

Building Leadership and Entrepreneurial Capacity

For a Sustainable Hawaii

by

Linda M. Lewandowski

Dr. Michael K. Orbach, Advisor

May 2012

Masters project submitted in partial fulfillment of the
requirements for the Master of Environmental Management degree in

the Nicholas School of the Environment of

Duke University

2012

Acknowledgements

I am deeply indebted to all of the people in the North Kohala community and others throughout Hawaii who have contributed to supporting this effort directly and indirectly. I have experienced the true essence of aloha through their patient yet dedicated efforts to share their knowledge and experience of their culture, what is important to them and their community, and open the door to greater collaboration in developing their children as future leaders and innovators. Their willingness to openly and honestly share information, experience, and knowledge at their homes or by opening their events to my participation throughout the months of this study was truly appreciated. Their warmth, dedication, and genuine commitment to moving North Kohala towards a more sustainable lifestyle is laudable. In addition, this study would not have been possible without the assistance of all of my professors at Duke throughout my entire DEL-MEM program. Their mentorship and support went well beyond the routine expectation from an academic leadership program. Dr. Chris Wedding provided me invaluable mentorship, contacts and facilitated connections to several key entrepreneurs and organizations during my two independent study classes (Spring 2011 and Fall 2011). I am very thankful to have Dr. Michael Orbach as my advisor for this undertaking. His wisdom, experience and pragmatic approach was invaluable as I slogged through multiple academic analytical models only to find that the practical experience and knowledge gained from members of this wonderful Kohala community were the true gems of this study. Last but certainly not least, I am thankful for the undying support of my husband and family who have supported me 110% in this challenging endeavor. Mahalo nui loa!

Abstract

Just a few years into the 21st century, Hawaii began to examine itself in the context of a changing world. Some of the challenges that this isolated chain of islands in the middle of the Pacific Ocean faced were a growing population, deteriorating public infrastructure, climate change impacts, dependency on imported fossil fuel and food, and decreasing biodiversity. After a two year effort involving over 10,000 island residents, the Sustainability Task Force released Hawaii 2050 (State of Hawaii, 2008) which was the most comprehensive planning effort in the state in over thirty years. In addition, the Governor's office launched the 2008 Hawaii Clean Energy Initiative (HCEI) in partnership with the US Department of Energy to transform Hawaii's fossil fuel energy backbone to 70% from clean indigenous sources by 2030 (DBEDT, 2008). This energy transformation will spawn an economic shift away from tourism towards the high tech demanding a more skilled and technical work force. Currently, the K through 12 curricula are not structured to develop leaders and entrepreneurs who will successfully guide Hawaii's efforts towards a more sustainable way of life.

Planet Pioneers is an organization designed to fill this gap. Their main goal is to make a unique contribution to Hawaii's security, stability, and economic growth by expanding the capacity of local communities and K-12 students to innovate and lead towards a sustainable future. This study is undertaken to:

1. Identify stakeholder knowledge, skills and motivations for supporting PP mission that will inform PP partnership and program designs.
2. Document and analyze the knowledge, attitudes and perceptions of local community residents and other stakeholders as they pertain to the vision of a sustainable Hawaii.

Data analysis consisted of a stakeholder and partner analysis using a survey tool and key informant interviews as the primary research tools. Results indicated that Planet Pioneers will be supported by partners and local community members. Where the results can best inform the Planet Pioneer partnership and program model is to raise the community's general awareness and knowledge of sustainability and how to scale the Planet Pioneer model after the pilot so it expands to a full K12 program with the addition of internships.

Table of Contents

Acknowledgements	ii
Abstract	iii
Hawaii Transformation	4
Introduction.....	4
Research Question and Objectives.....	6
Background: Sustainable Development and Clean Energy in Hawaii.....	7
The Planet Pioneers Concept and Evolution Over Time	9
What is the Compelling Need?.....	9
Validating the Idea	10
Strategic Planning	10
Identifying Potential Partners	13
The Plan.....	15
The Reality and Adaptations.....	17
Exploration of Partnership Models.....	20
Ulumau.....	21
Unreasonable Institute	22
Launching the PP Pilot	25
Methodology	25
Results.....	27
Next Steps	44
Discussion	44
Conclusions.....	48
References and Relevant Literature	50
Appendix A: Brief Overview of Planet Pioneers and the Research Effort	54
Appendix B: Questionnaire (including data summary)	56
Appendix C: Planet Pioneers Strategic Plan (Short Version)	64

List of Figures

Figure 1: Research Paper Roadmap	7
Figure 2. H2050 Goals	8
Figure 3. Initial PP Organization	16
Figure 4. Funnel Methodology for Survey Data Analysis	28

Figure 5. Fundraising 101.....48

List of Tables

Table 1. Planet Pioneers.org Original Concept.....11

Table 2. Eight Quarter Action Plan.....15

Table 3. PP Principled Framework.....16

Table 4. PP Pilot Action Plan and Schedule.....18

Table 5. PP Communications and Outreach Plan.....19

Table 6. Ulumau Core Values and Program Elements.....21

Table 7. UI Model.....23

Table 8. Planned and Actual Surveys.....27

Hawaii Transformation

Introduction

Just a few years into the 21st century, Hawaii began to examine itself in the context of a changing world. Some of the challenges that this isolated chain of islands in the middle of the Pacific Ocean faced were a growing population, deteriorating public infrastructure, climate change impacts, dependency on imported fossil fuel and food, and decreasing biodiversity. The 2005 Hawaii State Legislature passed Act 8 which established a 25-member Sustainability Task Force charged with developing a comprehensive plan for a sustainable Hawaii through the year 2050 (State of Hawaii, 2008).

After a two year effort involving over 10,000 island residents, the Task Force released Hawaii 2050 (State of Hawaii, 2008). Hawaii 2050 (H2050) was the most comprehensive planning effort in the state in over thirty years. The two main questions it focused on answering were: 1) Where are we going? and 2) What is Hawaii's preferred future? H2050 is the blueprint for Hawaii's transformational journey to a sustainable future state. Additionally in 2008, the Hawaii Clean Energy Initiative (HCEI)¹ was launched in partnership with the US Department of Energy (DBEDT, 2008) to transform Hawaii's fossil fuel energy backbone to 70% from clean indigenous sources by 2030. This energy transformation holds the potential to spawn an economic shift away from a tourism dominated economy towards a knowledge-based high tech economy which will demand a more skilled and technical work force.

One of the findings of the Sustainability Task Force was that sustainability is a balance between three interdependent components: economic, societal/cultural, and environmental (State of Hawaii, 2008). The challenge is to find the balance between these assets that is self-sustaining. It is a fundamentally compelling issue and about the future survival of Hawaii and its people. The Task Force recognized education would be key to a sustainable Hawaii. The current availability of highly skilled people to meet H2050's goals is inadequate to meet growing demand. The educational goals for H2050 emphasize integration of sustainability into curriculums and enhanced teacher training. H2050 does not focus on developing critical

¹ Hawaii Clean Energy Initiative (HCEI), a public-private partnership between Hawaii, the Energy Department and other governmental and private groups. The initiative intends to generate 40 percent of the state's electricity from renewable energy sources by 2030, and implement energy efficiency measures to cut energy demand by 30 percent.

thinking and leadership principles required for innovation. Furthermore, the K through 12 curricula are not structured to develop leaders and entrepreneurs who will successfully guide Hawaii's efforts towards a more sustainable way of life.

This critical gap in Hawaii's transformational goals and activities provides both a challenge and an opportunity. This gap is precisely the focus of Planet Pioneers (PP). PP is an organization designed to bring together a network of innovative thinkers, practitioners and entrepreneurs for the sole purpose of building sustainability leadership and entrepreneurship capacity in K12 students in Hawaii who will be needed to successfully lead Hawaii through the transformation of its energy infrastructure and economy.

PP exists to transfer experiential knowledge and leadership principles that will provide mentorship as well as inspire our next generation of youth to innovate and lead the journey to transform Hawaii. The organization will also strive to increase awareness of sustainability and cultivate a collaborative exchange with local community residents, industry, government, academia and other stakeholders working towards a sustainable future.

To achieve mission success, PP, in cooperation with key partners, undertake a transformational approach to design strategies and develop programs that build the capacity in local communities and individuals to innovate and lead Hawaii towards a sustainable future. PP is engaging partners and stakeholders in the development of a comprehensive sustainability leadership program that better integrates disparate efforts to transform Hawaii's energy and economic infrastructure. This necessitates collaborative planning and engagement across partners and stakeholders and is framed by a thorough understanding of community concerns and perspectives. Diligence spent in the design and planning phase have decreased execution risk and provided for greater buy in of all concerned. A stakeholder analysis provided the foundation for this understanding, and informed the development of strategies to ensure stakeholder support of and involvement in the PP program lifecycle.

PP is currently an approved project of the North Kohala Community Resource Center which is a not-for-profit 501(c) (3) entity providing local support and bridging to funding and education for projects that benefit North Kohala (NKCRC, 2012). Following this first year as a

pilot project, PP plans to incorporate as a 501(c) (3) Benefit Corporation (B Corp, 2012). PP began startup activities in January 2011.

Research Question and Objectives

The research question that this study aimed to answer is: What is the design of the partnership and program model needed to accomplish the Planet Pioneer mission? The answer to this question is important because:

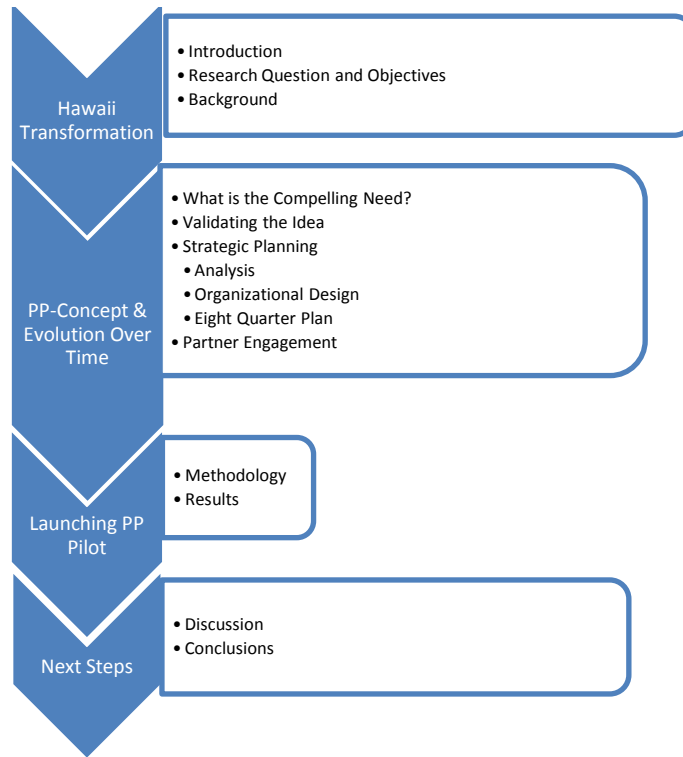
1. PP is based on an all volunteer design for all of its internal operations as well as external volunteer partners who are willing to share their time and experiences with PP students;
2. Without understanding what motivates people to support internal and external PP activities and students directly, PP risks mission failure; and
3. A deep understanding of cultural factors that would both inhibit as well as lend support to PP is necessary to effectively communicate with stakeholders and partners.

The objectives of the research are to:

1. Identify stakeholder knowledge, skills and motivations for supporting PP mission that will inform PP partnership and program designs.
2. Document and analyze the knowledge, attitudes and perceptions of local community residents and other stakeholders as they pertain to the vision of a sustainable Hawaii.

The figure below shows the process used to flesh out Planet Pioneers from concept to an operational pilot program. This paper and the associated research is organized within the construct of the Research Paper Roadmap (Figure 1) to help the reader orient the startup steps of Planet Pioneers in parallel with the research effort required to successfully complete this masters program.

Figure 1. Research Paper Roadmap



Background: Sustainable Development and Clean Energy in Hawaii

In 2008, Hawaii’s Sustainability Task Force issued the Hawaii 2050 Sustainability Plan (State of Hawaii, 2008) which included five goals (Figure 2):

1. Living sustainably is part of our daily practice in Hawai’i.
2. Our diversified and globally competitive economy enables us to meaningfully live, work and play in Hawai’i.
3. Our natural resources are responsibly and respectfully used, replenished and preserved for future generations.
4. Our community is strong, healthy, vibrant and nurturing, providing safety nets for those in need.
5. Our Kanaka Maoli² and island cultures and values are thriving and perpetuated.

² Native Hawaiians



Figure 2. H2050 Goals (State of Hawaii, 2008)

The H2050 Plan, as it is known, is a comprehensive plan that provides for integrated, broad reach policies for the economic, social and environmental future of an entire state of Hawaii. It is the blueprint for Hawaii's preferred sustainable, energy secure and thriving future. The plan is the response to a legal mandate to develop a state-wide long range sustainability plan to deal with the emergent opportunities and challenges for the 21st century (State of Hawaii, 2008). The plan was developed by a diverse 25-member task force whose membership reflected people from all walks of life and across a broad base of experience. The two year effort engaged community groups across the islands as well as using internet based surveys and polling techniques.

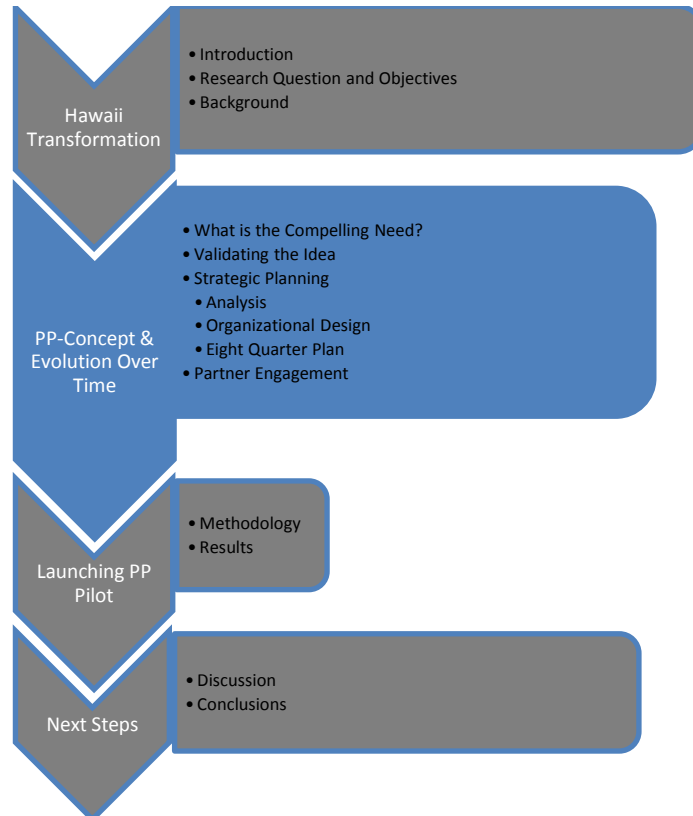
In 2010, the plan was updated to reflect attributes and metrics to be able to measure progress on the road to Hawaii's transformation. Sustainability means different things to different people. H2050 defined sustainability from the convergence of its citizens' voices across all of the islands (State of Hawaii, 2008):

A Hawai'i that achieves the following:

- Respects the culture, character, beauty and history of our state's island communities

- Strikes a balance between economic, social and community, and environmental priorities
- Meets the needs of the present without compromising the ability of future generations to meet their own needs

H2050 and HCEI set the context for the emergence of Planet Pioneers.



The Planet Pioneers Concept and Evolution Over Time

What is the Compelling Need?

Planet Pioneers (PP) was conceived to focus on transferring knowledge and best practices to the immediate next generation of Hawaii’s children that will lead organizations, initiatives and innovations in Hawaii’s government, businesses and society which would, in aggregate, contribute to a more sustainable Hawaii.

The idea for PP was conceived on the island of Hawaii in early 2010 and later refined while on a bus during the first DEL-MEM place-based leadership session at Duke University in late summer 2010. Conceptually, the idea sounded like a worthy undertaking given that the H2050 Plan and HCEI were spurring a wide range of activities across the Islands that were adding increased momentum towards a more sustainable way of life economically, environmentally, and socially. The idea needed to be tested before any large effort was expended in organizing resources and standing up the organization.

Validating the Idea

Initial market research was conducted by reaching out to members in the North Kohala community who were long time residents, many of whom had been born and raised in North Kohala and had attended the local public schools. Informal conversations at local hangouts or community events were the main venue for conducting these conversations. As these conversations continued from the summer of 2010 through the late fall of 2010, it became apparent that there was a need for a program that would increase sustainability leadership and entrepreneurship capacity of the local public school students at all levels.

Strategic Planning

A strategic plan (Appendix C) was developed in December 2010 to capture the original mission, vision, core values, goals and the initial organizational structure that would focus and guide startup activities through the successful launch and completion of the initial year of operations and the first cohort of Pioneers. Table 1 shows the main components of the original Planet Pioneers concept based on early community-based market research in 2010.

Table 1. Planet Pioneers.org Original Concept

Mission	Vision	Core Values	Goals
<p>Planet Pioneers exists to transfer experiential knowledge and leadership principles that will provide mentorship as well as inspire our next generation of youth to innovate and lead the journey to transform Hawaii. We will also strive to increase awareness of sustainability and cultivate a collaborative exchange with local community residents, industry, government, academia and other stakeholders working towards a sustainable future.</p>	<p>Expand the capacity in local communities and individuals to innovate and lead Hawaii towards a sustainable future.</p>	<p>-Good citizenship—respect for our ohanas (families), aloha for each other and the aina (land) -Leadership—through example and engagement cause the extraordinary to happen -Service—selfless dedication with uncompromising ethics -Critical thinking—hone the ability to think through complexity systematically and reach informed conclusions -Innovation—bringing new ideas to practical ends by challenging the conventional wisdom and exploring new ways of thinking and doing in collaboration with others -Continuous learning—continuously expand the capacity to create results -Collaboration—creating a sustainable future through sharing knowledge, learning and building consensus</p>	<p>-Make a unique contribution to Hawaii’s security, stability, and economic growth by expanding the capacity of local communities and K-12 students to innovate and lead towards a sustainable future -Focus on one school complex initially and select up to six students to start the program -Expand to second school complex in year 2</p>

There were several programs underway on the Big Island³ that contributed to sustainability in one way or the other. The majority of these programs were focused on agriculture and food security. A local not-for-profit community-based organization, the North Kohala Community Resource Center (NKCRC) was consulted to identify the number and types of

³ Big Island refers to the island of Hawaii in the Hawaiian Island chain

projects that were being started or already underway (NKCRC Projects, 2012). NKCRC is a 501 (c) (3) not-for-profit organization established in 2002 to support “individuals or groups who are creating projects that have the potential to enhance and sustain the North Kohala community” (NKCDC, 2012). The NKCRC leadership has a great deal of knowledge and experience with the local needs of the North Kohala community due to its mission and daily engagement with members of the community, public and private funders, and other key local leaders.

The NKCRC leadership confirmed that the concept of Planet Pioneers would fill a vital need in the North Kohala community (Partner information exchange #6, 2011). Initial investigation of a potential partnership with NKCRC revealed that PP may benefit by becoming a project beneath NKCRC’s 501 (c) (3) legal structure. NKCRC provides fiscal sponsorship for projects that it accepts under its not-for-profit shell. PP was originally intended to include formation of its own 501 (c) (3) Benefit (B) Corporation⁴.

Early research into incorporation included information gathering sessions with Benefit Corporation (Partner information exchange #1, 2011) points of contact in North Carolina, local small business and Chamber of Commerce people (B Corp, 2011), and with a local Hawaii Island B Corporation initiator (Partner information exchange #10, 2011). Hawaii was officially added to the list of states where B Corporations could form in the summer of 2011 (HSB 298, 2011). The idea of B Corporations was introduced by Dr. Chris Wedding, a Duke University adjunct professor, during an independent study project focused on sustainability planning and design conducted with the director of the HPA Energy Lab on the Big Island. As the B Corporation was explored further with contacts provided by Dr. Chris Wedding, it became increasingly clearer that PP should pursue incorporation as a B Corp not-for-profit. The time required to pursue incorporation and B Corporation certification exceeded the available time to complete PP startup and program kickoff planning in 2011.

The NKCRC provided a reasonable alternative that would allow for PP startup activities to continue for the planned 2011 launch while mitigating the risk for delays. So PP submitted an application to be considered for fiscal sponsorship under NKCRC in August 2011. The advantages of this relationship included: successful selection provided instant credibility in the

⁴ A Benefit Corporation or B Corp is new type of legal business entity that creates general benefit for society as well as for shareholders. B Corps use the power of business to solve social and environmental problems.

North Kohala community for the local value of the organization; decreased the administrative burden on PP staff for legal transactions with respect to establishing and maintain a legal fundraising structure; and assisted with branding PP further in the community by exposure on NKCRC's website (NKCRC Projects, 2012) and integration into their marketing materials.

Aligning with the fiscal sponsorship provided under the NKCRC freed up valuable time for PP's small volunteer part-time staff to dedicate their focus on cultivating partnerships, recruiting the first cohort of Pioneers and volunteer teachers, and in program operations activities. The original PP vision included incorporation as a not-for-profit 501 (c) (3) Benefit (B) corporation (B Corp, 2012) was far too ambitious for the tiny part-time volunteer staff and would have potentially increased the risk for less than optimum program performance. In retrospect, the PP Academy activities would have exceeded the available time resources of its founder. PP as a pilot project under NKCRC allows for available resources to remain razor sharp focused on completing a successful first year of operations and graduating its first cohort of Pioneers.

The lessons learned and best practices amassed during the first year would provide a solid foundation to roll into a successful second year launch of PP as a fully incorporated B corporation with an expanded PP Academy across K through 12 and addition of an internship program.

Identifying Potential Partners (Partner Information Exchanges #1-30)

Potential partners who were Hawaii-based innovators and entrepreneurs were identified by scanning the Hawaiian media for stories that described island innovators, their companies and projects across multiple businesses of Hawaii's commercial sector and prominent, relevant not-for-profits.

Many innovative projects were already initiated or in development across the islands in response to Hawaii's commitment to transform its energy infrastructure to be independent of fossil sources by 2030 (DBEDT, 2008). In addition, attendance at local events hosted by the Chamber of Commerce, the State's Department of Business, Economic Development and Tourism (DBEDT), and Hawaiian island business and economic forums (Asia Pacific Clean Energy Summit and Exposition, 2010) allowed for engagement with potential partners. This was an

excellent way to provide an introduction of Planet Pioneers and its mission and gauge level of interest in a potential future partnership as the program became refined.

Between the summer of 2010 and early 2011, there was clearly enough interest to identify a list of the first set of PP partners based on a common vision of a mentoring our youth towards realizing the vision of a sustainable Hawaii. The majority of partners which were not from the local Kohala area were engaged face-to-face at a prominent venue (Asia Pacific Clean Energy Summit and Exposition, 2011) in Honolulu in September 2011 to follow up on initial partnering discussions and to lock in their commitment to support the PP Academy program launch in January 2012.

The PP Academy program was far from being developed at this point so periodic engagement of the partners was necessary to continue to build and maintain relationships. This proved to be a critical element in the successful launch of PP's program. Furthermore, the growing momentum to increase renewable energy across the island provided a good focus for pursuing energy sector partners. Each of the partners identified for first year pilot phase program participation were either totally in the energy sector or their business contained a significant energy component.

Another key partnership identified in the initial strategic plan (Appendix C) was the school. Although PP's goals include implementing a full K12 program at the first school complex, the volunteer staff and available hours to properly plan, launch and manage a successful first year pilot program needed a smaller scope. Properly sizing the scope of the first year's pilot program was identified as an area of risk for successful launch.

The PP planning staff decided to focus on high school students only for the pilot with a maximum of six students in the first cohort. Later expansion of the scope of the program and PP organization would greatly benefit from lessons learned during the pilot. Contributing factors that led to this decision were: the PP operations officer was also a well-established Kohala High School (KHS) teacher who knew the administration and student body well; an assessment that KHS population of 270 students would potentially yield candidates from 1-2% of its population; an assumption that 1-3 volunteer teachers could be recruited to assist with candidate selection and refinement of the program; an assumption that the high school

population and community would be receptive to this type of program. Kohala High School was selected because initial conversations in early 2011 with the former vice principal confirmed that PP would satisfy a compelling need for leadership and entrepreneurship at the school.

The Plan

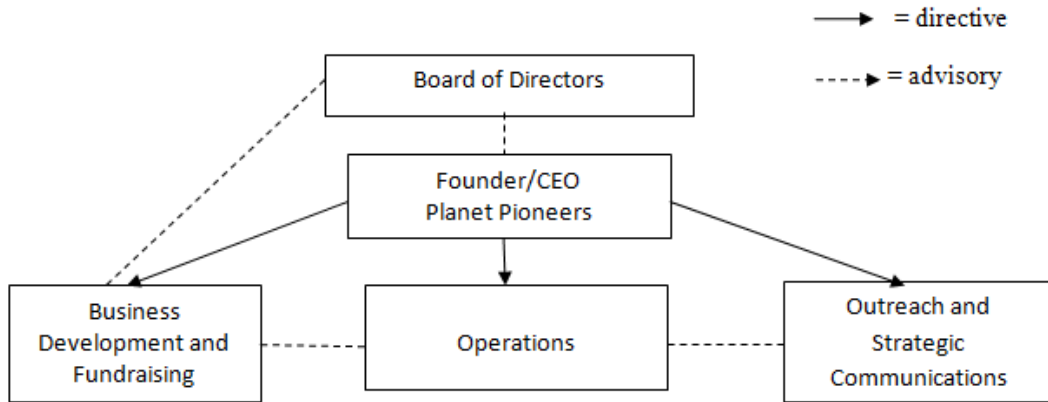
A communications and outreach campaign would be initiated as part of pre-launch activities in the fall of 2011. An eight quarter plan had been developed as part of the strategic plan. Table 2 is the eight quarter action plan for implementing PP’s strategic plan:

Table 2. Eight Quarter Action Plan

Quarter	Activities
1Q11	Identify and screen Board of Director (BoD) members; select and install BoD; conduct meeting to identify PP division heads; screen and select PP division heads; identify key partnerships, engage, partner with BoD
2Q11	Plan PP launch with division heads; develop curriculum; develop strategic communications and outreach plan; set up website
3Q11	Kickoff program; monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary
4Q11	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; conduct annual BoD meeting
1Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; plan for program expansion to second complex
2Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; identify, engage, partner with second groups
3Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; kickoff second program
4Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; conduct annual BoD meeting

The initial planned PP organization (Figure 3) included an advisory board, an executive director and three division leads that would head up the three main functional areas of first year activities: operations; outreach and strategic communications; and business development and fundraising.

Figure 3. Initial PP Organization



The organizational model reflects a “learning model” (Argyris and Schön, 1974). The learning organization is a model that values learning and adaptation to be more agile in delivering value to its stakeholders rather than conforming to a highly centralized and inflexible organization that does not perform well in high paced, complex environments (Argyris and Schön, 1978). This type of organizational model works well where all members have a high degree of shared awareness of organizational mission and goals and where information is shared across the organization to support decision-making. The advisory board consisted of three members who were local community residents and current or previous business owners.

The principled framework (Allan, 2008) was used to structure planning, decision-making and communications activities (Table 3):

Principles	Plans
Sponsorship	Engage BoD and the Sr. Leadership Team (CEO and Division Directors) to define and priorities needs and communicate across organization and with partners
Planning	The strategic plan will be reviewed by senior leadership and their input incorporated, as appropriate. The plan will include what we hope to accomplish, the different roles and the risk reduction/mitigation strategies.
Measurement	Key tiered metrics will be defined by sr. managers. Standard project management techniques (Project Management Institute standards) will be used for routine monitoring and control of the program to include continuing assessment, identification and mitigation of risks.
Engagement	Internal: all PP personnel will be consulted to enhance organizational shared knowledge especially best practices and lessons learned; External:

	Pro-active web-based and multi-media campaign, town hall meetings and annual conference. Ongoing board and CEO networking with community leaders, private and public sector leaders, parents, students and academia.
Support Structures	A standard Commercial-Off-the-Shelf set of web-based collaboration and management tools will be utilized. With additional complex expansion, an annual review will be conducted to assess gaps and to develop action plans to resolve the deficiencies.

Table 3. PP Principled Framework

The Reality and Adaptations

The tempo of pilot startup activities was progressing well through the early part of 2011. The strategic plan proved to be a meaningful and necessary expenditure of time. It forced translation of the mission, vision, and guiding principles into and organizational construct and eight quarter plan for an incorporated NFP undertaking a broader K12 program across the entire Kohala school complex in its first year of existence with plans to expand to another school complex in year two.

It became apparent in quarter one that the planned launch of such an entity with a broad program scope was considered too high risk for failure in the first quarter of 2011 given the lead time needed for incorporation and necessary community outreach. An additional barrier included an assessment that the old school principal may not have been open to a full partnership with PP and, therefore, may not have supported the program (Partner information exchange #2). The plan was rapidly adapted by scaling down the original and broader program action plan envisioned for a full up NFP organization down to a pilot program (Table 4) under the fiscal sponsorship of a well-established 501 (c) (3).

Preliminary discussions about PP and KHS were conducted over the summer with the Dean of Students. This was especially important for continuity purposes because the school’s principal had announced her retirement at the end of the school year in May 2011. The new principal was not selected and announced until just before the school year started in August. This event had the potential to complicate smooth execution of the startup schedule if the new principal, a critical stakeholder, was not supportive of PP at KHS.

Adjustments to the organization included an operations lead that was one of the volunteer KHS teachers. This step would enhance planning and execution of program activities

with students because of their daily co-location at school while freeing up time for the executive director to deal with building and maintaining partnerships, fundraising and interaction with the advisory board. This move resulted in the volunteer teachers actually becoming stakeholders instead of just partners as originally envisioned. Business development and fundraising was largely done by the executive director with assistance from the advisory board. Outreach and strategic communications was envisioned to be a separate staff member but was largely planned and executed by the director and operations lead during the first few months of operations as a pilot and midway through the first Pioneer Academy program. Table 4 shows the PP pilot startup plan and schedule of activities for 2011.

Activity	Date
PP briefing to KHS SCC	Aug 9
KHS identifies faculty program volunteers	Aug 22
Program planning meeting	Aug 27
Initial outreach to students	Sep, Oct
Initial outreach to parents and other community members	Sep, Oct
Partner surveys out	NLT mid Oct; re-look late May
Partner surveys returned	End Oct; re-look late May
Website activation	Oct
Student applications due	Nov 18
Convene selection board	Dec 3
Announce first year Pioneers	Dec 5
Program kickoff	Jan 4-May 30, 2012 (12 sessions)

Table 4. PP Pilot Action Plan and Schedule

A successful communications and outreach campaign to gain support from key stakeholders and the community in general was another area of potential startup risk identified in the strategic plan. Table 5 shows the communications and outreach plan that was key to selling PP to key stakeholders and community members.

Activity	Purpose	Planned Schedule (actual)	Key Issues Identified
Community newspaper articles	Announce Planet Pioneer launch and dates for community outreach sessions	Monthly-Sep, Oct (expanded into Nov, Dec, Jan, Feb to maintain PP “visibility” in the community)	Additional sessions were added because of low initial attendance
Obtain community feedback	Questionnaire distribution (expanded into key informant interviews and discussion group sessions)	Sep and Oct (extended into Nov, Dec, Jan, Feb)	Written questionnaires were largely ignored; people in North Kohala like to sit and talk story
Stand up PP website	Provide general information about PP and to allow for anonymous student application	Oct (Nov actual)	An off-the-shelf software product proved to be more challenging to design and implement on the web
PP briefings	Inform community members of PP mission, activities and schedule/solicit feedback	Jul, Aug, Sep, Oct (expanded into Nov, Dec based on feedback)	Questionnaires were originally planned to identify stakeholder groups but poor initial written responses delayed early identification of stakeholder groups

Table 5. PP Communications and Outreach Plan

These venues were also used to identify key issues that needed additional attention so as not to impede or derail staying on schedule and with strong stakeholder support and buy in. The briefing provided a means to inform community members of the PP program, solicit their support, answer questions, and gain insights into any issues that would either enhance or hinder program launch. A total of fourteen briefings were conducted between July and December 2011 to:

- KHS, Dean of Students
- New KHS principal
- Kohala High School Community Council
- Administration and all faculty at KHS

- Town hall style meetings with parents and interested community members (5 sessions)
- Kohala Seniors Group
- Local community leaders (4)

Interaction at these sessions provided key insights into their initial interest in supporting PP, potential barriers to a successful program launch, and confirmation of specific stakeholder groups. The questionnaires were distributed after the first few briefings in September. Many briefing participants asked to take the questionnaire home to complete. Out of seventy-five surveys distributed, only nine were returned completed. In mid September, the president of the seniors group asked a local community member that had experience in surveying this particular community to provide PP feedback on the questionnaire and the survey method (Informant interview #9). Overall, the feedback included the following invaluable insights:

- Questions were too complex
- Many senior community members have trouble with reading and writing in English
- Community members prefer to engage in small groups and “talk story” instead of taking surveys or answering questionnaires
- Identification of key community members for key informant interview purposes

The community outreach plan was quickly re-oriented to schedule discussion groups as the venue to provide a more interactive means to administer the questionnaire and collect data.

Other startup activities in the second and third quarter 2011 included interviews with key Hawaii-based economic development people, identification of Hawaii-based leadership and entrepreneurship programs for further study, and continuing engagement with key community members in Kohala. An off island entrepreneurship program that was identified through other independent course work at Duke was added due to its unique nature and possible application to PP.

Exploration of Partnership Models

Two organizations were identified and studied to understand how they were set up and what kind of partnership models they used to accomplish their missions. One of these organizations was Hawaii-based and one was a new and rather unique organization whose mission included leadership and mentorship across multiple satellite locations across the globe.

Hawaii is such a remote and isolated place that it was considered important to find and study a Hawaii-based organization due to cultural nuances and unique social norms. Without a solid understanding of the local Hawaiian culture and the key social networks, the risk of failure in starting PP was considered too great. The two organizations identified for further study were Ulumau and Unreasonable Institute.

Ulumau

<http://ulumau.org/>

Ulumau was founded in 2003 and is part of a not-for-profit 501 (c) (3) organization called Friends of the Future. Ulumau’s mission is to: “Expand the ranks of community leadership by providing a broad range of current and promising leaders with the knowledge and incentive to confront the needs of the community.” It does so by seeking “outstanding individuals who have demonstrated a sincere interest in the welfare of Hawai’i Island” (Ulumau, 2012). The core values of this organization include Hawaiian values, sustainability, and community and servant leadership. Unlike most leadership programs, Ulumau is not a leadership training organization. It creates a learning experience for its participants where they can broaden their leadership skills and knowledge through its program to expand the network of people working collectively to solve Hawaii’s problems. The core values are the foundational elements for its program’s elements (Table 6).

Mission	Core Values	Program Elements	Partners
Expand the ranks of community leadership by providing a broad range of current and promising leaders with the knowledge and incentive to confront the needs of the community	Hawaii values Servant leadership Community Sustainability	Hawaiian values & history Public & private education Government Health& human services The judicial system Economic diversity Agriculture, sciences, tourism & development Quality of life Future plans for Hawaii Island	Hawaii-based experts in the field who align with program elements

Table 6. Ulumau Core Values and Program Elements

Ulumau is on its eighth cohort of leaders. Planet Pioneers leadership had explored the organization's history and structure with its founder in August of 2011 (Partnership information exchange #4). The Ulumau model is a Hawaii island-based adult leadership and mentorship program set within the larger framework of sustainability. Its emphasis is on experiential learning and knowledge expansion for its participants who are current or emerging movers and shakers in the community. They are driven by their passion and deep commitment to make Hawaii sustainable, resilient, and a better place to live. The Planet Pioneer model has modeled its organization and program for K12 participants on an adapted Ulumau model.

What Motivates Partners to Participate?

The key element of any partnership model design is to understand what motivates partners to participate and to what level. Ulumau originally started as a pilot project under the Kona-Kohala Chamber of Commerce before becoming part of the well established Friends of the Future not-for-profit community group. The speakers for Ulumau's cohort program commit to share their knowledge and experiences without a formal partnership with Ulumau. Some are alumni and some have a formal relationship with the fiscal administrator, Friends of the Future (Partnership information exchange #12). "Most are speaking selflessly to help with the training of these Hawaiian based leadership program. Often it is not difficult to get speakers since the Ulumau alumni group covers such a far reach in Hawaiian society making our degree of separation <2" (Partnership information exchange #12).

Unreasonable Institute

<http://unreasonableinstitute.org/>

Unreasonable Institute (UI) is a 501 (c) (3) not-for-profit organization whose mission is to "give high-impact entrepreneurs wings" (Unreasonable Institute, 2012).

Mission	Vision	Objectives	Partners
We give high-impact entrepreneurs wings	Accelerate ventures that future generations will remember as having defined progress in our time	<ol style="list-style-type: none"> 1. Create effective, internationally scalable solutions to the biggest global challenges of our time. 2. Support the international collaboration of the world's most promising entrepreneurs. 3. Educate Unreasonable Fellows in the most innovative principles of entrepreneurship & equip them with integral skills, support, & financing. 4. Elicit an international community of the world's most innovative investors, entrepreneurs and thought leaders... what we like to call the International League of Unreasonables. 5. Ensure that Boulder, Colorado is recognized an international hub for innovation and entrepreneurship. 6. Work relentlessly and have fun doing it 	<ul style="list-style-type: none"> -Capital partners -Pipeline partners -Consulting organizations -Funding and corporate partners -Sponsors -Media supporters -Models of inspiration -Provide support (financial and technical), expertise and outreach

Table 7. UI Model

UI was founded to boost entrepreneurship that is focused on solving global problems. The scale of the problems UI is trying to solve and the network of partners are vast. Founder Teji Ravilochan describes UI: “In an unreasonable venture, we look for four things: an effective solution to a social or environmental problem, a strong financial model, and an ability to scale to at least 1 million people. We know that it’s very difficult to scale to a million, but we want

entrepreneurs who are up to that challenge, who are designing scalability into their models from the get-go.” (Ravilochan, 2011).

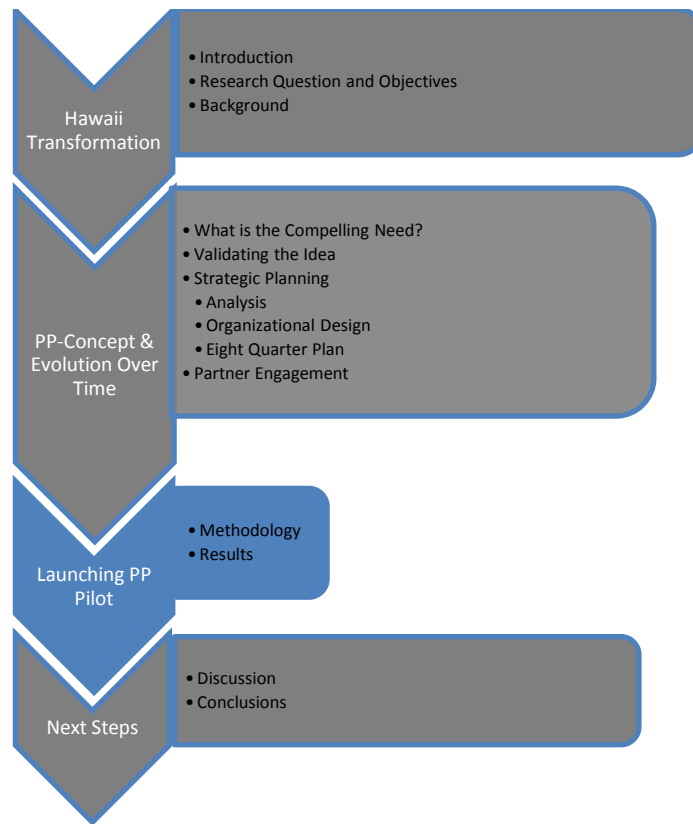
The list of partners and what they bring to UI is too extensive to list in this paper but details can be found at: <http://unreasonableinstitute.org/our-partners/>. For financial support of their cohort members, UI works with over 20 of the world’s top funds and foundations. Each of the capital partners sends a lead to UI’s six week long summer institute so that relationships can be established to assist entrepreneurs with mentors from concept through successive growth and expansion phases of their ventures. This life cycle approach to a range of funding mentors is extremely beneficial to UI members as they start and then expand their enterprise.

Pipeline partners serve as the recruiting mechanism to attract and nominate UI candidates. Some of the pipeline partners also provide opportunities after candidates complete their UI fellowship programs. Consulting partners are integrated into the fellowship program agenda. Their contribution is providing world class know how from concept through measuring impact of venture ideas. Other partners provide funding and media support to the UI model as it continues to scale and gain maturity as well as intensify its impact on creating a better and more sustainable world.

Planet Pioneers has opened a dialogue with UI to exchange lessons learned and best practices as the two organizations evolve over time (Partnership information exchange #17).

What Motivates Partners to Participate?

The complexity and scope of UI’s model may imply that partner motivations are also complex when in fact their reasons for contributing time, money and talent are very basic. Overall, all of the partners share UI’s common vision to have high impact effects in their generation. That would cover anything from starting micro-financing in Africa to improve the standard of living in remote villages to providing the breakthrough technology for generating power sustainably. In summary, the motives are simple and basic even though the problems and network of UI fellows, alumni and partners is rather complex.



Launching the PP Pilot

Focused research was conducted during the launch of the Planet Pioneers pilot to accomplish the following objectives:

- Identify stakeholder knowledge, skills and motivations for supporting PP mission that will inform PP partnership and program designs.
- Document and analyze the knowledge, attitudes and perceptions of local community residents and other stakeholders as they pertain to the vision of a sustainable Hawaii.

Methodology

The primary method was to use a questionnaire as a survey tool that was designed to gather data that could be further analyzed to accomplish the objectives above. The purpose of the survey tool is to provide a semi-structured interview guide to gather data on the knowledge, skills, motivations, attitudes and perceptions of local community residents and other stakeholders as they pertain to the vision of a sustainable Hawaii and for supporting the PP mission. Analysis of the data collected will be used to inform adaptations to the initial PP

program design and enhance partnerships between PP and other organizations in the delivery of the PP program. Research consisted of a stakeholder analysis utilizing a questionnaire and interviews as the primary research tools. Interviews were conducted in a small discussion group format. Given the local culture norms, the interview was considered the most effective approach (compared to other typical ethnographic methods) and allows for maximizing communications via personal engagements while providing a high amount of data for analysis (Bernard, 2000). It is also appropriate given the intended sample and geographical distribution of potential partners on different islands.

All potential study participants were contacted to arrange a phone or in person interview. The original implementation included a step that each study participant would be provided a packet of interview materials that includes a personalized cover letter thanking them for their participation and ensuring their confidentiality, a brief description of the Planet Pioneers organization and program, and the list of questions for the interview topics. This format was adapted into a discussion at the front end of the discussion group meetings. The interview was expected to take, on average, 30-45 minutes to complete. Participants who did not live in the immediate North Kohala area were contacted by phone or e-mail. Planet Pioneers was added as an agenda item to existing community and school venues where large portions of the community typically gather (i.e. monthly Kohala High School Community Council meeting, weekly seniors' group meetings, monthly Community Town meeting, etc.). Subjects were not asked to provide their names. They were asked to provide demographic data and information that will identify their stakeholder grouping.

The initial survey plan included the flexibility to obtain survey data using a questionnaire that could be administered in person or by phone for respondents who were not located in the local community.

The stakeholder group consisted of: Kohala High school parents; KHS teachers; KHS leadership; other local residents; and senior group members. The partners were also included in the survey. The students were not included in the initial list of stakeholders because of the timing of this research and the start of the PP Academy program in January 2012. Follow up interviews were planned at the end of the first cohort's program in May 2012 to gather

feedback for future PP cohorts and program adjustments. The study originally expected to enroll approximately 25-50 subjects for the survey/interviews. Completed questionnaire responses were anticipated from at least 25 of those subjects. Actual responses shown below include discussion group format and phone interviews (Table 8).

Stakeholder Group	Planned	Actual	Key Informant Interviews Conducted
KHS parents	25	12	Yes=6; #5,6,8,20,21,23
Teachers	25	5	Yes=3;#14,15,16
KHS leadership	2	2	Yes=2; #27,28
Community seniors	60	14	Yes=7; #7,9,10,13,22,24,29
Other community members	15	10	Yes=3;#25,26,30
PP Partners (not stakeholders but included in survey)	20	12	Yes=9; #1,2,3,4,11,12,17,18,19
Total	152	55	30

Table 8. Planned and Actual Surveys

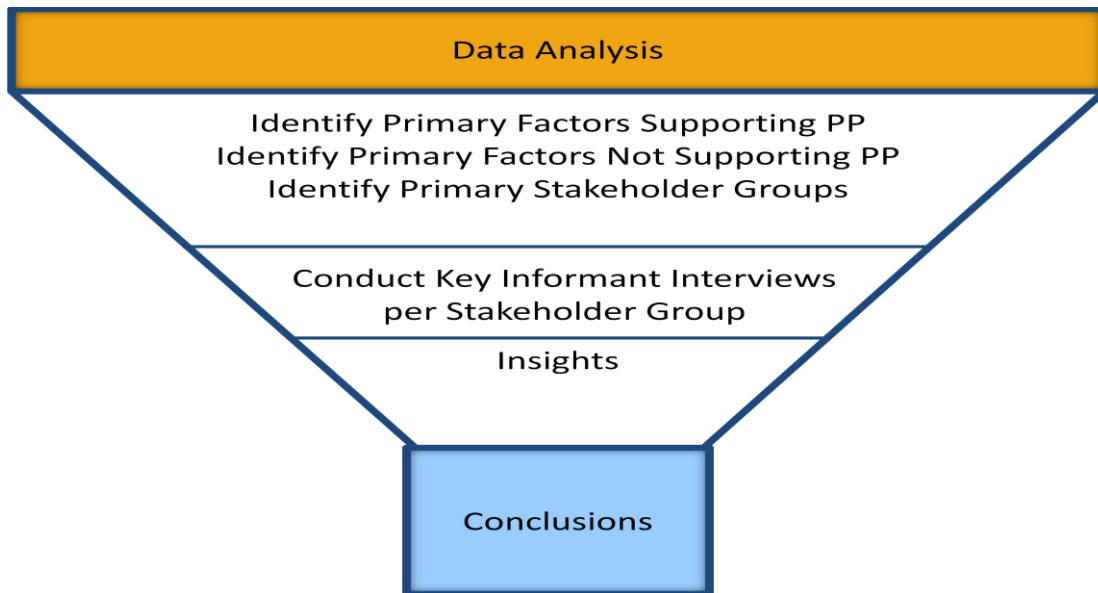
Identification of the initial survey subjects was planned to happen in three ways: first, the initial set of business partners who have been identified as partners for the initial PP pilot program (kickoff January 2012); second, attendees of two community meetings focused on introducing the PP organization and program to North Kohala residents’ and third, attendees of a Kohala High School meeting focused on introducing the PP organization and program. The letter of introduction (Appendix A) was incorporated into the introduction in all meetings.

Results

After the data was collected from the community and partners in September and the early part of October 2011, key informant interviews were needed to draw out more feedback

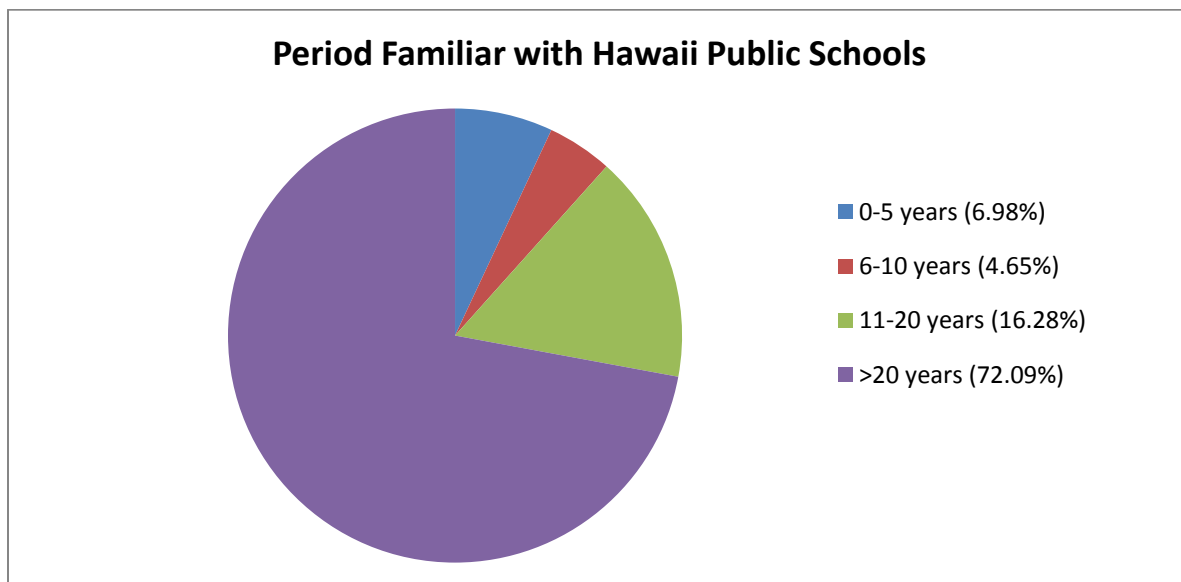
from the stakeholder groups and to understand the responses provided to date. The insights key informants provided were then used to draw insights and to develop conclusions about the data and how it achieves or does not achieve the objectives of the study. Figure 4 shows the methodology used.

Figure 4. Funnel Methodology for Survey Data Analysis



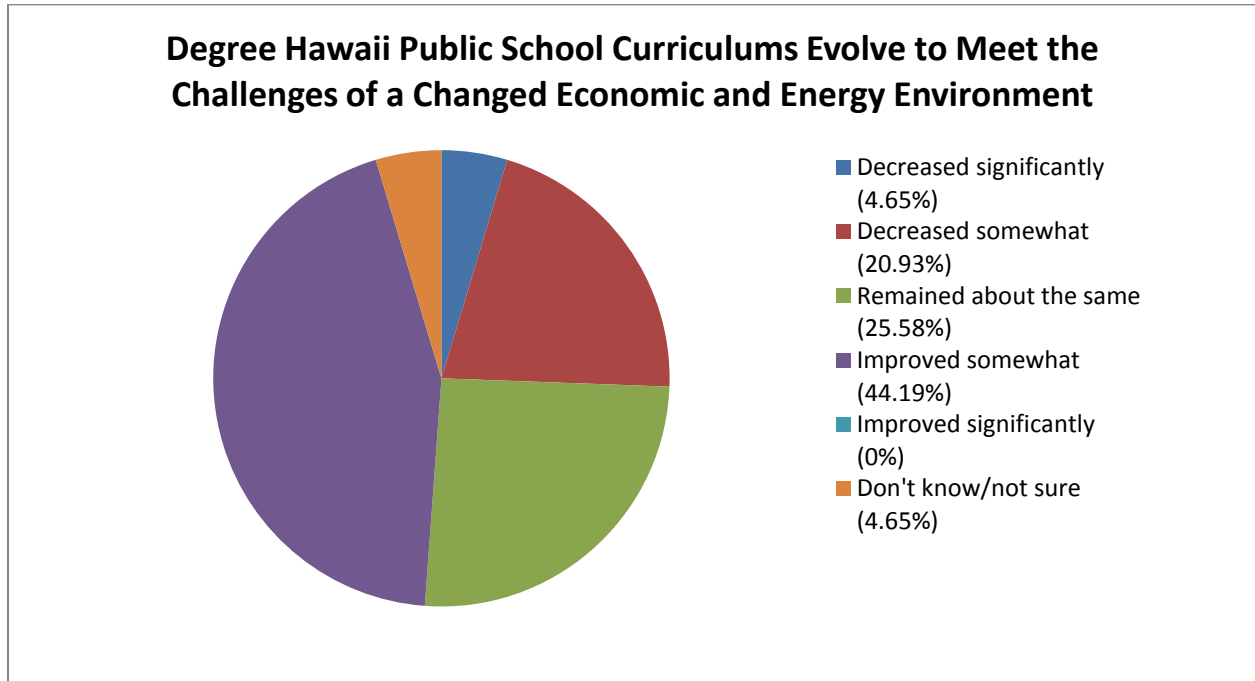
The results of the surveys were as follows:

Question #1: Respondents were asked to identify what period they had been familiar with Hawaii public schools.



The majority (72.09%) of respondents were familiar with Hawaii public schools for over twenty years.

Question #2: The next question asked if they thought the Hawaii public school curriculums had evolved to meet the challenges of a changed economic and energy environment.



The majority (44.19%) of respondents said that it had improved somewhat while 25.58% said that it had stayed the same. Another 20.93% indicated that the curriculums had decreased somewhat with respect to adapting to sustainability challenges over time.

Question #3: Respondents were next asked an open-ended question about their definition of sustainability. There were twelve total (27.9%) responses:

Buzzword

The ability to sustain a working, efficient planet and life for the long term

Not sure

Good stewardship

Taking care of our own environment

Resilient to natural and man-made disasters

Getting off oil

Growing our own food

Being able to buy basics like food, a house, and a car to get to work

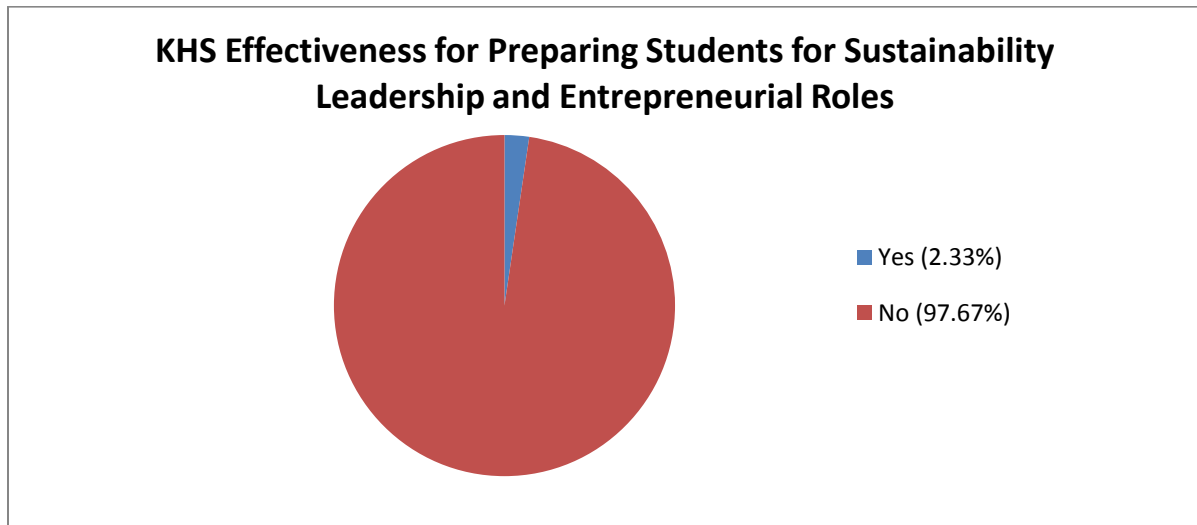
A way of life

Keeping my job

Buying less at COSTCO

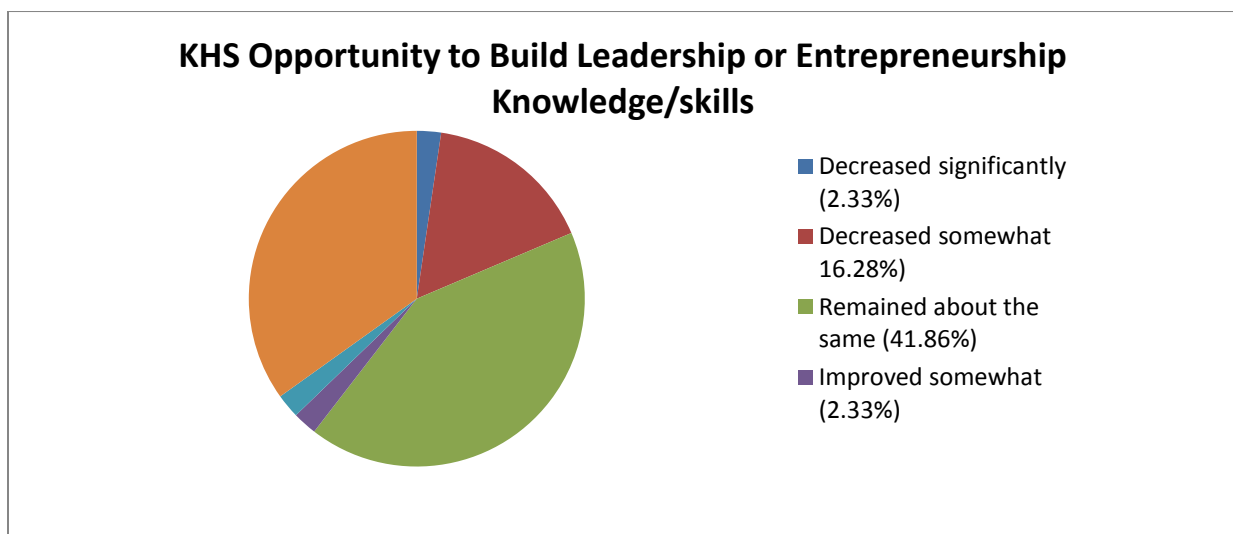
Most respondents (62.1%) left the question blank. Key informant interviews conducted confirmed that local Kohala residents were not really sure of the definition in modern times. They did know that the old Hawaiians sustained large populations on the islands before the arrival of the missionaries. The post-sugar cane era rise of tourism shifted the workforce to more service-oriented jobs at hotels, restaurants and tour operations. Hawaii became a majority importer of energy and food.

Question #4: The next question asked respondents if KHS effectively prepared students to lead sustainability and entrepreneurial initiatives.



The majority (97.67%) of local Kohala residents thought the school did not do an effective job at preparing students in these areas.

Question #5: The next question asked to what degree KHS students have the opportunity to expand sustainability leadership and entrepreneurship experience changed over time.



The majority (41.86%) said that opportunity to expand their sustainability experience had remained about the same. A significant number (34.88%) said that they were not sure or did not know. Many other (16.28%) residents thought that the opportunities to expand this experience had decreased somewhat. Key informant interviews confirmed that budget cuts at KHS during the last four years were partially the reason why there were fewer opportunities at the school for this type of curriculum. Overall, sustainability is not integrated into the curriculum at KHS.

Question #6: Respondents were next asked to identify the important knowledge and skill areas for effective sustainability leadership. There was a range of responses:

Not sure

Ability to communicate and articulate

Lead change

Get your community organized

Increase your knowledge and awareness

Be able to talk to people

Talk story and influence change in my community

I don't know

Planning, task analysis, organized brainstorming

Higher education

Be a businessman

Eleven respondents left this question blank. Key informant interviews confirmed that increasing sustainability knowledge and awareness, the ability to communicate and educate local residents about sustainability, and higher education were necessary to provide effective leadership and entrepreneurial initiatives in the community. Exposure to island-wide sustainability activities and opportunities for hands on participation were emphasized by PP partners on the Big Island as well as by partners on Oahu and Maui.

The second part of that question was also open-ended and focused on identifying important characteristics of effective leaders and entrepreneurs. Seven respondents left this question blank.

Responses included:

Political

Determination

Honesty

Dedication

Know the community and how to get things done

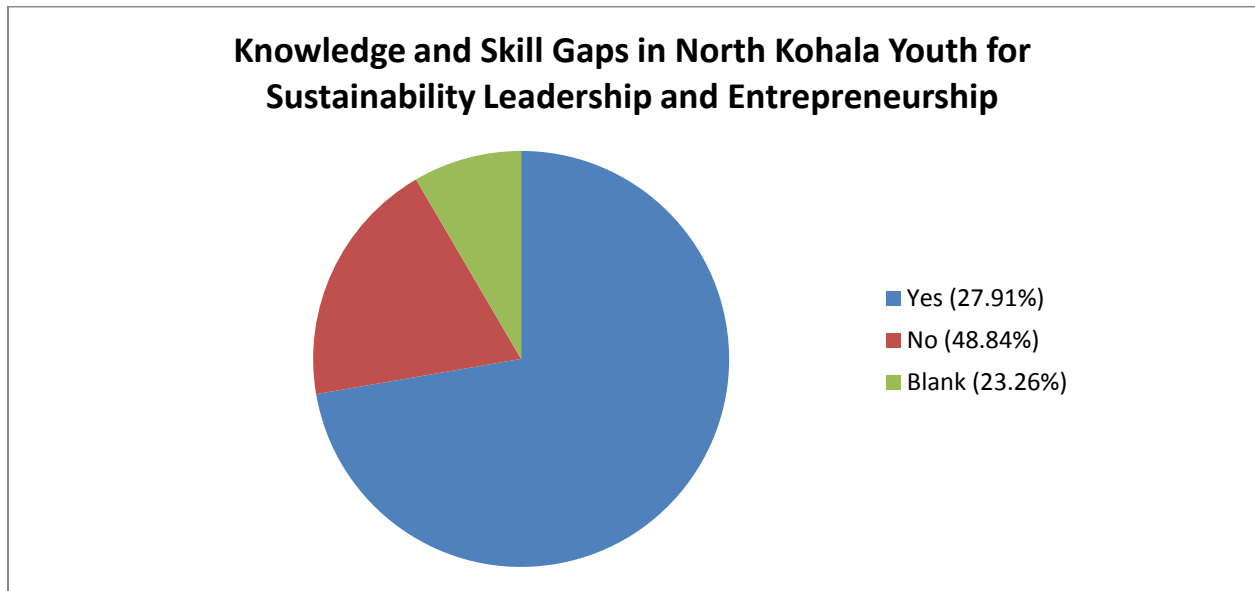
Turn "no can" into "can"

People look up to them

Respect for the culture and people

Persuasion and influence

Question #7: Local residents were then asked if there were any gaps in the ability of North Kohala youth to effectively lead entrepreneurial efforts towards a sustainable Hawaii in the public or private sectors.



Further explanations of the gaps included:

- Planning and task analysis skills for long-term projects are weak
- Weak knowledge of outside opportunities
- Not knowing what's on island and who to talk to
- Don't care
- Lack of higher education
- Exposure to the outside world

Key informant interviews revealed that many of the KHS students have never traveled outside Hawaii. This is true for many of the community members also. There was also general agreement that many parents do not understand or value post-high school higher education beyond the tourism industry or construction trades. Without further investigation, it is impossible to quantify why these parents have a "what was good enough for me, is good enough for you" mentality regarding the value of higher education beyond high school. On the other hand, several parents and many grandparents of KHS students support and promote education beyond high school. Of this group, there is a general feeling that graduation from college is important to access broader opportunity and well paying jobs, however, many of these opportunities are outside Hawaii.

Question #8: The next question asked respondents to identify Hawaiian sustainability leaders and entrepreneurs. Eight local residents were identified. Most (62.8%) respondents left this question blank and there were no people beyond the Big Island identified. Key informants interviewed stated that most local people do not have an awareness or understanding of sustainability initiatives beyond the local community.

Question #9: The respondents who identified sustainability leaders and entrepreneurs in the previous question were then asked to identify leadership and entrepreneurial traits that can be shared with North Kohala youth. The sixteen respondents who identified Hawaii leaders in the previous question provided the following traits:

Natural farming techniques

Don't know

Ability to organize and execute sustainability initiatives

Know the land

Linked in to the right people

Know the culture

Twenty seven respondents left the question blank.

Question #10: The respondents were next asked if a program such as Planet Pioneers could have a positive impact with North Kohala youth. All forty three respondents (100%) answered yes and provided the following reasons:

Exposure

Help students see importance of organized planning and execution

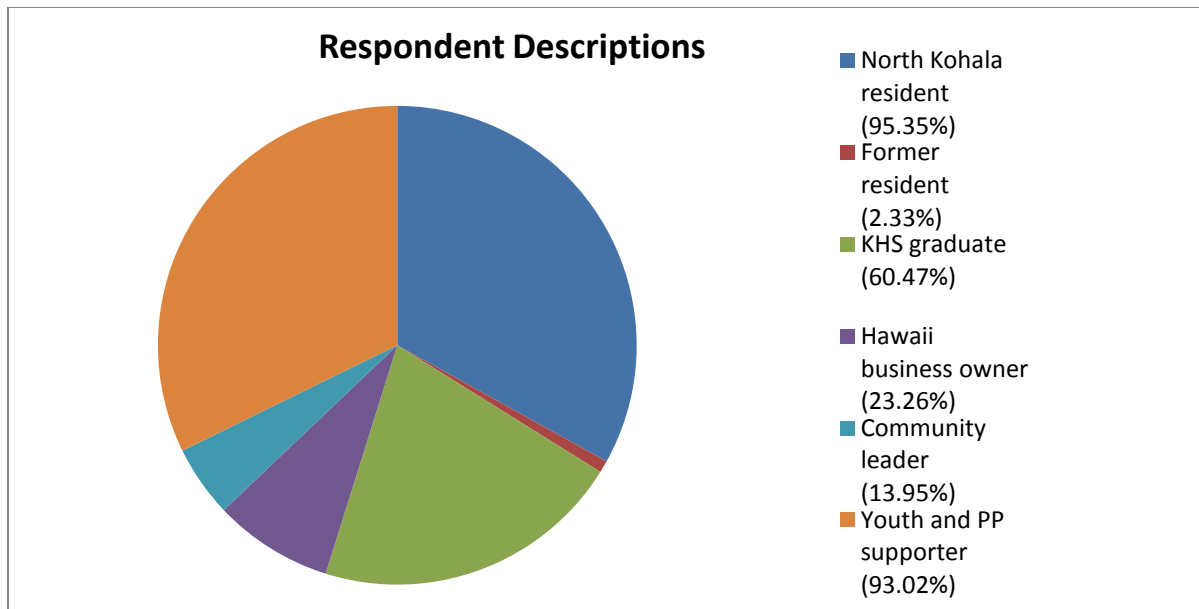
Give youth a chance to see one's dream become a reality

Show them what's going on in the islands

Get them involved in the community

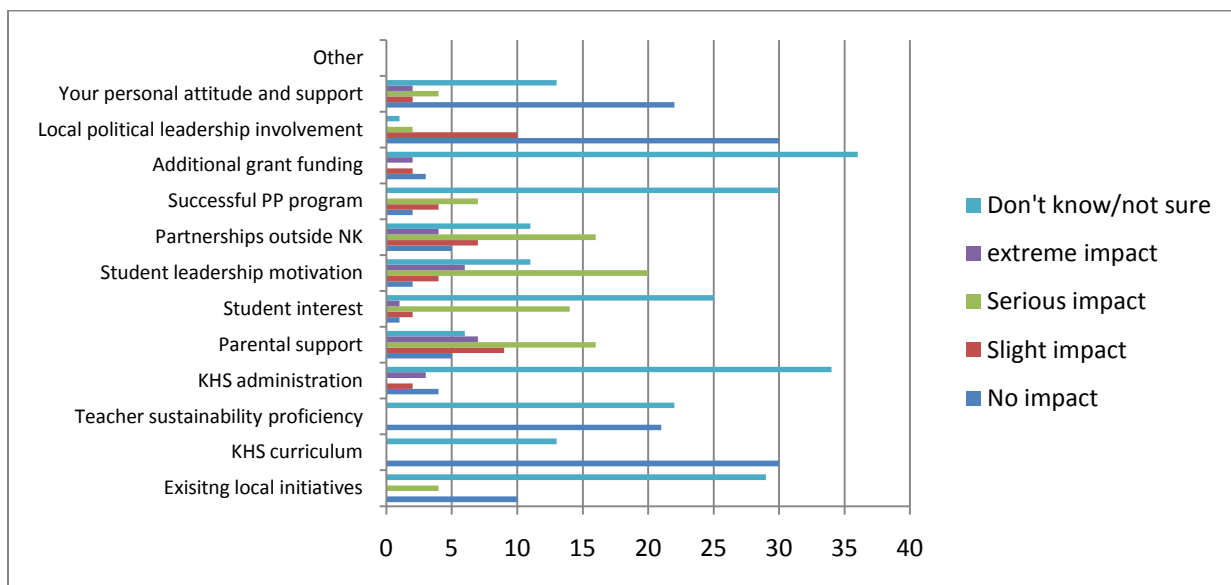
Key informants further elaborated that any legitimate program that prepared our youth to lead and solve current and emerging problems in Hawaii would be strongly supported by the community. This was the only area where respondents unanimously agreed. They see the youth as the future. Many are frustrated that the schools do not prepare the students better to solve local as well as Hawaii island-wide problems. There was general agreement that Hawaii had to become more sustainable despite the lack of a general consensus in the community regarding the definition of sustainability.

Question #11: Next residents were asked to select all categories that described themselves from a list of descriptive roles.



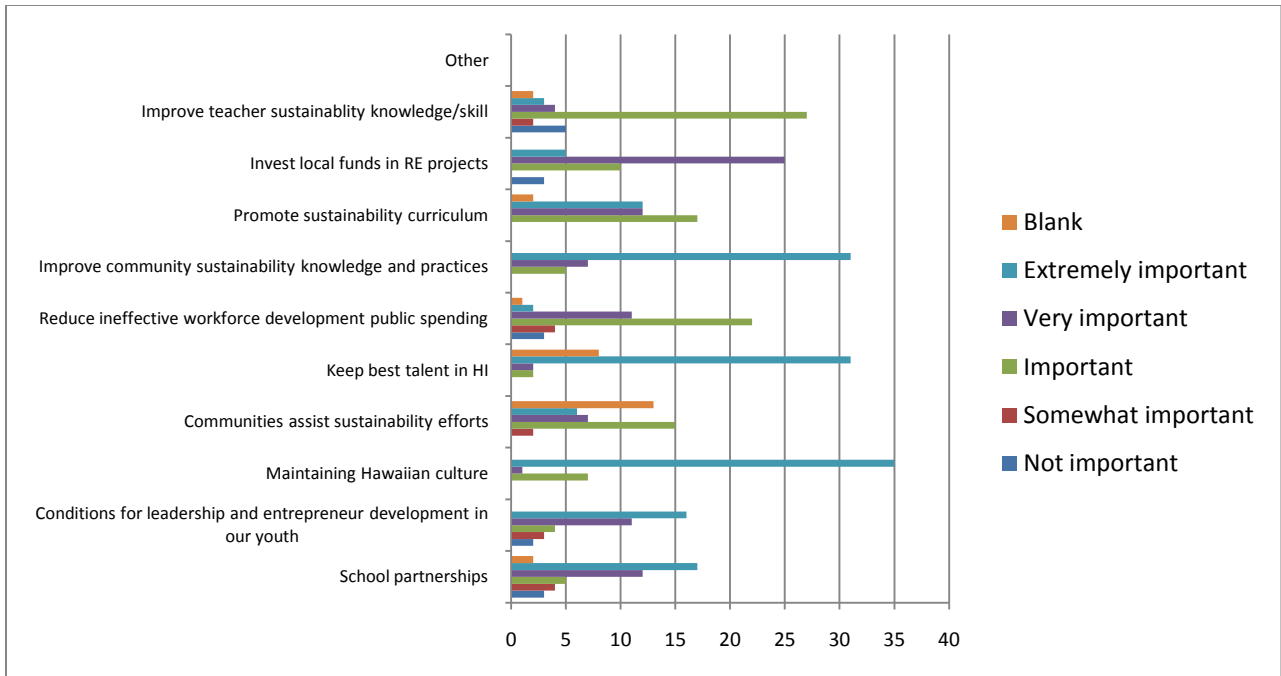
This question confirmed that the majority (95.35%) of the respondents were residents of North Kohala and that they support their youth and a program such as Planet Pioneers (93.02%). The majority were also graduates of KHS (60.47%).

Question #12: The next question asked respondents to consider the impact of specific activities on increasing youths' ability to effectively lead sustainability initiatives in Hawaii.



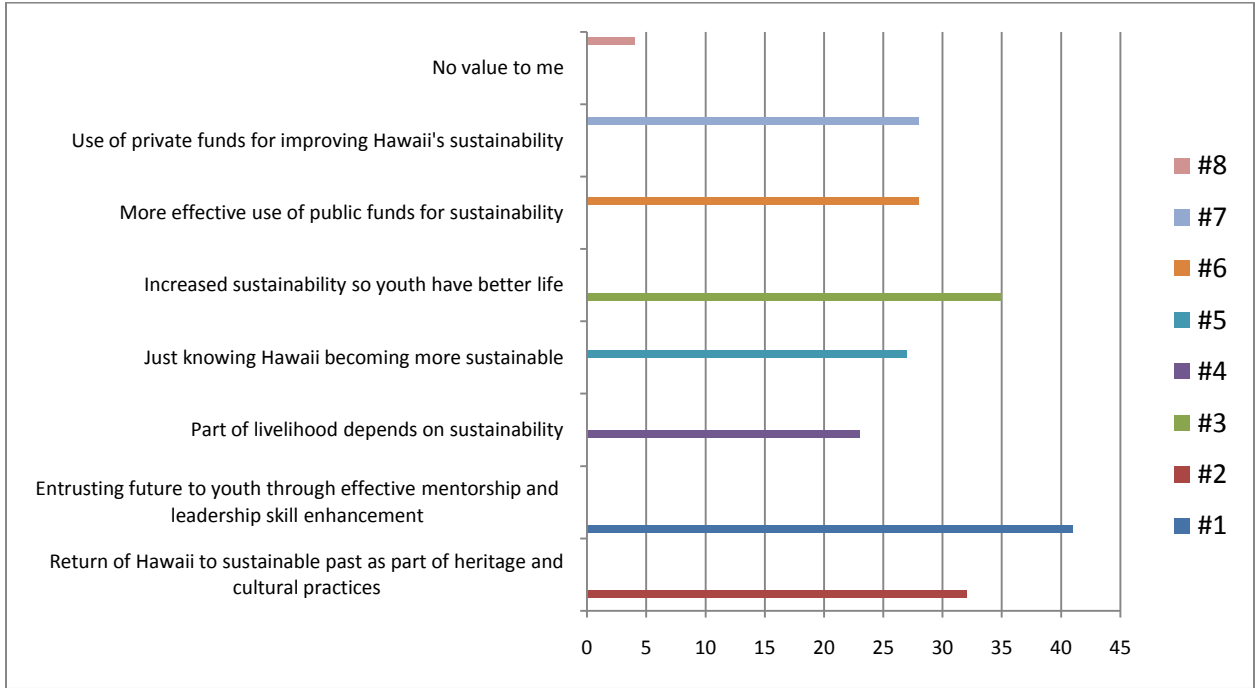
The greatest impacts were the students' motivation to lead, parental support, and leveraging partnerships outside North Kohala. Key informant interviews confirmed this to be the case.

Question #13: The next question asked respondents to rank the importance of specific items on achieving a sustainable Hawaii in the next 10-20 years.



The most important factors were improving the communities’ sustainability knowledge and practices, keeping the best talent in Hawaii, maintaining the Hawaiian culture, importance of school partnerships, and maintaining the conditions for effective leadership and entrepreneurship development in Hawaii’s youth.

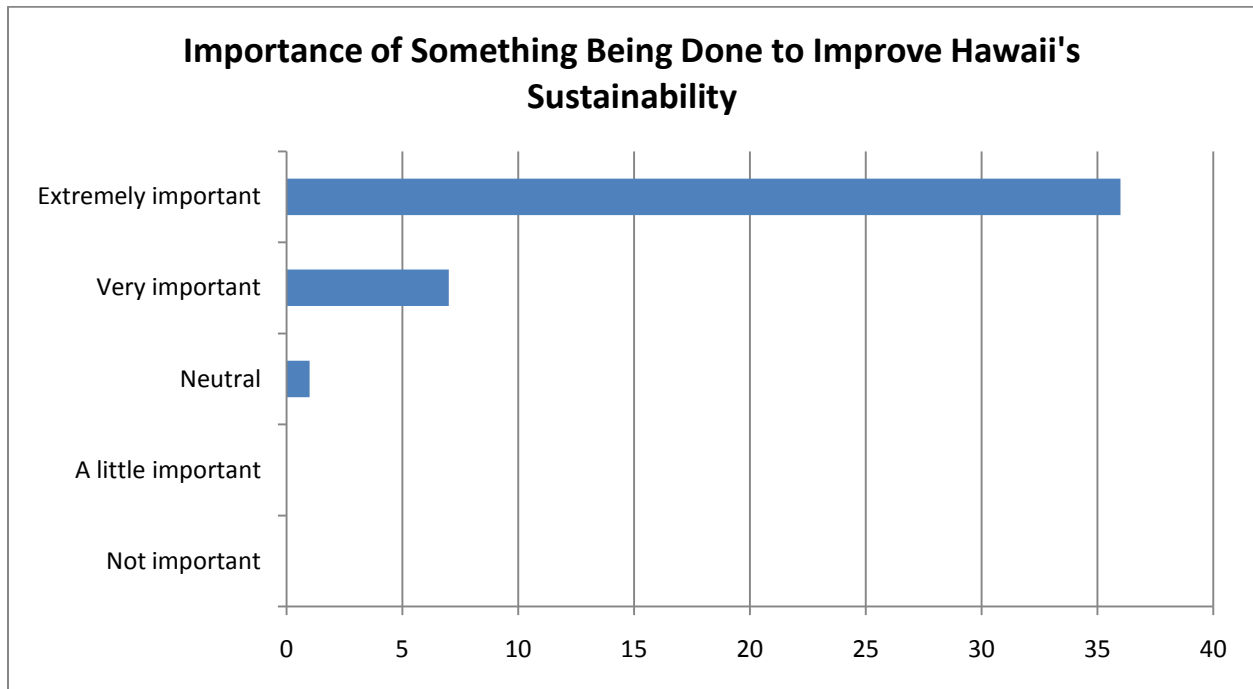
Question #14: The next question asked respondents to order which sustainability items were most important value to them.



The most important item was to entrust the future of Hawaii to youth through effective mentorship and leadership skill enhancement. There was also a high degree of importance assigned to return to a sustainable state because it was a part of their heritage and cultural practices.

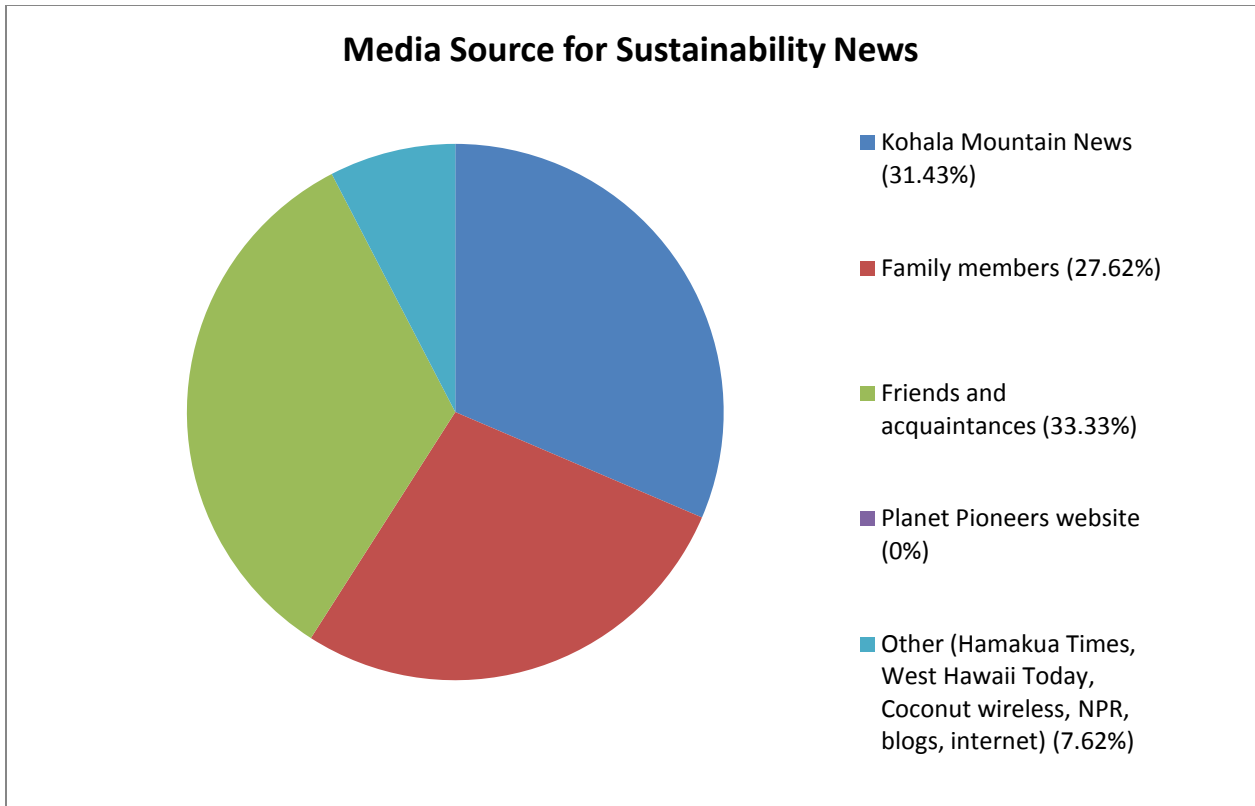
The next set of questions focused on the possibility of improving Hawaii’s energy and economic security by increasing the capacity of youths’ experience in leadership and entrepreneurship.

Question #15: The respondents were asked how important that something is done to improve Hawaii’s sustainability.



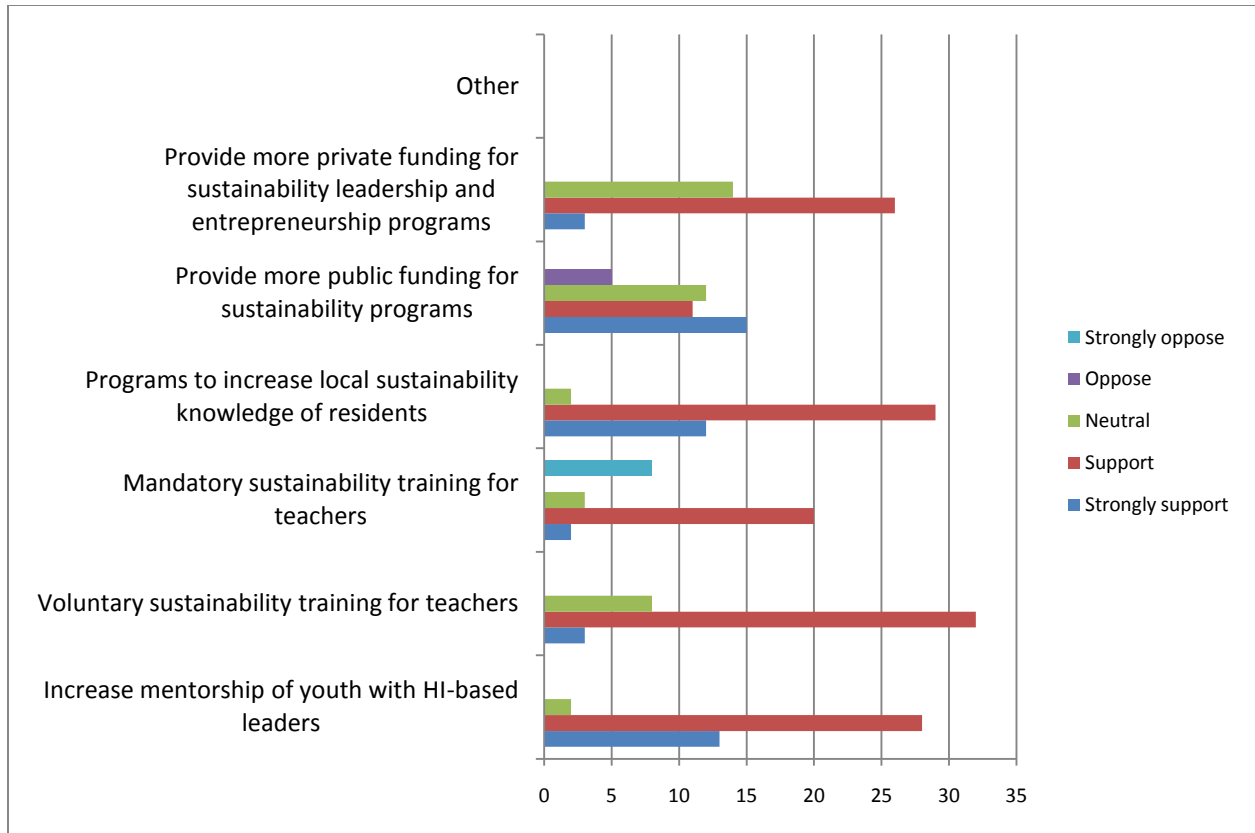
An overwhelming majority of respondents (81.4%) indicated that it was extremely important to improve Hawaii’s sustainability. 16.28% agreed that it was very important to improve Hawaii’s sustainability. Key informants across the stakeholder groups prioritized efforts to improve Hawaii’s sustainability at a high level but also emphasized that there needed to be more jobs locally. They also cited rising electricity, gas and food prices as high priorities needing attention.

Question #16: The next question queried how residents kept abreast of Hawaii and local sustainability activities.



This question confirmed that most Kohala residents read the local KMN newspaper as well as talk with family and friends to keep abreast of what is important to them. Key informants seemed to confirm this finding but added the internet and West Hawaii Today as routine sources of news.

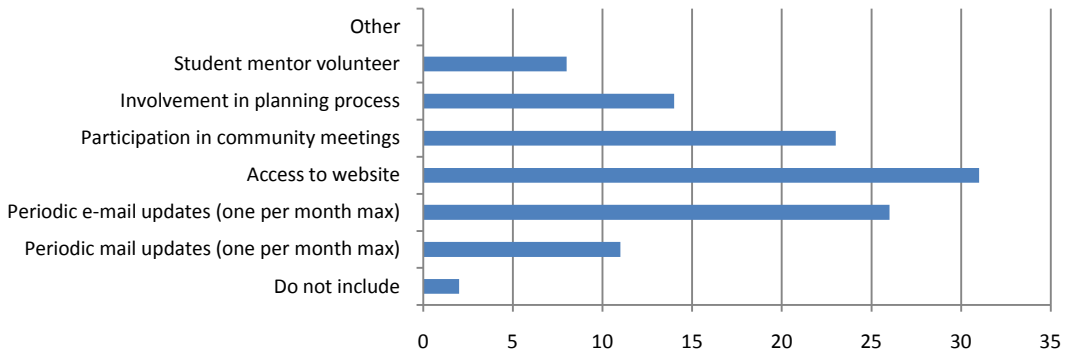
Question #17: The next question asked respondents to what degree they would support or oppose certain activities in North Kohala.



The responses seemed to support all of these options to a great degree except for mandatory sustainability training for teachers and more public funding for sustainability programs. Key informants were unanimous across the stakeholder groups in supporting programs that would increase local community sustainability knowledge and especially in youth. Teachers stated they were time-limited with respect to adding more training to their already overloaded schedules but supported voluntary sustainability training.

Question #18: The next question asked how respondents want to be included in any efforts to build leadership and sustainability capacity in Hawaii’s youth.

How to be Included in Efforts to Build Leadership and Entrepreneurship Capacity in Hawaii Youth



Respondents indicated a preference for web-based updates and direct engagement through community meetings. These responses will be used to refine PP’s communications and outreach plans in the future. Current limited PP resources for the pilot stage limit expansion of PP website for broader interactive communications with interested community members. Question #19: The respondents were then asked an open-ended question to reveal their motivation for supporting Planet Pioneers.

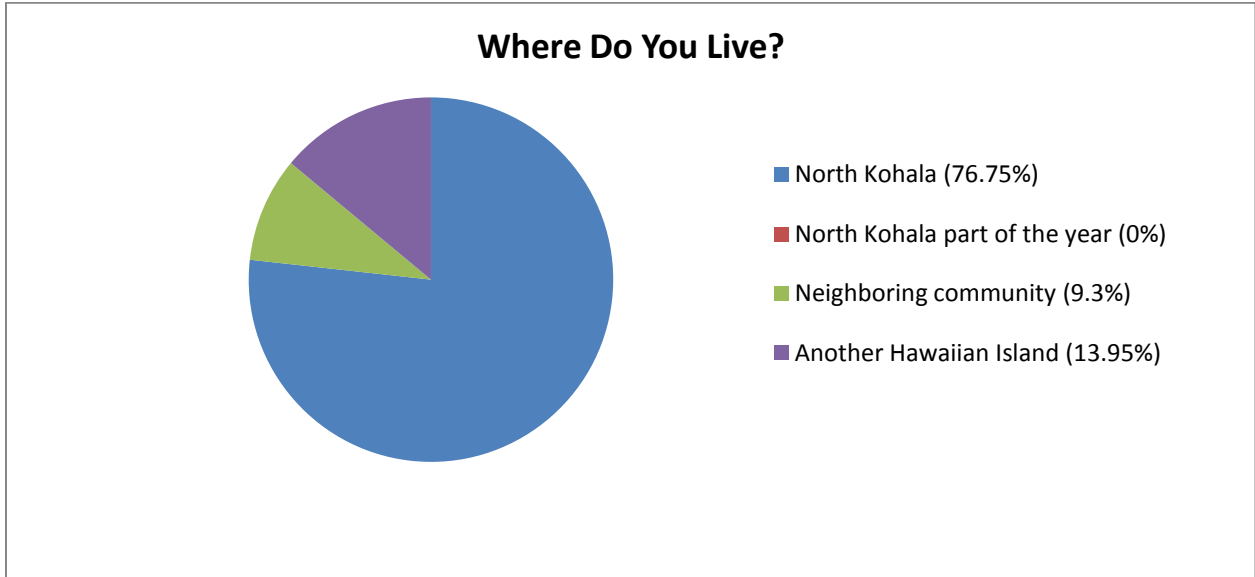
What Is Your Motivation for Supporting Planet Pioneers



The majority (65.12%) of respondents are motivated to support Planet pioneers because it improves the immediate community, educates our youth, and helps youth transform their thinking about sustainability.

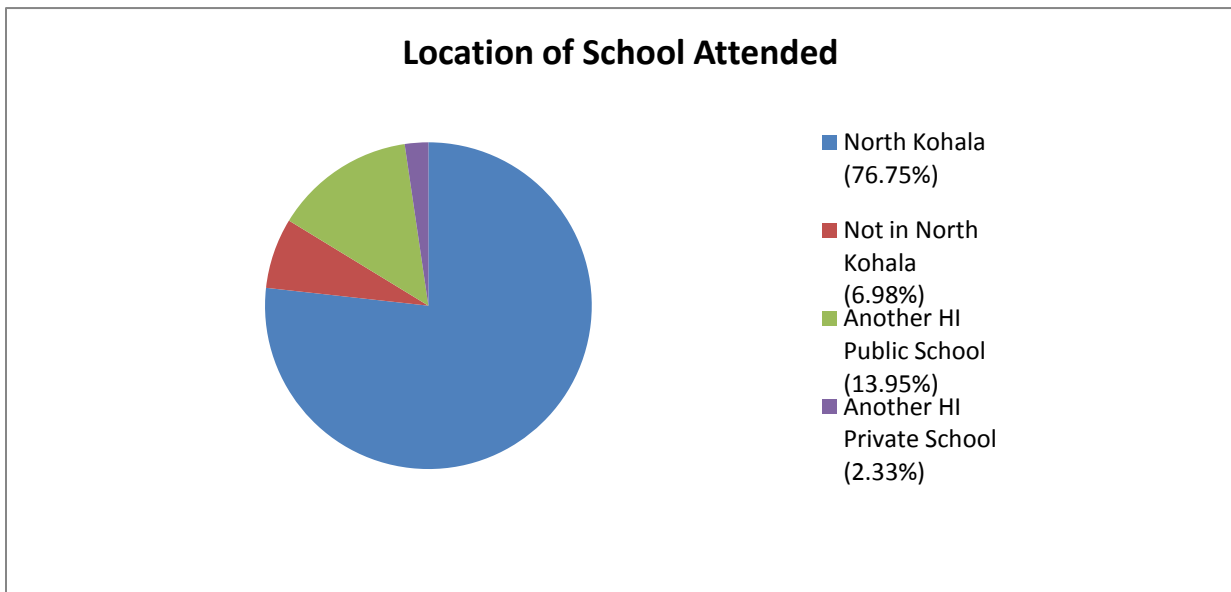
Finally, the last seven questions asked the respondents to provide demographic and personal information.

Question #20: Where do you live?



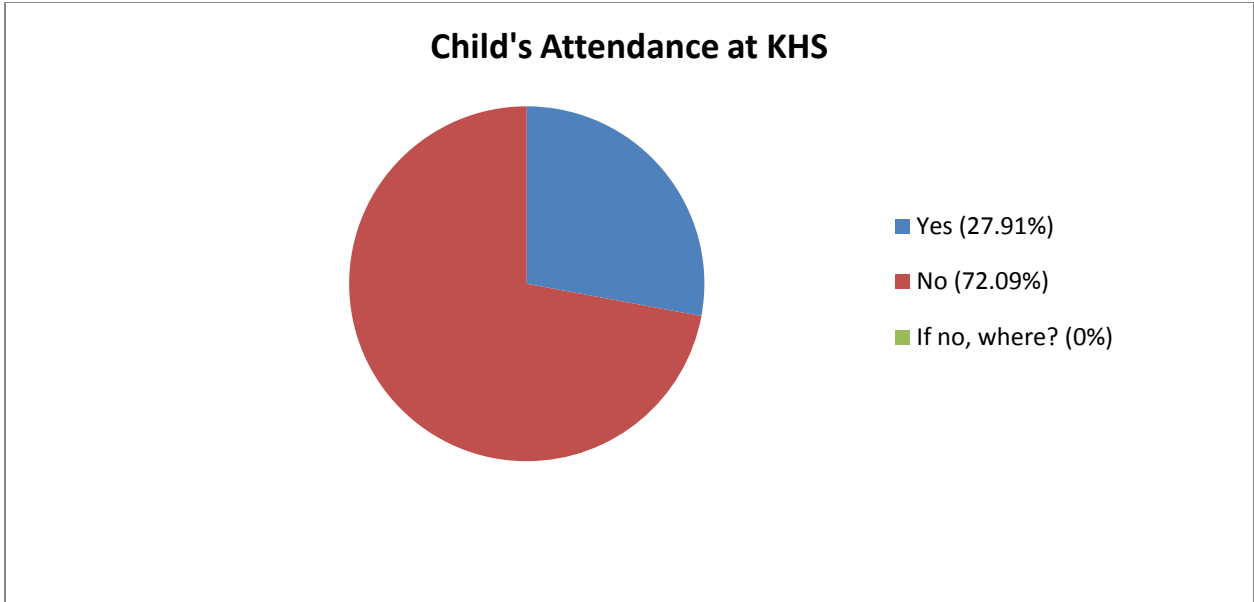
The majority of respondents (76.75%) live in North Kohala.

Question #21: The respondents were asked if they attended school in North Kohala.



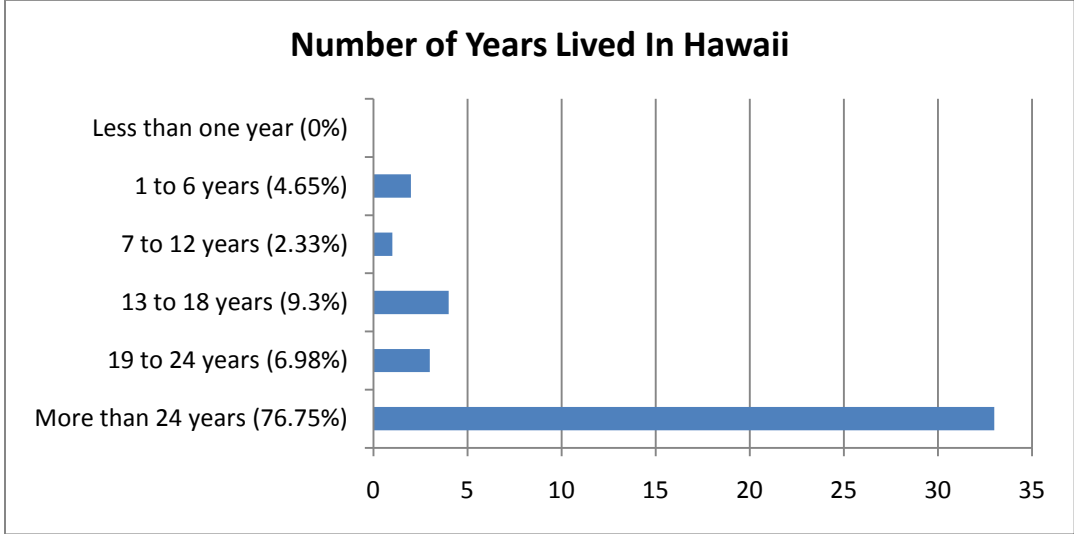
The majority (76.75%) attended school in North Kohala.

Question #22: The next question asked if the respondent's child(ren) attends KHS.



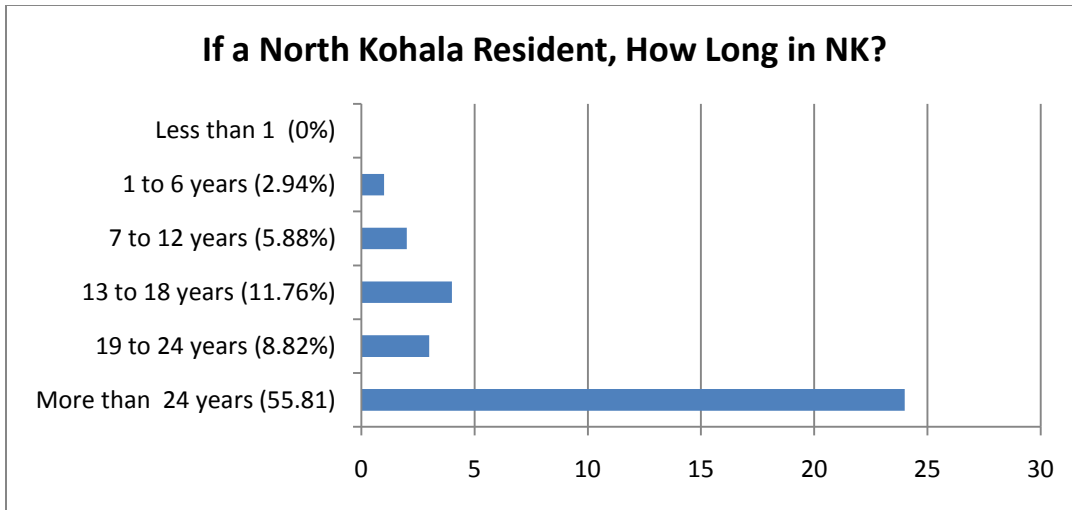
The majority of respondents have no children that currently attend KHS. Key respondents included community members who are not parents of current KHS students but are family members of current KHS students or parents whose children have graduated from KHS.

Question #23: The next question polled how many years the respondent lived in Hawaii.



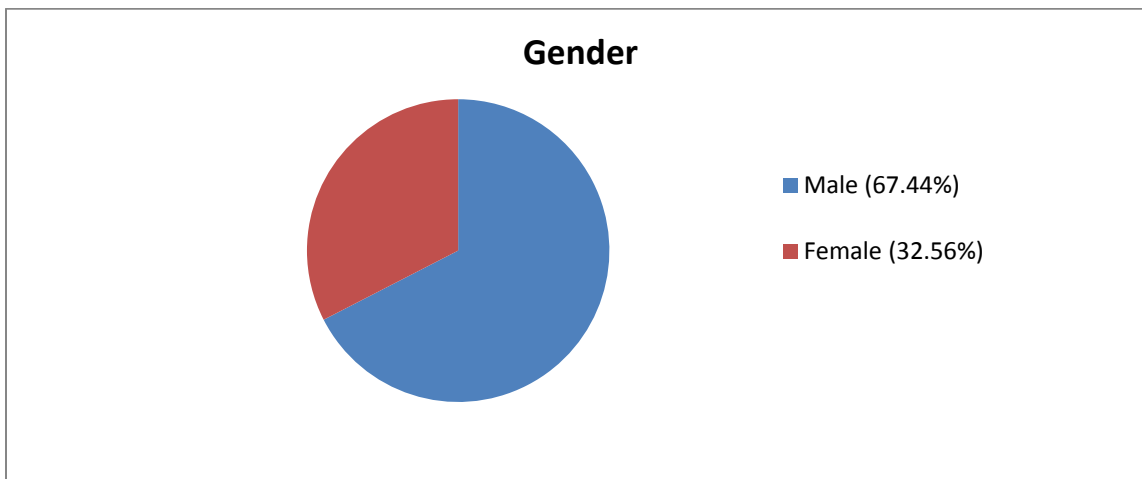
The majority of respondents (76.75%) have lived in Hawaii greater than 24 years. 9.30% have lived in Hawaii between 19 to 24 years. 95.35% of respondents have lived in Hawaii greater than 6 years.

Question #24: The next question asked specifically if the respondent was from North Kohala then how long had they lived there.

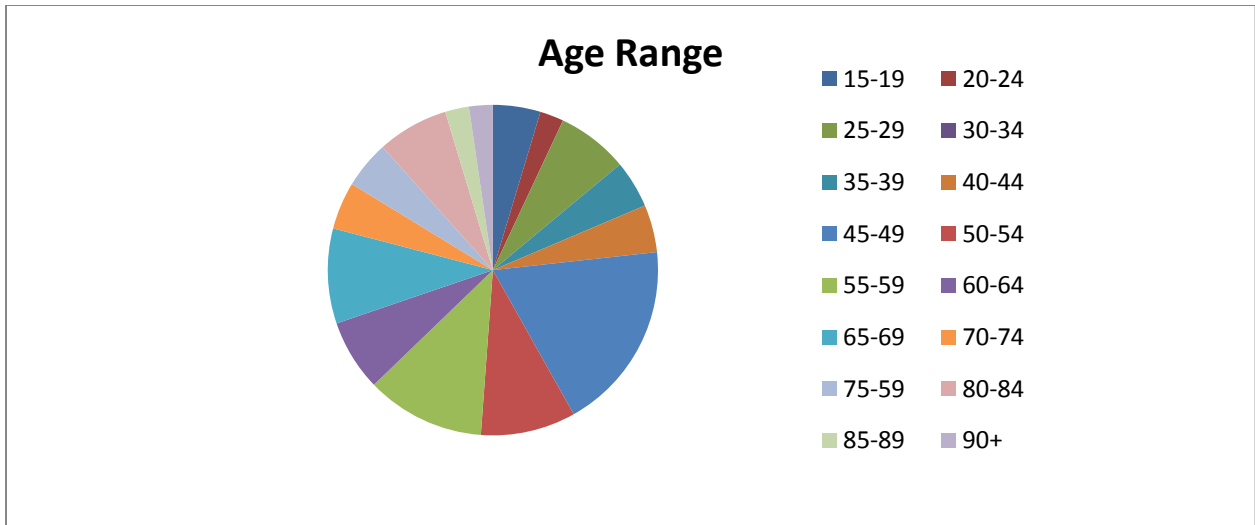


The majority of North Kohala respondents (55.81%) indicated that they had lived in North Kohala greater than 24 years.

Question #25: The respondents were then asked to identify their gender.



Question #26: The last question in this section asked the respondents to select their age range.

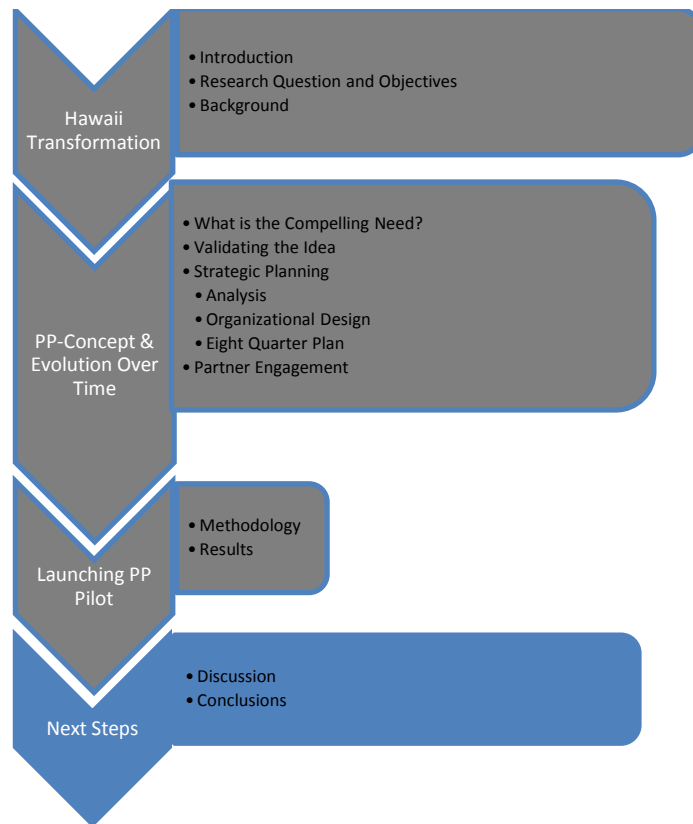


The majority of respondents were 40 or older (83.72%). 34.04% were seniors 60 or older.

At the conclusion of the survey, the recipients were provided an open-ended opportunity to share their ideas or interests about Hawaii’s movement towards a sustainable future.

The responses included:

- I fully support this program and wish for its success
- Thank you for bringing this program to Kohala
- Hope it works out
- This is good
- The kids are our future. Let me know if I can help
- I’d like to get more involved



Next Steps

Discussion

Survey responses and key informant interviews indicate that Planet Pioneers will be supported by partners and local community members. Both groups are motivated to invest their time, talent, and/or treasure in preparing our kids to lead Hawaii’s transformation. These two groups diverge in sharing a common understanding of sustainability challenges, opportunities and who is doing what to better Hawaii across the islands. The partners who are providing mentorship and sharing knowledge with the Pioneers have the most comprehensive understanding of Hawaii’s sustainability opportunities and challenges and are actively engaged in contributing to Hawaii’s transformation in their areas of expertise.

The general population in North Kohala does not have an awareness or understanding of sustainability challenges and opportunities or a general awareness of public and private efforts involved in transforming Hawaii to a more sustainable state. Where the results can best inform the Planet Pioneer partnership and program model is: 1) how to use the increased

shared awareness and knowledge gained by the students to raise the community's general awareness and knowledge of sustainability; 2) how the knowledge gained by participating volunteer teachers can influence the school's curriculum about sustainability; and 3) how to scale the Planet Pioneer model after the pilot so it expands to a full K12 program with the addition of internships.

PP Partnership and Program Model

Raising the community's awareness and knowledge of sustainability

1. Although there are many activities happening across the islands within the context of implementing the H2050 blueprint to increase Hawaii's sustainability, the rural and remote nature of North Kohala provide a great haven to live life in isolation from these activities. Residents are challenged with the symptoms of Hawaii's fossil fuel dependency—increasing food, electricity and fuel prices—but the majority would not seek ways beyond working to make ends meet to improve sustainability.

Residents will not want to “attend school” to increase their sustainability IQ. Raising their awareness must be associated with saving them money or raising the health or welfare of them and their families. As part of the PP Academy program, the Pioneer students are challenged to design and implement a community project that produces measurable impact to the North Kohala community and raises the residents' general knowledge and awareness of sustainability.

The community project will be launched in March 2012 and be completed in May 2012. The project will be the test case for raising the community's sustainability IQ. The project design is lead by the students and will enhance their leadership skills and test their innovations. Project implementation necessitates leveraging multiple local and other Hawaii-based partners to blend knowledge and physical resources to accomplish the project leaving a measurable increase in overall community sustainability. (Questions 3, 6, 7, 8, 10, 12, 13, 14, 15)

2. Resident responses also provide insight into how they would like to be informed of sustainability news (Questions 16 and 18). Since this survey was administered in late 2011 and January 2012, newspaper articles regarding Planet Pioneer activities have begun to generate increased interest from community members as well as partners. Two partners with Hawaii-

wide reach through online and news media have approached Planet Pioneer leadership to expand activities that are mutually beneficial to both Planet Pioneers and the partners. The partners will host the project activities of Pioneers in their media venues. This immediately lends additional credibility to the value of the PP mission and activities as well as dramatically broadens the visibility of Pioneer impacts to increasing sustainability of the local community and Hawaii. Residents in North Kohala can feel proud about what the Pioneer students are doing when they see increased visibility beyond the local Kohala Mountain News paper. Recently, some community members have approached PP leadership to volunteer their support for Pioneer project activities, mentoring, and even fundraising.

Pioneer volunteer teachers influencing school's curriculum to include sustainability

1. The majority of North Kohala residents indicated they supported programs and activities that increase sustainability awareness and knowledge in the community (Questions 13 and 17) including increasing voluntary and mandatory teacher sustainability training programs. Key informants from the teacher stakeholders, however, were strongly opposed to anything that increases their current class workload or demands more of their time spent outside of the classroom in education programs. The Planet Pioneer Academy program is collaboratively developed with the volunteer Pioneer teachers from KHS. They are active participants in all Pioneer program activities as well. Their exposure to these events with PP partners has resulted in exploring how to integrate sustainability into their classes (math, history, and English).
2. One of the partners is a private school that has a state-of-the-art facility, tools and access to sustainability leaders world-wide developing a 21st century sustainability curriculum. The private school has offered access to their facility, tools and data to the KHS teachers to support bringing sustainability into their public school classrooms. This relationship has evolved beyond the original expectations between PP and their partners. This opportunity offers free access and open collaboration between the two schools and a benefit well beyond the knowledge and experience of the participating Pioneer students. (Key informant interviews XX and XX).

Scaling Planet Pioneers across K12 and adding internships

1. The Planet Pioneer Academy program commenced on January 4, 2012 and concludes with a trip to Silicon Valley in late May 2012.

Fundraising 101

In keeping with Planet Pioneers' all-volunteer model and using only private funding for PP activities, fundraising for the Silicon Valley trip presented a challenge to the fledgling organization. With no previous experience in fundraising or grant writing, PP's founder decided to consult with a handful of community members who were already leading high profile projects that included significant fundraising events in the local area.

The engagements produced a solid background of local fundraising events, their donor focus, and best practices for how the events were planned and conducted. Key community donors were identified and contact information was shared. Although helpful, most of these community members were not willing to provide an introduction for Planet Pioneers. Reaching out to these existing community donors would have been the equivalent of a cold call. Cold calling requires a significant amount of effort and time to produce a satisfactory outcome. There were about 6 weeks to design, launch and complete events that would result in raising the required \$8,000.

Since the program launch in January, PP activities were announced in the local newspaper. At the end of each article, there was a brief plea for donations. No donations were received after three months of articles. Given the time constraints for raising funds and managing the existing PP program workload, the founder decided to have the Pioneers write personal letters that described who they were, what they were doing and what was needed from donors to make the trip to Silicon Valley. Their stories were distributed via e-mails, flyers and letters through the personal networks of Pioneers and their families. Donors resonated with the Pioneers' stories and responded generously with the necessary resources to fund the trip.

The main lessons learned from this experience are:

- 1- Donor philanthropic interests must be closely aligned with PP mission
- 2- Potential donors will assess the genuineness of the cause and its leadership
- 3- Fundraising can be a full time job without the right strategy for engaging donors

Figure 5. Fundraising 101

Currently the Pioneer students are thriving and exceeding expectations for increasing their sustainability awareness and knowledge. The students are reaching out for mentors in specific areas of interest as they learn and broaden their relationships and networks with program partners and other mentors that have graciously volunteered their talent and time. The upcoming launch of their community-based project will enhance their leadership skills and

allow for innovative thinking and creativity in design and implementation of their project. With 40% of the time elapsed into the pilot phase, it is expected that the student Pioneers' successes will garner broader community and partner support for expansion across K12 next year and the addition of internships with PP partners. Initial discussions with current and some new partners are positive for this expansion for next year's program.

2. As for moving beyond a pilot program under fiscal sponsorship of NKCRC's not-for-profit shell, PP has secured a highly experienced foundation mentor that has agreed to assist with PP activities to incorporate as its own 501 (c) (3) Benefit Corporation. The PP founder has increased networking across the islands with key people who want to maintain their partner status, become new partners, provide their services as mentors, and assist with advisory board and PP organizational activities. The founder is also pursuing application to the Ulumau program for consideration as a member of its next cohort.

Conclusions

In summary, the PP Academy program and partnership model for the pilot is meeting or exceeding expectations with 80% of the program time elapsed. Market research conducted to test the original PP concept and validate the compelling need for the organization's existence at the front end of the effort was invaluable to avoid potential duplication of effort with other initiatives or developing an organization that does not serve a valid need in the community.

Development of a strategic plan is essential to force founders to work through the mental exercise of articulating the organization's purpose, its organization, goals and how it will accomplish its mission. The rigor of working through a strategic planning process helps refine a concept into an actionable plan to effectively and efficiently guide startup and pilot efforts.

The early and continued periodic engagement with partners and key community members was clearly the best way to discover issues and problems with sufficient time to mitigate the risk of failure or delay with adaptations to the program plan and partner model. The survey tool was an important way to gather information from the community and partners to inform current and future program and partner model designs. Determining their knowledge, attitudes, and perceptions about evolving towards a more sustainable Hawaii proved a formidable task given the local culture and norms within the North Kohala community.

Adaptations to the techniques of eliciting this information when challenges arose could not have been possible without the immediate feedback from key community leaders. The resultant data shows broad support across all stakeholder groups and partners for continued support for the PP mission and program. The main reason they all give of their time, talent, and/or treasure to this effort is because it directly supports building the capacity of leadership and entrepreneurship in our youth who will be required to lead Hawaii's continued transformation towards a sustainable future.

The leadership and entrepreneurial capacity gap in Hawaii is a compelling need that clearly exists. There has never been a better time for Hawaii to step up and shape its future by preparing its youth to lead the state's transformation.

Planet Pioneers

Be bold, be innovative, be honest, and leave it better!

References and Relevant Literature

Allan, L. *Managing Change in the Workplace: A Practical Guide*. 2nd ed. Victoria (Australia): Business Performance Pty Ltd; 2008.

Argyris, C. and D. Schön. *Theory in Practice. Increasing Professional Effectiveness*. San Francisco (CA): Jossey-Bass; 1974.

Argyris, C. and D. Schön. *Organizational Learning: A Theory of Action Perspective*. Reading (MA): Addison Wesley; 1978.

Attendance at Asia Pacific Clean Energy Summit and Exposition. August 30- September 2, 2010. Hawaii Convention Center, Honolulu, Hawaii. <http://www.ct-si.org/events/APCE/>.

Attendance at Asia Pacific Clean Energy Summit and Exposition. September 13-15, 2011. Hawaii Convention Center, Honolulu, Hawaii. <http://www.ct-si.org/events/APCE2011/press/>.

B Corporation (B Corp). Retrieved December 2, 2011 from <http://bcorporation.net/>.

B Corporation (B Corp). 2012. Retrieved February 10, 2012 from <http://www.benefitcorp.net/state-by-state-legislative-status>.

Bernard, H. Russell. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. 3rd ed. Walnut Creek (CA): AltaMira Press; 2002.

Hawaii State Bill 298 (HSB 298). 2011. Retrieved February 16, 2012 from http://www.capitol.hawaii.gov/session2011/bills/SB298_CD1_.htm.

Informant interview #1 (teleconference), September 16, 2011.

Informant interview #2 (teleconference), September 22, 2011.

Informant interview #3 (teleconference), September 26, 2011.

Informant interview #4, September 30, 2012, Waimea, Hawaii.

Informant interview #5, October 13, 2011, Kapa'au, Hawaii.

Informant interview #6, October 20, 2011, Kapa'au, Hawaii.

Informant interview #7, October 24, 2012, Kapa'au, Hawaii.

Informant interview #8, October 27, 2011, Kapa'au, Hawaii.

Informant interview #9, November 15, 2011, Kohala, Hawaii.

Informant interview #10, November 18, 2011, Hawi, Hawaii.

Informant interview #11, November 21, 2011, Hawi, Hawaii.

Informant interview #12 (teleconference), December 2, 2011.

Informant interview #13, December 17, 2011, Hawi, Hawaii.

Informant interview #14, December 17, 2011, Waimea, Hawaii.

Informant interview #15, December 17, 2011, Waimea, Hawaii.

Informant interview #16, December 17, 2011, Waimea, Hawaii.

Informant interview #17, January 13, 2012, Kohala Coast, Hawaii.

Informant interview #18, January 14, 2012, Waimea, Hawaii.

Informant interview #19 (teleconference), January 17, 2012.

Informant interview #20 (teleconference), January 18, 2012.

Informant interview #21 (teleconference), January 30, 2012.

Informant interview #22, January 30, 2012, Kapa'au, Hawaii.

Informant interview #23, February 4, 2012, Kapa'au, Hawaii.

Informant interview #24 (teleconference), February 6, 2012.

Informant interview #25, February 8, 2012, Hawi, Hawaii.

Informant interview #26, February 12, 2012, Hawi, Hawaii.

Informant interview #27, February 15, 2012, Kapa'au, Hawaii.

Informant interview #28, February 15, 2012, Kapa'au, Hawaii.

Informant interview #29, February 17, 2012, Kapa'au, Hawaii.

Informant interview #30, February 24, 2012, Hawi, Hawaii.

NKCRC Projects. 2012. Retrieved January 15, 2012 from http://northkohala.org/projects_current.html.

North Kohala Community Resource Center (NKCRC). Retrieved January 20, 2012 from http://northkohala.org/our_mission.html.

Partner information exchange #1, August 24, 2011, Kamuela, Hawaii.

Partner information exchange #2, April 6, 2011, Hawi, Hawaii.

Partnership information exchange #3, July 5, 2011, Honolulu, Hawaii.

Partnership information exchange #4, July 5, 2011, Honolulu, Hawaii.

Partnership information exchange #5, July 5, 2011, Honolulu, Hawaii.

Partner information exchange #6, July 15, 2011, Kawaihae, Hawaii.

Partnership information exchange #7, July 26, 2011, Hawi, Hawaii.

Partnership information exchange #8, July 25, 2011, Kohala, Hawaii.

Partnership information exchange #9, July 29, 2011, Kapa'au, Hawaii.

Partnership information exchange #10, August 1, 2011, Waikoloa, Hawaii.

Partnership information exchange #11 (teleconference), August 2, 2011.

Partnership information exchange #12, August 3, 2011, Kona, Hawaii.

Partnership information exchange #13, August 8, 2011, Kapa'au, Hawaii.

Partnership information exchange #14, August 8, Kapa'au, Hawaii.

Partnership information exchange #15, August 9, 2011, Kapa'au, Hawaii.

Partnership information exchange #16, August 16, 2011, Durham, North Carolina.

Partnership information exchange #17 (teleconference), August 19, 2011.

Partnership information exchange #18, August 22, 2011, Kapa'au, Hawaii.

Partnership information exchange #19 (teleconference), August 22, 2011.

Partnership information exchange #20 (teleconference), August 24, 2011.

Partnership information exchange #21, August 25, 2011, Hawi, Hawaii.

Partnership information exchange #22, August 25, 2011, Hawi, Hawaii.

Partnership information exchange #23 (teleconference), August 25, 2011.

Partnership information exchange #24, August 27, 2011, Kapa'au, Hawaii.

Partnership information exchange #25 (teleconference), September 1, 2011.

Partnership information exchange #26, September 2, 2011, Hawi, Hawaii.

Partnership information exchange #27, September 12, 2011, Honolulu, Hawaii.

Partnership information exchange #28, September 13, 2011, Honolulu, Hawaii.

Partnership information exchange #29, September 13, 2011, Honolulu, Hawaii.

Partnership information exchange #30 (teleconference), September 30, 2011.

Ravilochan, T. Unreasonable Institute. Nov 4, 2011 interview. Retrieved September 12, 2011 from <http://www.care2.com/causes/giving-social-entrepreneurs-wings-to-fly-with-teju-ravilochan-of-the-unreasonable-institute.html>.

State of Hawaii, Department of Business, Economic Development & Tourism (DBEDT). 2008. Hawaii DOE Clean Energy Initiative. Retrieved December 23, 2011 from <http://hawaii.gov/dbedt/info/energy/hcei>.

State of Hawaii. 2008. Hawaii 2050 Sustainability Plan. Retrieved December 23, 2011 from <http://hawaii2050.org/>

Appendix A: Brief Overview of Planet Pioneers and the Research Effort

My name is Linda Lewandowski and I am a graduate student at the Nicholas School of the Environment at Duke University and the founder of Planet Pioneers. I am assisting with a research study to document and analyze what people know about the Planet Pioneers organization, its purpose and what they think can be done to build capacity in our youth to lead Hawaii's energy and economic transformation. I am asking for your help to gather data on the knowledge, skills, motivations, attitudes and perceptions of local community residents and other stakeholders as they pertain to the vision of a sustainable Hawaii and for supporting the Planet Pioneer (PP) mission. Analysis of the data collected will be used to inform initial PP partnership and program designs. The best way we have of learning about these issues is by asking people who live and work in Hawaii to share their thoughts and opinions. We thank you for your permission to share this questionnaire with you.

Planet Pioneers is an organization designed to bring together a network of innovative thinkers, practitioners and entrepreneurs for the sole purpose of building sustainability leadership and entrepreneurship capacity in K12 students in Hawaii. This capacity will be needed to successfully lead Hawaii through the transformation of its energy infrastructure and economy. Planet Pioneers, a future not-for-profit 501(c)(3) B corporation, exists to transfer experiential knowledge and leadership principles that will provide mentorship as well as inspire our next generation of youth to innovate and lead the journey to transform Hawaii. The organization will also strive to increase awareness of sustainability and cultivate a collaborative exchange with local community residents, industry, government, academia and other stakeholders working towards a sustainable future.

To make sure that we hear from all different types of people who live in the area, we are engaging with community members through a series of meetings where we will conduct the interviews.

Please find a list of interview questions enclosed that will be used during an interview that should take 30-45 minutes of your time to complete. Your responses are voluntary and will be kept confidential. Your contact information will not be put on our mailing list and your answers

will not be reported to anyone in a way that would identify you. I will keep your contact information until all the interviews are completed and the data analyzed. If you have any questions about this questionnaire or of your participation in an interview, please do not hesitate to contact me by telephone at (808) 756-9005 or by email at linda.lewandowski@duke.edu. You may also contact my faculty advisor for this study, Michael Orbach, at mko@duke.edu. If you have any questions about your rights as a participant in this study, you may contact the Chair of the Human Subjects Committee at (919) 684-3030. By taking a few minutes to share your thoughts about Hawaii's economic and energy transformation and our youths' leadership and entrepreneurship capacity you will be helping us out a great deal and your opinions will help to inform future planning and management of Planet Pioneers program and partnerships. I will also use the results of the study to write a paper for my Masters' Project.

I hope that you enjoy the questionnaire and look forward to our interview.

Many thanks,

Linda Lewandowski

Planet Pioneers, Founder and Executive Director / Duke University MEM candidate

Appendix B: Questionnaire (including data summary)

1. During what period have you been familiar with Hawaii public schools?

0-5 yrs=3

6-10 yrs=2

11-20 yrs=7

>20yrs=31

2. During the time you have been familiar with Hawaii public schools, how would you say the curriculum of Hawaii's schools have evolved to meet the challenges of a changed economic and energy environment?

1 Decreased significantly=2

2 Decreased somewhat=9

3 Remained about the same=11

4 Improved somewhat=19

5 Improved significantly=0

dk Don't know / Not sure=2

3. What does "sustainability" mean to you?

Buzzword

The ability to sustain a working, efficient planet and life for the long term

Not sure

Good stewardship

Taking care of our own environment

Resilient to natural and man-made disasters

Getting off oil

Growing our own food

Being able to buy basics like food, a house, and a car to get to work

A way of life

Keeping my job

Buying less at COSTCO

4. Do you think Kohala High School prepares students well enough to effectively lead entrepreneurial initiatives that will improve Hawaii's energy and economic sustainability?

1 Yes=1

2 No=42

5. During the time you have been familiar with the educational program at Kohala High School, how would you say that opportunities for students to expand sustainability leadership and entrepreneurship experience have changed?

1 Decreased significantly=1

2 Decreased somewhat=7

3 Remained about the same=18

- 4 Improved somewhat=1
- 5 Improved significantly=1
- dk Don't know / Not sure=15

6. What are the important areas of knowledge and skills necessary to provide effective leadership and entrepreneurial activity related to economic and energy sustainability?

Not sure

Ability to communicate and articulate

Lead change

Get your community organized

Increase your knowledge and awareness

Be able to talk to people

Talk story and influence change in my community

I don't know

Planning, task analysis, organized brainstorming

Higher education

Be a businessman

11=blank

What are their important characteristics and what makes them effective?

7=blank

Political

Determination

Honesty

Dedication

Know the community and how to get things done

Turn "no can" into "can"

People look up to them

Respect for the culture and people

Persuasion and influence

7. Are there any knowledge or skill gaps in our North Kohala youth to effectively be able to lead entrepreneurial efforts towards a sustainable Hawaii in the public or private sectors?

1 No=12

2 Yes.=21 Please explain_____

Planning and task analysis skills for long-term projects are weak

Weak knowledge of outside opportunities

Not knowing what's on island and who to talk to

Don't care

Lack of higher education

Exposure to the outside world

8. Can you identify some Hawaiian sustainability leaders and entrepreneurs?

8 names were provided

27 were blank

9. What do you think are their leadership and entrepreneurial traits that can be shared with our North Kohala youth?

Natural farming techniques

Don't know

Ability to organize and execute sustainability initiatives

Know the land

Linked in to the right people

Know the culture

27 were blank

10. Do you think an organization such as PP can have a positive impact with North Kohala youth? Yes=43 Why or why not? If yes, in what ways?

Exposure

Help students see importance of organized planning and execution

Give youth a chance to see one's dream become a reality

Show them what's going on in the islands

Get them involved in the community

11. I am (check all that apply):

1 a resident of North Kohala=41

2 former resident of North Kohala (when?)=1 (2008-2009)

3 graduate of KHS=26

4 business owner in Hawaii (location and type of business)=10 (energy, teacher, financial, construction, tourism, consultant)

5 a leader in my community=6

6 willing to support our youth and PP=40

12. What impact do you think the following activities have on increasing our youths' ability to effectively lead entrepreneurial initiatives in Hawaii that will move us towards a more sustainable existence (e.g. more jobs, energy security, food security, etc.)?

	No impact at all	A slight impact	A serious impact	An extreme impact	Don't know / Not sure
a. Existing local initiatives	1=10	2=0	3=4	4=0	5=29
b. KHS school curriculum	1=30	2=0	3=0	4=0	5=13
c. Teacher proficiency in sustainability	1=21	2=0	3=0	4=0	5=22
d. KHS administration's leadership	1=4	2=2	3=0	4=3	5=34
e. Parental support	1=5	2=9	3=16	4=7	5=6

f. Student interest	1=1	2=2	3=14	4=1	5=25
g. Student motivation to lead	1=2	2=4	3=20	4=6	5=11
h. Partnerships from outside the NK community	1=5	2=7	3=16	4=4	5=16
i. Successful PP program	1=2	2=4	3=7	4=0	5=30
j. Additional grant funding	1=3	2=2	3=0	4=2	5=36
k. Local political leadership involvement	1=30	2=10	3=2	4=0	5=1
l. Your personal attitude and support					
m. Other (describe):	1=22	2=2	3=4	4=2	5=13
					No other

Maintaining the health of Hawaii’s human capital resources may be important for Hawaii’s sustainability as well as opportunities for entrepreneurial activities that contribute to the overall quality of life for Hawaii residents. What do you think?

13. Please tell us how important each item is to you when considering how well Hawaii might achieve a sustainable state in the next 10-20 years. Please think critically about each of these items, as your answers will help us identify community priorities. (1= not at all important; 5 = extremely important)

- a. Maintaining conditions for partnerships to improve our schools1=3 2=4 3=5
4=12 5=17 2=blank
- b. Maintaining conditions for effective leadership and entrepreneurship development in our youth1=2 2=3 3=4
4=11 5=16
- c. Maintaining our rich Hawaiian culture1=0 2=0 3=7
4=1 5=35.....
- d. Fostering an environment where communities assist in enhancing Hawaii’s sustainability efforts.....1=0 2=2 3=15
4=7 5=6 13=blank
- e. Finding effective methods to keep our best talent in Hawaii1=0 2=0 3=2
4=2 5=31 8=blank
- f. Reducing the amount of public money spent on ineffective leadership and workforce development programs1=3 2=4 3=22
4=11 5=2 1=blank with comment that it was a biased question
- g. Improving community knowledge and practices of sustainability1=0 2=0 3=5
4=7 5=31
- h. Promoting a standardized sustainability curriculum in Hawaii schools1=0 2=0 3=17
4=12 5=12 2=blank
- i. Investing local funds in renewable energy projects for Hawaii.....1=3 2=0 3=10
4=25 5=5
- j. Improving teacher knowledge and skill in sustainability.....1=5 2=2 3=27
4=4 5=3 2=blank
- k. Other (no other entries).....1 2 3 4 5

14. Please rank from one to eight, in order of importance to you, each of the following values of Hawaii's sustainability. Ranked highest to lowest
- _2_ a. I value the return of Hawaii to a sustainable state as a part of my heritage and cultural practices=32
 - _1_ b. I value entrusting our future to our youth through effective mentorship and leadership skill enhancement=41
 - _4_ c. I value activities that improve Hawaii's sustainability because some part of my livelihood is dependent on it=23
 - _5_ d. Just knowing that Hawaii is becoming more sustainable is of value to me=27
 - _3_ e. I value increased sustainability because our youth will have a better life=35
 - _6_ f. I value more effective use of public funds to improve Hawaii's sustainability=37
 - _7_ g. I value use of private funding to improve Hawaii's sustainability=28
 - _8_ h. Improving Hawaii's sustainability is of no value to me=4

It may be possible to improve Hawaii's energy and economic security by increasing the capacity of our youths' expertise in leadership and entrepreneurship.

15. How important is it to you that something is done to improve Hawaii's sustainability?

- 1 Not at all important=0
- 2 A little important=0
- 3 Neutral=1
- 4 Very important=7
- 5 Extremely important=36

16. How do you keep up with activities that enhance Hawaii's sustainability? North Kohala's sustainability?

- a. Kohala Mountain News=33
- b. Family members=29
- c. Friends and acquaintances=35
- d. Planet Pioneers website=0
- e. Other Hamakua Times, West Hawaii Today, Coconut wireless, NPR, blogs, internet

17. Please indicate the extent to which you might oppose or support each of the following activities in North Kohala.

	Strongly oppose	Oppose	Neutral	Support	Strongly support
a. Increase the mentorship of our youth with Hawaii-based leaders and entrepreneurs	1=0	2=0	3=2	4=28	5=13
b. Voluntary training programs for teachers in sustainability	1=0	2=0	3=8	4=32	5=3
c. Mandatory training programs for	1=8	2=0	3=3	4=20	5=2

teachers in sustainability

d. Programs to increase sustainability knowledge for local residents	1=0	2=0	3=2	4=29	5=12
e. Provide more public funding for sustainability programs	1=0	2=5	3=12	4=11	5=15
f. Provide more private funding for sustainability leadership and entrepreneurship programs	1=0	2=0	3=14	4=26	5=3
Other: _____ none _____					

18. How would you like to be included in any efforts to build leadership and entrepreneurship capacity in our youth? Please note that we are asking for your preferences at this time and will not be sending any mailings, emails, or other correspondence based upon your answers below. *Please check all that apply.*

- 2 a. I do not want to be included.
- 11 b. I would like to receive periodic updates by postal mail (*no more than one per month*).
- 26 c. I would like to receive periodic updates by email (*no more than one per month*).
- 31 d. I would like access to a website where I can get more information.
- 23 e. I would like the opportunity to participate in community meetings.
- 14 f. I would like the opportunity to be involved in the planning process.
- 8 g. I would like to volunteer my time to participate in mentoring students.
- ___ h. Other: none

19. If you support Planet Pioneers, what is your motivation?

To see our youth grasp and transform their way of thinking

Volunteer

Give back

Leave a legacy

Improvement of our immediate community and education of our youth

Finally, we would like to ask a few questions about you and where you live in relation to North Kohala. This will help us better interpret our results.

20. Where do you live?

- 1 I live in North Kohala (island of Hawaii aka Big Island) year round=33
- 2 I live in North Kohala part of the year=0
- 3 I live in a neighboring community (e.g., Waimea, Waikoloa, Hilo, Kona, etc.)=4
- 4 I live on another Hawaiian island=6

21. Did you attend school in North Kohala?

1 Yes=33

2 No=3

3 I attended another Hawaii public school=6

4 I attended another Hawaii private school=1

22. Does your child attend KHS?

1 Yes=12

2 No=31

If no and your child is in high school, where do they attend? no responses

23. In total, approximately how many years have you lived in Hawaii?

1 Less than one year=0

2 One to six years=2

3 Seven to 12 years=1

4 13 to 18 years=4

5 19 to 24 years=3

6 More than 24 years=33

24. If you are a North Kohala resident, how many years have you lived in North Kohala?

1 Less than one year

2 One to six years

3 Seven to 12 years

4 13 to 18 years

5 19 to 24 years

6 More than 24 years

25. Are you:

1 Male=29

2 Female=14

26. What is your age range:

1 15-19=2

2 20-24=1

3 25-29=3

4 30-34=0

5 35-39=2

6 40-44=2

7 45-49=8

8 50-54=4

9 55-59=5

10 60-64=3

11 65-69=4

12 70-74=2

13 75-79=2

14 80-84=3

15 85-89=1

16 90+=1

Thank you for your assistance with this research. If there is anything else that you would like to share about your ideas or interests in Hawaii's movement towards a sustainable future?

I fully support this program and wish for its success

Thank you for bringing this program to Kohala

Hope it works out

This is good

The kids are our future. Let me know if I can help

I'd like to get more involved

Appendix C: Planet Pioneers Strategic Plan (Short Version)

Planet Pioneers.org

Strategic Plan 2010 through 2013

As we prepare for an unpredictable future with increasing globalization, climate change and the world economic downturn, we must prepare Hawaii's next generation to adapt to change, think critically, and lead innovation required to deftly navigate these challenges and ensure a better life in the future. This cadre must be highly trained and educated to function in both current and emerging complex environments against evolving sustainability challenges. Hawaii and the Nation require very capable people, covering the greatest range of tasks, at an affordable cost that can minimize the risks inherent in an unforeseeable future.

In 2008 the Hawaii Clean Energy Initiative (HCEI) was launched in partnership with the US Department of Energy to transform Hawaii's fossil fuel energy backbone to 70% from clean indigenous sources by 2030. This energy transformation will spawn an economic shift away from tourism towards the high tech; demanding a more skilled and technical work force. The current availability of highly skilled people is inadequate to meet growing demand.

Furthermore, the K through 12 curricula are not structured to develop leaders and entrepreneurs who will successfully guide Hawaii's efforts towards a more sustainable way of life. Planet Pioneers is an organization designed to bring together a network of innovative thinkers, practitioners and entrepreneurs for the sole purpose of transferring knowledge and expertise to the immediate generation who will be needed to successfully lead Hawaii through the transformation of its energy infrastructure and economy.

Vision

The vision for Planet Pioneers is to expand the capacity in local communities and individuals to innovate and lead Hawaii towards a sustainable future.

Mission

Planet Pioneers exists to transfer experiential knowledge and leadership principles that will provide mentorship as well as inspire our next generation of youth to innovate and lead the journey to transform Hawaii. We will also strive to increase awareness of sustainability and

cultivate a collaborative exchange with local community residents, industry, government, academia and other stakeholders working towards a sustainable future.

Core Values and Guiding Principles

Our foundational values—**integrity, moral courage and commitment**—allow us to serve our communities with a common vision and purpose. As such we are guided by the following principles:

- Good citizenship—respect for our ohanas (families), aloha for each other and the aina (land)
- Leadership—through example and engagement cause the extraordinary to happen
- Service—selfless dedication with uncompromising ethics
- Critical thinking—hone the ability to think through complexity systematically and reach informed conclusions
- Innovation—bringing new ideas to practical ends by challenging the conventional wisdom and exploring new ways of thinking and doing in collaboration with others
- Continuous learning—continuously expand the capacity to create results
- Collaboration—creating a sustainable future through sharing knowledge, learning and building consensus

Goals

Planet Pioneers' main goal is to make a unique contribution to Hawaii's security, stability, and economic growth by expanding the capacity of local communities and K-12 students to innovate and lead towards a sustainable future. PP will focus on one school complex initially and select up to six students to start the program. The first program will target the Kohala school complex. Expansion to the next school (TBD) complex will begin late in the second year of PP operations.

Opportunities Assessment and Plan

Significant groundwork has already been laid by building relationships with Hawaii's leadership and business community. There are a few key opportunities that are important for PP to

capitalize on in the near future (startup through year 2). They are summarized below:

Opportunities	Options	Actions to access
Multiple funding sources exist from private philanthropic individuals; foundations as well as public grants	Hawaii local private initiative; Pew Trust grant; local Kohala philanthropists	Engage the private donors directly; apply for local, other private and Federal grants
Hawaii Clean Energy Initiative provides the clean energy goals but reveals a capacity gap for skilled leaders and entrepreneurs	Work at university level—saturated; Work at K-12 levels—unfilled need	Start locally in Kohala on the Big Island and expand over time to cover the other two school complexes
New governor-favorable towards building capacity and reforming Hawaii schools to produce achievers	Engage the Gov and key state level staff plus local county staffs; or work with BI Mayor and staff only	Continue engagement with Gov directly (begun in Dec 2009) and key administration leads; must also engage BI Mayor

Threats and Managing Risks

The major challenges facing the organization are three-fold: identifying start up funding; branding the organization and gaining commitment from the local community members (parents, students, community leaders, and partners); successfully motivating volunteers and partners to build and deliver the PP program. The branding of Planet Pioneers within the community is critical to successful launch and early “wins” within the first year of operations. The parents, students and community elders (kupunas) must understand the purpose, methods, and desired outcomes of the program. Without their total buy in and commitment, the program will become marginalized. Planet Pioneers (PP) foresees the risks presented in the table below during its startup and initial phase (year 1 and 2) of operations:

Event	Probability	Impact	Reduction	Mitigation	Cost
Well established local NFPs expand to overlap PP programs	Low	High	Local business and community leader partnerships	Work business partnerships in advance	Medium
Inability to raise initial startup and first year operating costs	Medium	High	Board works as a recruiting team	Initial small volunteer staff	Medium
Volunteer staff is not motivated to develop curriculum and donate teaching time	Medium	High	Hands-on leadership, clear and frequent communications: local branding	Board is recruiting team	High

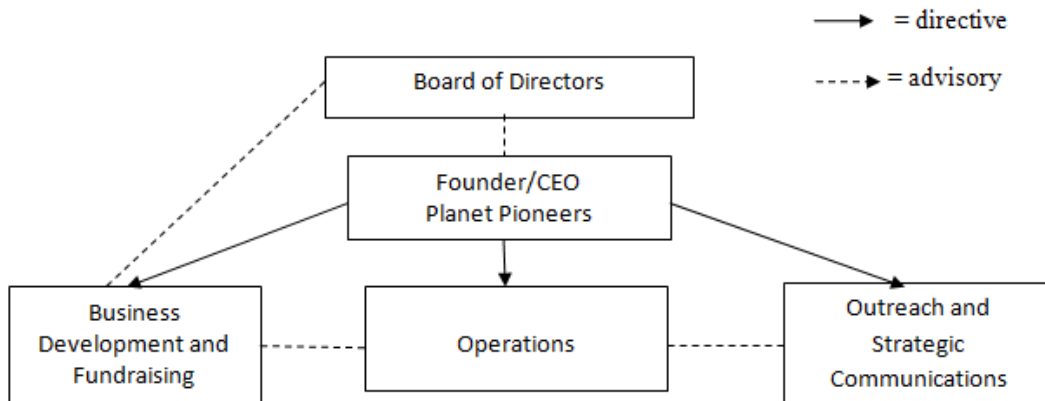
Risk Summary

These are considered the most likely risks during startup and early operations phases that could negatively impact the business in successfully carrying out its mission. The matrix shows how risks can be reduced or mitigated via adequate planning during the organization’s development and through continuous adaptation throughout operations. The risk register and plan will be integrated into daily operational processes. Monthly reviews by the director and staff across all facets of current and future operations will be part of the operating plan. The director and the board members will review the risk register quarterly. Risk management is a process that will be integrated into all planning and execution activities. We will be proactive in general and reactive by exception. These practices will span startup as well as the initial operating phase. There are no likely major threats that would impede the organization’s viability or ability to move forward in achieving its mission. The key lies in putting together a solid group of board members, advisors and business partnerships that have the connections and influence to mitigate or deflect challenges to Planet Pioneer’s mission.

Organizational Structure

Planet Pioneers will be organized to maximize the transfer of knowledge and expertise from a cross-section of leaders and innovators in the emerging field of sustainability. The organization

is based on a learning organizational model that allows PP to continue to evaluate changes in the global environment and adapt the curriculum and partners as necessary.



Roles, Responsibilities, Authorities, Accountability

The **Board of Directors (BoD)** provides strategic guidance and business outreach for PP. Their responsibilities include frequent engagement with the PP CEO and the senior leadership team (CEO and Division Directors) to plan and execute the strategic plan. Their authority is advisory only. They are accountable to the citizens who entrust their children’s future to the PP leadership. The BoD will be comprised of respected leaders in the business, government, local community, and educational system of the targeted school complex area (5-6 people initially). The addition of two to three BoD members is envisioned as the program expands to each new school complex.

The **Founder/CEO** leads and provides strategic decision-making, enterprise leadership and management to the PP organization. He/she is responsible to the BoD for effective and efficient execution of PP mission. He/she possesses line management authority over directors (i.e. business, operations and outreach) and makes decisions to assign resources outside PP. He/she is solely accountable to the BoD and community for the success or failure of the PP mission.

The **Business Development and Fundraising Director** engages private and public sectors and academia and develops cross-sector partnerships. He/she is responsible for the day-to-day management of effective and efficient business operations of PP to include: raising and managing financial resources; manages volunteer staff; assigns and manages resources within his/her functional role. He/she is directly accountable to the CEO. One person will fill this

position initially and leverage BoD members for fundraising efforts. Additional resources will be added (1-2 staff per addition of complex) as necessary.

The **Operations Director** develops and implements the K-12 program. He/she is responsible for developing, maintaining, and revising the curriculum for PP program participants. The staff will consist of dedicated volunteers. He/she is directly accountable to the CEO. One person will fill this role to ensure the integrity and consistency of the curriculum. Curriculum development and revisions will be accomplished through partnership resources with a local NFP and the University of Hawaii.

The **Outreach and Strategic Communications Director** leads marketing and outreach. He/she is responsible for developing, maintaining and revising PP’s message for internal and external purposes via web-based and social networks. He/she manages volunteer resources and is directly accountable to the CEO. One person will staff this position through start up and first year operations.

This model will be used for organizational design for startup and expansion:

Factor	Description	Expansion after first year of full operations
Strategy	Expand sustainability innovation and leadership capacity of local K-12 students; align PP as a learning organization	Expand the capacity of local communities across the Big Island (3 school complexes)-add one/year
Structure	Network-centric model	Financial management and Strategic Comms & Outreach will remain centralized; BD managers will be aligned to each geographical area; the Operations manager maintains the high quality of the curriculum
Systems	All business and communications environments are networked across the organization with transparency of internal operations; website design provides for learning as well as outreach	No changes here; web-based tools are adequate to scale across the additional school complexes
Staff	Strong leaders and managers; need expert knowledge in their areas; lifelong learners	Same skills across tier 2 staff members; additional members with expansion to more school complexes

Style	Collaborative planning and decision-making; decentralized execution	Same; CEO needs to manage distributed operations
Shared values	Integrity, moral courage, and commitment; 7 principles: Good citizenship; Leadership; Service; Critical thinking; Innovation; Continuous learning; Collaboration	The shared values are enduring and part of our culture; leaders emphasize our shared values at every level in the organization; communicated and branded externally
Skills	Transformational leadership; Business operations and management (strategic, portfolio, and project level); deal making; persuasion; negotiation; collaborative planning and decision-making	Increased people and financial management required of central staff as PP expands across the Big Island

Organizational Strengths and Weaknesses

The small size of the organization, existing relationships amongst its members and location in the same local geographical area are the strengths of the organization. These strengths will allow for a powerful execution team whose skills are well-balanced to achieve the goals of PP during the startup and first two years of operations. There are currently no significant weaknesses that would impede carrying out PP’s mission.

Planning and Decision-making for Creating Change

The entire PP organization will be involved in community outreach and engagement activities. The principled framework can be used to structure planning, decision-making and communications:

Principles	Plans
Sponsorship	Engage BoD and the Sr. Leadership Team (CEO and Division Directors) to define and priorities needs and communicate across organization and with partners
Planning	The strategic plan will be reviewed by senior leadership and their input incorporated, as appropriate. The plan will include what we hope to accomplish, the different roles and the risk reduction/mitigation strategies.
Measurement	Key tiered metrics will be defined by sr. managers. Standard project management techniques (Project Management Institute standards) will be used for routine monitoring and control of the program to include continuing assessment, identification and mitigation of risks.

Engagement	Internal: all PP personnel will be consulted to enhance organizational shared knowledge especially best practices and lessons learned; External: Pro-active web-based and multi-media campaign, town hall meetings and annual conference. Ongoing board and CEO networking with community leaders, private and public sector leaders, parents, students and academia.
Support Structures	A standard Commercial-Off-the-Shelf set of web-based collaboration and management tools will be utilized. With additional complex expansion, an annual review will be conducted to assess gaps and to develop action plans to resolve the deficiencies.

Most of the resistance to the PP activities is anticipated from some parents who do not value advanced education and some teachers who support mediocrity and low achievement in the educational system. PP will identify these “barriers’ to PP program goals and develop activities that first attempt to educate these people and eventually get them to “yes” with respect to PP support. Initial successes in PP programs will be used as a strong call to action for parents, students and other members of the community as the program matures and expands.

Strategic Objectives and Actions

Planet Pioneers will achieve the following strategic objectives during the startup and first two years of operations:

- 1) Focus on the individual Pioneer will be our most important asset. The recruitment, development, and retention of high-quality, disciplined Pioneers imbued with our core values are paramount to our mission.

Action plan: There will be a maximum of six candidates initially from the Kohala school complex. The program will begin to expand in year two to cover the next school (TBD) complex. Candidates will be selected by a small team of people whose membership represents local educators, business executives, government leaders and PP staff. Parents will also be integrated into the process. A key partnership with a local Gifted and Talented Association will leverage existing processes that identify students for leadership and entrepreneurial development.

- 2) Develop a training and education curriculum that produces innovative leaders who can operate under conditions of continual change and uncertainty in the global environment. It will provide Pioneers the tactical acumen and knowledge to develop

and assess these conditions in order to make sound decisions, and the proficiency to employ supporting knowledge, techniques, and resources. Our Pioneers will be prepared for greater responsibility while operating in an increasingly more complex and interconnected world.

Action plan: PP staff will engage a small team of professionals across industry, government, academia and the local community to develop the curriculum for the K-12 students selected for the PP program. The curriculum will be a continuum of activities across elementary, middle and high school levels that will develop the necessary leadership and technical knowledge and skills necessary to lead Hawaii's transformation. Industry and government partners will provide mentors for each candidate.

- 3) Expand presence and engagement in key areas of the public and private sectors. We will look for opportunities to increase apprenticeships and job placement for our Pioneers throughout the course of their educational and mentorship program.

Action plan: Use BoD and PP staff to identify, engage, and partner with selected public and private organizations. This activity will be integrated into PP messaging and outreach campaigns.

- 4) Posture for evolving challenges and opportunities. Without losing our core capabilities and shared values, we will imbed a double-loop learning model within our organizational processes and operations.

Action plan: Internal PP processes will continue to monitor the program curriculum and partnerships against performance goals and criteria to ensure high quality program delivery. Feedback from periodic program reviews will be assessed and lessons learned integrated to modify PP curriculum, processes and partnerships. PP must also continue to monitor external partnerships for feedback that will improve the program.

- 5) Establish and maintain relationships across the public and private sectors and academia that support advancing the mission of Planet Pioneers.

Action plan: PP will also engage with universities and other organizations that represent leading edge research in leadership development and capacity building techniques for feedback into the PP program.

Program Action Plan

The following is an 8 quarter action plan for implementing PP’s strategic plan:

Quarter	Activities
1Q11	Identify and screen BoD members; select and install BoD; conduct meeting to identify PP division heads; screen and select PP division heads; identify key partnerships, engage, partner with BoD
2Q11	Plan PP launch with division heads; develop curriculum; develop strategic communications and outreach plan; set up website
3Q11	Kickoff program; monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary
4Q11	monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; conduct annual BoD meeting
1Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; plan for program expansion to XXX complex
2Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; identify, engage, partner with XXX groups
3Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; kickoff XXX program
4Q12	Monitor; conduct routine program meetings internally; outreach and engagements externally; assess progress against goals; make changes as necessary; conduct annual BoD meeting

Measuring and Adapting

PP will define a set of program metrics and processes during the annual planning cycle for each phase of the program. Once the program is launched, PP managers will continue to monitor the program’s performance against plan using the metrics for each program element. Periodic assessments will drive program changes. Risks will be assessed also during quarterly internal PP program reviews. Any changes will be incorporated into the PP program promptly. Overall,

standard Project Management Institute program management standards will be followed to ensure proper management of the PP program. Internal processes include monitoring program indicators, assessing actual against plan and then adjusting the elements of the program that require change. Learning and adaptation were designed into the PP organization. Once PP is in execution, excellent leadership and careful management using standard program management techniques will ensure PP success.

In summary, PP is ready, willing and able to significantly contribute to evolving Hawaii's economic and energy infrastructure by building the capacity for innovation and entrepreneurial leadership in its youth. The organization was carefully staffed with high caliber professionals who collectively possess the knowledge, skills, commitment and dedication that will be required to successfully launch PP and carry out its mission through the first few years. The leadership and entrepreneurial capacity gap in Hawaii is a compelling need that clearly exists. There has never been a better time for Hawaii to step up and shape its future by preparing its youth to lead the state's transformation.

Planet Pioneers

Be bold, be innovative, be honest, and leave it better!