capacities of government employees, instructors, and apprentices through the application of participatory tools to develop characterization and autodiagnostic processes with local communities.
- Creation of projects based on the potential productivity of the environment or culture of the communities or participants, according to their ethnicity and culture.
- Strengthening of cultural knowledge through local research with an intercultural approach.
- Strengthening of the organizational processes of the communities' community organizing, derived from the training and the planification of activities that promote the development of pro-

ductive units, or from the construction of projects for training programs.

Trainings for SENA instructors use participatory, intercultural tools to sensitize them to training processes within a differential context. Pedagogical practices (Figure 1) are strengthened by interactions with Indigenous people, and thus, they generate more successful training that recognizes previous knowledge and ancestral practices. The following results have been obtained:

- Strengthened pedagogical capacities of the SENA instructors.
- Formative planification, where learning objectives are obtained through the implementation of participatory tools and playful activities.
- Learning guides designed with a differential culture focus.
- Linkages between territorial context and the training execution identified and employed.
- Intercultural participatory tools adjusted to the pedagogical context as active didactic tools.
- Linkages with Indigenous instructors.
- Linkages with one Indigenous knowledge holder, strengthening cultural identity in the training processes.
- Research focused on strengthening local and ancestral knowledge.
- SENA staff trained in the use of participatory tools (Figure 32.1).

This training began with a presentation on the pedagogic use of participatory intercultural tools and with strengthening of the didactic capacity of the instructors through the inclusion of characterization and contextualization that linked local knowledge and practices. For three years, this training was available to youth and adults belonging to different communities to generate learning practices that were more dynamic and illustrative. This complementary training paved the path for the SENA-Vaupés office to incorporate capacitybuilding courses into tourism training a few years later. This training lasted two years, and instructors began to incorporate the cultural, natural, and territorial potential of the Vaupés into their lessons, making the training locally pertinent. The



Figure 32.1 SENA apprentices birdwatching at the national gathering of ornithology (Rivera 2016).

apprentices, alongside the training instructors, associated themselves with the SENNOVA program through the seed fund in Ethno-Ornithology, where they were able to monitor birds in neighboring communities in urban Mitú, to articulate sustainable tourism initiatives based on birdwatching, and to generate important products such as the basic birdwatching guide for the Vaupés region, *Vaupés in plumages, sounds, and colors.* The birds' traditional histories and a digital museum of bird photographs and sounds allowed them to share experiences at multiple national and regional events for avitourism and natural sciences.

This experience resulted in lessons learned associated with a significant practical and knowledge-based potential around forest management, fauna, the flora that must be visualized as a potential basis for scientific research. Additionally, they show the importance of institutional training processes in different Amazonian contexts that allow its members to recognize contextual characteristics of the communities.

32.5.2 Local research to strengthen autonomy and territorial governance

María Clara Van der Hammen and Sandra Frieri (Colombia)

We would like to share the story and analysis of a training experience in territorial governanceⁿ with the Indigenous communities Koreguaju de Solano, Caquetá, in order to reflect on the possibilities of constructing decolonial practices through dialogue methodologies oriented towards the symbolic articulation between different ways of signifying the world, and the exploration of our own environmental, productive, social, and cultural resources.

The Koreguaju people, with a population of approximately 3,700, belong to the Western Tukano linguistic family. Their ancestral territory is located in the transition corridor between the Andes (the eastern valley of the Andes, contiguous with the Magdalena river) and the Amazon (its eastern plains, in the department of Caquetá, and part of Putumayo, see Figure 32.2).

As part of a project developed by The Nature Conservancy (TNC) and Tropenbos from 2018 to 2019, "Strengthening local governments as a strategy to fight against deforestation in the Caquetá mosaic", we hoped to create spaces for the exchange of experiences in the participatory implementation of territorial management plans elaborated by a previous project with the support of TNC°, in seven legally-recognized Indigenous territories of the Koreguaju people, and one of the Nasa people, all located in the Peneya River Basin. In this process, there were 2 participants from each of the 8 legallyrecognized territories, with the idea that all participants had elements to contribute in the reflections and lessons learned from their respective communities.

The training consisted of combining a series of intra-community activities and inter-community meetings. Collective encounters took place on three occasions, at which, from the beginning, participants aimed to create a space of conversation and dialogue through the presentation of various activities that stimulate participation and connection with the training space.

The participants prioritized, in the implementation of the management plans, the following themes: cultural materials (textiles, ceramics), strengthening of the chagra, the territory and its origin stories, traditional Koreguaje food, body paint, and dances associated with rituals. From this point, implementing their own research became the principal mechanism to strengthen their knowledge as a foundation for environmental management actions, whether productive or educational. Local research is a strategy that we have promoted for various decades from the perspective of Tropenbos (https://www.tropenbos.org/where we_work/colombia), as a way to encourage the transmission of knowledge in communities, from compiling, making it visible, and using it in distinct contexts for the development of productive initiatives, territorial ordering, education exercises, or political negotiation scenarios. This strategy implies the definition of a subject matter, an objective, and a methodology by the local communities, either individually or collectively. It is facilitated through materials (paper goods, cameras, recorders), or money to acquire gasoline or food for meetings. There are no pre-established formats and there is much liberty in the way that these research processes are constructed and used. In some cases, publication of results is facilitated, if this is the

ⁿ We include within governance as the interactions and accords between governors and the governed, in order to generate opportunities and solve community members' problems, and to construct the institutions and norms necessary to generate change. In the context of Indigenous territory governance, this is associated with aspects such as government autonomy, and the right (and responsibility) to conserve, transmit, and develop their own forms of life and their own culture to future generations.

^o The objective of these plans is to strengthen governance within legally-recognized Indigenous territories through the reflection on territory, the available resources, and the accordance of a zonification agreement for different uses, and prioritization of actions for sustainable development.

wish of the local researchers and their communities^p.

Through this training, a pedagogical proposal was designed and implemented based on the construction of methodological routes for the strengthening of territorial management. The development of local research served as a departure point for reflection and exploration of diverse forms of construc-

ting and strengthening knowledge associated with culture, which allowed learning to be significant and situated within context. The transformations observed in the participants, understood as unfinalized processes in permanent development, are related to their subjective position in the role of autonomy and leadership. They do not represent just the strengthening of abilities to communicate with others' methodologies and accompany their imple-

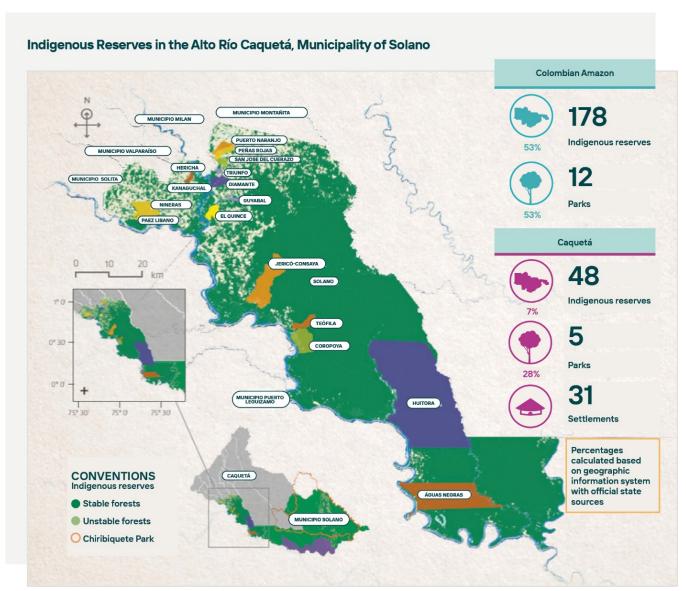


Figure 32.2 Indigenous reserves in Alto Río Caquetá, Municipality of Solano. Source: The Nature Conservancy. Portfolio of projects for the implementation of strategies for the conservation and management of Indigenous territories (Solano-Solita 2018).

^p For examples, see <u>www.tropenbos.org</u>

mentation and systematization, but also the construction of narrative discourses in relation to pride, cultural identity, and territorial governance in spaces destined for the exchange of experiences and the socialization of the products of the local research. These products become references of externalization and transmission of knowledge processes (Bruner 1997), and they are developed through different strategies of compilation and documentation, such as written text, illustration, photography, and material culture (e.g., baskets, *matafrios*, sifters, ceramics, necklaces).

In this way, positive connection to local knowledge allowed the discovery of identity manifestations in the culture that, as they are recognized, are turned into self-esteem and agency to continue accompanying various participatory processes associated, in this case, with governance and territorial management.

32.5.3. Indigenous intercultural education in the Rio Negro

There is perhaps no other place where there are more intercultural experiences than between the Indigenous and non-Indigenous peoples of the Rio Negro region, where there are 23 different ethnicities, four linguistic families, and 18 languages spoken. In fact, each person, each group of Indigenous people, is already born in the intercultural life environment if we consider that the father and mother are different from each other and they have become one family. In this way, interculturality is lived, many times without knowing that it starts from weddings.

The Indigenous Organization of the Içana Basin (OIBI, acronym in Portuguese), founded in 1992, mobilized the Baniwa and the Koripako, and has served as a tool for the Baniwa to realize their rights, leading the way on many initiatives such as traditional medicine and education, which inspired the unification of spelling of the Baniwa language, the training of teachers, and the elaboration of the Indigenous School Baniwa and Koripako (BIEK Pamáali) (Figure 32.3). In addition, it

invested in the production and commercialization of basketry from Arumã and the culinary seasoning Baniwa jiquitaia pepper. The first year of the new millennium was the launch of the Arte Baniwa brand and the inauguration of the BIEK, which impacted municipal policy by creating other elementary schools in Baniwa communities.

Indigenous School Baniwa and Koripako (BIEK Pamáali): Infrastructure, organization, students and teachers, teaching, and languages program

We say that this school is of the Baniwa peoples, because the school was thought of, elaborated, constructed, implemented, and managed by the Baniwa people through their representatives, leaders, and teachers, with the support of partners. This school is recognized by the Educational System of the São Gabriel da Cachoeira Municipality. The Baniwa people began their fight for a school in 1984, reaffirming this fight in 1987 through the Rio Negro Indigenous movement. Between 1992 and 1997, there were meetings and discussions on education where the goal was to seek understanding. In 1998, the school project was proposed in partnership with the Socioenvironmental Institute (ISA, acronym in Portuguese). ISA is a Brazilian NGO, founded in 1994 to propose integrated solutions to social and environmental issues with a central focus on the defense of social and collective goods and rights related to the environment, cultural heritage, and human and peoples' rights) and the Federation of Indigenous Organizations of the Rio Negro (FOIRN), which is the Indigenous organization from the Rio Negro region, founded with the goal to articulate actions in defense of the rights and sustainable development of 750 Indigenous communities in the most preserved region of the Amazon, on the tri-border with Venezuela and Colombia. In 1999, the project was consolidated and the construction of the physical space began. The implementation of this project was made possible by a partnership between the São Gabriel da Cachoeira municipality, the Rio Negro Regional Office of the National Foundation of Indigenous People (FUNAI), and Norwegian secondary school students.

The Baniwa and Koripako School promotes their own learning process utilizing the methodology Teach-by-Research. This methodology has facilitated the teaching and production of intercultural knowledge, whether it is cultural, technical, or scientific, since 2000. The foundation of this process is discussions during meetings where the Baniwas, masters in culture and tradition, teach that the child is born curious. For example, they teach that at birth, the child cries, "where am I?!" We observed that, while the schools of non-Indigenous people valued curiosity only at higher education levels, our school could be different – we could value it from the beginning. Thus, the sum of Indigenous and non-Indigenous cultures that characterize the interculturality of teaching and learning was present at the school.

The school has an infrastructure with a set of houses, including dormitories, classrooms, a library, a cafeteria, a computer lab, a science lab, a native fish fry production lab, fish farming dams, an agroforestry system, a kitchen, an administration office, a flour mill, a tool deposit, and a fuel deposit. The number of houses has increased with the number of students, and the teaching space facilities increase according to the quality of the teaching project. It is a school community, or a community school.

During the school period, the teachers and students live at the school for two months and then return to their communities, where they carry out field research projects. Some classes are theoretical, and some classes are field classes, where stu-



Figure 32.3 Pictures from the Koripako school from the Baniwa indigenous people (A-B) and their educational experiences in management of the land using traditional knowledge (C).

dents practice field methods. The educational process is realized by instituting learning responsibilities. Students are organized in weekly groups with the end goal of developing capacities of organization, planification, accompaniment, and supervision of activities in the school. At the end of each week, there are collective presentations, discussions, and reflections on accountability with their colleagues.

The students in the Indigenous School Baniwa Koripako Pamáali are from the Içana River region and its tributaries: Ayari and Cuiari. They are all Baniwa or Koripako. The objective of the students in the school is to study, valuing their culture and language in order to gain ancestral knowledge and Western knowledge, and create new, creative intercultural knowledge for sustainable environmental and territorial development, always paying attention to and adopting new scientific, technological, and communication practices.

Teachers also embody the role of "parent-educators", since cohabitation is constant, and on some occasions, students need this sort of accompaniment. In fact, for the Baniwa and the Koripako, there is no separation between educating youth and teaching in school—before a teacher is a school teacher, they must be educated to be an example for the youth during the teaching process, with tools to form their students civically and culturally.

The general themes and objectives of discussions between students and teachers emphasize the constant relationship between the disciplines of the common core and the diversified part (i.e., professional practices). This relationship is reinforced through emphasis on four themes transversal to all disciplines, theoretical or practical, studied in the school or in the communities of origin of the students: Politics, rights, and Indigenous movements; Baniwa Ethics; Politics and Education for Health; and Sustainable Development. The Pedagogical Political Project, oriented towards training through participatory action research, is focused on the problems and potentials of the *buen vivir* (welfare) of the Indigenous communities in the Içana Basin,

and has been responsible for the formation of the new social capital responsible for the socioenvironmental management of the demarcated Indigenous territory, whose extent occupied by the Baniwa/Koripako comprises an area of ~3,487,792 ha and houses a population of 6,200 people in 93 sites and communities.

The Baniwa Koripako Pamáali School, although its curriculum is developed from its own practice, is also part of a curriculum common to non-Indigenous schools, so that it is possible for students to finish their studies in other schools.

Research is carried out in the native language, since the Indigenous narrative respects the context and true significance of tradition, and in this way, it is more likely that the work returns to the community. The School is multilingual, with five languages: three Indigenous and two national languages. The Baniwa language is one of the co-official Indigenous languages of the municipality of São Gabriel da Cachoeira and, along with the Koripako language, is widely spoken throughout this region. The school also uses the general language, or Nhengatu, which is spoken by many ethnic groups in the Rio Negro region, the Spanish language because of the neighboring countries Colombia and Venezuela, and Portuguese, the national language of Brazil.

All disciplines have the objective to facilitate fluency in the Portuguese language, verbal and written, as this is important for comparison, confrontation, and mutual comprehension between cultures, opening doors for intercultural dialogue. Learning Baniwa and Koripako is also important and structured, as this is fundamental to prevent these languages from becoming extinct like other Indigenous languages. Additionally, by teaching the phonetics, phonology, morphology, and grammar of our local languages, others can have access to study and write in them. Written Baniwa and its study can be studied by Indigenous peoples and by other people interested in learning them. It is the same with Nhengatu and Spanish.

Results

- 86 students graduated from the BIEK between 2000 and 2011 (from 148 total students). They came from 35 different communities in the Basin, and from 13 different clans from the main Baniwa and Koripako fraternities (the Dzawinai, Walipere, Hohoodene, Kapitiminanai, and Komadaminanai Indigenous groups).
- 32 indigenous teachers have taught at the BIEK.
 They also received training as they worked.
- Graduated BIEK students went on to become teachers (39%), researchers (14%), community leaders (3%), public health officers (1%), military personnel (8%), secondary students in other Içana communities (21%), students in urban secondary schools (9%), and non-student wives (6%).
- 24 Baniwa/Koripako women were educated between 2000 and 2011 (28% of the total). They are now teachers (6), researchers (2), secondary students in other Içana communities (7), students in urban secondary schools (3), and non-student wives (6).
- Capacity at the BIEK: The ideal number of people studying and working is between 80 and 100. For example, 7 teachers, 1 cook, and 1 general service provider serve 78 primary and secondary school students. The freshman class that entered elementary school in March 2012 had, for the first time, more girls (7) than boys (5).
- Thematic activities for general public education: BIEK also regularly receives 5–20 students per cycle that are teachers, public health officials, and leaders from other schools or communities in the Basin for workshops, courses, and research activities that focus on themes such as computer science, environmental management (forest and fisheries), aquaculture, Indigenous health, rights, project and organization management, and economic entrepreneurship.
- BIEK maintains an average of 40–50 primary school students, and 20–30 secondary school students, with a total of 70–80 students.

BIEK-educated students will help with the construction of policies and autonomy in the commun-

ities, and will fight for their educational rights. Today, in the Içana Basin there are 25 complete schools, something that would have been thought impossible 18 years ago.

The decision of the Baniwa and Koripako peoples to create their own school had a positive impact on various public initiatives. For example, it led to the creation of a Master's Degree and intercultural certifications as a proposal from the Institute for Indigenous Knowledge and Research of the Rio Negro.

The collective school education project of the Baniwa and Koripako peoples is thriving. In the future, the Baniwa and Koripako peoples hope to create a higher-education institution.

32.5.4 Balcanes Farm at the Universidad de la Amazonia and its role in Intercultural Knowledge Mediation (MIC)

Bernardo Herrera H. (Amazônia Colombiana - Universidad de la Amazonía)

The current case study about the role of intercultural mediation at the university is inspired by two gaps found by the most recent report on post-conflict Colombia by the Kroc Institute, firstly the absence of consideration for gender, and secondly the exclusion of Indigenous peoples. Having a gender focus and including Indigenous peoples are both crucial for the consolidation and adhesion to the peace accords. Both motivations coincide with prior academic research on the role of intercultural knowledge mediation and field research to characterize this role (Herrera 2020a).

In this context, the Balcanes case proposes the possibility of an alliance between a university (Universidad de la Amazonía, Florencia, Caquetá, Colombia) and an Indigenous organization (Agrosolidaria) to lead a knowledge dialogue about the *chagra* (agricultural plot). This is an example where the university became an Intercultural Mediator of Knowledge (MIC, acronym in Spanish) with Indigenous women farmers. The knowledge dialogue highlighted and strengthened the role of Indigen-

ous women in securing food security and sovereignty. Women in the Amazon are increasingly assuming the role of household heads and leaders of agricultural production. This case study invites us to reclaim the role of universities and Indigenous or community organizations in recognizing the Indigenous *chagra* and mediating productive knowledge dialogues.

Between 2019 and 2020, multi-situated ethnographies were carried out with the populations and riverine territories of the Guaviare and Caguán, and in the Orteguaza Basin, where the current case study is situated. Together, these rivers contribute 40% of the Amazon's flow, and, of the 400,000 ha deforested each year in Colombian territory, more than half of it is in the upper basin of the Amazonian region.

The "farmer-professor", as Orlando Alzate is known, is a farmer in the high Caguán, where he went after being displaced from the Río Pato valley for claiming the land as his right. In 2000, when he was already 60 years old, he decided to study agroecological engineering, a study offered by the Universidad de la Amazonía. There, he was put in charge of the Balcanes Farm. Orlando began a dialogue process with ancestral knowledge, which bore fruit after two decades of lessons learned in the community.^q

Twenty years later, a generation of youth lead the Balcanes Farm. Graduates of the agroecology program coordinate the Balcanes Farmer School of Amazonian Knowledge. The coordinator of the farm, along with their partner, work with the farming community, and cultivate their own plot together, growing various non-timber species. They describe this as the "thesis of the knowledge dialogue with Indigenous communities. ... [It] is an understanding of their worldview and beliefs in their nature, and, in this spirituality, understanding the magic of the plant, which is also the magic of the knowledge ... from this tradition through ... their medicine. ... One asks, how is it that

they've achieved this through time, and how is it that they can continue with food security and sovereignty, while taking care of our Amazon?" (Herrera 2020).

In this context, the Balcanes case proposes the possibility of an alliance between the university and Indigenous communities for a dialogue of knowledge oriented towards the *chagra*. Could university farms mediate and resist biopiracy in the commercialization of seeds and plants developed from the accumulated knowledge of farmers and Indigenous communities?

We propose an affirmative answer to the question, taking the experience of the Universidad de la Amazonía as an example of an Intercultural Mediator of Knowledge (MIC, acronym in Spanish), as long as women farmers are included. This requirement is important for their role in sovereignty vigilance and food security in the Amazonian context. Not only are women often the head of the family, their contributions towards the agricultural production of the region is rising. This case study invites us to reclaim the role of the university, as well as those of community organizations, such as Agrosolidaria, in order to recognize the Indigenous *chagra*, and to mediate in a knowledge dialogue.

Intercultural Mediation (MIC) is a resistance against hegemony and a route to food security and sovereignty. It is important to interculturally mediate the search for governance over nature, including the role of care by women. This happens, for example, in the recognition of the leadership of women leaders in Nükak villages in the Colombian Guaviare.

In this context, it is important to recognize the river as a vehicle for the exploitation of timber within the forest. Through the river it is possible to connect timber markets to roads and urban centers. Within this commercial process there is an absence of recognition of ancestral knowledge, which can be transformed by intercultural mediation in an anti-

^q Learn more through a video available at https://www.youtube.com/watch?v=ujHh0-Jhodw&t=823s.

hegemonic perspective.

Recognition of the role of the river is a mandatory step; before the river was used to exploit timber, it linked its upper course to the lower course and, like a highway system, links the market with urban centers. In the river's commercial flows, one can observe the lack of recognition of ancestral knowledge. In this flow, we can also understand it as a form of intercultural mediation in an anti-hegemonic perspective.

The experience of Agrosolidaria grounds the academic discourse and encourages the shared construction of meanings. The discourse "has lowered the sky to the ground", as a leader from the Association of Economic Solidarity shared. In order to not exclude women, maintenance fees were lowered from 10,000 to 5,000 (from USD\$3, dues were cut in half). Lowering the cost allows more access to women because they are paid less in the labor market.

These food security processes extend beyond the familial scale. In terms of empowerment and governance, reclaiming the territory has to happen at a national and multilocal scale. In the construction of this food sovereignty, there is co-production (Miller and Wyborn 2020) of knowledge. At a distance from the Western anthropocentrism, one has to contemplate the rights of nature, and the principle of intellectual property, recognizing at a constitutional level the knowledge of 'native' communities in the *buen vivir*, which originates from Amazonian peoples.

32.5.5 Climate change as a strengthening theme and struggle for the Indigenous peoples of the Amazon

Fernanda Bortolotto and Paulo Moutinho (Brazilian Amazon)

This case study presents how leaders of Indigenous peoples in the Brazilian Amazon incorporate climate change into their agenda and the fight for

their territories. By strengthening the capacities of Indigenous and non-Indigenous peoples, Indigenous peoples are constructing their own narratives, based on their knowledge and life experiences, to incorporate into national climate policies. As an example, the National Plan of Adaptation in Brazil acknowledged Indigenous and local knowledge as an important tool for adaptation. Also, after multiple workshops with Indigenous peoples and local communities (IPLCs), the plan included the results of their local studies about climate impacts on their lives.

Indigenous peoples possess multiple types of knowledge related to climate because of their dependency on natural resources, in particular knowledge on seasonality for harvesting and rituals. Armed with this knowledge, they know what to wait for and the anomalies that exist (Turner and Clifton 2009). Their deep understanding of variability allows them to easily distinguish between normal delays and the impact of climate change.

In the last 20 years, Indigenous leaders and representatives to the Coordination of Indigenous Organizations of the Brazilian Amazon (COIAB, acronym in Portuguese) have participated in meetings and discussions about climate change, organized and promoted by NGO partners such as the Amazon Environmental Research Institute (IPAM), the Socioenvironmental Institute (ISA), Greenpeace, The Nature Conservancy (TNC), and the Education Institute of Brazil (IEB). In these meetings, Indigenous leaders are introduced to technical concepts about climate change, concepts established by non-Indigenous researchers who rarely consider the perspective of Indigenous peoples in the elaboration of their studies or concepts.

Indigenous leaders present comprehensive reflections about climate change, framing it as an axis of fight for territorial rights. According to Sonia Guajajara^r (Bortolotto 2020), "Today, you can't just fight for climate change without considering Indigenous peoples or the role of Indigenous territories.

^r Information collected via interview with Sonia Guajajara, March 12th, 2020.

For all this, to confront climate change, you have to make necessary the fight for territorial rights, human rights, and specific rights."

This comprehension is notable because the most recent demands that Indigenous leaders have brought to the UNFCCC, between 2016 and 2018, presented in an institutional space^s, consider national climate policies and strategies. Territorial demarcation, strengthening Indigenous organizations, and environmental and territorial management are the principal issues in their demands (Bortolotto 2020). By strengthening their territorial fight, they also reaffirm their links and connections with nature, connecting the climate agenda with the Indigenous movement's other priorities.

The development of Indigenous peoples' demands illustrates how the production of ideas and concepts by actors, on the one hand, and the institutionalization of agreements and practices, on the other, are mutually constitutive (den Besten *et al.* 2014). The combination of Indigenous claims with themes on the world agenda, such as climate change, is a political strategy capable of guaranteeing the recognition or appreciation of ethnicity and Indigenous organizations and peoples as legitimate political subjects that can influence decision-making processes beyond their territories (Doolittle 2010; Bortolotto 2020).

Capacity-building processes on climate change, alongside the leadership of Brazilian Amazonian Indigenous peoples, resulted in the creation of an institutional space in 2016, within the National Foundation of Indigenous Peoples (FUNAI). FUNAI is the official Indigenous organization in Brazil responsible for the protection of Indigenous rights and assuring ethnic plurality.

From this space, Indigenous representatives from their community organizations influenced public policy on climate change elaborated in the 20162018 period. Both in policies of mitigation, such as the REDD+ National Strategy and the Nationally Determined Contributions (NDC), and policies of adaptation, such as the National Plan for Adaptation, the greatest demand from Indigenous organizations was the guarantee of their territories, and the completion of all due demarcation processes.

32.6 Emerging reflections and identified needs

The cases presented in this chapter provide evidence of the diversity of contexts in which intercultural education can be constructed. These include intercultural education in community schools that offer elementary education, in schools that offer secondary and technical education, in institutions that offer post-secondary technical education, and in universities. At the same time, there are experiences of capacity building with Indigenous peoples in the framework of climate change projects and the construction of governance and leadership processes.

Some cases demonstrate interesting alternatives to the increasing integration of the Indigenous population and other Amazonian actors into national economies under standardized programs, and poor recognition of local economic systems. In contrast, there are experiences, such as the one carried out in the SENA-Vaupés in Colombia, which depart from Indigenous and local knowledge to design and implement projects on alternative sustainable products. This case shows an important post-secondary training experience in which a governmental institution includes an intercultural education policy. At the same time, the intercultural mediation and the dialogue of knowledges between Indigenous and community members around agricultural practices and the important role of women in the construction of these knowledges, are part of the experience of the Balcanes Farm in the Universidad de la Amazonia in Colombia

s In 2016, the Climate Change Technical Office of the National Environmental and Territorial Management Policy for Indigenous Lands was established. This space was intended to strengthen Indigenous participation in national climate policies that were under preparation and implementation in Brazil, in addition to strengthening the discussion on the topic among Indigenous leaders.

When higher education involves Indigenous peoples, it is worth noting affirmative actions have been in elaboration in Brazil over the past 15 years, such as the quota law in Brazil, which incentivized the matriculation of Indigenous students in universities (Dal Bó 2018). The law, No 12,711 from 29 of August 2012, titled the Quota Law, stipulates that all federal universities must use a percentage of their scholarships for black and Indigenous students. After the law was passed, an estimated 8,000 Indigenous students from multiple peoples matriculated in higher education, in contrast to 1,300 students in 2004 (Bergamaschi et al. 2018). Considering the sociocultural diversity in Brazil, the law was a great achievement for Indigenous peoples and other social movements, who had been fighting for the democratization of higher education for all Brazilians since the Federal Constitution of 1988 (Baniwa 2013).

The presence of Indigenous peoples in universities offers possibilities for self-reflection on the university's pedagogical practices and its social role. However, there are still major challenges to be faced, such as the permanence of Indigenous peoples in the university, which depends on financial resources, the financing of research in their communities, and complementation of the quota system with projects and programs that enable support of Indigenous scholars throughout their training (Baniwa 2013).

The case study presented by André Baniwa, from the upper Rio Negro (Brazil), allows the appreciation of the construction of an intercultural education project in Indigenous schools in a context where there is great diversity of Indigenous peoples. The possibility to construct their own curriculum, with a strong emphasis on language, strengthens autonomy in this context. Additionally, the importance of local research, focused on Indigenous and local knowledge, is a way to strengthen the Baniwa peoples. The local research produced on sustainability projects in the region is also a way of communicating with the non-Indigenous public, funding agencies, and other partners, fitting not only as an educational model but also as

a strategy for organizational strengthening and expansion of relationships (Dal Bó 2018). From this process of construction, fight, and experience, Indigenous autonomy is important in the political and economic realm, as well as with partners and supporters.

Cases that demonstrate important experiences in capacity building associated with climate change in Brazil, and the strengthening of leadership and governance in Colombia, put into evidence the significant lessons and the individual and collective transformations of those who participate in these spaces when training is a dialogical approach that allows connection with the previous knowledge of the participants.

The diversity of cases allows us to conclude that when curricula and training plans are in dialogue with day-to-day experiences, the sociocultural context, and Indigenous and local knowledge, subjectivity takes its place in institutions and new forms of relation with each other and the territory are created, giving way to the construction of interculturality.

There are several needs to strengthen intercultural education. One is the valuation of Indigenous languages in intercultural education policies. Another is the strengthening of Indigenous organizations and local communities, towards the support of intercultural education processes, as well as education councils, differentiating them at the local, regional, and national scale. Intersectoral policies that connect educational processes developed at multiple institutions and for multiple population groups with cultural, economic, and productive sectors are also required. Funding is needed for intercultural education processes in the mediumand long-term. Another gap is the use of participatory curricular models and methodologies that allow those who design and implement intercultural education and capacity building to create spaces for dialogic learning, connected with the territory, with the possibility for technological innovation, and the creation of intercultural education

proposals in the urban Amazon to facilitate continuity and higher education.

Given these needs, a first recommendation is the construction of platforms for knowledge dialogues and decision-making that involves the participation of actors (local, private, public, and academic) that could come together to think through education and pedagogy in the Amazon. Platforms oriented towards knowledge dialogues can be nourished with different methodological proposals developed by local communities that allow the recuperation of knowledge and experiences, which can be put to service for educational projects and capacity building.

Local investigation is part of the recognition that communities are particular universes, with their own histories and accumulated knowledge of the surroundings, constructed through their interactions. To promote local research, it is necessary to generate ideas on the use of the content developed through the research and the possibilities to strengthen ongoing local projects with the information compiled. Also it is important to identify the knowledge holders with whom the local research will be carried out (Van der Hammen *et al.* 2012).

The systematization is oriented towards identification of emergent learning from the experiences of teachers and students. This type of systematization establishes the reconstruction and recovery of experiences for the purpose of critically interpreting occurrences. As well as obtaining these, the lessons learned and understandings will allow the improvement of practices; to propose the possibility of learning from the implemented actions implies a potential to transform and share them (Jara 2012). The systematization supposes an active linkage of people that develops intercultural education and that the protagonists of the experience give meaning. The systematization of important experiences of intercultural education and capacity-building, as described in this text, make possible the design of different curricular models in which daily educational experience can strengthen

official proposals. In the same way, the design of training-the-trainer workshops, and the development of pedagogical guides and materials based on significant experiences from the perspectives of teachers and appendices are important opportunities to include diversity and strengthen the formative processes.

Although teachers and technicians who tend to lead training processes have a solid disciplinary training, under this proposal, it is necessary for them to have tools that allow an integrative and interdisciplinary view of reality, including social, political, economic, cultural, and environmental aspects.

Exploring distinct pedagogic and didactic proposals allow the trainer the elements to attempt new forms of teaching, the ability to reflect on their own practice and transform it, the ability to value differences as enriching opportunities, the ability to get to know the students, diversify, and adapt the curriculum, and the ability to propose learning experience pertinent to the context. All these elements are configured in possibilities for education within diversity, assuming that these differences are opportunities to create culturally pertinent and relevant education.

32.7 Conclusion

The Indigenous and local knowledge of Amazonian populations is rarely recognized in formal education processes and capacity building. Such knowledge is not only systematically ignored, but there is also epistemic violence. Through the standardization of curricula and courses required of Indigenous peoples, local, traditional, and rural communities can lead to the erasure and even extinction of a diversity of knowledge that is fundamental for the permanence and survival of these peoples.

With this problem in mind, in this chapter we present important case studies by different authors from different countries, representing regional and sociocultural diversity in the Amazon Basin. We hope that these cases contribute to a greater

reflection about the incorporation of Indigenous and local knowledge in the construction of locally-appropriate education, and that the recognition of the knowledge held by Amazonian peoples is a potent tool for the maintenance of sociobiodiversity in the region.

However, we recognize that there have been a number of successful experiences in the region involving the specificities of Indigenous peoples and local communities that we were not able to include in this chapter. The inclusion of more representative cases from the region was a barrier in the elaboration of the document. Some workshops were held with stakeholders from the region, in addition to direct invitations for authors to contribute cases that presented models for implementing intercultural education in local contexts. Unfortunately, we did not have the expected response within the given time for writing the chapter. One of the recommendations for the next version of this chapter would be the inclusion of more authors representing IPLCs, who can bring more reflections on the implementation of appropriate educational practices.

There is also a gap in the academic literature on the state of the art of intercultural education in the countries of the Amazon Basin and the involvement of IPLCs, both in the development of specific programs and policies as well as in monitoring the implementation of such actions. Further research, as well as the contribution of more authors, mainly Indigenous and from local communities, would be necessary to represent the challenges of implementing intercultural education and strengthening adequate capacities for Amazonian diversity.

32.8 Recommendations

In general, intercultural education and capacity building in the Amazon does not recognize the knowledge, practices, and resources that already exist in the region. Not only has Indigenous and local knowledge (offered by Indigenous people, but also by local communities) been systematically ignored, but there is also an epistemic violence in the

development of educational and capacity-building processes. To address these inequalities and in accordance with the discussions brought by the cases and experiences presented in this chapter, we highlight some recommendations:

- Create participatory intercultural education and linguistic policies that recognize the experiences and efforts that communities and institutions have been developing in these fields. Likewise, guarantee the participatory implementation of these public policies.
- Create intercultural education proposals in the urban Amazon and bridges that facilitate continuity to reach higher education.
- Create and strengthen interdisciplinary and participatory Amazon research involving IPLCs that can help us understand and confront the changes that the Amazon is going through.
- Create spaces for intergenerational transmission of traditional and contemporary knowledge to strengthen local, technical, and scientific capacities to face the regional problems of the Amazon.
- Strengthen local governance and political-administrative autonomy for the development of education programs and the implementation of intercultural education and linguistic policies.
- Design participatory curricular models and pedagogical support material based on ILK, with the possibility for technological innovation, to avoid standardized curricula and highlight the culture and knowledge in the local context.
- Create spaces for the exchange of experiences in intercultural education in the Amazon and experiences from mainstream society to expand knowledge about the region, its knowledge, practices, threats, and diversity.

32.9 References

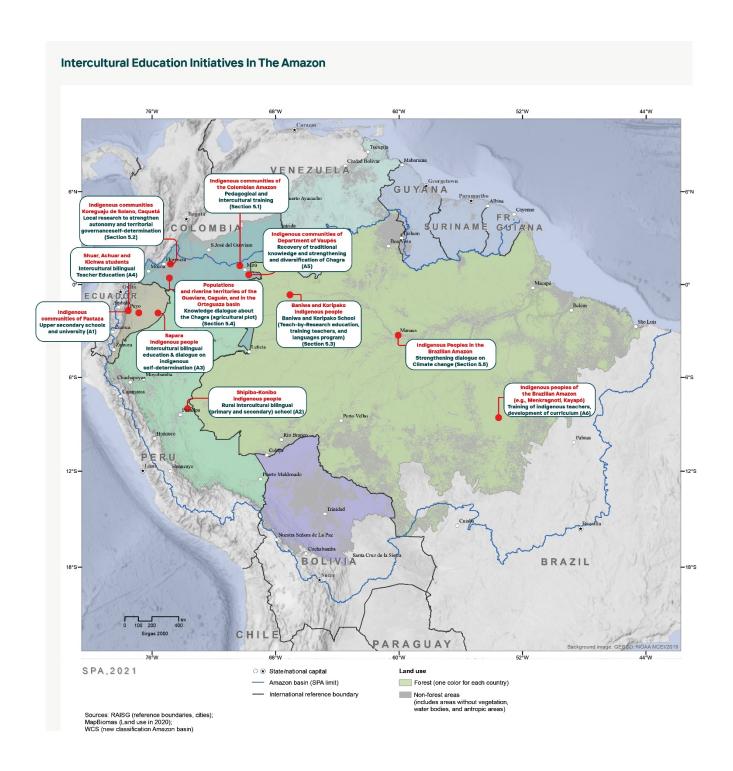
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Annex 32: Cases & Experiences in Intercultural Education in the Amazon



A32.1. Objective 4+: Eco-cultural pluralism in quality education in the Ecuadorian Amazon

Contributor: Paola Minoia

Organization: University of Helsinki

Location of the initiative or project: Pastaza Prov-

ince, Ecuador

Description of the project or experience: Access to scholastic and university education is seen as the main means to empower marginalized groups and enhance sustainable development in the Global South. In Ecuador, the intercultural bilingual education program that affirmed the fundamental importance of the integration of diverse local languages, knowledge, and pedagogical practices in education was established as early as 1993 and later modified based on the philosophy centered on the community, the ecological balances, and the culturally sensitive philosophy of sumak kawsay or buen vivir. The program is still only partially implemented, and therefore education generally follows homogenized standards and does not include specific cultural realities, placing Indigenous nations in an unfavorable position compared with the majority of the mestizo population.

The project expands upon Sustainable Development Goal 4 (Quality Education), through the promotion of cultural diversities, which include ecological cultures, and also the recognition of Indigenous pedagogies, which should be included in the programs to reinforce educational quality in the Ecuadorian Amazon. The inclusion of ecological aspects is important for Amazonian Indigenous groups who have strong connections to the land and natural resources, currently threatened by illegal logging, oil extraction, hydroelectric projects, and climate change. Defending eco-cultural diversity means protecting both the Amazon's delicate environment and the survival of Indigenous peoples threatened by poverty and cultural disappearance.

The 4-year project (2018–2022) was funded by the Academy of Finland and the Ministry of Foreign Affairs of Finland (Develop Program n.318665) and was carried out in close collaboration with Ecuadorian researchers from the Amazon State University who have established connections with Indigenous communities.

Target Communities and Number of People Reached: Indigenous Communities of Pastaza

Goals: The project is divided into four objectives aimed at

- Evaluating the spatial-temporal access of Indigenous youth to upper secondary schools, universities, and workplaces.
- Understanding how the principles of eco-cultural diversity and sumak kawsay are respected and realized in education and university programs.
- Studying the transition of Indigenous students to tertiary education or working life from upper secondary schools.
- Analyzing bilingual intercultural education policies and establishing a research network on Indigenous and intercultural education.

All objectives pay attention to gender-specific challenges in intercultural education. The data consists of educational materials and documents, interviews, observations, photographs, videos, drawings, and GPS points collected and analyzed using mainly qualitative and participatory approaches.

Strategies and Challenges: Collaboration with universities and Indigenous organizations.

Key Results: Interculturality in universities, improved access to higher education for all.

A32.2. Intercultural bilingual education in the transition from primary to secondary school

Contributor: Thais de Carvalho

Organization: School of International Development, University of East Anglia

Location of the initiative or project: Calleria, Ucayali, Peru

Description of the project or experience: Participant observation for 7 months in the region of Ucayali, with immersion in a rural intercultural bilingual school in Peruvian Amazon, and focus groups with Shipibo school evaluators.

Target Communities and Number of People. The village has a total of 73 children at primary school, but the case study discusses the reality of intercultural education in rural schools for the Shipibo–Konibo people (which has a population of at least 45,000).

Goals: Identify challenges and contradictions of the intercultural education system.

Strategies and Challenges: Reflect on how to incorporate participatory values and Freirean pedagogy in hierarchical settings.

Key Results: There is a paradox in the aspirations of parents and Indigenous organizations. This is not well incorporated by the State, and there is a lack of reflection on the racism of State institutions that regulate intercultural education

A32.3. Education and Indigenous territorial struggles: A study of the Sapara people's experiences with the education system in the Ecuadorian Amazon

Contributor: Riikka Kaukonen Lindholm

Organization: University of Helsinki

Location of the initiative or project: Pastaza Province, Ecuador

Description of the project or experience: I conducted ethnographic research collaborating with members of the Sapara nation in the Ecuadorian

Amazon. The research investigated the experience of the Sapara people with intercultural bilingual education in Ecuador and its relation to their territorial rights and struggle for self-determination. This investigation was part a Master's thesis and book chapter (in production). Future research concerning Indigenous self-determination with the Sapara is ongoing as part of a doctoral dissertation.

Target Communities and Number of People Reached: 27 people in four Sapara communities (Llanchamacocha, Cuyacocha, Jandia Yacu, and Atatakuinja), university students from Universidad Estatal Amazonica, and teachers in IBE Amauta Ñampi (Puyo).

Goals: Identify which educational practices strengthen political emancipation and territorial self-determination of Indigenous peoples and understand the challenges faced by Indigenous groups in identifying and implementing such practices.

Strategies and Challenges: Ethnographic research (semi-structured interviews and participant observation); securing access to the field and limited time available for research in remote communities.

Key Results: Indigenous political institutions can be supported when the education system respects Cultivating culture. Indigenous knowledge in the education system can strengthen and revitalize cultural expressions of the Sapara, including decision-making practices that can contribute to political emancipation and territorial self-determination. Furthermore, Saparas emphasized how their holistic and relational world-view, which includes values and a vision for themselves. should be conveyed to future generations. In this project, education is indispensable. However, Indigenous knowledges should be integrated in a manner that does not fragment, decontextualize, or severe links to community and relations, where knowledge is traditionally shared, since relationships and holism are innate qualities of knowledge, without which it loses its meaning. Furthermore, a

vision that Saparas hold for education would support different epistemologies as complementary. Hence, Saparas appreciate learning aspects of Western science that they perceive as valuable assets in the globalized reality that they face. In this sense, education can further serve as a cultural broker that prepares Saparas with tools and knowledge to understand and navigate both worlds. However, the most important way in which education could strengthen Indigenous territorial selfdetermination and political emancipation, advocated furiously by many interviewees, is how it should be organized locally, in a respectful manner, and within the context of local particularities. Only in this manner can groups such as the Sapara truly transfer knowledge to their children, avoid the problems caused by migration, and reduce the monetary demands that come from intensified contacts with the capitalist mode of production. In practice, this means that the Sapara people themselves would have a greater autonomy and would meaningfully participate in the development of educational content. This also requires respect for the historical and geographical contexts that the Sapara people face. Historically, Saparas have been great in number, but tens of thousands were decimated as a result of disease, assimilation to other Indigenous communities, enslavement, and forced migration. Today, the Sapara people number around 200-300 individuals, the smallest Indigenous nationality in Ecuador. This poses considerable challenges for education and cultural revitalization, which depends on respect for their special condition. This also requires that education not be centralized, as this enables the Sapara people to practice their livelihoods and students to learn also outside of the school together with their community.

A32.4. Revival and regeneration of indigenous knowledge in intercultural bilingual teacher education: a study in the Ecuadorian Amazon

Contributor: Tuija Veintie

Organization: University of Helsinki

Location of the initiative or project: Pastaza Province, Ecuador

Description of the project or experience: Doctoral research on Intercultural Bilingual Teacher Education. Empirical study conducted in the Pastaza Province in Ecuadorian Amazon in 2007–2010.

Target Communities and Number of People Reached: Target communities: 3 (Kichwa, Shuar, and Achuar)

Goals: This study examined how Indigenous knowledge is recognized and incorporated into a teacher education program targeted at Indigenous Shuar, Achuar, and Kichwa students.

Strategies and Challenges: The field study was conducted in one intercultural bilingual teacher education institute with students who self-identify as Kichwa, Shuar, or Achuar, and educators representing Indigenous and non-Indigenous people. This qualitative interpretive study involved ethnographic fieldwork with observation in the classroom and outside school hours, interviews with students and teachers, and participatory photography and photo-elicitation. Coding and interpretive analysis of the data was conducted through inductive and theory-oriented readings. During the time conducting this research project, the Ecuadorian government initiated a major reform in education, causing instability in the activities of the intercultural bilingual teacher education institute.

Key Results: This study showed that the Shuar, Achuar, and Kichwa teacher education students conceptualized knowledge and learning primarily through their everyday domestic life, and schooling seemed to play a secondary role. Both the students and the educators were concerned about the amount of theory-oriented education in schools, and believed that learning through observation and practice, hands-on activities, and manipulative educational materials was culturally pertinent for Indigenous students. Interview data show that many of the Kichwa, Shuar, and non-Indigenous

teacher educators in the IBTE institute were committed to reasserting and supporting the revival of Indigenous knowledge. Furthermore, these educators perceived Indigenous knowledge as an important resource in terms of confirming Indigenous identity. The interviews and observations showed that the educators promoted Indigenous knowledge in their instruction, particularly by bringing students' knowledge into the classroom, using culturally-relevant instruction methods, and connecting with the Indigenous community. The non-Indigenous educators sought Indigenous knowledge from books, the Indigenous community, and the students, and used instructional methods, such as hands-on activities and group work that they considered culturally pertinent to the students. The Kichwa and Shuar educators drew on their own life experiences, knowledge, and Indigenous oral tradition in their classroom instruction. The observation data also showed some examples of educators furthering dialogue between Indigenous and non-Indigenous knowledge, which offered opportunities to regenerate Indigenous knowledge by creating knowledge in between diverse epistemologies. The study indicates that more effort is needed to develop instructional practices that would better reflect Indigenous epistemologies. The Shuar, Kichwa, and non-Indigenous educators, and the Shuar, Achuar, and Kichwa students discussed, for instance, the relevance of connecting instruction with the Indigenous community and learning through exploration. However, based on observations, connections with the community or learning through exploration were not among the common instructional practices at the teacher education institute. The data showed that the incorporation of Indigenous knowledge into instruction forms a challenge for educators because of the lack of adequate educational materials, insufficient or lacking initial or inservice education related to Indigenous students and intercultural bilingual education (IBE), and the lack of educators' understanding of epistemological diversity and Indigenous knowledge. Furthermore, IBE teacher educators' cultural, linguistic, and educational backgrounds vary, as does their commitment to IBE and their preparedness and

willingness to break with the epistemological hierarchy and strive for epistemological justice by promoting Indigenous and alternative knowledge, ways of thinking, and instruction practices.

A32.5. Contribution to the recovery of the knowledge of the *chagra* of Indigenous communities of the department of Vaupés as a model of intervention in the production of self-consumption

Contributor: Camilo Jaramillo Hurtado

Organization: Corporación Selva Húmeda NGO

Location of the initiative or project: Township of Yabarate. Papunahua and Pacoa, Department of Vaupés.

Description of the project or experience: Provide temporary support to families through resources and interventions to meet the minimum conditions for quality of life that are not covered in conventional assistance programs; develop a framework of co-responsibility with the users so that the families overcome their situation of vulnerability and poverty.

Target Communities and Number of People Reached: Approximately 1,044 families.

Goals: Contribute to the recovery of traditional knowledge, and strengthening and diversification of the *chagra* of Indigenous communities as a model of intervention in the production of self-consumption.

Strategies and Challenges: The project is adapted from the precepts of the conventional lines of the Food Safety net (Red de Seguridad Anlimentaria [ReSA]) and the social prosperity philosophy, which is aimed at improving food production processes through the strengthening of traditional agroecological practices, local seed saving/production, and promoting healthy eating habits.

Key results: 1. Socialization, consultation with traditional authorities. 2. Develop a model of intervention in food and nutritional security, according

to the dynamics of the territory and cultural characteristics of the Indigenous population. Four routes were established and include the following topics: a. Socialization of the project and diagnosis of communities. b. Preparation of organic fertilizers and seedbeds. c. Strengthening and/or preparation of the farm and delivery of supplies. d. Healthy habits and lifestyles. 3. Contribute to the strengthening of 1,044 chagras of the prioritized communities in order to improve the conditions of access to food. 4. Deliver the prototype of inputs adapted to the geographical and environmental conditions of the area. 5. Promote clean food production methods among participating families (i.e. quality, safety, and nutritional value). 6. Generate skills and capacities focused on collective work, preservation of the culture and food heritage of the community, and good eating habits in families. 7. Strengthen the social and community fabric around ancestral values and traditions, autonomy, and the rights of the community.

A32.6. Bilingual, culturally adapted education for Indigenous peoples in Brazil.

Contributor: Lars Lovold

Organization: Rainforest Foundation Norway

Location of the initiative or project: Bilingual, culturally adapted education for Indigenous peoples in Brazil.

Description of the project or experiences: Training of Indigenous teachers, development of curriculums, production and printing of education materials in Indigenous languages and Portuguese.

Target Communities and number of people Reached: Many Indigenous communities during the 1990s and early 2000s.

Goals: Obtain the right to culturally-differentiated and socially-relevant education for Indigenous peoples in Brazil.

Strategies and challenges: Develop a series of pilot experiences, gradually obtaining financial and political support from the relevant municipalities and states; having a continuous dialogue with the Ministry of Education to get formal approval for curricula, education materials, etc.

Key results: Indigenous teachers trained, education materials developed, public support for Indigenous schools obtained, the right to culturally differentiated education obtained.

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