The Galapagos Island Education System: Results of the Listening Phase, July 2014
Acknowledgements

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# Table of Contents

Executive Summary.................................................................................................................. 4

Part I: Introduction.................................................................................................................. 5

Part II: The Diagnostic Framework......................................................................................... 8

Part III: Relevant background Information............................................................................. 11

Part IV: Summary and Analysis of the Observations of the Listeners................................. 15

A. School Leadership.............................................................................................................. 15
B. Professional Capacity........................................................................................................ 19
C. Relationships within the School....................................................................................... 23
D. Parents and Community Relationships with Schools..................................................... 26
E. Incentives.......................................................................................................................... 30
F. Helpful Mechanisms......................................................................................................... 32
G. Outside Environment/Everything Else............................................................................. 36

Part V: Plan for the Education Improvement Initiative....................................................... 39

Bibliography............................................................................................................................ 45

Appendix 1: Members of the Listening Team........................................................................ 48

Appendix 2: Detailed Explanation of the Diagnostic Framework......................................... 50

Appendix 3: Designing Effective Professional Development............................................... 55
**Executive Summary**

In July 2014, Galapagos Conservancy (GC) and the Scalesia Foundation (SF) facilitated a five-day observation and data collection process designed to make an initial assessment of the state of education in Galapagos. The process, referred to in this report as the Listening Phase, was the result of dialogue initiated in early 2012, following a weeklong, multi-sector visioning workshop in Galapagos funded by the Helmsley Charitable Trust. At that time GC, SF, and the Ecuadorian Ministry of Education (MoE) began to discuss ways to work together to strengthen education in the Islands.

The Listening Phase was carried out from July 13-19 by a team of educators (referred to as Listeners) with expertise in priority areas identified by the MoE: natural science, English language, language arts, and educational leadership. Listeners conducted learning walks at 14 of the 20 schools offering preK-12 education on Santa Cruz and San Cristobal, interviewed all school directors on these islands, and conducted focus groups with teachers, parents and students from each school.

The framework used to guide observations and analysis was based on the work of sociologist and organizational development practitioner Marvin Weisbord and the research of Tony Bryk and colleagues from the Chicago Consortium for School Research (Weisbord 1978; Bryk et. al. 2010), focusing on seven areas of activity that have been identified as critical to school effectiveness: 1) School leadership, 2) Professional capacity of teachers, 3) Relationships within schools, 4) Parent and community relationships with schools, 5) Teacher incentives, 6) Helpful mechanisms, and 7) Outside environment.

Based on the Listening Phase, it is recommended that GC, SF and the MoE explore the possibility of a five-part school improvement program to be conducted over a five-year period. Components include:

1) Demonstration School and Education Support Team. Local capacity to support and sustain an education improvement program would be established through: a) a demonstration school for professional practice, and b) a Galapagos-based Education Support Team to coordinate project activities with the Ministry, to provide ongoing mentoring and support, and to sustain the improvement efforts beyond the five-year project timeframe.

2) Instructional Leadership. School leadership would be strengthened through an instructional leadership program for directors and by developing a culture of continuous improvement in the schools through leadership teams that include directors, teacher leaders, and eventually parents.

3) Subject-specific professional development. Improved instruction in literacy (English and Spanish), math, and science would be achieved through subject-specific professional development, including workshops and ongoing mentoring that follow the directives of the Ecuadorian curriculum.

4) Extra-curricular education. Technical assistance would be provided to extracurricular education initiatives of schools and other organizations to optimize out-of-classroom learning and to connect these activities with the learning objectives of the formal curriculum.

5) Program Monitoring and Evaluation. A monitoring and evaluation program would be developed to optimize program delivery and to document impact on teacher and director practices as well as student learning.

These interventions would build on MoE priorities and would be designed based on research evidence collected from numerous studies over several decades, which has identified key features that have the greatest impact on education quality. Funding could be provided by a combination of MoE, fees for service from schools, and grants from individuals, businesses and foundations.
Part 1: Introduction

This report presents the findings of a five-day observation and assessment process (referred to in this document as the Listening Phase) undertaken in July 2014 by Galapagos Conservancy (GC) and the Scalesia Foundation (SF), with technical support from the Consortium for Policy Research in Education (CPRE), and an international group of educators identified by GC and SF, and Ecuador’s Ministry of Education (MoE). The purpose of the Listening Phase was to gather data to allow for an initial assessment of the state of the education system on the Galapagos Islands and to identify strategies and potential opportunities of collaboration to improve preK-12 education. The intended audiences for the report are the MoE, the Galapagos educational community, and potential donors and technical collaborators.

GC, a US-based conservation organization, and the SF, an Ecuadorian foundation registered with the MoE, believe the quality of the local education system is among the most important factors determining the future of Galapagos. Whether Galapagos remains the world’s most environmentally intact oceanic archipelago or not depends in large part on how well resident youths are educated to understand and assume their pivotal role in shaping a sustainable society in the Islands.

This belief in the importance of improved education to the sustainability of the Galapagos Islands is shared by the international community. In fact, in 2007, when considering placing Galapagos on the List of World Heritage Sites in Danger, UNESCO identified 12 strategic areas, including education, in need of urgent attention. In the area of education, the report noted the absence of a “comprehensive strategy for building the capacity of permanent Galapagos residents so that they may be better prepared for employment opportunities that have traditionally been filled by non-residents.” It also observed that “The education system has not been reformed as required under the Special Law for Galapagos, and as yet does not incorporate elements of environmental management and heritage preservation, and natural resources conservation development, further delaying the critical need to develop an insular culture” (UNESCO, 2007).

Although in its 2010 Mission Report the UNESCO committee documented advances in many areas, it also noted a lack of progress in the area of education: “It will probably take another generation to address education issues and the need to develop local capacity.” The report indicated a need to better match education with local labor market demands and suggested focus on skills needed in business administration, natural resources management and hotel management. It also stressed the need for greater emphasis on English language education (UNESCO, 2010).

In 2010, during a weeklong multi-sector visioning workshop funded by the Helmsley Charitable Trust, GC, SF, the MoE and members of the Galapagos education community began to discuss ways to work together to strengthen education in the Islands. While this dialogue generated ideas and enthusiasm, all parties agreed that external expertise was needed to help define the best path forward.

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1The Consortium for Policy Research in Education (CPRE) brings together education experts from renowned research institutions to contribute new knowledge that informs PK-16 education policy and practice. Institutional members include University of Pennsylvania, Columbia University, Harvard University, Stanford University, University of Michigan, Northwestern University, University of Wisconsin-Madison.
In May of 2014, the MoE signed an agreement with GC and SF authorizing these organizations to conduct a needs assessment for a future PK-12 school improvement program in Galapagos. GC and SF then met with representatives of CPRE at Teachers College, Columbia University in New York, to discuss strategies for designing such a program.

The first phase of data collection came to be known as the “Fase Escucha” (the Listening Phase), underscoring a collective belief that school directors, teachers, and other local stakeholders must play a central role in the early phase of project development and planning in any school improvement program.

The Listening Phase was designed to gather qualitative data on the islands’ preK-12 educational systems in areas identified as priorities by the Ministry of Education: natural sciences, English language and language arts. Data collection involved interviews with education officials and school directors, school and classroom visits, and focus groups of teachers, students, and parents.

The Listening Phase took place from July 13-19, 2014. Participants were Dr. Diego Roman (Assistant Professor at Southern Methodist University—focus on English language and natural sciences), María Cristina Cortez (Instituto de Enseñanza y Aprendizaje/Universidad San Francisco de Quito—focus on language arts and work group facilitation), Dr. Jessica Ivonne Duchicela (Assistant Professor at the Universidad de las Fuerzas Armadas, Ecuador—focus on natural sciences), Dr. Susan Huss-Lederman (Associate Professor at the University of Wisconsin Whitewater—focus on English language), Dr. Nick Cabot (Clinical Assistant Professor at the University of North Carolina at Chapel Hill—focus on natural sciences), William Stroud (CPRE—focus on educational leadership and program design), and Adriana Martín del Campo (Instituto Thomas Jefferson Valle Real, Guadalajara, México—focus on language arts). Amelia Faber, an undergraduate student who represented Dr. Nicole Ardoin (Assistant Professor at Stanford University), accompanied the group and following the Listening Phase collected data related to environmental literacy. The group was accompanied throughout the week by Alia Hassan (the Ministry of Education’s Director for International Cooperation), Richard Knab (GC’s Director of Strategic Partnerships), and representatives of the SF (who oversee the Tomás de Berlanga School in Galapagos). For biographies of the participating educators, see Appendix 1.

Members of the Listening Team organized into groups of two or three people. Each day, the groups conducted visits to at least two different schools in the morning and participated in two different afternoon focus groups of teachers, parents, students or school leaders. Members of the team also met with local Ministry officials. At the end of each day, researchers met to discuss impressions.

The Team visited 14 of the 20 schools offering preK-12 education on Santa Cruz and San Cristobal and interviewed all school directors on these islands. All schools marked in red in Table 1 were visited during the Listening Process.

After the Listening Phase, participants summarized the information they gathered and sent those reports to CPRE, who facilitated the synthesis and analysis of observations and the elaboration of recommendations.
Table 1: Galapagos schools offering general education (PK-12)*

<table>
<thead>
<tr>
<th>CANTÓN</th>
<th>NAME OF SCHOOL</th>
<th>GRADES TAUGHT</th>
<th>TYPE OF INSTITUTION</th>
<th># STUDENTS</th>
<th># TEACHERS</th>
<th>STUDENT:TEACHER</th>
</tr>
</thead>
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<tr>
<td>SANTA CRUZ</td>
<td>JULIO HUMBERTO PUEBLA</td>
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<td>Public</td>
<td>44</td>
<td>3</td>
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<td></td>
<td>CASTELLANOS</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>RUNAKUNAPAX YACHAY</td>
<td>PK-0 / 1-7 de Básica</td>
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<td>177</td>
<td>12</td>
<td>15:1</td>
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<tr>
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<td>GALO PLAZA LASO</td>
<td>PK-12 / 1 de Básica - 3 de Bachillerato</td>
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<td>656</td>
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<tr>
<td></td>
<td>NACIONAL GALAPAGOS</td>
<td>7-12 / 8 de Básica-3 de Bachillerato</td>
<td>Public</td>
<td>840</td>
<td>46</td>
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<tr>
<td></td>
<td>CAUPOLICAN MAREN</td>
<td>PK-6 / 1-9 de Básica</td>
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<td>14</td>
<td>13:1</td>
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<td></td>
<td>MIGUEL ANGEL CAZARES</td>
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<td>422</td>
<td>23</td>
<td>18:1</td>
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<tr>
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<td>PK-12 / 1 de Básica - 3 de Bachillerato</td>
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<td>1,113</td>
<td>55</td>
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<td>Private</td>
<td>177</td>
<td>19</td>
<td>9:1</td>
</tr>
<tr>
<td></td>
<td>ADVENTISTA LOW LINDA</td>
<td>PK-12 / 1 de Básica - 3 de Bachillerato</td>
<td>Private</td>
<td>344</td>
<td>22</td>
<td>16:1</td>
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<tr>
<td></td>
<td>DELIA ISBARRA DE VELASCO</td>
<td>PK-6 / 1-10 de Básica</td>
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<tr>
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<td>ALEJANDRO ALVEAR</td>
<td>PK-6 / 1-10 de básica</td>
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<td>30</td>
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<tr>
<td></td>
<td>PEDRO PABLO ANDRADE</td>
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<td>Particular Láico</td>
<td>271</td>
<td>25</td>
<td>11:1</td>
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<td>Total S. Cristobal</td>
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<td>6to de Básica-3ro de bachillerato</td>
<td>Fiscopolicial</td>
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<td>7</td>
<td>1</td>
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</table>

* Sources: Exposed Ministry of Education 2014
Part II: The Diagnostic Framework for the Galapagos Listening Phase

The Listening Phase Framework

The framework chosen to guide observations and subsequent analysis of the Listening Team draws on the experience of experts in organizational development as well as an empirical theory based on research on school improvement conducted in the United States, which CPRE has found useful to apply in analysis of educational systems in other countries and cultures.

The primary source for this framework is a seminal book on organizational diagnosis written by sociologist and organizational development practitioner, Marvin Weisbord. However, revisions were made to Weisbord’s six-box theory, which is founded on research on organizational development in many fields, based on the empirical studies of school development conducted by Tony Bryk and colleagues from the Chicago Consortium for School Research. Although developed 30 years apart and based on different sources of evidence, the two frameworks are remarkably similar and taken together provide a useful framework for understanding schools as organizations (Weisbord, 1978; Bryk et al., 2010).

Figure 1 depicts the CPRE Framework used for data collection during the Listening Phase. Its seven dimensions include:

1. **School Leadership.** Research identifies the following as essential leadership tasks: 1) defining purpose, 2) embodying purpose in programs, 3) ensuring quality of teaching and supporting improvements in teaching, and 4) maintaining order with respect to internal conflict. Studies also point to the important role of inclusive leadership and the director’s ability to cultivate a team of leaders that develop a sense of shared responsibility for school improvement (Burke, 1992; Selznick, 1957; Bryk et al., 2010).

Relevant questions in this area included:

- Is there a clear vision for the school?
- What is the typical form of leadership?
- How are decisions affecting teaching and learning made?
- To what extent, and in what ways, are formal leaders involved in instruction?
- Do teachers have a voice in decisions affecting teaching and learning?
- Are there formal leadership roles for teachers?

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2 For a more detailed explanation of how the Weisbord and Bryk models were adapted for the Listening Phase, see Appendix 2.
2. **Professional Capacity.** Bryk et al. (2010) describe schools as “human resource-intensive enterprises that are only as strong as the quality of faculty, the professional development that supports their learning, and the faculty’s capacity to work together to improve instruction.”

Relevant questions in this area included:

- What is the quality of the professional staff?
- Do they hold degrees in their fields of teaching? Are they teaching in their fields?
- What is the quality of the observed instruction?
- Are classrooms active? Is the observed teaching student-centered?
- What is teachers’ access to professional development? What is the perceived quality of the professional development?
- Are teachers willing to try new approaches?
- Is there a sense of professional community?
- Do teachers collaborate on lessons? Do they observe each other? Do they share lessons and materials? Are there regular meetings to discuss teaching and student progress?

3. **Relationships in the School.** According to Singh (2010), Weisbord points to the importance of relationships between peers, supervisors and subordinates, as well as between units or departments that perform different tasks.

Relevant questions in this area included:

- What is the relationship between administration and teachers? Between teachers and parents? Between students and teachers?
- How interdependent are the different people and roles?
- How are conflicts mediated?
- How is cooperation encouraged and supported?
- What are the issues that bring people together and what are the issues that push them apart?

4. **Parent and Community Relationships with Schools.** Bryk et al. (2010) highlight the importance of trusting relationships between schools, parents and communities that are focused on strengthening student learning. Additionally: 1) teachers need to be knowledgeable about student culture and the local community and draw on these in their lessons; 2) school staff must reach out to parents and community to engage them in the process of strengthening student learning, and 3) schools should draw on a network of community organizations to expand services for students and their families.

Relevant questions in this area included:

- What roles do parents and community play in the schools?
- What are the mechanisms for communication with parents and community members?
- How do the schools encourage collaboration with parents and the community?
- How do the schools manage conflict among staff and between teachers and parents?

5. **Incentives.** Research shows that although both monetary and emotional incentives can be effective motivators, the latter often brings better results (Kotelnikov, 2008, cited by Allred et al., 2008).
Relevant questions in this area included:

- Are there rewards for doing all that needs doing?
- Are teachers recognized and praised for good work?
- Are there sanctions for failing to do what is expected or required?

6. **Helpful Mechanisms.** Bryk et al. (2010) highlight the importance of timely access to information on teacher and student performance, and to coherent instructional guidance systems that articulate the “what” and “how” of instruction, such as professional development, teaching materials, and instructional routines.

Accordingly, Listeners sought to answer questions such as:

- What supportive mechanisms are available to leaders and teachers?
- Do principals and teachers have access to data on student performance that can identify needs and guide interventions? Is the available data used to focus improvement efforts?
- Are there lesson plans?
- What forms of instructional guidance are provided?
- Are there adequate instructional materials available to teachers?
- Are there computers in the classrooms or available to teachers, to students?

2. **Outside Environment/Everything Else.** Bryk et al. (2010) identified the importance of various aspects of the community context (available resources, social capital, etc.) that could impact school performance. CPRE expands this concept to include external policies and professional cultures that also may be crucial to schools in Galapagos.

In this area, relevant questions included:

- What are the most critical aspects of the school context?
- What other policies, practices and organizations deeply affect the operation of the schools?
- Is there variation across schools in these external influences?
- What other influences should be taken into account in planning an improvement project?
Part III: Relevant Background Information

Prior to the Listening Phase, team members received background information to inform their observations. Team members found the following information particularly helpful.

1. The ongoing process of educational reform

Ecuador is now in its 8th year of an ambitious 10-year National Education Plan (*Plan Decenal de Educación del Ecuador 2006-2015*). The eight main goals of this plan include:

1. Achieve universal early childhood education for children under five years of age
2. Achieve universal elementary education through 10th grade
3. Achieve 75% participation in high school (*bachillerato*)
4. Eradicate illiteracy and strengthen adult education
5. Improve educational infrastructure and equipment
6. Strengthen quality and equity of education and establish a national system for evaluating students, teachers and schools
7. Raise the profile of the teaching profession through formal training, ongoing professional development and better work and living conditions
8. Increase educational investments to 6% of GNP

Implementation of these strategic goals has required major initiatives, including: the development of a new national curriculum and supporting textbooks, guides and teaching tools; the launching of a new Teacher’s University (*Universidad Nacional de Educación/UNAE*); the creation of a semi-autonomous evaluation entity (INEVAL) to conduct student, teacher, director and school assessments; and the establishment of a national on-line system for enrollment and student record-keeping. This has been an extremely busy time for the Ministry of Education. While substantial progress has been made towards most of these goals, some of the educational infrastructure that is being established will take time to become fully functional.

2. Legal and governance issues in Galapagos

The Special Law for Galapagos (*Ley Orgánica para el Regimen Especial de Galapagos—LOREG*) was approved and became part of Ecuador’s Constitution in 1998. The Special Law establishes a legal framework that regulates many aspects of island life, including regional planning, inspection and quarantine measures, residency and migration, tourism, agriculture, and waste management. The Governing Council of Galapagos (CGG) is responsible for managing these elements and the President of the Council reports directly to the President of Ecuador. While Ministries, such as those of Education and Environment, remain responsible for activities in their respective areas, there is a growing emphasis in Galapagos on coordination of programs and activities.

In the area of education, the 1998 Special Law called for Integrated Educational Reform for Galapagos that was to include: greater local authority to deal with administrative and pedagogical matters in Galapagos; curricula designed to address special needs in the islands, at all educational levels; specific attention to environmental protection in formal education and extracurricular activities; and higher salaries for Galapagos teachers.
A new version of the Special Law is currently under review. In the area of education, it appears that the new law will call for Galapagos education to adhere to the Organic Law for Intercultural Education (LOEI) and the priorities of the national education reform process, as opposed to the specialized and decentralized approach outlined in the 1998 Special Law.

3. Population and living conditions in Galapagos

According to the 2010 Galapagos Census, the total population in the Archipelago is just over 25,000 individuals distributed on three islands: San Cristobal 7,500 (30%); Santa Cruz 15,250 (61%); Isabela 2,250 (9%). Approximately 100 people live on Floreana Island, which forms part of the Municipality of San Cristobal. People reside in just 3% of the land area of Galapagos; the remaining 97% is designated as protected area of the Galapagos National Park (INEC, 2010).

Much of the current population arrived in Galapagos during the 1990s and 2000s, in response to poor economic conditions on the mainland and employment opportunities related to tourism. While migration to Galapagos is being regulated much more closely than in previous decades, 74% of those living in Galapagos are migrants and 35% of children under the age 11 were born outside of the Islands (INEC, 2010). Consequently, many observers agree that there isn’t a strong “sense of place” in Galapagos or a deep understanding of/connection to what makes Galapagos special.

According to the 2010 census, Galapagos has a lower illiteracy rate (1.3%) than the national average (6.8%). The number of years spent in school in Galapagos (11.9 years) is higher than the national average (9.6 years). Despite these positive indicators, according to the Ministry of Education’s Office of Continuing Education, only 4.3% of the graduates of Galapagos high schools enroll in university, compared to the national average of 12.2%. This low enrolment contributes to both local population growth and a surplus of non-specialized labor.

While Galapagos is generally considered a safe place to live, high levels of domestic violence against women and children have been reported through the National Census (2011) and by the National Institute of Children and Families/INFA (Maldonado, 2012; Villacis & Carrillo, 2013).

León et al. (2012) report that according to the Unsatisfied Basic Needs Index (UBIN), one in ten people in Galapagos experience sever poverty (lacking access to two or more basic needs) and another 40% experiences non-extreme poverty level (lacking access to one basic need). Adequate sanitary and housing conditions are the most commonly unmet needs.

Access to conventional phones, cell phones, internet, computers and pay TV are all significantly higher in the Islands than on the mainland (Villacis & Carrillo, 2013). However, the reliability of phone and internet connections and the very slow internet connection speeds greatly reduce the effectiveness of these communication tools.

4. The Galapagos labor market

Table 2 compares the labor market structure in Galapagos with the national average for Ecuador. This data reveals a much higher percentage of workers in the public sector (where the Special Law mandates a higher basic wage) and in activities related to the tourism sector.
Education in Galapagos: Results of the Listening Phase

According to 2009 figures, unemployment is lower in Galapagos than on the mainland (4.9% compared to 7.9%), with 51.6% of the total population in the islands reported as economically active, compared to 42.1% on the mainland (Villacis & Carrillo, 2013).

Table 2: Market labor structure by economic activity*
(Source: INEC, Population and housing census, 2010a)

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Ecuador%</th>
<th>Galapagos%</th>
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<td>Wholesale and retail</td>
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<td>12.8</td>
</tr>
<tr>
<td>Public administration and defense</td>
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<td>10.7</td>
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<tr>
<td>Hosting activity and food service</td>
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<td>9.5</td>
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<tr>
<td>Agriculture, livestock, forestry, and fishing</td>
<td>21.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Construction</td>
<td>6.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>5.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Administrative and support services</td>
<td>2.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Teaching</td>
<td>5.1</td>
<td>5.6</td>
</tr>
<tr>
<td>Manufacturing industries</td>
<td>10.2</td>
<td>5.1</td>
</tr>
<tr>
<td>Other activities</td>
<td>22.1</td>
<td>25.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*From Villacis & Carrillo, 2013

Galapagos education

Organizationally, the schools in Galapagos belong to the Ministry of Education’s “Zone 5” in the province of Guayas on the Ecuadorian coast. As such, the Galapagos school calendar follows that of the coastal communities (students in class from May-February) as opposed to the calendar of schools in the highlands (students in class from August-June).

The Ministry’s District Office in Galapagos is located in Puerto Baquerizo Moreno on the island of San Cristobal. The District Office oversees three “circuits”: San Cristobal (which includes the Island of Floreana), Santa Cruz and Isabela. During 2013 and 2014, the District Office was restructured to resemble the District Offices on the mainland, whose responsibilities include:

- Student services: school registration; school transfers, authentication of diplomas, provision of academic transcripts, requests for re-grading of exams, validation of transcripts or diplomas from abroad; receipt of school-related complaints, etc.
- Teacher services: provision of certifications (years of service, remuneration, etc.), Social Security (IESS)-related issues; processing requests for vacation or leave; pay-scale categorization, etc.
- Schools services: requests for institutional documents, textbooks, uniforms and other supplies; requests for contracting personnel; requests for technical support for computer labs; registration of student grades; registration of school organizations (student government, executive council, etc.; authorization of tuition fees; requests for infrastructure and equipment; certification of the status of NGOs working in the area of education; approval of school work plans; financial oversight of education institutions, etc.
The District Office does not currently provide professional development and training for teachers and directors. According to the Ministry of Education, professional development planning is centralized at the Ministry’s offices in Quito and it is implemented by national and international universities with strong professional development programs.

As can be seen in Table 3, Galapagos is relatively small in terms of the total number of schools offering PK-12 education (22), students (7,468) and teachers (471). With the exception of one small school on Floreana Island (28 students and 3 teachers), schools are located on the islands of Isabela, San Cristobal and Santa Cruz.

Table 3: Distribution of Schools, Students and Teachers (PK-12)*

<table>
<thead>
<tr>
<th>LOCATION</th>
<th># S SCHOOLS</th>
<th># STUDENTS</th>
<th># TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. CRUZ</td>
<td>11</td>
<td>4,565</td>
<td>261</td>
</tr>
<tr>
<td>S. CRISTOBAL</td>
<td>7</td>
<td>2,186</td>
<td>162</td>
</tr>
<tr>
<td>ISABELA</td>
<td>4</td>
<td>715</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>7,468</td>
<td>471</td>
</tr>
</tbody>
</table>

* Source: Ecuador Ministry of Education 2014

The only non-governmental organization in Galapagos focused exclusively on education is the Scalesia Foundation, based on the island of Santa Cruz. The SF was established in 1993 by community leaders in Puerto Ayora, Galapagos who were concerned about the poor quality of education in the Islands and who believed that the Foundation could serve as a local voice and champion for education reform. In 1994, the Foundation initiated its first project—the establishment of the Tomás de Berlanga School or TdB School (known in Spanish as the Unidad Educativa Tomás de Berlanga) to serve as an educational alternative for their own children and as a future model of effective educational practices and a platform for training teachers from the growing number of public schools in the archipelago.

In terms of higher education, in 2010 there were four university extension programs offering courses. Despite the challenging internet connectivity, a significant percentage of youth (10%) is enrolled in distance education compared to 1.1% on the mainland (Villacis & Carrillo, 2013).
Part IV: Summary and Analysis of the Observations of the Listeners

The following section of the report summarizes the observations the Listening Team. The findings are organized around the framework described earlier in the report and initial conclusions are provided at the end of each section.

Given the exploratory nature of the Listening Process (Phase I), the Team spent only five working days in Galapagos and school visits and classroom observations were conducted in short blocks of time. Although the evaluation period was limited by design, the members of the Listening Team believe that they were able to secure an accurate and comprehensive snapshot of the current stage of education in Galapagos.

While bright spots where observed and some are reported here, the report focus primarily on areas in need of improvement. These findings will be examined further with the Ministry and local education community in Galapagos during the program design stage (Phase 2).

A. School Leadership

School Directors or Rectors in Galapagos (referred to as Directors in this document), are the primary formal leaders of Galapagos public and private schools.

The MoE explained that public school directors are chosen according to a competitive, merit-based process that considers candidates’ results on psychometric evaluations from a training program for directors. School directors reported in interviews that they learn school leadership “on the job,” mostly drawing from their own previous experience, usually a traditional education and classroom teaching background, rather than from any formal pedagogical or leadership training. Directors of public schools serve for four years and can be reappointed for an additional four years before rotating out of the post.

In the case of the private Tomás de Berlanga School (TdB School), the director is named by the Board of the Scalesia Foundation, which operates the school. Since 2008, the Board has recruited nationally and internationally to fill this position, because of the school’s bilingual approach (English/Spanish) and the Foundation’s vision of eventually developing the TdB School as a demonstration site that can serve as a resource for Galapagos educators.

What does school leadership on the Galapagos Islands look like?

Focus groups with teachers and interviews with directors revealed that the work of the school directors is almost exclusively administrative—focusing on assuring implementation of the Ministry’s education reform program and oversight of personnel and resources. Directors explained that administrative responsibilities alone are a challenge, given the significant, simultaneous changes being implemented by the Ministry. Most directors commented that they are under-resourced to successfully carry out this role.

In other words, most school directors in Galapagos do not seem to be focused on exercising leadership for instructional reform. They do not engage their faculty in discussions about instruction and do not provide professional development beyond the offerings of the Ministry (see comments on professional development in section F). Listeners found that the schools’ specific academic needs seemed unclear to most directors, although many conveyed that they were aware their schools do have them. Directors
expressed awareness that some of the teaching practices in their schools are not “up to date,” without further elaboration.

As one listener reports, “Even at the TdB School, a private school whose Board has made instructional leadership a priority and who has recruited several directors with significant educational leadership experience, it has been difficult to free the director from the demands associated with MoE requirements and administrative and logistical challenges associated with running a school in a remote archipelago. As a result, there has been considerable turnover in the director position at the TdB, often due to frustration on the part of the incumbent related to the difficulty in creating the time and space for focusing on the instructional leadership for which they were hired.”

As evidence of current administrative requirements, in July one director reported that she was simultaneously involved in: updating the school’s Intuitional Education Plan (PEI) based on new Ministry guidelines; developing a risk reduction and safety plan; carrying out a detailed, notarized inventory of equipment and furnishings; providing more detailed documentation of the teaching staff and work assignments; establishing new controls for academic processes (for student monographs, make-up exams, and parent agreements); developing a new action plan for its office of orientation and student well-being; learning about the new student and teacher evaluation system to be implemented; and updating the schools legal documents based on new requirements. While all of the requirements are potentially important, many of them are new and quite complex.

The mode of leadership in most schools in Galapagos might best be described as vertical. With the exception of the larger schools such as the Colegio Nacional Galapagos, where the Vice Rector and Inspector share leadership responsibilities, and there is an individual responsible for managing the International Baccalaureate Program, Listeners did not learn of examples of shared leadership. In a number of cases, teachers assist directors with administrative responsibilities, but the focus groups and interviews did not identify any cases where authority and responsibility was truly shared, either formally or informally. Nor did Listeners learn of examples of inclusive leadership, through which teachers play a significant role in decisions affecting their work. Teachers explained that they are given directives, but they do not participate in the decision-making process. Several teachers commented that they understand that the Education Reform process calls for the implementation of a shared leadership system and a “code of co-existence” designed to promote a more inclusive, team approach that they believe would be more effective in moving schools forward, but have seen no evidence of its implementation in Galapagos.

Listeners observed different management styles among directors. For example, the director of one of the primary-middle schools on Santa Cruz seemed very “parental” (as opposed to paternalistic). He is a very visible principal who was embraced by students as the Listeners walked through school grounds. He spoke with pride about the high level of parental support for the school, his role of resolving conflicts between teachers, and the challenges in providing his teachers the necessary instructional materials. Another director at one of the larger schools appeared to have a much more formal relationship with students and staff and explained that the demands of their position did not allow frequent visits to classrooms. Yet another director, serving in an interim role, is also a classroom teacher and is well known to all the students and teachers in his school.

Despite the lack of shared, inclusive or instructional leadership, the Listeners did report observing engagement, commitment and passion for education in many of the directors they met. They also noted a sense of pride and accomplishment at some schools. One listener reports: “The Colegio Galapagos is
rightfully proud of what it has achieved with its Culinary School and its International Baccalaureate Program. Implementing these programs has required skill, vision, creativity and persistence.”

Several directors expressed the need to receive feedback on their performance in order to improve. Relatively new Ministry policy calls for evaluations of directors to be conducted annually, but this has yet to occur in Galapagos.

_Do schools have a stated purpose or mission? Who develops the school’s mission and vision?_

The Ministry of Education requires all Ecuadorian schools—public and private—to develop and submit an Institutional Education Plan (Proyecto Educativo Institucional /PEI) which is essentially a strategic plan for each school focused on medium and long-term actions designed to assure quality learning and a positive school environment. Beginning with the 2012-2013 academic year, the Ministry launched new guidelines for developing the PEI which call for a collaborative planning process that involves the director, teachers and parents, and the creation of self-monitoring and evaluation plans (Guía Metodológica para la construcción participativa del Proyecto Educativo Institucional. Ministerio de Educación del Ecuador, 2012). Additionally, those involved in the process are encouraged to articulate an “institutional identity” for their school, as well as a school vision, mission, and a plan for school improvements. All PEI’s must include an Institutional Code of Co-Existence—intended to guarantee positive learning environments in each school—and a curriculum map (malla curricular).

Based on conversations with directors, teachers and parents, it appears as though the PEI’s are not yet “living documents” for which the entire community—directors, teachers, parents—feel a sense of ownership. Even in the private Tomás de Berlanga School, where a separate Strategic Plan was developed to complement the PEI, the strategy was developed by a small group of Board members and the school’s mission and vision have not been shared broadly with teachers, parents and students.

Nevertheless, directors and teachers seemed to have a general sense of mission: to prepare students to meet the Ministry’s learning standards and also to inculcate in them a sense of responsibility for preserving Galapagos and to prepare them for work or studies after high school. There is a generalized understanding in the local education community of the need to instill in students the importance of protecting Galapagos as both a world heritage site, worthy of preservation in its own right, and as the foundation for the livelihoods of the residents of the archipelago. However, that goal awaits curriculum and instruction to support it, which directors and teachers feel has not been fully provided.

_Program Coherence_

_What do the curriculum materials look like? Are they appropriate to the goals of instruction?_

Listeners report that the MoE has involved content-area experts and other education professionals to establish reasonable learning standards. It appears also that considerable thought has been given to their progression, sequence and vertical alignment. The curricular materials available to teachers seem aligned with these standards.

However, though the national curriculum outlines what to teach, and provides certain guidance to teachers about how to teach it, teachers have the flexibility to adapt the curriculum to their students’ needs and to the contexts in which they teach. While this flexibility is helpful for well-trained, experienced teachers, the Listeners found that most teachers have received little or no teacher training
beyond their high school and undergraduate years and felt unprepared to teach the new curriculum effectively. This lack of confidence among teachers is worthy of attention, given the lack of instructional leadership in the schools, noted previously.

Several teachers and directors reported that in math and science in the middle school/high school grades there is too much material to be covered in the allotted time; they believe it would be difficult even for an experienced teacher familiar with the curriculum to get through all units in the course of the year. This can result in gaps in students’ preparation for downstream classes.

Nearly all the directors and teachers visited during the Listening Phase mentioned that the revised and adapted curricular materials offered as part of the Integral Education Reform for Galapagos, and called for in the Special Law of 1998, have yet to materialize. At the same time, there seems to be a clear, if uncoordinated, attempt by some teachers to include lessons that align with the needs of the community, in particular, lessons that focus on conservation and citizenship in the context of the islands.

Predictably, there are differing opinions about what the needs of the community are; some teachers and parents described wanting higher standards and a more rigorous, college-prep curriculum, while others called for a vocational track, emphasizing the hospitality industry and job opportunities on the island. There were many areas of overlap, however, including the need for stronger English education and more attention to understanding the unique ecosystems and biodiversity of the Islands.

**Do the goals of the curriculum align with the goals of the community?**

According to representatives of GC, SF (whose board and assembly members include community leaders and leaders in the scientific and conservation sectors in Galapagos), and others interviewed in the Islands, on a conceptual level the new Ecuadorian curriculum is very consistent with the needs of Galapagos. Its integrating theme of the Quechuan concept of *Sumak kawsay* (living in balance with nature), its focus on natural science (essential for understanding and appreciating the unique ecosystems and biodiversity of Galapagos), and added emphasis on English language skills (essential in the tourism, conservation and science sectors) are all highly-appropriate for Galapagos. However, these same informants report that many of these concepts have yet to be put into practice in the classroom, primarily due to lack of guidance for directors and teachers about how to effectively do so.

**What curricular tools and support are available to teachers?**

Ministry-designed texts and teacher and student guides are available to Galapagos schools but, according to teachers and directors spoken to, those materials have been developed in-depth only in the lower grades. Some of the curriculum guides ask teachers to use examples online or instruct teachers to go to a specific website to show students a video, which is virtually impossible due to slow Internet speeds and limited technology resources. It should be noted that the listeners did not examine these materials in detail.

English learners use texts and workbooks from Pearson, an international publisher, but these are not tailored to the interests or needs of the local communities. Many schools are missing elements of the text package (e.g., audio CDs and teaching guides).
Initial conclusions: School Leadership

At present, there is weak coordination and alignment between school leadership and the execution of the schools’ missions. This has resulted in a range of or lack of implementation strategies and, consequently, a wide variation in the quality of the delivery of educational services.

While a number of directors interviewed clearly have the desire and the potential to become strong school leaders, if training could be provided, these same leaders are products of schools that have not benefitted from the kind of effective educational leadership that has been documented as essential to school improvement.

Improving education in Galapagos will require transforming the role of school directors and ensuring their capacity to fill this role. Directors must come to believe that they are capable of affecting positive change in their schools, even in the face of many challenges, such as incomplete teaching tools or the added challenges of running a school in a remote archipelago. A “can do” mindset and culture is essential for school change.

B. Professional Capacity

As stated in the Ministry’s 10 Year Plan, professionalizing Ecuador’s teacher force is a national priority. In the Organic Law for Intercultural Education (LOEI) educators with only a high school teaching degrees were allowed a period of six years to obtain a university-level degree, and teachers not interested in obtaining a new degree or in continuing in the profession were offered the option of early retirement.

Table 4 compares the training of Galapagos teachers to that of their counterparts on the Ecuadorian mainland. While all primary-grade teachers must complete a Ministry-approved teacher preparation program, this is not always the case for secondary teachers who need only a college degree in the content area they teach. Thus, many secondary teachers, in particular, have had no formal training in pedagogy or curriculum. They rely on their own experience as students without the benefit of evidence-based approaches to teaching, and their university training may not have given them mastery over the content of the K-12 curriculum.

<table>
<thead>
<tr>
<th>Level of Training</th>
<th>Galapagos</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school teaching degree</td>
<td>5.7%</td>
<td>6.2%</td>
</tr>
<tr>
<td>University teaching degree</td>
<td>72.8%</td>
<td>66.4%</td>
</tr>
<tr>
<td>Graduate teaching degree</td>
<td>8.0%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Non-education degree (undergraduate or graduate)</td>
<td>13.5%</td>
<td>21.1%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Do teachers feel they and their colleagues are continually learning? Do they have a can-do attitude?

In focus groups, Galapagos teachers reported that they are not continually learning new things because there is a shortage of meaningful and attainable professional development. Limited Internet access makes on-line research and learning very difficult and it is costly, in terms of time and travel, to pursue
professional development opportunities on the mainland. Moreover, they described many of their peers as unmotivated, tired of meetings and of having too many things to do in too little time. One teacher said that she wished teachers realized what valuable teaching resources are to be found in the Islands themselves. However, Listeners did meet a number of resourceful teachers who seemed to be finding ways to develop sound lessons even in the absence of professional development.

**How committed do the teachers seem to be to their schools?**

Many teachers expressed strong commitment to their students, as opposed to their schools, and many also expressed a strong desire to improve as professionals. Some expressed strong commitment to ideals like promoting and modeling environmentalism and lifelong learning. Many expressed passion for teaching in general.

At the same time, many also said they feel tired, not listened to, and poorly paid. Some teachers mentioned that they are eager to retire in order to receive their pensions. Apathy and frustration among some teachers was confirmed by comments from students and parents in the focus groups.

**How is a teacher’s work structured?**

In 2011, the LOEI changed the teacher work schedule to a full 40-hour week. Previously, teachers could go home after classes at 12:30 and were not required to return to schools. Now, teachers must return from 1:30-4:00 to plan, provide remedial support to students, meet with parents, and support student clubs. This represents a major point of contention among teachers, since the change was not accompanied by a pay increase. Almost unanimously, teachers say that they could be much more productive—and would work more than the required 40 hours—if they were given the flexibility to plan and work from home in the afternoons.

Teachers described not having enough time in any given class, to complete a full lesson. The day’s schedule is divided up into nine, 40-minute blocks. There are breaks between two or three consecutive blocks. A typical class meets 5 blocks per week, meaning teachers only have 40 minutes for class each day and 200 minutes per week, which teachers said is not enough time to do much more than the typical teacher-presented lesson. However, some classes will meet for two consecutive blocks (80 minutes) such as for a lab or a test. Teachers said that they would be willing to teach longer class period (50 to 55 min.), but there does not appear to exist any flexibility for schools to make adjustments to this schedule.

**High-Quality Learning and Teaching**

**Is school safe?**

School leaders believe the schools and getting to and from them to be quite safe, because Galapagos is generally a safe environment. While most teachers, parents and students echoed that belief, one of the children from *Escuela Fiscal Runakunpak* said that she does not feel safe walking home from school when it is dark.

However, instances of bullying have arisen lately in several schools across the islands. There is no evidence that directors and teachers are prepared to address this problem if it grows as it has elsewhere
in the world, especially with the advent of increased student access to computers, cell phones and social media.

**Are classroom disruptions affecting learning?**

Listeners observed no significant classroom management concerns with students. However, across the islands, there are significant variations in class size from perhaps only five or six students at a school in the highlands, to 35 students in one math class in Puerto Ayora. Teachers reported that excessive class sizes in some schools are a problem.

While not referring specifically to classroom problems, both teachers and parents said that youths in the islands have too much freedom compared to their counterparts on the mainland and this freedom can manifest itself in behavior issues. Listeners note that even the largest classes in Galapagos could be managed effectively by well-prepared teachers. Reducing class sizes would be costly and, by itself, would not make a significant difference in education quality.

**Did teachers appear to have mastery of their subject matter?**

School leaders, teachers and students all named the need for subject area professional development. English was most often singled out as the area of need—recent TOEFL scores of teachers suggested low English proficiency among teachers across the country, and observers in Galapagos concurred with that result. Teachers reported limited opportunities available to them to practice and develop their proficiency in English.

Listeners did not have access to detailed data about the depth of need for either Science or Math subject area professional development, but one observer reported some errors in one teacher’s lessons in basic mathematical concepts, and several focus groups stated content area development in these areas was also a need.

**How do lessons typically unfold?**

One listener put it this way: “The approach of teachers in almost every classroom we visited was consistent with a very traditional, teacher-centered model of teaching. Much of the instruction was lecture, call-and-response, or undirected questioning—consistent with knowledge retention-oriented learning standards and pedagogy. Most of the teachers observed presented whatever content was on the current page of the student workbook provided by the Ministry of Education. Rarely were students called on directly; rarely did they work in groups, although there were notable exceptions. Teachers were invariably authoritarian but kind; students participated actively.”

The following is an observation one listener felt to be emblematic of the state of science education on the Islands: “A procedure for a soil analysis lab was written on the front whiteboard. Students were to compare five soil samples for porosity, color, texture, and nutrient content. However, no measurements of real soil would be made—students must look up the answers in the book and fill in the table.”

Another listener put it this way: “Teachers do most of the talking. Even when they ask questions and students answer them, teachers did not provide students with opportunities to expand, develop, reflect or explain further their ideas, hypothesis, beliefs, doubts or statements. Most of the students’ work consisted of them copying things from the board or filling out worksheets. There was little evidence of
students creating new material, extending, applying, evaluating, or practicing any other higher level thinking skills.”

A Language Arts teacher observed relied solely on the textbook book and the instructions and activities that are proposed there. Teachers for the most part were using the student textbooks as a script to be read aloud, in essence, lecturing the student with the words on the page then asking students questions in to test their recall of the lecture. That was the predominant mode of instruction in all the schools visited. There was no evidence of leveled reading instruction.

The English teachers observed in public schools showed little use of the Communicative Approach—the pedagogical method advocated by the Ministry of Education—in practice. In this approach, the lesson moves from teacher presentation through controlled and guided practice of the lesson focus (in which students practice language with each other, with the teacher observing and guiding), ultimately to communicative practice in which students are given a task which they complete and then share with the class, with minimal involvement by the teacher. Instead, students had workbooks that they completed or copied work into their notebooks. In one English class, workbooks were marked as correct as long as exercises were completed, regardless of whether or not answers were correct. No oral practice of English was observed.

A notable exception in the area of English language instruction was found at the Tomás de Berlanga School, where staff had considerable experience teaching English as a foreign language. Little or no reliance on textbooks was observed. Instead, teachers guided students in the creation of learning materials (posters and pictures) which were used to scaffold presentations in English. This was the only setting observed during the Listening Phase in which all teachers could communicate extensively and fluently in English. Additionally, in the earlier grades (up to 6th grade) some core subjects were taught in English.

Elsewhere, across subjects, when companion guidebooks for the textbooks were available, suggesting ways to teach, teachers tried to use them. However, without training in these unfamiliar pedagogies—student-centered, inquiry-based lab activities, as one example—teachers reported that they felt unable to use those guidebooks. Instead, they reverted to the familiar lecture/question-for-recall mode of teaching.

One observer pointed out that having teachers shift rooms, rather than the students, seemed to make classroom disruption more likely: “The classrooms, from kindergarten/primero de básica up through high school, are mostly designated by grade, not by subject. Teachers come to the students; students stay in their assigned classroom for the majority of the school day. Classrooms are empty except for the teacher’s desk (with nothing on it), cubbies for backpacks, and student desks. Teachers cannot set up classrooms with materials that are appropriate to their subject matter. Teachers often enter the classroom late, and students are out-of-line even before class starts.”

**Were instances of high quality teaching and learning observed?**

Listeners observed a number of instances of high quality teaching. In one science class about cells, Listeners observed a teacher projecting a diagram of a mitochondrion on a wall-mounted whiteboard and a group of three students explained the steps for energy metabolism in mitochondria. The teacher asked a few clarifying questions and then invited the student audience to comment or ask questions of
the presenters. There was a quite a bit of give and take between the audience and the presenters. The teacher closed the discussion with a call for any further questions.

In another case, the teacher had not yet received his instructional materials from the Ministry so he created the lesson himself. He had provided students with a list of four questions about logarithms that they researched before class. Consequently, there was a wide range of interesting and relevant questions about the use and properties of logarithms, which the teacher integrated into his presentation.

At another high school, a physics teacher described a hands-on project each of his students must complete over the course of a year that demonstrates some principle of physics (e.g., little electric motors, a wind turbine, a Tesla coil, etc.) and utilizes materials that can be found on the Island, including at the local electronics junkyard.

The examples of English instruction at the TdB School noted above were also indicative of high quality teaching.

**Initial conclusions: Professional capacity**

While Listeners identified a number of bright spots across the Islands, most teachers are unprepared to implement effective teaching strategies and instead rely on traditional, knowledge-recall oriented techniques that cannot prepare students to be thoughtful, critical thinkers. Any school improvement program in Galapagos should pay considerable attention to coherent and ongoing professional development opportunities focused on pedagogy and content knowledge, and must recognize the time and support needed to make significant changes in classroom practice.

Listeners report a readiness for dialogue about improving instruction from teachers in all subjects. However, as reported in the case of professional development offered in Galapagos in the area of English by the English Language Fellows Program of the US Department of State (K. Havjovski, personal communications, June 12, 2014) teachers will not necessarily embrace professional development opportunities if their schools do not provide the time, flexibility, and support to do so, and if there are no consequences for not improving, or no incentives beyond one’s own professional growth.

Based on comments of many teachers, it would be useful for a school improvement program to work closely with directors and teachers to identify ways to optimize the use of the afternoon work periods, either for planning, professional development or participation in professional learning communities within and among schools.

**C. Relationships within the School**

The Organic Law for Intercultural Education (LOEI) describes leadership roles in schools (depending on the size of the school, directors/rectors, vice directors/vice rectors, sub directors, inspectors, and subinspectors) as well as the rights and obligations of teachers and mechanisms for resolving conflicts.

**How is collaboration between and among teachers encouraged and supported?**

Teachers are required to plan units and lessons. Some teachers described planning by grade level or subject within schools, but that planning is usually conducted individually. There is no functioning
system for planning with colleagues and observers did not hear about examples of collaboration among teachers being encouraged or supported by school leaders, although several directors agreed that collaboration is important.

Teachers reported while there are limited opportunities for collaboration within schools, there are no opportunities for collaboration between schools. Participants in the focus groups, which were arranged by subject areas with representatives from all schools, repeatedly expressed interest in value of collaboration between schools by subject matter.

One of the factors teachers identified as limiting collaboration was lack of time. Despite the recent addition of the two-hour extra period after lunch, teachers explained they have little time for collaboration. The two hours are set aside for academic support for students, meetings with parents, clubs activities, paperwork, and occasional ministry-facilitated planning sessions. Teachers also commented that professional jealousies hinder collaborative planning and the sharing of information, and that in small schools, teacher collaboration can be complicated by the fact that there aren’t very many same-grade or same-subject teachers with whom to plan or collaborate.

A former trainer associated with the English Language Fellows Program of the U.S. Department of State said he met with only partial success at fostering collaboration and exchange of ideas among teachers (K. Havjovski, personal communications, June 12, 2014). His observations, based on two years of teacher training and mentoring in Galapagos, confirm the findings of the focus groups regarding the lack of opportunities and a culture of collaboration.

Directors also commented they do not have many opportunities to interact or to exchange ideas with other school directors in the Islands.

**Dispositions**

*Do teachers tend to show a lot of confidence, or passivity, or innovation, or joy or ...?*

In focus groups, many teachers expressed a deep commitment to their profession and their students. When asked if they were happy being teachers, Literacy teachers responded with a resounding “yes!” With regards to actual practice, one listener reports: “In classroom observations, teachers seemed engaged, business-like, and attentive to their students—with a few exceptions for teachers who exhibited no “joy” whatsoever. Several teachers observed demonstrated innovation and pro-activeness in the absence of curriculum materials or teaching tools.

On the other hand, outside of class, talking about their work, listeners heard repeatedly from many of the teachers that they feel stifled by issues discussed elsewhere in the report, including their daily schedule, reporting requirements, lack of access to training, and insufficient incentives.

*Does there appear to be a willingness to improve instruction?*

Both teachers and directors verbalized many times the need to improve education on the islands. They expressed their need to learn and to receive support from the Ministry to improve teaching. They asked for feedback on their performance to help them understand if they are “doing their jobs correctly” and for professional development to help them improve their practices. Both groups also said that they would find it useful to have more meetings in which educators from different schools could sit, talk, and
share all their concerns and needs. They expressed the need to be listened to and to learn from one another.

In the case of English teachers, they are aware that they need to improve their language skills. The Ministry has reported that most teachers did not pass the assessment (TOEFL iBT) with the level of proficiency required to carry out the goals of the national curriculum for English instruction. However, the teachers have expressed willingness to engage in professional development.

Listeners report a clear readiness for dialogue about improving instruction from teachers in all subjects. In fact, teachers, more so than school directors, consistently asked for professional development. However, as reported in the case of professional development offered over two years in the area of English by the English Language Fellows Program, teachers will not necessarily embrace professional development opportunities if their schools do not provide the time, flexibility, and support to do so, and if there are no incentives beyond one’s own professional growth.

**What issues divide or unify educators and how are those issues handled?**

Teachers and directors both report isolation from the Ministry, from other districts, from other schools and even from other teachers in the same school.

Reportedly, divisions among educators are often related to professional jealousies and perceived professional inequities in payments, benefits, or the way they are favored or treated. With the Ministry’s transition to a new pay scale based primarily on academic preparation, the salaries of lesser-trained teachers with many years of teaching experience have been frozen, while salaries of younger teachers with more formal training have risen. Also, contract and temporary teachers report that they have not been provided access to professional development.

Since Galapagos is such a small community, teachers and directors are in regular contact both inside and outside the schools. Personal problems/conflict between educators can often enter into the workplace.

Dissatisfaction with the eight-hour workday appeared to be the single most significant issue that divides teachers and school leaders, even though directors do not have any flexibility regarding this schedule.

**How well and by what means do school leaders communicate with teachers? With the Ministry?**

Communication between teachers and school leaders appears mostly administrative in nature. Communication styles of school leaders vary as do the leadership styles described earlier in this report. Teachers and directors report that some schools hold regularly-scheduled faculty meetings, but the teachers interviewed did not value these; in particular, they objected to the extended time necessary to explain new Ministry requirements.

Directors note that there is not much communication with Ministry officials beyond the District Office, either with the Zone 5 offices in Milagro, to which the Galapagos District reports, or with Ministry headquarters in Quito. Listeners noted that this lack of communication is likely a contributing factor to a gap that appears to exist between those making policy in Quito and those charged with implementing reform in the Islands.
Initial Conclusions: Relationships in Schools

While educators interviewed expressed a desire to improve instruction, the desired changes will require professional development that will demand additional effort on behalf of teachers, and more effective instructional leadership and supervision on behalf of school leaders. Teachers and directors must be prepared to work harder than ever before. Additionally, effective incentives must be in place.

Research on professional learning communities in schools make it clear that teachers need to be delivered from their individual roles to collectively support and learn from one another so as to refine, revise, or redesign their classroom practices and become more effective teachers (Bryk, A., Camburn, E. & Louis, K. S. (1997), Kruse, S. & Louis, K. S. (1993), Little, J. W. (2003), Little, J. W., Horn, I. & Bartlett, L. (2000), and McLaughlin, M.W. & Talbert, J. (2001)). Similarly, work by researchers such as Michael Fullan indicate that the organizational structure of schools and school districts can either be an aide or an obstacle to fulfilling the goals of reform that can be obtained by teachers and principals working together to promote student learning.

While Galapagos teachers expressed a strong desire to collaborate and to improve instruction, Listeners did not learn of any effective, ongoing examples of collaboration in practice. This lack of a culture of collaboration among Galapagos educators is an obstacle that must be overcome to improve education in the Islands.

D. Parent & Community Relationships with Schools

The LOEI and several Ministry Agreements lay out a number of structures to ensure the involvement of parents and the community with schools. The LOEI also lays out specific rights and obligations of teachers, students and parents. While many of these directives have yet to be implemented, the Ministry appears to understand the importance of parent and community involvement in the schools.

How do the schools and the community interact and perceive each other?

In November of 2011, the MoE mandated the creation of a new school governance structure to ensure the involvement and interaction of school authorities, teachers, parents and students in oversight and planning related to each school (Acuerdo No. 382-11, Ministerio de Educación). These entities include: an Executive Council, a Teacher Advisory Board, Teacher Councils (based on grade and subject area), Student Councils, and Parent Councils. Schools that did not have such structures in place before the agreement was signed were required to create them before the end of that academic year. These structures were not mentioned in interviews and focus groups by directors, teachers or parents; it is unclear as to whether or not these structures exist in Galapagos, and if they do exist, the extent to which they are functional.

How do people describe the student culture in the schools?

Teachers and directors describe student culture as much more relaxed in Galapagos than on the Ecuadorian mainland, although relationships between students and teachers are, by some standards, still quite formal. In Galapagos everybody knows everybody, which teachers said is good and bad. The good part is that it can be easy to have a conversation with a parent from a chance encounter. The bad part is that this informality can erode the professional distance between teachers and students and their parents, which some teachers feel to be a disadvantage.
Teachers reported that many students arrive to school with serious problems from home that can affect behavior and student learning. Divorce and domestic violence are common in Galapagos (Maldonado, 2012, Villacís & Carillo, 2013).

Teachers also expressed concern that the student rights outlined in the LOEI make it easier for students and parents to challenge teachers’ grading and disciplinary practices, which teachers say inhibits them from exercising the authority they need in their classrooms. They report that even young students are well-versed in the law and threaten that they will lodge complaints (denuncias) with authorities if they are disciplined.

Teachers interviewed, many of whom had been students themselves on the islands, described Galapagos students as not particularly academically driven, often unmotivated, and not placing a lot of value on their education. Teachers used the phrase “Island mentality.” They said students have difficulty seeing a future beyond the Islands which often dis-incentivizes engagement in class. They said students have a limited view of the world and lack a global perspective. This message was expressed clearly to Listeners by a representative at the District Office of the Ministry (himself a product of Galapagos schools) in one of the wrap-up meetings.

**Parent/community perceptions**

Listeners report that communities in Galapagos overall seem to feel that education on the islands is not what it needs to be. However, listeners did not get the impression that communities hold school leaders or teachers entirely responsible for this situation—much of the responsibility seems to have been placed on the shoulders of the Ministry and the challenges of conducting business in Galapagos.

During the Listening Phase parents expressed concerns primarily about the quality of the teachers (especially English teachers), the lack of a system of teacher evaluation, the overdue Galapagos-centric curriculum, high teacher turnover, large class sizes in some schools, and poor communication between parents, schools, and the Ministry.

Parents in Santa Cruz noted that they see good things happening in the schools, such as clubs in English and Science (which students are very enthusiastic about) but they think that these activities need to be better organized. At the same time, they lamented that previously existing environmental education classes have been abandoned.

Parents consulted also expressed appreciation for the difficult conditions under which teachers work, but nevertheless expect the schools to live up to their obligation to prepare students for life after school—which they do not believe is happening on a consistent basis.

Data collected as part of the 2010 Galapagos Census documents considerable satisfaction among parents with school infrastructure. On Santa Cruz and San Cristobal Island, over 70% of families consider school infrastructure to be “good,” compared to approximately 50% of families on the island of Isabela (INEC, 2010).
Education in Galapagos: Results of the Listening Phase

Teacher perceptions

Teachers repeatedly described a gradual loss of respect of parents and students over the years, although they did not offer a specific cause. They observed that in Galapagos teaching isn’t valued as much or considered as important as it is on the mainland.

Many teachers feel that they have not been given the tools or orientation needed to implement many Ministry mandates. For example, they have charged with establishing academic clubs, but they have not received guidance about what form clubs should take or how to integrate instructional themes.

They also noted a lack of support from parents related to academics, such as helping their children with homework assignments. Literacy teachers pointed to the lack of a reading culture in Galapagos and that reading at home is not cultivated by parents. Summarizing the comments of her colleagues, one teacher said, “Education requires all three—parents, students and teachers—to do our part. Without the support of parents and a commitment from students, how can we expect to do our jobs?”

Student perceptions

Listeners interviewed students from San Cristóbal who expressed concern that school directors and administrators rarely solicit their input regarding their needs. Although student councils exist, students felt the councils are symbolic and are underutilized as a forum for students to make positive contributions to educational improvements. Students also noted the lack of knowledge about technology their teachers have.

Do teachers press students toward high academic standards?

According to students and parents interviewed, many teachers do not encourage or promote high academic performance. They say that many teachers are failing to prepare students for university—a perception that could be supported by the low university enrollment rates of Galapagos youths noted earlier in this report.

Students report that some fellow students do not seem to have high hopes or dreams and wish that teachers could help them imagine and prepare for a better future. Students say some of their teachers are not good roles models; they play and talk over the phone in class, come unprepared to class, and repeat the same content over the years. They report that absenteeism because of illness or other reasons is common and disrupts learning.

On the other hand, one listener reports that in talking with IB students and teachers, there is a sense that there is a community of teachers and students that press each other towards high standards. These teachers give the impression that they take their positions extremely seriously and have worked very hard to improve their content knowledge and teaching abilities. Many students outside of the IB program wish that the same rigor and opportunities existed for them.
Parent Involvement

What is the teacher and school relationship with parents?

While the LOEI outlines a number of mechanisms for parent involvement with the schools, in practice the most common form of involvement is through work groups (mingas), to improve school grounds and buildings. Parent Associations also raise funds and provide volunteer manpower to support school improvement activities, fieldtrips and school events. Beyond this, the listeners found no ongoing efforts in public schools to work with parents to develop common goals and to strengthen student learning.

Teachers and directors cite the limited education of many parents as a barrier to greater parental involvement in their children’s learning. The new teacher schedule requires teachers to be available for parent-teacher conferences in the afternoon, but teachers say parents—especially those of older students--do not come to the meetings. Teachers stated that they do not generally perceive parents as partners in helping students learn and grow and that parents have low expectations and do not help their kids at home with homework or other learning activities.

A few teachers, however, said that parents are very reachable and committed to school. Directors generally felt parents were involved enough, especially in their role with the mingas.

Use of Community Resources

What is the teacher and school outreach to the community?

Listeners learned that some of the schools offer continuing education programs in the evening: literacy, high school equivalency, and technical fields. Additionally, a Ministry initiative called Escuela para los Padres (School for Parents) is designed to foster involvement of parents in the education of their children. To date, the program focuses largely on social issues like drug abuse prevention, early pregnancy prevention, etc.

What partnerships or relationships with community organizations exist?

There are numerous examples of local organizations partnering with schools to provide learning opportunities for students:

- The Galapagos National Park has presented proposals to the Ministry of Education to help with micro-curricular design in the area of natural science and to help strengthen the content knowledge of science teachers. The Park also works with schools to offer a number of hands-on environmental education activities. Teachers mentioned, however, that the Park may have recently stepped back from this previously more active role.

- The Ecuadorian Navy coordinates with schools to offer marine-related extracurricular education via the Guardians of the Ocean Program (Guardianes del Mar) that helps students to better understand and appreciate marine and coastal environments.

- Many NGOs coordinate with schools to offer environmental education, leadership training and service learning opportunities, entrepreneurship training, etc. These include local NGOs, such as FUNDAR Galapagos, Grupo GECO, Pasos Equilibrados, and Agentes de Cambio, as well as national and international NGOs, such as Conservation International, Ecology Project International (EPI) and
Outward Bound. Some of these organizations work closely with schools to offer activities related to the alternativas—the extra-curricular activities that can help sophomores and juniors to fulfill their 200 hour community service requirements.

- The Scalesia Foundation continues to dialogue with local school directors and Ministry of Education officials regarding its desire to serve as a local champion and supporting organization of education improvements in the Islands. The Foundation also seeks to develop the Tomás de Berlanga School as a demonstration site of proven educational practices for teachers throughout Galapagos.

- Others. Government agencies, such as the Ecuadorian Institute of Childhood and Family (INFA – Instituto de la Niñez y la Familia), the Ministry of Labor, and the Ministry of Justice and Human Rights, are sometimes involved in issues between teachers/directors and students, and between teachers and administrators.

Initial conclusions: Parent and Community Relationships with Schools

Improving education in Galapagos will require greater parental and community engagement in student learning. The LOEI lays out a number of structures, as well as rights and obligations of teachers, students and parents, that could help promote such engagement. Mechanisms such as the Escuela para Padres provides an existing platform from which schools could work with to develop more constructive involvement of parents in the education of their children. Additionally, the expertise of Galapagos-based NGOs and professionals working in science, conservation and business community represent a valuable and underutilized resource for classroom learning and teacher professional development. Similarly, the Alternativas represent a potentially valuable opportunity to extend learning beyond the classroom. However, expertise is needed to optimize these learning opportunities and to link them with the learning objectives in the formal curriculum

E. Incentives

As noted previously, a goal of the Ministry’s 10 Year Plan is raising the profile of teaching profession through such means as merit-based pay, better working conditions, and opportunities for professional development. The LOEI lays out specific merit-based incentives, including bonuses for individual and/or host school effectiveness (based on evaluations of INEVAL), professional development received outside of Ecuador, and publication of research or innovations in their area of expertise. However, while some educators interviewed reported benefitting from such incentives, teachers overwhelmingly describe a lack of formal and informal incentives associated with their work.

What are the formal rewards for teachers doing all that needs to be done?

Teachers agreed that in practice, there are few formal incentives beyond salary offered. Previously, medals were awarded for achieving certain years of service, but this practice has been discontinued. Teachers said that they would consider quality professional development a good incentive, but there is limited training available in Galapagos. Science teachers reported being promised laptops to facilitate their work, but as of the July visit that promise had not yet materialized. Teachers agreed that any kind of positive public recognition of their efforts can be an important motivating factor, but this sort of recognition is uncommon. Several teachers mentioned the Teacher’s On Board Program of Lindblad Expeditions-National Geographic, which has awarded Galapagos cruises to local teachers.
**What else motivates the teachers you have observed?**

Teachers describe a number of informal sources of motivation. For example, Language Arts teachers say they like the fact that they can build relationships both with students and their families and that they are agents of change and improvement in children’s lives. They also like teaching in safe, small communities, where they can get to know students and their families.

Math teachers reported that they are motivated by being able to reach kids, working with other teachers, making a difference in students’ career paths, getting positive feedback from graduates now at university, seeing positive impacts/results, and getting positive feedback from parents and a sense that one is doing one’s duty.

Science teachers reported that they are motivated by connecting with students, imparting life skills, “little victories” with young students, and knowing that patience and persistence will pay off.

**What are the consequences for educators who commit infractions or who do not teach well?**

The LOEI lays out specific sanctions for teachers who commit infractions, which can include fines, temporary suspension without pay, or removal from post. In such cases, a director must submit a report to the District Office and an investigation ensues. This can be a lengthy process and often times there are no consequences for the offending party, although one director informed the Listeners that the Ministry almost always sustains his recommendations to reprimand or dismiss a teacher.

Consequences for poor teaching performance are another matter. The LOEI outline consequences (dismissal or early retirement) for those failing the content knowledge tests two consecutive times, but according to Galapagos school directors, this has yet to occur in Galapagos. The primary issue is that INEVAL is developing its teacher evaluation protocols and methodologies, but this system has yet to be fully implemented. Several directors expressed the need to develop their own interim mechanisms to evaluate teacher performance. Similarly, parents report that they are not sure how, or if, teachers are evaluated. To them, teacher standards seem minimal and they see no sanctions being implemented.

**Initial conclusions: Incentives**

High quality professional development that is directly and immediately relevant to teachers’ subject areas, grade levels and classroom practice, and leads to changes in student performance, can be highly incentivizing to teachers, especially if it also is connected to the salary structure. In-service training opportunities with schools and universities in Ecuador and elsewhere could represent attractive incentives for promising Galapagos educators. In addition, incentives teachers formerly received, such as diplomas and public awards for service, should be revived.

Teachers’ comments on the informal motivations they feel (in particular, a sense of reward when they have impacted student learning) indicate that professional development that has more immediate effect on students will be more motivating. This suggests that providing teachers new units of instruction with new pedagogy embedded might work better than focusing directly on pedagogy.

In addition to professional development and monetary incentives, opportunities should be explored to revive less formal incentives that have proven effective in the past, such as diplomas and public awards for service. Opportunities should also be explored to continue the Teacher’s On Board Program of
Lindblad Expeditions-National Geographic, and to coordinate travel awards with a future school improvement program.

Implementing a formative incentive structure for teachers requires full implementation of an effective system for teacher, director and school assessment. The results of these assessments must be made available to school directors and teachers in a timely manner.

**F. Helpful Mechanisms**

According to Listeners, Galapagos teachers are working without sufficient support or guidance regarding the “what” and “how” of instruction, and without supporting teaching materials, tools, and instructional routines.

**Do teachers create lesson or unit plans? Are they reviewed? If so, what are the criteria?**

Teachers report that they do create lesson plans (a Ministry requirement), although they do not receive guidance in their development or use, and they are not generally reviewed. Apparently, many teachers extract the lessons plans that are offered in the teacher guides for their textbooks. Says one listener: “The concept of a lesson plan seems very different than that in the US. A lesson plan on Galapagos can simply be copying word for word what is written out in the national curriculum materials. Lesson plans reviewed did not include projects, activities, altered curriculum, additional material, or anything from the mind of the teacher.”

**Table 5: 2013 Results of the Ser Estudiante Exam**
(Source: Ministry of Education, 2014)

<table>
<thead>
<tr>
<th>Subject/Grade</th>
<th>Galapagos</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4th Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>619</td>
<td>654</td>
</tr>
<tr>
<td>Language and Literature</td>
<td>630</td>
<td>643</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>666</td>
<td>675</td>
</tr>
<tr>
<td>Social Studies</td>
<td>630</td>
<td>640</td>
</tr>
<tr>
<td>INEV (average)</td>
<td>609</td>
<td>650</td>
</tr>
<tr>
<td><strong>7th Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>594</td>
<td>642</td>
</tr>
<tr>
<td>Language and Literature</td>
<td>671</td>
<td>681</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>685</td>
<td>691</td>
</tr>
<tr>
<td>Social Studies</td>
<td>661</td>
<td>686</td>
</tr>
<tr>
<td>INEV (average)</td>
<td>655</td>
<td>670</td>
</tr>
<tr>
<td><strong>10th Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>609</td>
<td>610</td>
</tr>
<tr>
<td>Language and Literature</td>
<td>677</td>
<td>686</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>680</td>
<td>677</td>
</tr>
<tr>
<td>Social Studies</td>
<td>579</td>
<td>674</td>
</tr>
<tr>
<td>INEV (average)</td>
<td>559</td>
<td>660</td>
</tr>
</tbody>
</table>

*Scale: Ineficiente: 401-550; Elemental: 551-600; Satisfactorio: 600-950; Excelente: 951-1,000.*

**How is student learning monitored?**

Standardized student evaluations are administered to students in grades 4, 7 and 10 by the Ministry of Education and INEVAL through the *Ser Estudiante* exam which seeks to measure student learning in math, language and literature and social studies. Table 5 shows recent *Ser Estudiante* results of Galapagos students, compared to the national average. The Ministry of Education and the Secretariat of Higher Education, Science, Technology and Innovation administer the National Exam for Higher Education, known as *ENES* for its acronym in Spanish, which measures verbal, numerical and abstract reasoning.

While aggregated results of these exams are published by the Ministry, directors and teachers do not receive the results in time or a format needed in order to be able to use them to adapt curriculum or instruction.

**How is teacher effectiveness monitored?**
One listener reports based on Ministry information, “According to legal statutes, teacher evaluations should be conducted annually by INEVAL, using knowledge-based testing focused on the subject area in which a teacher dedicates most of his or her time. The results are to be used to identify gaps in knowledge in order to generate individualized plans for professional development. However, this system has yet to be fully implemented.”

In the meantime, several schools are starting to create their own system to evaluate teachers, schools and themselves--at the Colegio Galapagos, for example. The director of this school explained that she and her team are working to develop a system of “self- and co-evaluation” to generate information that can be used to strengthen teacher performance.

**Professional development**

*What professional development has been helpful on the islands?*

Table 6 provides a list of professional development activities offered in Galapagos over the past five years. In 2010 and 2011 considerable investments were made to introduce the new national curriculum. Teachers indicated that the Ministry continues to convene monthly professional development meeting by grade level/subject but teachers report that these sessions are focused on Ministry announcements and unpacking Ministry directives and do not serve the purpose of professional development.

![Table 6: Professional Development Offered in Galapagos 2009-2014](image)

Since 2011, most professional development has been held on the mainland and/or on-line. Teachers report that participation in professional development on the Ecuadorian mainland is both time-consuming and expensive and that most of it is limited to teachers from public schools, tenured teachers (*maestros nombrados*) and in some cases to teachers under 45 years of age (although some of these observations, such as private school teachers being limited from Ministry professional development,
appear to be contradicted by the LOEI). On-line training is virtually impossible for local teachers to access because of the slow internet connection available in Galapagos.

Teachers reported that they would prefer longer training periods programmed well in advance. Teachers said that the most convenient time for extended professional development in Galapagos is in February and March, two weeks before schools open.

Teachers spoke highly of the following professional development activities, some of them offered by organizations other than the Ministry of Education:

- Training held in Guayaquil related to the IB program. Teachers reported that follow-up components were difficult to access via the Internet.
- Training in English language instruction offered to English teachers by the English Language Fellows Program of the US Department of State and supported by a local NGO, FUNDAR Galapagos. Participating teachers particularly liked the fact that the professional development events used a participatory methodology and were planned around the schedules and activities of teachers.
- Training in ecology from the University of Florida. Teachers in San Cristóbal report that they still use much of what they learned from that workshop.
- The Teachers on Board Program, sponsored by Lindblad Expeditions-National Geographic, one of the major tour operators in Galapagos. This program offers Galapagos teachers with opportunities to explore the archipelago and to broaden their science and environmental knowledge and their understanding of the unique ecosystems and biodiversity of Galapagos.

Representatives of the Scalesia Foundation commented that the Tomás de Berlanga School receives frequent offers of professional development from educators from various schools and universities around the world, but these offers are often made at the last minute by people visiting Galapagos, and/or reflect the professional interests of the trainers—not necessarily the priority professional development needs at the school.

**What do school leaders and teachers name as professional development needs?**

The Listeners repeatedly heard teachers and directors call for professional development designed by topic and grade level. Among the topics requested by teachers were:

- Subject area, topic-based instruction to deepen their expertise
- Modeling as part of teaching
- Differentiation for children with special needs
- Teaching methodology
- How to adapt curriculum to island goals
- Ways to engage and motivate their students
- Classroom management
- Lesson design
- Integrating technology into their curricula
• Conducting labs or other hands-on or inquiry-based lessons
• Organizing and managing science fairs and clubs

Technology

In what ways is technology being leveraged to improve education?

Approximately 60% of schools in Galapagos have computer labs (63% in urban areas and 43% in rural areas). Listeners observed that some of these facilities are very well equipped. However, extremely slow Internet connections and intermittent electrical service in some locations limits the impact of technology in those schools that have it (INEC, 2010).

The use of technology in the classroom varies from school to school. There are clearly technology haves and have-nots on the Islands. There were interactive whiteboards, projectors, and computers, including laptops, in actual use in many schools but not in every room. Some teachers, even at the primary level, have incorporated technology in their instruction—for instance by projecting a page from a math text or website--others have not.

Tentative conclusions: Helpful mechanisms

Considerable improvements could be made in Galapagos schools if teachers had access to instructional guidance and support, including high-quality professional development and mentoring designed by subject area and grade, that is well-connected to Galapagos realities. Local educators would also benefit from seeing examples of proven practices in action through model classrooms or a demonstration school in Galapagos. Solutions to the slow Internet connectivity that exists in the Islands (local computer networks, off-line content, etc.) should be explored to allow for more effective use of technology, in the classroom and for teacher professional development.

G. Outside Environment/Everything Else

What are the most critical aspects of the school context that are relevant to the design of a school improvement initiative?

While some of these topics are mentioned elsewhere in this report, Listeners noted a number of critical aspects of the school context in Galapagos that should be considered when designing a regional school improvement program:

1. Ecuador’s ambitious national education reform process. This is an extremely busy time for the Ecuadorian education community. The pace and scope of changes associated with the 10 Year Education Plan are dramatic and are a source of significant stress and an especially heavy workload among school leaders and teachers in Galapagos. On the other hand, new processes and approaches are being rolled out (teacher, director, student and school evaluations; participatory planning at the school level; merit-based incentives; etc.) that should be helpful over time in addressing many of the challenges identified during the Listening Process.

2. The physical isolation of the Galapagos Islands. The considerable cost and time associated with travel between Galapagos and the mainland, as well as between islands within the Archipelago, limits access of educators to professional development opportunities and make it more expensive
and time consuming for them to attend to health issues and other personal needs. This isolation also hampers the exchange of ideas and experiences among educators on the different islands.

3. The electronic isolation of Galapagos. The limited Internet connectivity available in Galapagos has a significant impact on school operations, student learning, and professional development of Galapagos educators.

4. The need for a local champion to support a school improvement program. Research points to the important role played by “middle tier” entities—non-profit organizations that operate between schools and central governments—in support of education improvement programs (Aston, 2013). Listeners believe that the physical and electronic isolation of Galapagos heightens the need for such a supporting organization in Galapagos.

**What other policies, practices and organizations directly affect the operation of the schools?**

While the Ministry of Education is ultimately responsible for public education in Galapagos, Listeners learned about several other organizations with strong interest in education in the Islands and the potential to provide valuable collaboration to a school improvement program. The most significant of these include:

- The Galapagos Governing Council (CGG). The CGG is responsible for overall planning and management in Galapagos and ensuring conservation and “good living” (buen vivir). While Listeners were unable to meet with CGG officials in July, they learned that the CGG has a strong interest in seeing that education is optimized in ways that will strengthen local capacity and result in a sustainable society in Galapagos. The CGG also oversees migration issues and makes all decisions regarding residency visas in Galapagos, which has direct implications for staffing public and private schools in Galapagos, since highly-skilled teachers are in short supply in Galapagos.

- The Ecuadorian Ministry of Environment (MOE) and the Galapagos National Park Directorate (GNPD). The MOE’s and GNPD’s “2014 Protected Areas Management Plan for Good Living” recognizes education as a key component of protecting the Galapagos environment and commits its support to the formal education sector to ensure that Galapagos education promotes sustainable living in the Islands. The GNPS also carries out a number of environmental education initiatives which could be connected to the learning objectives of the national curriculum and coordinates research and conservation with international scientists whose expertise could be tapped by Galapagos teachers and local schools.

- Municipal governments. While there is only one municipal-funded school in Galapagos (Jacinto Gordillo on Isabela Island), the LOEI and draft text associated with the new Special Law for Galapagos described an increased responsibility of municipalities to construct, equip and maintain schools in their jurisdiction. In December of 2013, the Ministry of Education signed an agreement with the Municipalities of San Cristobal, Santa Cruz and Isabela, which committed more than $1 million for public school improvements and a school infrastructure plan (Convenio de Cooperación con Alcaldes de Galápagos).

- The New Special Law. In addition to describing a greater role in education for Municipalities, the draft language for the new Special Law for Galapagos calls for K-12 education in Galapagos to adhere to the priorities and objectives of the LOEI, reversing the decentralization called for in the
1998 Special Law, which granted special authority to the Provincial Directorate of Education in Galapagos, and placed special emphasis on education designed specifically for Galapagos.

Is there variation across schools in these external influences?

Listeners were not aware of variation in these external influences across public schools. However, they did learn about several examples of policies that have significant impact on private schools in Galapagos:

1. Ministry of Education caps on tuition charged by private schools. The operational budgets of private schools are limited by tuition caps established by the MoE, based on a number of factors including school infrastructure, teacher-student ratios, available technology, etc. Board members from the Scalesia Foundation report that these calculations, which do not factor in the higher costs associated with operating a school in Galapagos, make it difficult for the Tomás de Berlanga School (which is committed to serving as a resource for other educators in Galapagos and to making its program accessible to students unable to pay the cost of tuition) to offer competitive salaries and to invest in necessary quality enhancements, even though many parents have strongly expressed their willingness to pay higher tuition in order to further enhance academic performance.

2. Galapagos residency regulations. As a school committed to a high-quality bilingual program (English-Spanish), the Tomás de Berlanga School has found it time consuming and costly to secure visas for qualified teachers able to instruct in English. Costs associated with securing Galapagos visas for TdB teachers (legal fees, teacher per diem and travel between Galapagos and the mainland) represent 5% of the school’s budget. The process also results in extended absences of teachers who must travel back and forth to the mainland to comply with residence requirements.

Tentative conclusions: External Factors

A well-designed school improvement initiative could be an empowering process for Ministry officials and Galapagos educators. It could provide directors and teachers with the tools they need to implement Ministry directives, while providing the Ministry with the opportunity to explore new strategies for implementing different components of the 10 Year Education Plan on a relatively small scale with the benefit of added technical expertise. To be effective and fully embraced by all parties, the school improvement program must be closely aligned with the ongoing national education reform process, and carefully crafted in ways that recognize Galapagos’ special needs and opportunities.

Given the current and evolving mandates of the CGG, the MOE, the GNPS and the three Municipalities in Galapagos, these entities should play an active role in the design of any school improvement program.

Technological upgrades or “work-arounds” need to be implemented to deal with the limited internet connectivity in the islands, such as mirroring relevant web content (teaching materials, teacher training tools, etc.) on school or island-wide networks and/or making these materials available offline.

Even if technology solutions are identified, the physical isolation of Galapagos makes it important to establish some level of permanent professional development expertise in the Islands. During the Listening Phase, the Board of the Scalesia Foundation expressed strong interest in serving as a local champion of a school improvement program by seeking funding to hire and support a team of lead teachers/mentors. The Foundation also seeks to continue developing the Tomás de Berlanga as a demonstration school for Galapagos, and to share its national and international network of education
specialists with schools in the Islands. Galapagos directors participating in the Listening Phase expressed support for such a role for the Scalesia Foundation.

The Scalesia Foundation would be better positioned to develop the Tomás de Berlanga School as a demonstration site and a resource for the broader Galapagos education community if it were extended greater flexibility in setting tuition and securing Galapagos visas for teachers dedicated to building local education capacity.

Similarly, any kind of large-scale school improvement program would benefit greatly from a fast-track Galapagos visa process for trainers and mentors spending extended periods of time working with the program (1-3 years).
Part V: Plan for the Education Improvement Initiative

Based on the observations made by the Listening Team and other commentaries on the status of education in the Galapagos Islands, it is recommended that GC, SF and the MoE explore the possibility of a five part improvement intervention to be conducted over a five-year period. Note that many of the issues identified by the Listening Team – large class size, limited teacher evaluation, lack of instructional resources, and teacher frustrations with the school schedule, are beyond the scope of an external intervention. The plan proposed here addresses what might improve the quality of teaching and learning given the prevailing conditions.

While this work would face a number of challenges, the most serious one is whether teachers and directors would implement new practices. Some of the conditions described by the listeners--limited instructional support, lack of a culture of collaboration among educators, and frustration and confusion related to the ongoing education reform process--could all contribute to less than satisfactory implementation. The provision of more and better professional development may not have much effect without significant attention to the development of stronger instructional leadership. The proposed plan addresses this issue.

The five parts are:

1. **Demonstration School and Education Support Team.** The proposed program will develop local capacity to support and sustain education improvements by establishing: a) a demonstration school for professional practice and b) a Galapagos-based Education Support Team to coordinate project activities with the Ministry, to provide ongoing mentoring and support, and to sustain the improvement efforts beyond the five-year project timeframe.

2. **Instructional Leadership.** School leadership will be strengthened through an instructional leadership program for directors and by developing a culture of continuous improvement in the schools through leadership teams that include directors and teacher leaders, and set and act on priorities for improvement in each school.

3. **Subject-specific professional development.** Improved instruction in literacy (English and Spanish), math, and science will be achieved through subject-specific professional development, including workshops and ongoing mentoring that follow the directives of the Ecuadorian curriculum.

4. **Extra-curricular education.** Technical assistance will be provided to extracurricular education initiatives of schools and other organizations to optimize out-of-classroom learning and to connect these activities with the learning objectives of the formal curriculum.

5. **Program Monitoring and Evaluation.** A monitoring and evaluation program will be developed to optimize program delivery and to document impact on teacher and director practices as well as student learning.

Parts 1, 2 and 5 will be launched in Year 1 and continue through Year 5; Parts 3 and 4 will be piloted during Year 1, fully-launched in YEAR 2 and sustained through Year 5.
To the extent possible, these interventions will seek to build on Ministry of Education priorities and initiatives and will be designed based on research evidence collected from numerous studies over several decades, which has identified a set of key features that profoundly impact professional development on teaching. These include: the focus, form, and duration of the professional development; its emphasis on collective participation, the curriculum content, and active learning; and the degree to which the professional development builds coherence for teachers by drawing connections from their practice to students learning and external standards, and by engaging the support of school leaders (Corcoran, 2007; Darling-Hammond et. Al., 2009; Desimone, 2009; Odden, Archibald, Fermanich, & Gallagher, 2002; Timperly, Fung Wildon and Barrar, 2007). These topics are described in greater detail in Appendix 3.

The proposed activities could be supported by a combination of the MoE, fees for service from schools, and grants from individuals, businesses, and foundations.

A. Demonstration School and Education Support Team

Recognizing the physical and electronic isolation of Galapagos, and the fact that schools in the Islands will need ongoing support, we propose:

- Developing the SP’s Tomás de Berlanga School as a demonstration site of effective educational practices. The TdB School is a logical place to serve as a demonstration school given its relatively small size, its strong focus on English language, and its ongoing efforts to incorporate the Galapagos environment into student learning.

- Developing an Education Support Team to provide ongoing professional development and to coordinate with the MoE and external consultants. The Support Team would consist of master teachers/mentors in educational leadership, English language, mathematics, science, and Spanish (initially one mentor for each subject area) who would work directly with directors and teachers at schools throughout Galapagos to promote the adoption of proven educational practices. These positions could be employed and managed within SP’s existing structures.

The Listening Team believes that the SF Board is committed to and capable of implementing these measures.

B. Instructional Leadership

We recommend that developing stronger instructional leadership should be the cornerstone of the school improvement program. Workshops and ongoing mentoring will be provided in two complementary areas:

**Strengthening the role of directors**

The suggested program does not address all aspects of a director’s job (such as the director’s pastoral role, budgeting, staffing, community relations or a myriad of other tasks of principals); rather it focuses squarely on the central business of schools – teaching and learning. Professional development for school leaders addresses the following six domains of work:

1) Accepting responsibility for improving the quality of teaching
2) Learning about effective practices
3) Learning to observe, monitor, and analyze
4) Practicing strategies for building a community of practice
5) Learning to coach teachers and provide feedback
6) Supporting continuous improvement

An illustrative sequence of workshops to be conducted over a two-year period is displayed in Table 7. Much of this work might be condensed into two or three two-day workshops but it should not be done as one-day workshops because it is seldom possible to engage busy people in the time afforded by short workshops.

Table 7: A Model Professional Development Sequence for School Directors

<table>
<thead>
<tr>
<th></th>
<th>Workshop One</th>
<th>Workshop Two</th>
<th>Workshop Three</th>
<th>Workshop Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big ideas</td>
<td>Instructional leadership; High impact practices.</td>
<td>Internal accountability; Analyzing practice; Coaching teachers.</td>
<td>Professional learning communities; Use of rubrics.</td>
<td>Continuous improvement; Mentoring.</td>
</tr>
<tr>
<td>New skills</td>
<td>Focused classroom observation.</td>
<td>Conducting learning walks; Giving feedback.</td>
<td>Scoring students work collectively.</td>
<td>Collecting and analyzing data.</td>
</tr>
<tr>
<td>Skills reviewed</td>
<td></td>
<td>High impact practices.</td>
<td>Learning walks.</td>
<td>Scoring student work.</td>
</tr>
</tbody>
</table>

This program will involve leaders from all 22 K-12 schools in Galapagos.

Creation of Leadership Teams

Development of strong instructional leadership is difficult unless it takes place in a context in which teachers, school directors, and others are being asked to work together to improve their own practice and the performance of students. We suggest that the development of instructional leadership teams at each school comprised of 6-10 staff members, depending on the size and staffing of the school: the school director, sub director, and at least one teacher leader from each core subject area, including English language. Eventually, parents will be involved in these teams. To the extent possible, these teams will encompass the structures of Teacher Councils or School Improvement Teams mandated by Ministry Agreement No. 382-11.

The primary strategy to improve performance of schools is the provision of high-quality professional development over time for the school leadership teams. Three related strategies will complement this approach. First, the training provided will focus on the development of cultures of collaborative practice that support the school leadership teams and encourage them to pursue continuous improvement. Second, we recommend developing teacher leaders in each school who can work with the principal to implement and support new practices and mentor other teachers in the school. Finally, we seek to develop norms of continuous improvement in the schools and encourage principals and teachers to monitor their progress by analyzing available data and seek solutions to observed problems of teaching and learning.
For these teams to be successful, it will be essential that from the outset the Ministry of Education recognizes their potential value and empowers them, with the time and authority, to implement their ideas.

The specific leadership practices that could be introduced and developed include:

- Learning walks – a collaborative practice designed to gain school-wide information and insight into a particular condition for learning, and planning next steps.
- Looking at student work – where groups of educators analyze student learning through close examination of assessment tasks and student work products, and determine strategic instructional adaptations.
- Instructional observation and effective feedback – where school leaders and teachers co-plan, observe, provide feedback, and make adaptations to subsequent lessons.
- Data-based decision-making and planning – an evidence-based approach to school quality review and planning for improved teaching and learning. This is the keystone without which the entire school improvement structure will collapse. Directors and teachers must know if they are achieving their academic targets.
- Professional communities of practice within and across schools. Educators beyond these leadership teams must learn to trust one another and to work together productively.

Three two-day workshops are suggested each year during the first two years, and one workshop each year for the subsequent three years. Support will be offered to the leadership teams between workshops by the local Education Support Team and by external experts via teleconferencing, email, phone or other modes as appropriate.

We recommend that the formation of leadership teams begin with a pilot project involving all 11 schools in Santa Cruz. Depending on the success and challenges of implementation, schools on additional islands could be added in subsequent years.

**C. Subject-specific professional development in K-8 Literacy (Spanish and English), math and natural sciences.**

We recommend a sustained program of professional development for teachers designed by subject area and grade level that consists of focused workshops and ongoing mentoring.

Initially the workshops will be designed and led by external consultants and will focus on the use of research-based instructional strategies as well as the content knowledge needed to teach specific units of the national curriculum. These will be intense, hands-on, training events that will engage teachers in the learning experiences in which they want students to engage. We recommend that workshops last at least one week in duration to explore topics in sufficient depth. Each workshop will be part of a series; the workshops will build on one another.

Master teachers/mentors on the Education Support Team will provide support to teachers between training events and will train local educators to fill this role in the future. They will also promote communities of practice within and across schools in each subject area. We suggest beginning subject-related professional development with all schools in Santa Cruz in 2015 and adding schools from additional islands in 2016.
**K-8 Literacy in Spanish and English**

Literacy is fundamental to academic success, and proficiency in Language 1 is essential for success in Language 2 so improvements are needed in both Spanish and English.

There are two parts to our recommended improvement program in language teaching. First we recommend that the Galapagos Conservancy and Scalesia Foundation work with the Ministry of Education and other funders to ensure effective selection and distribution of classroom libraries of leveled books in Spanish and in English. We estimate that each classroom requires four levels of books, about 15 books per child in Spanish and 15 in English per grade level. The books should be high-interest and aligned with the topics in the history, science, and mathematics curriculum. In addition, schools need audio-visual materials to provide additional language models.

Each year, the project will provide intensive 3-5 day professional development workshops for teachers responsible for teaching Spanish and English. The workshops will support teachers in two ways: first, by advancing their content knowledge and facility—in Spanish or English—in the domains identified as challenging and second, by preparing teachers to use an enhanced version of the workshop model for reading and writing. The workshop model will place emphasis on high-impact instructional practices such as group work, classroom discussion, and project learning, and on acquisition of content knowledge. The workshops will begin with writing instruction because writing instruction will improve reading and will not require the classroom libraries which will be rolled out in years two and three. Teachers will also benefit from implementing methodologies in which they could create texts with students or “bridge” what is learned in one language to the other.

**Mathematics**

We propose two multi-day workshops for math teachers each year. These workshops will focus on addressing teaching the curricular topics identified by the teachers as difficult for students and improving teacher knowledge and skill and implementation in three domains:

- Content knowledge about the core concepts in the domains identified;
- Use of high-impact pedagogical practices, especially lesson design, selection of tasks, student discussion, and formative assessment; and
- Design and administration of inter-disciplinary projects.

Initially, the training will be designed and delivered by an external team who would be eventually superseded by the master teachers/mentors of the local Education Support Team and teacher leaders within Galapagos schools.

**Science Focused on Inquiry, Core Concepts, and Science Practices**

Professional development in math and science can and should be rolled out separately and simultaneously. The key difference between science and math is vetting the science curriculum for both content and pedagogy before the workshops. Similar to math, topics students struggle to learn and/or teachers struggle to teach will be selected for review. Existing curriculum units will be revised to be consistent with current understandings of content and effective pedagogy, which makes it more likely teachers will assimilate the updated materials and implement the revised curricula with fidelity.
D. Support for extracurricular education

In order to help schools respond to the Ministry’s call for school-organized academic clubs and formative extracurricular learning opportunities for the “alternativas,” the Education Support Team will include one person dedicated to this purpose. This individual will support teachers in the formation of clubs and in connecting them with local NGOs that have the technical expertise teachers need to improve extracurricular education activities in areas such as environmental education, service learning, leadership, art and music. This member of the Support Team would also help schools and NGOs to connect extracurricular activities with the learning objectives of the formal curriculum.

E. Documentation of the Galapagos school improvement program and related applied research

To optimize the delivery of these program activities over time and to measure longer-term impact, we suggest the establishment of a monitoring and evaluation process that will document the use, adaptation, and sharing of the practices acquired or developed by the program. We recommend that data collection include: teacher and principal baseline questionnaires, teacher and principal workshop survey feedback, analysis of collections of teacher lesson plans and related student work, and annual site visits to participating schools (including interviews and classroom observations), and data on student performance, including the Ser Estudiante standardized tests (grades 4, 7 and 10), the ENES high school graduation exams, college admission rates, and results of Ministry teacher, director and school evaluations.

In addition to the project monitoring and evaluation, the program will consider providing access and logistical support to researchers interested in exploring topics related to the implementation and impact of this program and its possible replication beyond Galapagos.

Final Remarks regarding the plan

The recommendations presented in this report address the most critical issues identified in each of the seven dimensions of the Framework for Analysis. Suggested interventions are based on what research has identified as the most effective ways to improve school effectiveness and student learning.

The plan is ambitious but achievable and meshes well with the priorities of the MoE’s 10 Year Education Plan. In fact, in addition to improving education in Galapagos, the project could become a demonstration site where educators from other parts of Ecuador could observe many of the Ministry’s innovations in action.

The public-private approach suggested in this report will be essential to the project’s success. GC and SF are clearly committed to the MoE’s vision and priorities, and have demonstrated their ability to mobilize technical and financial resources for education improvements.

Members of the Listening Team remain committed to this initiative and would welcome the opportunity to be involved in its implementation. Team members would also be pleased to connect the MoE, GC and SF with other educators at their respective institutions.
Bibliography


Appendix 1: Members of the Listening Team

1. **Dr. Diego Roman**- Assistant Professor in Teaching and Learning at Southern Methodist University. Focus during the Listening Phase: Science education/English language teacher training.

   Diego, a former volunteer at the Charles Darwin Research Station, is originally from Quito, Ecuador. Specializing in bilingual and science education at SMU, Diego holds a B.S. degree in Agronomy from Zamorano University in Honduras and a M.S. degree in Curriculum and Instruction from the University of Wisconsin-Whitewater. He earned a M.S. degree in Biology, a M.A. in Linguistics, and a Ph.D. degree in Educational Linguistics, all from Stanford University. Prior to starting his studies at Stanford University, Diego taught middle school science to English Learners and newcomer students for seven years, first in rural Wisconsin and then in San Francisco, California. During 2011 he served on an external review team that evaluated and helped provide strategic direction to the Tomás de Berlanga School in Galapagos.

2. **Dr. Jessica Ivonne Duchicela**- Assistant Professor of Ecology at the Universidad de las Fuerzas Armadas/ESPE in Ecuador. Focus during the Listening Phase: Science education and identification of opportunities for out-of-school science and environmental education and service learning.

   Jessica earned her PhD in Ecology, Evolution and Behavior from Indiana University. Research for her dissertation (focused on mycorrhizal fungi) was conducted in Galapagos where she got to know many of the key players in the areas of science and conservation. While in Bloomington, Jessica worked with the university’s Biology Outreach Program and was involved in the design and implementation of hands-on science activities for elementary school students. This work developed a strong interest in finding ways of engaging students in hands-on activities in and outside of the classroom, including citizen science.

3. **María Cristina Cortez**- Teacher/instructional facilitator associated with the Universidad San Francisco de Quito’s IDEA teacher training program and the Colegio Menor Campus in Samborondón. Focus during the Listening Phase: Literacy.

   Cristina earned her Master degree in Education at Adelphi University, NY and has accepted the PhD program in Education at Ghent University where she plans to investigate “Clinical Simulations in Teacher Education.” Cristina is an educator with 10 years of experience in the classroom focused primarily on developing reading and writing skills of students of all ages. Cristina served as the coordinator of the Education Department of Universidad San Francisco de Quito (USFQ) and currently teaches at the university. She is also an associate of the Institute of Education and Learning (IDEA)—the teacher training arm of USFQ—and is the Instructional Facilitator at the Colegio Menor Samborondón, where she trains and mentors teachers.

4. **Dr. Susan Huss-Lederman**- Associate Professor of Applied Linguistics & TESL in the Department of Languages and Literatures at the University of Wisconsin-Whitewater. Focus during the Listening Phase: English language teacher training.

   Susan has extensive experience in the area of best practices related to forming and strengthening the skills of teachers of English as a second language (TESL). She has developed university curriculum in this area, including on-site and distance-based graduate programs. She also designed and
implemented a two-year, sustained professional development program for English teachers for a state-wide, academic high school system in Oaxaca, Mexico. This program included on-site workshops in Oaxaca and a homestay experience for teachers in Wisconsin. For 13 years, Susan co-directed several federally funded projects to increase the number of bilingual and ESL-certified teachers in Wisconsin public schools and to offer professional development to all teachers working with English language learners.

5. **Dr. Nick Cabot**-Clinical Assistant Professor of Science Education at the University of North Carolina, Chapel Hill. Focus during the Listening Process: Natural Science.

Nick obtained his Ph.D. at the University of Washington following a 20 year career as a high school science and mathematics teacher and department chair. His research has focused on factors that affect the influence of professional development programs on changing teachers’ pedagogical content knowledge and classroom practice. His philosophy of teaching, especially in science, is that students learn science and science teachers learn to teach science by engaging in many of the same practices of professional scientists - observation, experimentation, model building and public debate. His professional experience includes consulting on elementary science curricula, development of classroom teaching tools connected to new curricula, and piloting computer-based science curricula.


Bill’s experience includes the design of a new public elementary school as a demonstration site for Teachers College (Columbia University) which opened in Harlem in 2011. He conducts leadership workshops in Jordan, Palestine, Poland, Mexico, and Thailand. He served as the CPRE Project Director for the International Baccalaureate Access Project, funded by the Bill and Melinda Gates Foundation. Bill was the founding Principal of two public schools, including one offering the International Baccalaureate Program. He was a Network Leader and Executive Director for School Quality for the New York City Department of Education.

7. **Adriana Martín del Campo**-Director General of Instituto Thomas Jefferson Valle Real in Guadalajara, México. Focus during the Listening Phase: focus group facilitation and Language Arts.

Adriana served as Director of Educational Projects for an NGO on the coast of Nayarit, México and has established and lead two bilingual schools. She was a mentor in the area of Language Arts for a network of public schools in the metropolitan area of Guadalajara in a project conducted jointly with the Language Arts Project of Columbia University and Cuauhtémoc-Moctezuma. Adriana is a bilingual educator with degrees in Social Anthropology and Primary Education and has conducted research on the indigenous communities in rural Mexico.
Appendix 2: The CPRE Framework used in the Listening Phase

The framework chosen to guide observations and subsequent analysis of the Listening Team draws on the experience of experts in organizational development as well as an empirical theory based on research on school improvement conducted in the United States, which CPRE has found useful to apply in analysis of educational systems in other countries and cultures.

The primary source for the framework used is a seminal book on organizational diagnosis written by sociologist and organizational development practitioner, Burton Weisbord. However, revisions were made to Weisbord’s original six-box theory based on the work of Tony Bryk and colleagues from the Chicago Consortium for School Research. The Weisbord framework is based on research and experience with organizational development in many fields, while the Bryk model is based on empirical studies of school development in Chicago. Although developed 30 years apart and based on different sources of evidence, the two frameworks are remarkably similar and both provide useful frameworks for understanding schools as organizations.

The Weisbord Model

The conceptual framework developed by Weisbord takes a systems approach to looking at an organization’s structure and design. Known as the “six-box model”, the framework is comprised of the following interconnected components:

- **Purposes**: What “business” are we in?
- **Structure**: How do we divide up the work?
- **Relationships**: How do we encourage collaboration? How do we manage conflict among people? How do our systems impact relationships?
- **Rewards**: Are there incentives for doing all that needs doing?
- **Leadership**: Is someone focusing, guiding, and coordinating the work of the organization?
- **Helpful Mechanisms**: Have we adequate coordinating and improvement systems?

The Bryk Framework

CPRE often uses a new framework for organizational research on schools developed by Tony Bryk and his colleagues at the Chicago Consortium for School Research. This framework, developed from the analysis of a decade of research on schools in Chicago, identifies five essential supports for school improvement: 1) a coherent instructional guidance system, 2) professional capacity, 3) strong parent-community-school ties, 4) student centered learning climate, and 5) leadership that drives change (Bryk, 2010). This framework is displayed in figure 1.

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3 Weisbord, B. *Organizational Diagnosis* (1978).
To narrow the focus of the data collection required during the Listening Process, CPRE suggested using the Weisbord model as the baseline framework, but adapting it slightly to draw on certain components of Bryk’s approach:

- Merging the “Purposes” and “Leadership” categories of Weisbord, as the two are united in school management as leaders set the vision and the goals for schools, and by integrating Bryk’s findings related to leadership;
- Adding from Bryk “Parent and Community Relations” because community resources and engagement are critical to schools, and in the islands, are clearly a crucial element in the wider context of the schools;
- Adding from Bryk “Professional Capacity” to encourage the listeners to provide a more detailed evaluation of the state of teaching itself;
- Combining Bryk’s emphasis on instructional guidance systems with Weisbord’s “Helpful Mechanisms”
- Adding from Bryk “Context” (CPRE renamed this final category “Everything Else”) to encourage attention to the external policies and professional cultures that also may be crucial to school systems on the islands.

The resulting framework includes seven distinct categories for data collection and reporting. The framework was intended to be comprehensive and cover most of the key aspects of school performance, but also practical in terms of its usability during a relatively short observation period.

1. **School Leadership.** Research identifies the following as essential leadership tasks: 1) defining purpose, 2) embodying purpose in programs, 3) ensuring quality of teaching and supporting improvements in teaching, and 4) maintaining order with respect to internal conflict. Studies also point to the important role of inclusive leadership and the director’s ability to cultivate a team of leaders that develop a sense of shared responsibility for school improvement (Burke 1992; Selznick 1957; Bryk et al. 2010). Relevant questions in this area included:
• Is there a clear vision for the school?
• What is the typical form of leadership?
• How are decisions affecting teaching and learning made?
• To what extent, and in what ways, are formal leaders involved in instruction?
• Do teachers have a voice in decisions affecting teaching and learning?
• Are there formal leadership roles for teachers?
• What roles do informal leaders play?

2. **Professional Capacity.** Bryk describes schools as “human resource-intensive enterprises that are only as good as the quality of faculty, the professional development that supports their learning, and the faculty’s capacity to work together to improve instruction.” Relevant questions in this area included:

• What is the quality of the professional staff?
• Do they hold degrees in their fields of teaching? Are they teaching in their fields?
• What experience do they have?
• What is the quality of the observed instruction?
• Are classrooms active? Is the observed teaching student-centered?
• What is teachers’ access to professional development? What is the perceived quality of the professional development?
• Are teachers willing to try new approaches?
• Is there a sense of professional community?
• Do teachers collaborate on lessons? Do they observe each other? Do they share lessons and materials? Are there regular meetings to discuss teaching and student progress?

3. **Relationships in the School.** Weisbord identifies three important kinds of relationships—those between individuals, between units or departments that perform different tasks, and between the people and the nature and requirements of their jobs. Relevant questions in this area included:

• How do their technologies and systems impact relationships?
• What is the relationship between administration and teachers? Between teachers and parents? Between students and teachers?
• How interdependent are the different people and roles?
• How are conflicts mediated?
• How is cooperation encouraged and supported?
• What are the issues that bring people together and what are the issues that push them apart?
• How do people present themselves to one another—what are their usual dispositions toward those in other roles in the organization?

4. **Parent and Community Relationships with Schools.** Bryk’s findings point to the importance of school’s establishing trusting relationships with parents and communities and to work together to strengthen student learning. More importantly: 1) teachers need to be knowledgeable about student culture and the local community and draw on these in their lessons; 2) school staff must reach out to parents and community to engage them in the process of strengthening student learning, and 3) schools should draw on a network of community organizations to expand services for students and their families. Relevant questions in this area included:
• What roles do parents and community play in the schools?
• What are the mechanisms for communication with parents and community members?
• How do the schools encourage collaboration with parents and the community?
• How do the schools manage conflict among staff and between teachers and parents?

5. Incentives. The incentive component of the Weisbord model includes incentives that can be monetary or emotional, noting rewards that affect emotions often work better. Research points to the importance of rewarding accomplishments immediately in order for employees to connect their behavior with the reward (Allred et al., 2008; Kotelnikov, 2008). Relevant questions in this area included:

• Are there rewards for doing all that needs doing?
• Are teachers recognized and praised for good work?
• Are there sanctions for failing to do what is expected or required?

6. Helpful Mechanisms. In the Weisbord model, helpful mechanisms include the systems and processes that every organization needs to survive: planning, control, budgeting, and other information systems that help the members of the organization to do their jobs and meet organizational objectives (Burke, 1992). Along these lines, Bryk speaks to the importance of coherent instructional guidance systems that articulate the “what” and “how” of instruction and support teachers, and which include teaching materials, tools, and instructional routines. Accordingly, Listeners sought to answer questions such as:

• What supportive mechanisms are available to leaders and teachers?
• Do principals and teachers have access to data on student performance that can identify needs and guide interventions?
• Is the available data used to focus improvement efforts?
• Are there lesson plans?
• What forms of instructional guidance are provided?
• Are there adequate instructional materials available to teachers?
• Are there computers in the classrooms or available to teachers, to students?

7. Outside Environment/Everything Else. Bryk identified the importance of various aspects of the community context (available resources, social capital, etc.) that could impact school performance. The CPRE framework expands this concept to including external policies and professional cultures that also may be crucial to schools on the islands. In this area, relevant questions included:

• What are the most critical aspects of the school context?
• What other policies, practices and organizations deeply affect the operation of the schools?
• Is there variation across schools in these external influences?
• What other influences should be taken into account in planning an improvement project?
Figure 2: The CPRE Framework
Appendix 3: Designing effective professional development

There is growing agreement in the research community that contrary to contemporary reform fads, it is the design features of professional development that matter most, not where it is provided. Research evidence collected from numerous studies over several decades has identified a set of key features that profoundly affect the impact of professional development on teaching (Corcoran, 2007; Darling-Hammond et. al., 2009; Desimone, 2009; Odden, Archibald, Fermanich, & Gallagher, 2002; Timperly, Fung, Wilson, and Barrar, 2007). These include the focus, form, and duration of the professional development, its emphasis on collective participation, the curriculum content, and active learning, and the degree to which the professional development builds coherence for teachers by drawing connections from their practice to student learning and external standards, and by engaging the support of school leaders.

Key features include:

- **The degree of focus** on the improvement of student learning in a specific content area and in a specific setting. Effective professional development is designed to help teachers meet the needs of real students in real classrooms and addresses real problems that educators are facing with their students.

- **The form of the activity** — that is, whether the activity is organized as a summer workshop, university course, study group, teacher network, or mentoring collaborative. Research suggests that effective professional development often combines intensive off-site learning experiences with school-based and job-embedded opportunities to learn.

- **The duration of the activity**, including the total number of hours that participants are expected to spend in the activity, as well as the span of time over which the activity takes place. Research has shown the importance of intensive immersion in new content combined with continuous, ongoing, long-term experiences that total a substantial number of hours each year. Some researchers have found that teachers need 30 or more hours of professional development annually to change their practice, and others have found it takes 2-3 years to fully incorporate new approaches into their practice.

- **The degree to which the activity emphasizes the collective participation of groups of teachers from the same school, department, or grade level** and contributes to the development of their collaborative practice. Research suggests that the most effective professional development is organized around groups of teachers from a school who share responsibility for the same children and/or subject.

- **The degree to which the activity is content-based** — improving and deepening teachers’ knowledge of the content of the curriculum they teach. Research concludes that teachers need to know well the content they teach, need to know common student miscues or problems students typically have learning that content, and effective instructional strategies linking the two.
• **The emphasis placed on active learning**, as suggested by research on adult learning, professional development will be more effective if teachers are engaged in the meaningful analysis of teaching and learning; for example, by scoring student work or developing and “perfecting” a standards-based curriculum unit or by observing a lesson and reflecting on it.

• **The creation of coherence** by helping teachers see connections among student content and performance standards, instructional materials, classroom and standardized assessments, school and district goals, and the development of a professional community. Research supports tying professional development to a comprehensive, inter-related change process focused on improving student learning.

• **The engagement and preparation of school leaders** to provide active support for implementing new practices. School leaders participate in these activities as appropriate in order to be able to support the use of the new knowledge and skills by teachers.

These features provide a design frame for describing, comparing, and analyzing professional development. They imply a clear purpose and a high degree of rigor for the activity. They suggest that professional development is a serious business, a product of thoughtful design, and that the rationale for participation and learning should be clear and compelling. Thus, teachers should be expected to incorporate new knowledge and skills into their practices.