



**Impact Assessment of the Formal Schooling Program:  
A Look at Health & Social Outcomes**

**Final Report  
May 2011**

**Melissa Kemp  
Khetiwe Khumalo  
Jae-sung Kim  
Nadya Saber**

**Faculty Advisor:  
Professor Toni Sethi**

<b>Table of Contents</b>	
Executive Summary.....	4
Background & Context: Street Children in Kenya.....	6
Jitegemee.....	9
Formal Schooling Program.....	11
Project Description.....	11
Rationale.....	11
Evolution of Task.....	12
Ultimate Goals.....	12
Methodology.....	12
Phase I.....	13
Participatory Resources.....	13
Focus Groups & Interviews.....	15
Modifications to the Scope & Focus of the Project.....	15
Phase II.....	16
Survey & Questionnaire and Evaluation Resources.....	17
Activities.....	19
Surveys.....	19
Interviews.....	20
Focus Group.....	21
Findings.....	23
Qualitative.....	23
Phase I.....	23
Phase II.....	25
Quantitative.....	25
Phase I.....	25
Phase II.....	26
Impact Analysis.....	35
Recommendations.....	37
Monitoring & Evaluation.....	37
Peer Mentoring.....	38
Alumni Day.....	39
References.....	41
Appendix.....	44
Survey.....	58
Peer Mentoring Guidelines & Questionnaires.....	61

## Acknowledgements

We would like to thank the staff and board of Jitegemee for giving us the opportunity to work with such an incredible organization; it was truly inspirational. Each of the staff members greeted us with a smile and provided us with input that was integral to the work that we did. Special thanks to Mr. Mike Kimeu for welcoming us into the organization, for providing us with guidance and for coordinating the logistics of our time in Machakos. His efforts to arrange meetings for us with members of the academic community throughout Machakos enabled us to gain greater insight into students' experiences at school. Thank you also to Ms. Laurah Mwelu who put her own work aside and graciously accompanied us on our many school visits throughout Machakos, and to Ms. Elizabeth Nzivo who translated our work and served as an interpreter to ensure that our meetings with both students and parents were meaningful and successful. In addition, we thank Mr. Alex Mutiso for his input about the organization's programs and impact.

A special thank you to the Jitegemee scholars and their parents for their willingness to meet with us and share about their experiences.

Thank you also to the Jitegemee Doctor, to levels 7 & 8 at St. Mary's Boys Primary School, and to the staff and teachers at Machakos Girls Secondary School, Machakos Boys Secondary School, St. Mary's Boys Primary School, Muthini Primary School and Baptist Primary School.

Here at SIPA, we would like to thank our Faculty Advisor, Toni Sethi, for providing ongoing guidance and support – and for bearing with us as we worked to find our way. Her concern for our team, respect for Jitegemee and passion for the work that we were doing kept us focused throughout our experience. We are also extremely grateful to Jenny McGill and Melissa Giblock for their tireless support, patience and encouragement. Their efforts were absolutely vital to making this project happen.

We humbly submit this report of our findings and recommendations with the hope that the work that we have done can help to increase the already profound positive impact that Jitegemee is having on children in Machakos.

Sincerely,

The 2011 SIPA Team,  
*Melissa Kemp, Khetiwe Khumalo,  
Jaesung Kim & Nadya Saber*



## Executive Summary

Since 1996 Jitegemee has worked to rehabilitate street children in Machakos, Kenya, equipping them with practical and academic knowledge and providing them with a network of support to help them reintegrate into their communities. The organization's Formal Schooling Program strives to remove the many critical – namely financial - barriers to education that exist for primary, secondary and university students in Kenya so that they can focus all of their energy on getting ahead in school.

This year our team was asked to perform the first ever outside evaluation of the Formal Schooling Program. Our main task was to conduct a comprehensive impact assessment of the program, with an emphasis on health and social outcomes for participating primary school students and their families. During our first trip to Machakos in Phase I of the project, Jitegemee's Director asked us to focus on two additional tasks: 1) to help develop a tool that the organization could use to monitor the on-going progress of students in the program, and 2) to research causes for negative behavior changes in adolescents and help the organization find a way to address them. The latter task was based on staff observations that as students were nearing secondary school age, they were becoming less respectful toward authority figures and losing motivation to succeed.

### *Project Methodology*

We took a mixed-method approach to the project, developing and utilizing both qualitative and quantitative data-gathering tools to solicit information from major stakeholders. In Phase I of the project we conducted a series of interviews and focus groups, and administered questionnaires. Based on the information we gathered, for Phase II we identified four main areas of impact so that we could more effectively target our next round of interactions with stakeholders. Those areas were: Academic Performance, Health, Interpersonal Relationships, and Self-Perception and Awareness. We also prioritized the use of participatory activities in order to meaningfully engage participants and make them feel like an integral part of the process.

### *Findings*

We found that the Formal Schooling Program leads to both positive overall health and social outcomes. One of the major contributing factors to improving students' health is the feeding program, which provides free lunch on a daily basis during the week. In addition, regular check-ups from the Jitegemee doctor and access to medication have had a large impact on both students and their families. With regard to social outcomes, we concluded how Jitegemee's financial support – especially in terms of providing uniforms and shoes - has helped the students to feel like they belong among their peers, allowing them to focus more on their studies and less on social stresses. The financial support has also had a major impact on families, enabling parents to put the money they save toward other household expenses, as well as to better outfit the students' siblings for school.

We also found additional positive financial, educational, health and interpersonal relationship outcomes based on the four areas of impact that we identified during Phase II, and determined that Jitegemee’s impact on relationships was the area where there was the most room for improvement.

### *Recommendations*

We have two major recommendations for the Formal Schooling Program. First, we are providing Jitegemee with the surveys that we used for primary and secondary students during Phase II and we would like to suggest that they begin to implement them in order to monitor the students’ progress in the program. We will provide both guidelines for how and when to implement the surveys, as well as some of the materials and research that we used to develop them. Second, we recommend that the organization introduce a peer mentoring program that matches older primary school students with younger ones. This will help improve Jitegemee’s impact on relationships and, we hope, will also address some of the negative behaviors that the staff have observed in older primary students by giving them a greater sense of accountability and personal responsibility.



## Background & Context: Street Children in Kenya

### Societal Context

**“While few street children could be seen on the streets of Nairobi in the 1960s, today the phenomenon of street children has intensified to such an extent that neglected children have come to be viewed as the “other” society living beside the mainstream “normal society but not enjoying its privileges.”<sup>1</sup>**

Recent statistical reports approximate that there are upwards of tens of millions of street children throughout the world, roughly 250,000 to 300,000 of whom live within Kenya.<sup>2</sup>

Being a “street child” can mean a variety of different things. As Yodon Thonden of Human Rights Watch observes, some street children have parents or family members nearby, some come from single-parent or extended-family households and choose to spend varying amounts of time on the streets before returning home, others have been abandoned or orphaned, and still more have left home simply because of problematic familial relationships. As Thonden recognizes, a reference to street children can encompass any number of young people “for whom the street more than their family has become their real home.”<sup>3</sup>

The Kiswahili word that is commonly used for street children in Kenya, *chokora*, refers to someone who pokes at dustbins or garbage heaps, and implies a search for food. Life on the streets for a child there may be characterized by any combination of negative factors that include prostitution, drug abuse, exploitative manual labor, police harassment and social stigmatization, among others.<sup>4</sup>

### Causes

#### Dynamics Changes: Agriculture & Family

**“Years of drought have had a serious impact on the well-being of Kenya’s children, increasing malnutrition rates, morbidity and mortality.”<sup>5</sup>**

Although it has a long history of being a drought-prone country, Kenya continues to depend heavily on rainfall for its economic and social development. Both its agricultural

<sup>1</sup> Gakuru et. al “Children in Debt: The Experience of Street Children in Nairobi,” p. 38

<sup>2</sup> “Street Children Statistics,” [www.streetchildren.org.uk](http://www.streetchildren.org.uk)

<sup>3</sup> Yodon Thonden, “Juvenile Justice: Police Abuse and Detention of Street Children in Kenya”

<sup>4</sup> Kilbride et. al, *Street Children of Kenya: Voices of Children in Search of a Childhood*, p. 2

<sup>5</sup> “Info. By Country: Kenya,” [www.unicef.org](http://www.unicef.org)

sector as well as the rivers from which it derives water for human consumption rely almost entirely on rainfall, and the threat to both is increasing as population growth and climate change persist.<sup>6</sup>

These frequent droughts jeopardize many families' livelihoods because they lack non-farm sources of income that would allow them to re-invest in farming activities and survive such agricultural crises.<sup>7</sup> This, in addition to the transition of Kenya's economy from one of traditional subsistence farming to participation in the modern cash economy, means that rural families are losing their land and being forced to move to city slums where they struggle to support and feed their children.<sup>8</sup>

In addition to uprooting entire families and threatening their survival, this rapid urbanization has caused significant changes to the traditional Kenyan family dynamic. Male family members have migrated to cities leaving families behind, mothers have had to leave the home to work, and children have been forced to seek new – often harmful – means of income. It is precisely this “family breakdown” that authors Kilbride, Suda and Njeru believe is the “immediate precipitating push factor” that is prompting more children to adopt a street life.<sup>9</sup>

## Resulting Challenges

### Health

Kenya has a population today of about 39.8 million people, the majority of whom are young, with the median age at roughly 19 years.<sup>10</sup> AIDS is the leading cause of death in the country, with 1.2 million people currently estimated to be living with HIV and AIDS-related illnesses. It is also the main factor contributing to the continuing decline in life expectancy in Kenya.<sup>11</sup> The second major cause of death is malaria.<sup>12</sup> In recent years, the recurrence of malarial outbreaks and the emergence of drug resistant strains have further exacerbated the problem.<sup>13</sup> Other common illnesses include: respiratory and skin diseases, diarrhea, intestinal parasites, eye infections, rheumatism and other infections.<sup>14</sup>

Declining availability, access to, and quality of public health services in Kenya, perpetuated by increasing poverty, continue to cause high levels of morbidity and

<sup>6</sup> Dr. Serigne T Kandji, “Drought in Kenya: Climatic, Economic and Socio-Political Factors,” p. 17-18

<sup>7</sup> John Murton “Population Growth and Poverty in Machakos District, Kenya,” p. 41

<sup>8</sup> “About: Overview,” [www.jitegemee.org](http://www.jitegemee.org)

<sup>9</sup> Kilbride et. al, p. 5

<sup>10</sup> “Data By Topic: Health,” data.worldbank.org

<sup>11</sup> Muga et. al “Chapter 2: Overview of the Health System in Kenya,” p. 13

<sup>12</sup> World Health Organization, *Country Health System Fact Sheet 2006: Kenya*

<sup>13</sup> Muga et. al, p. 13

<sup>14</sup> Ibid.

mortality, especially among women and children. In just ten years, from 1993 to 2003, full immunization coverage for children declined over 18%.<sup>15</sup>

These circumstances paint a rather grim picture of the potential for healthy development of future generations in Kenya, regardless of the socio-economic status of any given individual. But for street children who lack access to even basic necessities for survival such as clean water, sanitation and adequate nutrition, the worst of these circumstances is their reality.

## Education

**“Kenya’s free and compulsory education system has increased gross enrollment rates to over 90 percent nationally. But poor children still cannot afford to attend school; 9 out of 10 children from poor households fail to complete their basic education. School dropout rates are increasing...”<sup>16</sup>**

In January 2003, in line with Millennium Development Goal #2 which calls for universal, free compulsory primary education, President Kibaki officially eliminated all primary school fees.<sup>17</sup> Unfortunately, this did not create an automatic guarantee that every child who wanted to attend school could do so. While primary school in Kenya is now theoretically free, there are fees associated with attending that often include a small to moderate tuition and payment for books. In addition, children are required to wear uniforms – which are considered relatively costly according to Kenyan standards - particular to the school they attend. This means that many children are unable to attend school at all, or are ultimately forced to leave because their families cannot afford the associated costs. In addition, with the introduction of free primary schooling, many afterschool rehabilitation programs closed down due to a perceived lack of need for their services and decreased funding, creating a larger number of children for whom the streets are their only alternative for getting ahead.

---

<sup>15</sup> Ibid. p. 14

<sup>16</sup> “Info. By Country: Kenya,” [www.unicef.org](http://www.unicef.org)

<sup>17</sup> Michael Fleshman, “Giant step for Kenya’s schools: Progress for both boys and girls towards Millennium education goal,” p. 10



## Background

Jitegemee, Inc. was founded in 1996 in Machakos, Kenya to address the needs of the growing number of children on the streets in the area, and their lack of available opportunities to earn viable livelihoods. The organization first sought to rehabilitate the children and provide them with vocational training that could lead to stable, productive jobs so that they could ultimately sustain themselves. It later expanded its programs to include a curriculum that focused on teaching “living values,” or life skills for helping the street children to reintegrate into society, as well as a program to help facilitate their attendance in both primary and secondary schools, and eventually at university.

Jitegemee is a partnership between Kenyan educators and American volunteers, and responds to the increasing need for social development in Machakos by creating partnerships between NGOs and the public sector to improve the living conditions for street children.<sup>18</sup>

The organization is comprised of four staff, all of Kenyan origin. They are: Program Director, Mike Kimeu; Senior Founding Teacher, Alex Mutiso; Teacher and Social Worker, Laura Mwelu; Teacher and Administrative Assistant, Elizabeth Nzivo.<sup>19</sup> The Board of Directors is made up of nine members, with the majority residing in the United States. Farah Stockman, the Founder and current Executive Director of Jitegemee, heads the Board.<sup>20</sup> Jitegemee also has a Professional Advisory Board of six Kenyan professionals that help to attract support from the local community.<sup>21</sup>

The children in Jitegemee’s programs benefit from an approach that includes a combination of educational, health and social support. According to its website, the organization is “dedicated to removing the obstacles that prevent street children from attaining their educational or vocational goals—whether these obstacles are hunger, homelessness or lack of schooling.”<sup>22</sup> Some of Jitegemee’s services include: after school tutoring, counseling and adult guidance, internship placements in various local business sectors, presentations by motivational speakers, AIDS education and yearly medical screening and health care, educational trips and recreational time that allows students to eat and play together, and to learn to support one another.<sup>23</sup> Jitegemee also

---

<sup>18</sup> Ibid.

<sup>19</sup> “About: Kenya Staff,” [www.jitegemee.org](http://www.jitegemee.org)

<sup>20</sup> “About: Board of Directors,” [www.jitegemee.org](http://www.jitegemee.org)

<sup>21</sup> “About: Advisory Board,” [www.jitegemee.org](http://www.jitegemee.org)

<sup>22</sup> “About: Our Mission,” [www.jitegemee.org](http://www.jitegemee.org)

<sup>23</sup> “Programs: Social Support,” [www.jitegemee.org](http://www.jitegemee.org)

encourages the children to give back to their community by helping those who are less fortunate than they are, and supports their families by offering parents opportunities to learn about income-generating activities and giving them access to certain health services.<sup>24</sup>

Although there are a number of other organizations within Machakos - and the whole of Kenya - that serve street children, none of them takes the holistic approach that Jitegemee does. The organization's emphasis on the whole child, through opportunities for building social networks and self-esteem, to educational assistance, to attention to health concerns and support for the entire family is what really makes the difference in the impact of its work.

## Jitegemee at a Glance

Vocational Training Program (ages 14+)	
Formal Schooling Program (primary, secondary & university students)	
<b>Social Support Program</b> (all participants)	
General Services	<ul style="list-style-type: none"> <li>• Tutoring</li> <li>• Counseling</li> <li>• Educational Field Trips</li> <li>• Camping Trips</li> <li>• Motivational Speakers</li> </ul>
Feeding Program	Lunch provided daily for primary and vocational students
Living Values Curriculum	<ul style="list-style-type: none"> <li>• Streetism (rehabilitation/empowerment)</li> <li>• Relationships</li> <li>• Social Integration</li> <li>• Sexuality</li> <li>• Math</li> <li>• Writing</li> </ul>
Medical Treatment	<ul style="list-style-type: none"> <li>• HIV/AIDS Education</li> <li>• Yearly screenings</li> <li>• Medication</li> <li>• Immunizations</li> <li>• Emergency Care</li> </ul>

### The Formal Schooling Program

Jitegemee's Formal Schooling Program currently serves 72 primary school, 14 secondary school and 2 university students. For university students, Jitegemee pays tuition and other school-related costs. For secondary students, Jitegemee pays for tuition, exam fees, the purchase of books and uniforms and, where necessary, room and board.

<sup>24</sup> Ibid.

For this project we were asked to focus mainly on the primary students in the program and their families. All of the primary students and at least one of their family members benefit directly from the services offered through Jitegemee's Social Support Program. The organization also pays all costs associated with the primary students attending school, including: any tuition, exam fees, and the purchase of books and uniforms. In addition, each year Jitegemee provides the students with a new pair of shoes. The staff keep a close eye on the primary students. They see most of them every day when they come for lunch, check up on their attendance at school, and call school and home regularly when the students are experiencing problems.

## Project Description

### Initial Task

According to the Project Terms of Reference that we received in November 2010, our initial task was to perform a comprehensive impact assessment of Jitegemee's Formal Schooling Program, with an emphasis on health and social outcomes for both the students and their families. We were asked to prepare a final report that:

1. Documents the program
2. Outlines the methodology used to assess the impact of the program
3. Clearly presents the analysis of the data collected on the impact of the program
4. Provides some concrete recommendations for how the program might be improved

### Rationale

Jitegemee's board and staff are constantly looking for ways to improve its programs. For the past two years, SIPA teams have assessed Jitegemee's Vocational Training Program, documenting its specifics and making recommendations for its improvement and expansion. This year the organization asked our team to conduct the first ever assessment of the Formal Schooling Program. As Jitegemee continues to grow, not only do the board and staff hope to improve its programs, but they plan to move the organization to a new and bigger building. Having comprehensive documentation of all of its programs will help the organization target fundraising efforts to support this change.

## Evolution of Task

During the team's field visit in January, Director Mike Kimeu indicated that in addition to providing the organization with an assessment and recommendations for the Formal Schooling Program, he hoped that we could consider a few additional matters:

1. The organization was looking for a way to monitor the on-going academic progress and health of their students
2. He had witnessed a trend recently among older primary school students exhibiting disrespect toward authority figures and other negative behaviors, and decreased interest in working to get into secondary school

## Ultimate Goals

Taking into account both the original task that we were asked to complete and the matters that Mike asked us to consider, our team set the following overall goals:

1. Conduct a comprehensive impact assessment of the Formal Schooling Program, with an emphasis on social and health outcomes on primary students and their families and make recommendations for its improvement
2. Develop and test a monitoring and evaluation tool that Jitegemee can adapt and implement in the future to track students' on-going progress
3. Research causes and means for addressing negative behavior in adolescents and make a concrete recommendation for how Jitegemee can address the issue with its students

## Methodology

### Fieldwork & Research Design

The findings in this report are based on data that was gathered using a mixed-method, qualitative and quantitative approach over a period of seven months. Our team conducted on-going desk research in order to guide our work in the field and substantiate our interpretation of data. The team traveled to Machakos in January 2011 and March 2011 for a combined total of four weeks. During the first trip we gathered information about impacts of the Formal Schooling Program by consulting with primary stakeholders (Jitegemee staff, students and parents) and asking them to describe the lives of students and their families both before and after (or since) entering the program. In March the team continued this work, but took a more targeted approach by conducting more detailed follow-up interviews and administering surveys to students. These interviews and surveys were used to perform *comparison of means tests* to highlight statistically significant differences and non-differences between our treatment group (Jitegemee students) and our control group (other primary school students in Machakos).

## Phase I: November 2010 through January 2011

### Initial Goals

We began with the following initial research questions:

1. How does the organization itself define social and health impacts?
2. What kind of impacts are the staff observing? And what kind are they hoping to achieve?
3. Exactly what health services are offered by the organization?
4. What are the social impacts of the Formal Schooling Program that students and their parents have observed?
5. What are the health impacts of the Formal Schooling Program that students and their parents have observed?

We then established the following goals to help answer those questions:

1. Meet with Jitegemee staff to:
  - a) Clarify the purpose and overall goals of the project
  - b) Get their input on how to define social and health impacts and what they are hoping to achieve
2. Solicit preliminary information from students and their parents about the social and health impacts they have observed, and to help determine how and with whom to follow up during Phase II
3. Gather additional qualitative and quantitative information from the Director to give us a more comprehensive picture of how the organization works
4. Identify additional stakeholders with whom to interact during Phase II

### Objectives & Completed Tasks

Our preparation for Phase I included creating comprehensive interviews for the Jitegemee staff and developing focus group and interview guides targeted to both students and their parents. We devised ice breaker and participatory activity ideas to use with each group in order to help us put them at ease and keep them engaged. Some of the resources that we consulted to create these activities are highlighted below.

### Participatory Resources

1. *PME*<sup>25</sup>

The Participatory Monitoring and Evaluation (PME) approach includes a range of techniques that can be used to increase program performance, ensure accountability, build local management capacity and foster an environment of partnership and collaborative learning. Key features of PME include the following:

---

<sup>25</sup> DFID, *Tools for Development*

- Enhancement of local learning, management capacity and skills
- Empowerment of local populations with emphasis on future decisions

We engaged main stakeholders using the PME approach in order to guide the creation of the goals and objectives of our impact evaluation. We distributed our work plan to donors and Jitegemee staff to both share our goals and to gather these stakeholders' opinions before moving forward. We also extensively utilized the PME framework during focus groups with students and their families. We empowered students by asking for their feedback about the program and by creating a comfortable environment conducive to eliciting honest opinions. Our team based the structure of focus groups on the social and health outcome indicators that we developed based on our initial literature review, and eventually restructured them based on the results of data gathered in focus groups. After each trip, we shared our initial findings and analyses with the Jitegemee staff, and continued to incorporate their feedback, along with that of the students.

## 2. *Participatory Impact Assessment: A Guide for Practitioners*<sup>26</sup>

The guide outlines what it calls “An Eight Stage Approach to Designing a Participatory Impact Assessment.” We found stage three “Identifying Indicators of Project Impact” and stage four “Methods” the most useful. These sections provided guidance for how to measure the impact of specific activities and incorporate community feedback into indicator design, and suggested the use of ranking exercises, as well as how to adapt them to certain age groups and purposes.

## 3. *International Workshop: Children’s Capabilities and Project Why*<sup>27</sup>

The Project Why report offered a good resource for participatory activities to use with children, including a photo mapping exercise and a series of card games. We especially drew on both the photo mapping exercise and an association exercise aimed at understanding the impact of certain institutions on children’s well-being for activities that we utilized in phases I and II of our project.

## 4. *The Evaluator’s Cookbook*<sup>28</sup>

*The Evaluator’s Cookbook* is a compilation of activities for use with children and youth that emphasizes a participatory approach. Each activity description includes details about what materials are needed, the preparation time required, the time needed to complete an activity, the level of energy required and the ideal number of participants. Our team used ideas from the Cookbook to adapt activities that were used during focus groups, and found its suggestions for eliciting responses from young people in cases of shyness or potential embarrassment.

## Focus Groups & Interviews

<sup>26</sup> Catley et. al

<sup>27</sup> Prepared by Project Why

<sup>28</sup> The National Education Children’s Fund

We met with the staff jointly and one-on-one to learn as much as possible from them about both the Formal Schooling Program and the organization as a whole.

We held two focus groups with the primary school-aged participants in the Formal Schooling Program, each consisting of an ice breaker activity, a short questionnaire and a group discussion. During the focus groups we realized that some of the students were hesitant to answer our questions, so we adapted our approach and asked them to write their answers down on 3x5 cards and give them to us. This helped to mitigate some of their fear of sharing their answers in front of peers, and encouraged more honest answers.

We also held two focus groups with the students' parents, one for women and one for men, each consisting of an ice breaker activity, a questionnaire and a group discussion. With a few of the parents we conducted one-on-one follow-up interviews to gain further insight into the impact the program has had on their families.

## Challenges

### Non-comparison group

At the outset, our main research questions revolved around how participation in the Formal Schooling Program has affected students' lives. Therefore, the initial approach to data gathering that we adopted focused on examining changes that Jitegemee students and parents have observed in their lives since the students first entered the program. Through a series of focus groups and interviews, we asked the students and their parents questions about the types of changes they have experienced in the areas of school, health, family life, and interpersonal relationships. This participatory method to soliciting mainly qualitative responses relied heavily on self-retrospective answers, which we acknowledge may have yielded some biased results.

### Other challenges

Due to the short length of our visit in January, our team was only able to establish a minimal bond with the students and their parents. An overwhelming majority of the responses we received to our focus group questions and written questionnaires were positive. Had we had more time to build rapport with them, our questions might have yielded more direct and honest responses – perhaps responses that were a bit more critical of Jitegemee. In addition, the topics of some of our questions were a bit sensitive and may have caused some of the participants to refrain from speaking at all.

## Modifications to the Scope & Focus of the Project

In addition to yielding a significant amount of information relevant to our initial research questions and goals, our meetings with Director Mike Kimeu drew our attention to two more potential areas of focus. First, Director Kimeu was interested in our thoughts about developing a means for Jitegemee to monitor the progress of its students on an ongoing basis. And second, he expressed concern about the negative behavior changes he was witnessing in older primary school students as they approached the transition to secondary school and wondered if we could do some research to help shed some light on this situation.

When our team members returned to the States, we discussed the idea of developing surveys to administer to the students that would not only help us to gather more detailed qualitative information, but also a decent amount of quantitative information to complete our impact assessment. We hoped that the surveys could then serve as a monitoring and evaluation tool that Jitegemee's staff could use to track the progress of their students as they advanced through the Formal Schooling Program. Further, the surveys would help triangulate the data we had collected where bias was suspected.

We also planned to research behavior changes among adolescents and look for ways to positively address them. We began to discuss the potential of introducing a peer mentoring program within Jitegemee that would match older students with younger ones in an attempt to encourage a greater sense of responsibility and accountability in the older students that might improve their behavior.

## **Phase II: February 2011 through May 2011**

### **Goals**

Based on our findings from Phase I research and data-gathering activities, we developed a set of indicators in an attempt to adequately measure both qualitative and quantitative health and social impacts of the Formal Schooling Program. We also did extensive desk research in order to help us better interpret the results of our efforts during Phase I. During the March trip, we used a mixed-method qualitative and quantitative approach with an emphasis on participation, conducting interviews and administering surveys, to gather feedback from both primary and secondary stakeholders that was targeted to capture data that addressed our indicators. Our primary goal for Phase II was to gather sufficient data to test whether a statistically significant difference between our treatment group (Jitegemee students) and our control group (non-Jitegemee students) existed. We also sought to check earlier responses where we suspected bias.

### **Survey & Questionnaire Resources**



### 1. *PMSEI*<sup>29</sup>

The Partners Mentoring Services Effectiveness Index (PMSEI) is a survey that was developed for use by a mentoring program in Denver, Colorado to track the progress of its participants. The PMSEI consists of a series of statements and questions that are ranked on four and five point scales, and are intended to measure changes in areas including: self esteem, interpersonal relationships, academic performance and attitudes toward school. Because the PMSEI is a proven research tool, we chose to leave the statements, questions and scales more or less intact to preserve their validity. Our goal in doing so was to ensure that our own research tools had a high level of integrity. In some cases, we had to modify the vocabulary to better reflect local usage, but attempted to do so without compromising the originally intended meaning.

### 2. *IPFI*<sup>30</sup>

The Individual Protective Factors Index (IPFI) is a self-administered questionnaire that was originally developed for use with 10 to 16 year olds to measure adolescent resiliency with an emphasis on the areas of school bonding, personal competence and social competence. The questionnaire has been administered to over 3,000 youths nationwide in over 15 sites, and has been used in over a dozen independent evaluation projects. As we did with the PMSEI, we chose to leave the IPFI statements largely intact, adapting them only in terms of vocabulary.

## Evaluation Resources

In addition to the above sources, we read several articles summarizing findings from studies conducted on programs that serve children and youth, the most significant of which are highlighted below. Our main objective was to compile a list of a wide range of potential indicators based on legitimate existing studies. We used that list to help us come up with the four categories – or areas of impact – that we eventually used: Academic Performance, Self Perception/Awareness, Interpersonal Relationships and Health. (See References section for full citations)

### 1. *What Adolescents Learn in Organized Youth Activities: A Survey of Self-Reported Developmental Experiences*<sup>31</sup>

In addition to highlighting indicators that fall into the categories of Personal Development and Interpersonal Development, the summary of findings also pointed to the fact that “students reported higher rates of experiences involving goal setting, problem solving, effort and time management in youth activities” than in strictly

---

<sup>29</sup> Developed by Omni Research and Training

<sup>30</sup> J. Fred Springer and Joël L. Phillips

<sup>31</sup> Hansen et. al

academic settings. The study also found that such activities – typically structured, extra-curricular activities for young people – were well-suited to helping develop emotional intelligence and interpersonal skills.

## 2. *The Impact of After-School Programs That Promote Personal and Social Skills*<sup>32</sup>

The study was based on an analysis of seventy-three after-school programs available to children ages 5 to 18 years old that specifically targeted the promotion of personal and social skills, with a focus on 3 general areas: Feelings and Attitudes (toward self and school), Indicators of Behavioral Adjustment (based on positive and problem behaviors) and School Performance.

## 3. *Enhancing School-Based Prevention and Youth Development Through Coordinated Social, Emotional and Academic Learning*<sup>33</sup>

This approach to youth development emphasizes programs that target fifteen social and emotional learning constructs in an attempt to teach young people to “recognize and manage their emotions, appreciate the perspectives of others, establish positive goals, make responsible decisions, and handle interpersonal situations effectively.”

## 4. *The Impact of Caring and Connectedness on Adolescent Health and Well-Being*<sup>34</sup>

This study focused on the impact of relationships on the likelihood of young people to exhibit several types of “risk behaviors,” and found that the three most powerful “protective factors” were: family connectedness, school connectedness and low family stress. A few of the more salient points for our purposes include:

"A repeated finding in these analyses has been the centrality of caring relationships between children and adults, including relationships within and outside the family, for the development of resilient adolescents and young adults."

“What is striking about the family connectedness variable is that this factor referred to a sense of belonging and closeness to family, in whatever way family was comprised or defined by the adolescent. Thus, the centrality of families in the promotion of well-being among young people was reaffirmed, but without specifying the form or composition that families must take in order to serve this protective function. At the core of family connectedness is the adolescent's experience of being connected to at least one caring, competent adult in a loving, nurturing relationship.”

---

<sup>32</sup> The Collaborative for Academic, Social and Emotional Learning

<sup>33</sup> Greenberg et. al

<sup>34</sup> Resnick et. al

## Phase II Activities

### Surveys

The surveys were structured around four areas of impact that we believed could best capture Jitegemee's impact regarding health and social outcomes: health, academic performance, interpersonal relationships, and self-perception and awareness. Each survey question or statement required that the students rank their answers on a *yes-no* scale. The survey included forty-four questions, each targeted to one of the four categories, which were randomized to minimize bias.

Our team first administered the survey to eighty primary school students, levels seven and eight, from St. Mary's Boys School (a co-ed primary school in Machakos). These students served as our control group. Next, we administered the surveys to Jitegemee students, levels one through eight in school, and the handful of Jitegemee students in secondary schools that we were able to gain access to. These students served as our treatment group.

Because the Jitegemee students reflected such a significant range of ages, where necessary we incorporated more participatory elements to accommodate their levels of comprehension. For students in levels one through three, we selected a handful of the survey questions and asked the students to rank their answers using stickers on a tree diagram that illustrated the *yes-no* scale.

To include an additional participatory element, we asked the students in levels four through eight to draw pictures of what Jitegemee meant to them.



Tree Diagram



The survey results served two purposes: 1) to enable our team to conduct a *difference in means test* between Jitegemee and non-Jitegemee students using statistical software, and 2) to help us measure the impact of the Formal Schooling Program on Jitegemee students with regard to our four indicator categories.

The *difference in means test* was used to determine if there is a statistically significant difference between our treatment and control groups, thereby demonstrating the depth of Jitegemee's impact on health and social outcomes. We also used the survey data to run regression equations to determine the best means for demonstrating quantitative impact.

## Interviews

The interviews conducted included:

1. Staff Interview
2. Jitegemee Doctor Interview
3. Secondary Student Interview
4. Vocational Student Interview
5. Primary School Teacher and Administrator Interviews

During this phase, our team also identified additional primary and secondary stakeholders throughout Machakos who we thought could give us a more comprehensive picture of the impact of the organization. We interviewed students from Jitegemee's Vocational Program who did not qualify for secondary school as well as Jitegemee students who were attending secondary school. The team also interviewed the doctor who provides services to Jitegemee students and some of their family members in order to better understand the nature of the services offered, as well as to highlight any need for improvement.

In addition to our planned tasks for the March trip, Jitegemee's Director, Mike Kimeu, asked us to conduct additional interviews with teachers at the primary schools that Jitegemee students attend. The purpose of these interviews was to gauge the teachers' overall opinions of the Formal Schooling Program as well as their general impression of Jitegemee students. We asked teachers and administrators at Baptist Primary and Muthini Primary schools questions regarding the behavior, academic performance, relationships with peers, hygiene and overall performance of Jitegemee students.

## Focus Group

We held one large focus group with the parents of the Jitegemee students enrolled in the Formal Schooling Program. The group, which consisted of eleven people, was asked to rate which three Jitegemee services benefited their children and their families the most. Because the Jitegemee staff expressed concerns that some parents/guardians may not be able to read and write, we adapted our approach by asking the parents to rank their choices using numbered stickers, with 1 signifying their top choice and 3 their third.

## Challenges

### The Counterfactual

In the context of program evaluation, the “counterfactual” represents what might have occurred had the program under evaluation not existed, or if an alternative program existed instead.<sup>35</sup> Consideration of the counterfactual is important, because by attempting to measure both what has happened as a result of the program, as well as what might have happened in its absence, one can hope to distinguish specific impacts of the program in question. In our project’s design, we were limited in our ability to present the counterfactual because finding street children in Machakos who were not already receiving Jitegemee’s services proved nearly impossible. The number of street children in Machakos varies greatly from year to year, and those who are not already participating in the organization’s programs are hard to find – at least for outsiders like ourselves. Therefore, we chose to use a different control group – those students who attend public school with the Jitegemee students, who may or may not come from similar backgrounds. In addition to attending the same schools, the students that make up this control group experience daily life in Machakos in much the same way that Jitegemee students do. While their socio-economic backgrounds may be vastly different from those of Jitegemee students, we determined that a comparison of the two groups would help us to identify how Jitegemee is helping to narrow the gap between them.

### Survey Vocabulary

The first time that we administered the surveys in English (which was at St. Mary’s Boys), we noticed that there were certain words that the kids struggled with in both the level 7 and level 8 classrooms. We realized through trial and error that by using synonyms of the original words we were able to find words that the students understood. This meant that the issue was with vocabulary, and not the overall concept that the questions were trying to get at. (We had encountered some difficulty with vocabulary during Phase I in the focus groups as well). After this first administration, we made note of the “problem” words and changed them on all remaining surveys. This subsequently improved students’ understanding of survey statements and questions.

---

<sup>35</sup> Rick Cummings, “What If: The Counterfactual in Program Evaluation,” p. 7

## Findings

### Qualitative

#### Phase I

Figure 1 provides a detailed summary of the impact of the Formal Schooling Program on Jitegemee students, based on information that was gathered during the Phase I focus groups with primary students. The statements that are highlighted in blue reflect the responses that were most frequently given for each category.

### **Figure 1: Impact on Jitegemee Students**

Before Jitegemee		After (Since) Jitegemee
<b>Life</b>	<ul style="list-style-type: none"> <li>Family was poor</li> <li>Family had insufficient food</li> <li>Sent away from school for not paying tuition</li> <li>No hope for education</li> </ul>	<ul style="list-style-type: none"> <li>Tuition is paid</li> <li>Moral and financial support from Jitegemee</li> <li>Have ambition for the future</li> </ul>
<b>School</b>	<ul style="list-style-type: none"> <li>Teased by other students because they were dirty</li> <li>Unable to finish homework because of lack of textbooks</li> <li>Missing school</li> </ul>	<ul style="list-style-type: none"> <li>Look like other students (uniforms)</li> <li>Other students want to hang out with them</li> <li>Complete homework on time</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>Very thin and weak</li> <li>Often suffered from hunger</li> </ul>	<ul style="list-style-type: none"> <li>Feel stronger because of free lunch</li> <li>Regular check-ups from Jitegemee doctor help them to stay healthy</li> </ul>
<b>Family</b>	<ul style="list-style-type: none"> <li>Parents were under a lot of stress to pay school fees</li> <li>Parents couldn't afford kerosene → couldn't see to study at night</li> </ul>	<ul style="list-style-type: none"> <li>More income in Family (less stressful)</li> <li>Positive behavior due to Living Values Curriculum</li> <li>Enough food in home</li> <li>Can afford kerosene and see to study at night</li> </ul>

Figure 2 provides a detailed summary of the impact of the Formal Schooling Program on Jitegemee students' families, based on information that was gathered during the Phase I focus groups and interviews with parents. The statements that are highlighted in blue reflect the responses that were most frequently given for each category.

**Figure 2: Impact on Families According to Parents**

Before Jitegemee	After (Since) Jitegemee
------------------	-------------------------

<b>Life</b>	<ul style="list-style-type: none"> <li>Tuition &amp; other school expenses were a big burden for parents</li> <li>Money was the main reason parents could not send their child to school</li> </ul>	<ul style="list-style-type: none"> <li>The child attends school more regularly</li> <li>The child has hopes for the future</li> </ul>
<b>School</b>	<ul style="list-style-type: none"> <li>The child hung out with bad friends</li> <li>The child did drugs</li> <li>The child refused to go to school without shoes and uniforms (sensitive ages)</li> <li>No education goals for the child due to financial constraints</li> </ul>	<ul style="list-style-type: none"> <li>The child hangs out with classmates, not friends from the street</li> <li>The child attends church more regularly</li> <li>The child is developing educational goals (secondary school, university)</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>There was not enough food at home, so the child suffered from hunger</li> <li>Parents sometimes could not send the child to the hospital</li> </ul>	<ul style="list-style-type: none"> <li>The child is more healthy because of feeding program and medication/treatment received from doctor</li> </ul>
<b>Family</b>	<ul style="list-style-type: none"> <li>Parent was concerned about the child spending so much time on the streets</li> <li>The child sometimes did not come home</li> <li>The parent was stressed due to lack of money to pay for tuition and uniforms</li> </ul>	<ul style="list-style-type: none"> <li>Thanks to saving money, the parent can afford to send another child in the family to school</li> <li>The siblings want to join Jitegemee</li> <li>Jitegemee has a positive influence on younger siblings</li> </ul>

Phase II

Figure 3 presents a summary of the qualitative findings from Phase II.

**Figure 3: Summary of Qualitative Findings**

Stakeholders	Key Observations
--------------	------------------



<b>Secondary Students</b>	<ul style="list-style-type: none"> <li>• Aspirations to attend University</li> <li>• Secondary School → Opportunities</li> <li>• Parental Support is essential</li> </ul>
<b>Primary School Administrators</b>	<ul style="list-style-type: none"> <li>• Jitegemee Students well-behaved and top performers</li> <li>• Impressed with Jitegemee’s involvement in students’ lives</li> <li>• Expansion of Program</li> </ul>
<b>Vocational Students</b>	<ul style="list-style-type: none"> <li>• Entered Vocational Program after not passing qualifying exam</li> <li>• Pleased to have an alternative option in the Vocational Program</li> <li>• Believe that education is important</li> </ul>
<b>Parents</b>	<ul style="list-style-type: none"> <li>• Ranked Uniforms, Lunch Program and School Fees (family)</li> <li>• Ranked Uniforms, Lunch Program and Counseling (children)</li> <li>• Positive spillover effect on siblings</li> </ul>
<b>Jitegemee Doctor</b>	<ul style="list-style-type: none"> <li>• Common ailments: malaria, cough, flu, upper respiratory infections, abdominal pains</li> <li>• Biggest challenge: specialized health issues – lack of technical medical equipment</li> </ul>

## Quantitative

### Phase I

During the first trip, we obtained the statistics in the table below from the Director in order to supplement our research. The Jitegemee staff keeps track of figures such as these in order to monitor students’ progress in the program.

The Dropout Rate indicates the number of Jitegemee students who have left the Formal Schooling Program. Some students have left the program simply because they wanted to, while others were forced to leave because of outside pressures such as that of earning an income to help support their families. Although our team, through Director Mike Kimeu, attempted to contact these students to speak with them, we were unable to since most of them have lost touch with the organization.

The Secondary School Entrance Rate reflects the ratio of the number of Jitegemee students who have entered secondary school among all secondary school candidates. In

order to qualify for secondary school all students in Kenya are required to take a national exam, totaling 500 points. Because Jitegemee’s funding is limited and secondary school is quite expensive, the organization requires that its students achieve a minimum score of 300 points in order to enroll in secondary school with its continued financial support. According to the Director, Jitegemee’s staff have set the goal of sending more Jitegemee students to secondary school in the coming years.

The prevalence of Malaria was quite high among Jitegemee students. Whenever students show symptoms of malaria, they have access to free treatment from Jitegemee’s doctor.

We were unsure of what to expect regarding the occurrence of teen pregnancy for students in the Formal Schooling Program, but found that it was significantly low. The Director explained that it was not a major concern for Jitegemee students.

Jitegemee Drop-out Rate (2010)	Secondary School Entrance rate (2009)	Prevalence of Malaria (2010)	Teen Pregnancy (2009)
5/63 (8%)	3/9 (33%)	44/63 (70%)	1/57 (2%)

Phase II

Comparison of Means Test

We compared Jitegemee students with non-Jitegemee students using indicators in the areas of interpersonal relationships, academic achievement, health, and self-perception and awareness, in order to identify the impact of the Formal Schooling Program, as well as to address the limitations of the ‘before and after’ approach we used in Phase I. As a result of our desk research following the January trip, we derived four possible adequate control groups:

1. Children on Jitegemee’s waiting list for the Formal Schooling Program
2. Classmates of Jitegemee students
3. Siblings of Jitegemee students
4. Street children in Machakos not participating in Jitegemee’s programs

Due to time limitations and accessibility of certain groups, we selected the classmates of Jitegemee students, or what we call non-Jitegemee students, to be our comparison group. We believed that the non-Jitegemee group (non-JT) would make a good control group because they experience similar cultural trends to Jitegemee students (JT), and are also part of the same educational system.

However, we also took into serious consideration the many differences that might exist between the non-JT and JT student samples. In general, most of the non-JT students had not been exposed to the experiences of street life, and were likely from higher socio-economic backgrounds. Based on the qualitative data from Phase I and our ‘before and

after' approach analysis, we found that prior to joining the Formal Schooling Program, the JT students lacked food security, had low-self esteem, felt hopeless regarding opportunities for their futures, were very stressed, and had little motivation to prepare for the secondary school qualifying exam. Therefore, it was fair to assume that JT students would exhibit lower scores in our four selected areas of impact prior to entering the Formal Schooling Program. Additionally, it was highly likely that these students would have maintained the same conditions without the intervention and subsequent services provided by Jitegemee. Therefore, our assumption was that JT students should demonstrate lower scores on the various indicators versus the non-JT students who have not had similar experiences. However, if JT students were to exhibit results that were similar to - or even better than - our sample of non-JT students, then this would reflect the strong impact of Jitegemee's services. We referred to this as the *catching up effect*, meaning that if this were the case, we would conclude that the organization had indeed been helping its students to close the gap between them and their peers in a variety of areas. This is how we measured the impact of Jitegemee's Formal Schooling Program.

The sample of non-JT students came from St. Mary's Boys co-ed Primary School, a school that many JT students attend. With cooperation from the Head Teacher, we were able to conduct surveys in two classes, levels seven and eight, consisting of a combined total of 80 students.

Our sample of JT students totaled 50 students ranging from levels four through twelve.

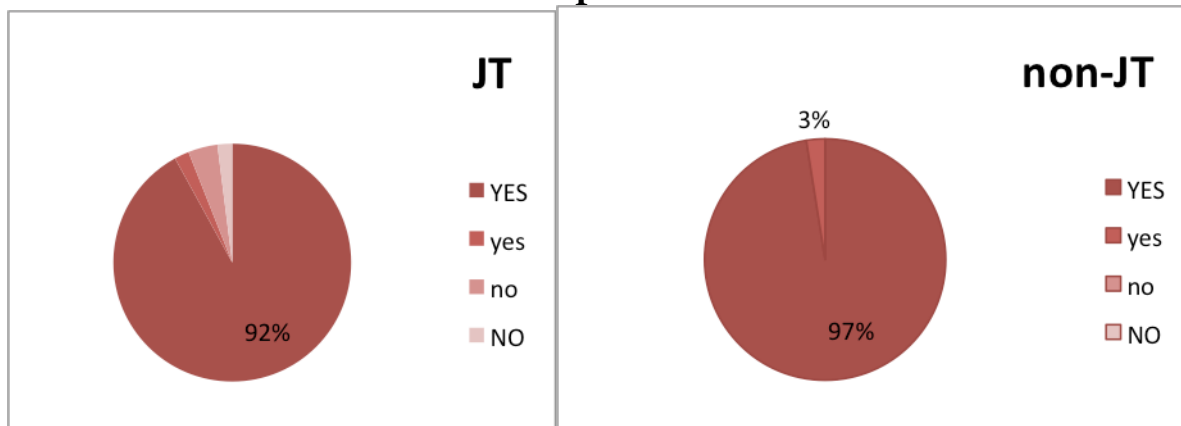
Mean scores for the two groups in each indicator category are compared using what is called a *T-test* that determines the statistical significant difference between two groups.

	Levels 4 & 5	Levels 6 - 8	Secondary
JT	14	31	5
Non-JT	0	80	0

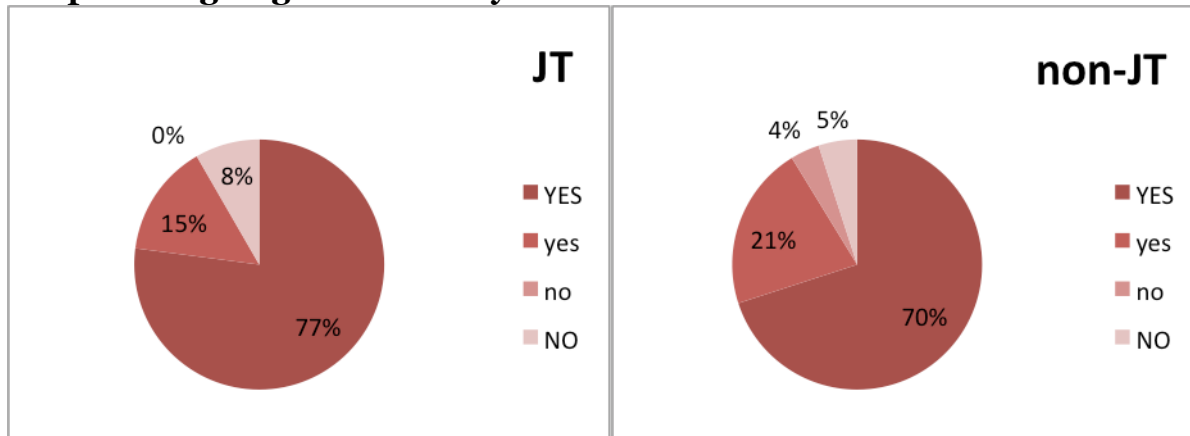
### Comparison of Means Results

Below are examples of two indicators that show no significant difference between the treatment (JT students) and the control group (non-JT students). The students who answered 'yes' to the statement, 'What I learn in school will be important later in life', total over 92% for the JT sample and 97% for the non-JT sample. Similarly, JT students displayed no statistically significant difference in their desire to attend secondary school as compared to non-JT students. These both demonstrate existence of the *catching up effect*.

**a. What I learn in school will be important later in life.**



**b. I plan on going to secondary school.**

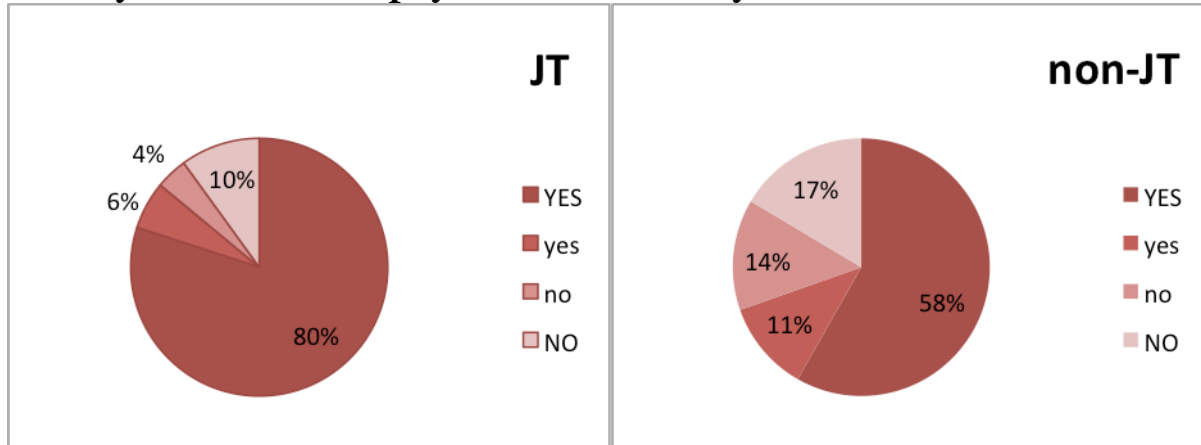


Below are two examples that display significant differences in mean scores between JT and non-JT students. In the first indicator ‘Can you do the same physical activities as your classmates?’ JT students show a higher ‘YES’ response rate than non-JT students, which indicates that JT students are more confident in their physical abilities than non-JT students are. From these results, we observed that JT students not only appear to be ‘catching up’ in the health category but exceeding the non-JT students in physical ability as well.

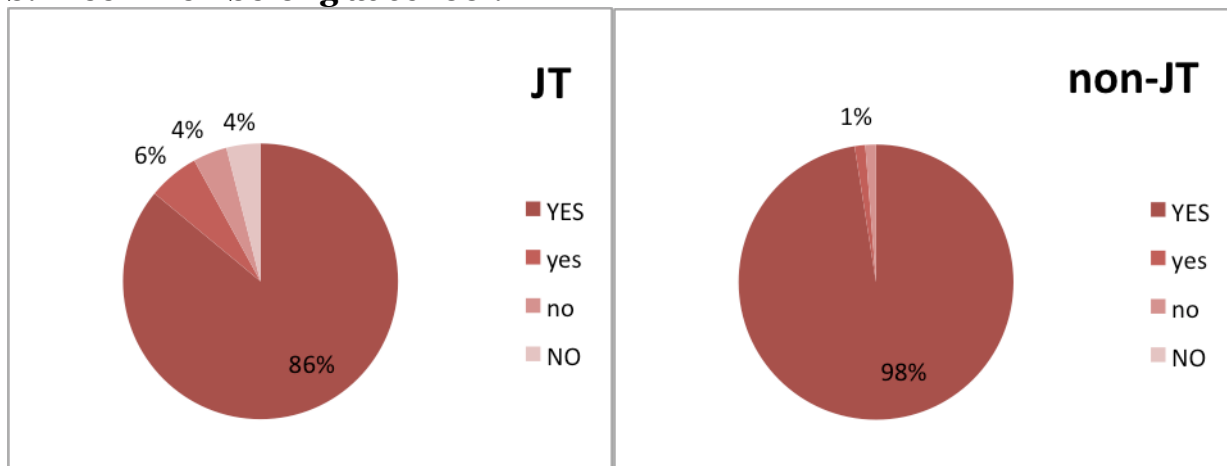
On the contrary, example b which relates to the ‘interpersonal relationships’ indicator, shows that JT students score lower when asked if they feel like they belong in school

when compared to non-JT students. One interpretation of this disparity may be that JT students are still experiencing results of the social stigma that followed them while they were living on the streets. Therefore, the Formal Schooling Program could be further developed to incorporate mechanisms which could change this outcome.

**a. Can you do the same physical activities as your classmates?**



**b. I feel like I belong at school.**



Areas of Impact

**1. Academic Achievement**

We used this category to measure the academic achievement of the sampled students. Since it was difficult to obtain data on the test scores from the primary schools, our team developed academic performance-related measures from the Collaborative for Academic, Social and Emotional Learning (CASEL).<sup>36</sup>

<sup>36</sup> [www.casel.org](http://www.casel.org)

In the category of Academic Achievement, JT students demonstrated no difference in mean scores when compared to non-JT students. We believe that this is an extremely important result because the Formal Schooling Program focuses on two primary goals: highlighting the importance of education and developing educational skills for secondary school. The fact that there is no difference between the groups reflects the positive impact of the program on the students as far as their school preparedness is concerned. Thus, as far as academic achievement (as defined by our indicators) is concerned, the program has a significant impact on the JT students.

	JT students (%)		Non-JT (%)		T-test of mean scores	Remarks
	Yes <sup>37</sup>	No	Yes	No		
School is important	47(94)	3(3)	80(100)	0	P=.052, no difference	The main goal of JT
Study hard to get better marks	46(94)	3(6)	77(96)	3(4)	P=.95, no difference	
Listen to teachers	49(98)	1(2)	79(98)	1(2)	P=.24, no difference	
Enjoy being in school	48((96)	2(4)	80(100)	0	P=.51, no difference	
Plan on going to secondary school	44(92)	4(8)	73(91)	7(9)	P=.61, no difference	The main goal of JT
Finish Homework on time**	42(89)	6(11)	68(85)	12(15)	P=.73, no difference	
Miss school*	8(17)	40(83)	11(14)	69(86)	P=.53, no difference	
Don't understand, ask for explanation	48(96)	2(4)	76(95)	4(5)	P=.98, no difference	
Care about Homework done correctly	48(96)	2(4)	74(95)	4(5)	P=.45, no difference	

## 2. Health

We created our health survey questions to capture both the students' physical capabilities and mental and emotional well-being. The table below shows that there is no difference between JT and non-JT students in the following categories: having a bed net, feeling hungry and sad, getting sick and trouble sleeping at night. On the other hand, JT students exhibit higher scores on selected indicators including: confidence in physical abilities, concentration and stress from school versus non-JT students. These

<sup>37</sup> Yes includes: 'YES' and 'yes' answers; No includes 'NO' and 'no' answers.

\*\* Coding: often/always=yes, sometimes/ never=no

results imply that JT students are more confident in their physical abilities and their ability to concentrate, and that they are less stressed about school than non-JT students. Therefore, we conclude that the Formal Schooling Program has a strong positive impact on the health of JT students.

	JT students(%)		Non-JT(%)		Significant difference(t-test)	Remarks
	Yes	No	Yes	No		
<u>Worry about school work</u>	<u>11(23)</u>	<u>37(77)</u>	<u>36(46)</u>	<u>42(54)</u>	<u>(p=.009): lower in JT</u>	
<u>Do the same physical activities as classmates</u>	<u>43(86)</u>	<u>7(14)</u>	<u>47(72)</u>	<u>22(28)</u>	<u>(p=.035) : Higher in JT</u>	
<u>Trouble concentrating</u>	<u>15(30)</u>	<u>35(70)</u>	<u>40(51)</u>	<u>39(49)</u>	<u>(p=.003) : Lower in JT, Jitegemee</u>	
Have a bed net in home	37(75)	12(25)	63(79)	17(21)	P=.18, no difference	
Feel hungry *	5(11)	43(89)	12(15)	67(85)	P=.23, no difference	Free lunch program
Get sick*	2(4)	46(96)	4(5)	75(95)	P=.69, no difference	Free medication
Feel sad*	2(4)	46(96)	5(6)	73(94)	P=.08, no difference	
Trouble sleeping*	8(17)	40(83)	6(8)	73(92)	P=.18, no difference	
Know how to relax when get stressed	45(90)	5(10)	62(78)	18(22)	P=.10, no difference	

### 3. Interpersonal Relationships

The Interpersonal Relationships category was developed to measure students' abilities to comfortably and effectively interact with others, including their friends, teachers and parents. The table below shows that JT students fall behind non-JT students in the first three categories. As a result of these scores, we believe that Jitegemee should develop new ways to continue to strengthen the social and communication skills of their students.

Conversely, results related to the 'having someone to talk to when in trouble' indicator show that JT students have similar positive scores to non-JT students, which we believe can in part be attributed to the positive impact of Jitegemee's services such as the on-going counseling that they offer.

	JT students	Non-JT	Significant	Remarks
--	-------------	--------	-------------	---------

	Yes	No	Yes	No	difference (t-test)	
<u>Helping others makes me feel good</u>	45(90)	5(10)	78(99)	1(1)	<u>P=.01, lower in JT</u>	
<u>Hard to make friends</u>	13(26)	37(74)	9(11)	71(89)	<u>P=.008, lower in JT</u>	
<u>Feel like they belong at school</u>	46(92)	4(8)	79(98)	1(2)	<u>P=.01, lower in JT</u>	
Having someone to talk to when in trouble	47(92)	4(8)	72(90)	8(10)	P=.14, no difference	JT provides counseling service
Work well with others	50(100)	0	76(96)	3(4)	P=.55, no difference	
Tell parents about feeling	46(92)	4(8)	74(94)	5(6)	P=.82, no difference	

#### 4. Self-Perception and Awareness

Self-perception and awareness measures how students perceive and evaluate themselves. Based on qualitative data, we found that prior to entering the Formal Schooling Program, JT students were suffering from low self-esteem and self-efficacy. Based on our results we see that after joining Jitegemee, JT students are indeed “catching up” with non-JT students with regard to several indicators within this category. Therefore, we can conclude that the Formal Schooling Program has had a positive impact on students’ self-perception and awareness.

	JT students		Non-JT		Significant difference(t-test)	Remarks
	Yes	No	Yes	No		
Can do most things I try	46(92)	4(8)	77(96)	3(4)	P=.59, no difference	
Feel I am a good person	46(94)	3(6)	78(97)	2(3)	P=.19, no difference	
Important to follow the rules	46(92)	4(8)	80(100)	0	P=.07, no difference	
I can be trusted	40(80)	10(20)	71(90)	8(10)	P=.74, no difference	
If you work hard, you will get what you want	48(96)	2(4)	77(97)	2(3)	P=.50, no difference	
Bad things happen to people like me	21(43)	28(57)	32(41)	46(59)	P=.96, no difference	



## Further Analysis: Regression Equations with Jitegemee Student Sample

Regression analysis helps us to understand if a causal relationship exists between dependent and independent variables (in this case related to both our treatment and control groups). However, because our quasi-experiment sampled only a fraction of primary school students in Machakos, and some of the children did not understand our survey scale (YES, yes, no, NO), we cannot draw a causal relationship between variables for both of our groups.

Since we perceive the indicators ‘I plan on going to secondary school’, ‘I feel like I belong at school’ and ‘I try to do my best at school’ as related to significant goals of the Formal Schooling Program, we conducted further regression analysis using only Jitegemee student survey data in order to better understand relationships between the selected indicators. Results can be seen in the table below.

The first indicator, ‘I care if my homework is done correctly’ is strongly associated with ‘I plan on going to secondary school’. This can be interpreted to mean that students who take the time and effort to ensure that their homework is done correctly also have a stronger desire to attend secondary school. Therefore, those students who believe in the importance of their present education likely believe in the significance of future education. This result can be attributed to Jitegemee’s effective influence and emphasis on education for a hopeful and successful future.

For the second outcome, the indicators ‘I have someone to talk when I am in trouble’, and ‘I can do the same physical activities as my classmates’ are strongly correlated with ‘I feel like I belong at school.’ Students who feel like they have someone to talk in times of need, and who can do the same physical activities as their peers, feel a stronger sense of belonging at school. This result can be at least partially attributed to the improved health of students as a result of medical treatment and the feeding program, as well as a reflection of the counseling services that Jitegemee provides. In general, since Jitegemee students exhibited weaker results in the Interpersonal Relationships category, we believe that Jitegemee should offer opportunities for students to build stronger connections with their peers, in addition to continuing to provide counseling services.

For the last outcome, the selected indicators ‘If I don’t understand something I will ask for an explanation’, ‘I have someone to talk to when I am in trouble’ and ‘If I study hard I will get better marks’ are positively correlated with the dependent variable ‘I try to do my best at school’. Based on these results, we suggest that Jitegemee include a school advocacy component in the Living Values Curriculum to increase students’ confidence and ability to speak up for themselves at school and effectively take responsibility for their education.

Outcome/Dependent	Independent Variables	
-------------------	-----------------------	--

Variable		Remarks
I plan on going to secondary school.	If I get stressed out, I know how to relax.	
	I care that my homework is done correctly.	P=.000 (strongest)
	It is hard for me to make friends.	
	If I don't understand something, I will ask for an explanation.	
I feel like I belong at school.	I have someone to talk to when I am in trouble.	P=.014 (strongest)
	I can do the same physical activities as my classmates.	P=.042
I try to do my best at school.	If I don't understand something I will ask for an explanation.	P=.000 (strongest)
	If I study hard I will get better marks.	P=.047
	I have someone to talk to when I am in trouble.	P=.022
	My family thinks my education is important.	

### Limitations

The following factors limited our interpretation of the quantitative, and to some extent our qualitative, impact analysis of Jitegemee's program. Due to the following constraints, we suggest a more rigorous monitoring and evaluation strategy.

**Lack of Demographic and Control Variables:** In terms of our surveyed samples, we were unable to incorporate all possible demographic and control variables (such as age, gender, socio-economic status, and so on), which in turn may have biased our results. In addition, since respondents were primarily children, the nature of our questions was limited in scope (i.e. it was difficult to ask family-related information, such as household income).

**Small Sample Size:** Our quasi-experiment contained a small number of respondents. This was due to the limited time of the project and the fact that we were only able to survey eighty non-JT students and fifty JT students, which may have affected the accuracy of interpretation of our regression equation and t-tests.

**Convenient sampling:** The survey sample was not randomized since we were dependent on the availability of students that we had access to. Also, our JT sample consisted of those students who were willing and available the day of our March visit to the center and therefore our results may be effected by selection bias.

**No Baseline Data:** Because of a lack of baseline (or comprehensive pre-Jitegemee) data for students before they entered the Formal Schooling Program, we were unable to construct a more precise impact analysis.

## Impact Analysis: A Discussion

Through the extensive analysis of findings from Phase I and Phase II of our project, in conjunction with our additional research, we found that Jitegemee students and other key stakeholders (including parents, teachers and administrators) had an overwhelmingly positive attitude toward, and reaction to, the Formal Schooling Program. Based on qualitative and quantitative data gathered through surveys and interviews, we were able to show that Jitegemee has had a positive impact in four key areas: health, education, finances and interpersonal relationships.

### Health

We found that **regular checkups** and **access to medication** from the Jitegemee doctor, coupled with the **feeding program** have improved the overall health of students and their families, including their abilities to perform physical activities. Any potential areas for improvement (such as the need for more advanced medical equipment) that were recommended by the Jitegemee doctor fell outside the scope of Jitegemee's programs and were more of a reflection of the realities of life in Machakos.

### Education

The Formal Schooling program has had a substantial impact on encouraging the **importance of education** amongst the primary students. We found that students have a **higher ability to concentrate** in school because of the feeding program and that overall the formal schooling program improves **self-efficacy** of the students. Additionally, we discovered that the program achieves its goal of encouraging **higher educational aspirations** and that almost all the students surveyed answered yes on planning to go to secondary school.

### Finances

In terms of the financial impact of the Formal Schooling Program, we found that in addition to providing uniforms, textbooks and shoes that parents would not be able to afford otherwise, the program also has a **spillover effect** on the siblings of Jitegemee students. Siblings are able to share uniforms and shoes as well borrow books from Jitegemee's library. During the parents' focus group, we discovered that overall the Formal Schooling Program has **reduced family stress** by helping to free up some of families' incomes for other uses.

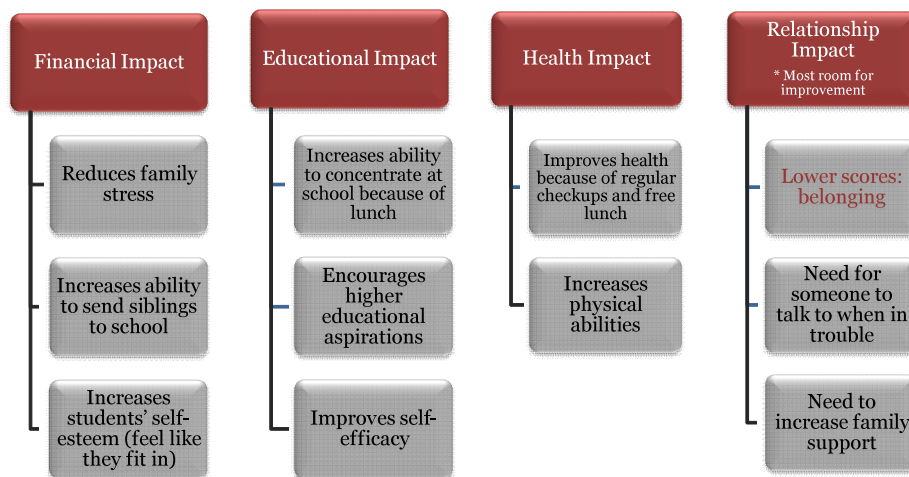
Additionally, parents observed that the Formal Schooling Program has had a **positive hygiene and behavioral spillover effect** on their other children, as well as boosting their participating childrens' overall **self-esteem, self-perception** and **outlook for the future**.

### Relationships

We found that the Formal Schooling Program’s effect on students’ interpersonal relationships was the area that needed the most improvement. As discussed earlier (see pg. 23), we observed that a significant number of the students felt that they did not belong at school and had trouble getting along with their peers. We also discovered a positive relationship between those students who felt that they had someone to go to when they needed help and their likelihood to perform well in school.

Based on these results, as well as discussion with Jitegemee’s staff, our team has made some recommendations to further strengthen and improve the Formal Schooling Program, with special emphasis on these four areas of impact.

### Impact Analysis of Formal Schooling Program: Key Indicators



## Recommendations

### 1. Monitoring & Evaluation Tool: Surveys

We have developed a framework and tool for evaluation that can be utilized to measure the impacts of the Formal Schooling Program on students in four key areas: academic performance, health, interpersonal relationships, and self-perception and awareness. Jitegemee has been very successful thus far in providing meaningful support in order to

increase students' academic achievement. We hope that with the survey that we have developed the organization will not only be able to improve and better target that support, but will be able to monitor the on-going, resulting progress it has on students in the Formal Schooling Program.

\* For the complete survey, please see page 58 in the Appendix.

## Guidelines

1. **Purpose:** The Jitegemee staff should make it a point to explain to students that they are taking the survey both in order to track their improvement as they progress through the program, and to help improve the program itself. It may interest students to know that they are helping to improve the organization that has helped them so much.
2. **Confidentiality:** Research indicates that anonymity is the best way to guarantee that survey respondents provide honest answers. Because of the size of the Formal Schooling Program, and the fact that Jitegemee's staff are quite intimately involved in their students' lives, anonymity may not play such a significant role here. However, we suggest that students be guaranteed that their answers will be kept confidential. It might be a good idea to designate one or two staff members who will be the only ones that have access to students' answers, and assure the students of this.
  - a) In addition, students will be much more likely to provide open and honest answers if they are assured that only Jitegemee staff – not their parents, nor their teachers – will have access to the information that they provide.
  - b) It should also be made clear to students that they will not be penalized in any way for providing honest answers, but that designated staff may follow up with them to discuss their answers if they have concerns.
3. **Implementation:** Having baseline data for the survey is ideal. This means that all students who are admitted to the Formal Schooling Program should take the survey **before they begin receiving any of Jitegemee's services**. This will help to provide the most accurate picture of the impact that the program has on students' progress overall.
  - a) For continuing students, the survey will still yield meaningful results regarding their on-going progress, it just won't be able to give a comprehensive picture of changes since they were admitted to the program.
4. **Frequency:** We recommend that the survey be administered to all students every six months. This should be sufficiently frequent enough to track their progress and help Jitegemee to detect any negative trends that may be developing, but with enough time in between to keep the staff from being overwhelmed with the work it takes to administer surveys and compile results. However, this timeline may be adjusted as the organization sees fit.

5. **Tracking:** The Jitegemee staff should develop a database – either hand-written, or via computer – to track each students’ progress through survey responses. We believe the staff themselves are the best judge of what their capacity is to do so, and feel that they should determine a system that best meets their needs.

## 2. Peer Mentoring Programs

Predominately based on the findings from our surveys, we discovered that the Formal Schooling Program needed the most improvement in the area of strengthening students’ interpersonal relationships. Therefore we recommend that Jitegemee establish a Peer Mentoring program. We believe that the social network necessary to create such a program already exists within Jitegemee. We are also aware that the organization places great value on encouraging students to support one another and their community, and believe that a mentoring program would help them to further this goal.

As discussed earlier, our data clearly shows that that Jitegemee students and their families greatly appreciate the counseling that the Jitegemee staff offers. However, we recognize that the staff are limited by their small size, the number of hours in each day, and the continued growth of enrollment in the organization’s programs. We hope that by implementing peer mentoring, the staff can help to enlarge and improve students’ social networks in a way that will not create more work for the staff themselves. We suggest secondary-primary mentoring and primary-primary mentoring.

### Secondary-Primary Mentoring

We see great potential for the positive impact of matching Jitegemee students who attend secondary school with those who are in levels seven and eight of primary school.

In this case, secondary school students would serve as peer mentors to older primary school students. They are an example of students who come from similar backgrounds, have successfully completed primary school AND have achieved sufficient scores on the national secondary school entrance exam, and can serve as positive role models for older primary students. Their role as mentors also has the potential to help improve the secondary school students’ own self-esteem and sense of personal responsibility, as well as their pride in their ability to contribute positively to the Jitegemee and greater Machakos communities.

The level seven and eight primary students would be the mentees in this case. We believe that the positive influence of their mentors will help to boost their hopes of qualifying for secondary school and encourage them to work harder to do so. We also think that this encouragement and support will help to address some of the negative behavior changes that Director Kimeu and the Jitegemee staff have observed as students make the transition to secondary school. By interacting with their older peers, these

students will have the ability to ask questions, better understand what to expect in secondary school, and assuage some of the fears and insecurities regarding their future that may be causing them to act out.

### Primary-Primary Mentoring

Another useful method for Jitegemee staff to address the negative behavior changes that seem to be occurring as primary students near secondary school age is to implement a primary-primary mentoring component.

In this case, older primary students (levels seven and eight) would serve as mentors to younger primary school students. By becoming mentors, these students would realize their need to exemplify positive behaviors and develop leadership skills which, in turn, would increase their sense of personal responsibility and accountability, as well as their accountability to Jitegemee and their communities. This greater sense of accountability should have a positive effect on curbing negative behaviors as the older students begin to see themselves as role models who play an important part in the lives of others.

The younger primary students, or mentees, would benefit from gaining someone to talk to about school work, belonging at school and life outside of school. They could look to their older mentors as someone who, like them, has been rehabilitated from life on the streets, and hopefully strengthen their self-confidence and trust in others in the process.

\* Please see Appendix page 61 for further guidelines.

### 3. Alumni Day

While we were in Machakos in March, Director Kimeu communicated to us that he would welcome our ideas on how to engage Jitegemee alumni. He stressed the importance of keeping them involved in the Jitegemee community, both so that they can give back to the organization that helped them and so that they can be seen as role models by current Jitegemee students.

We suggest that Jitegemee hold an annual or semi-annual Alumni Day for students and their families. Those individuals who have completed the organization's programs and have either enrolled at a university or have pursued successful vocations should be invited to Jitegemee's offices to share their experiences and insights with current students and families – especially siblings of current students.

The organization (with the help of donors) could provide food and activities, and make the day a celebration of achievement and hope for the future. Successful alumni will be recognized for what they have accomplished, and current students would benefit from seeing what lies ahead if they stay committed to the program and to their academic and vocational performance.

## 4. Additional Recommendations

As we discussed earlier in the Regression Equations section (pg. 34), we found that the dependent variable ‘I try to do my best at school’ is positively correlated with the statement ‘If I don’t understand something I will ask for an explanation’. For this reason, we recommend that Jitegemee include a **school advocacy** component in their Living Values Curriculum that students receive during their rehabilitation in the six months prior to entering school. School advocacy encompasses various means by which students – and their parents/guardians – can learn what their rights are regarding education, services that schools offer, and how to advocate for themselves and their interests in an academic environment. This can be as simple as knowing how and when to ask questions when they are confused, to requesting meetings with teachers or administrators when necessary.

Often when families are particularly poor or uneducated, they do not fully understand or have not been informed of all of the benefits that are available to their children at school, and they are often hesitant to ask. In the case of Jitegemee students, they may feel as though they do not deserve to ask, which may harm their overall ability to help themselves succeed.

By educating Jitegemee students more fully about how to advocate for themselves, and by showing parents and guardians how they can become more involved in their student’s schools, the organization can help to improve students’ confidence about their academic environments with their parents’ support.

## References

Catley, Andrew, John Burns, Dawit Abebe and Omeno Suji. *Participatory Impact Assessment: A Guide for Practitioners*. The Feinstein International Center at Tufts University. October 2008. Accessed via web at [https://wikis.uit.tufts.edu/confluence/download/attachments/19924843/Part\\_Impact\\_10\\_21\\_08V2.pdf?version=1&modificationDate=1225200269000](https://wikis.uit.tufts.edu/confluence/download/attachments/19924843/Part_Impact_10_21_08V2.pdf?version=1&modificationDate=1225200269000).

Cummings, Rick. “What If: The Counterfactual in Program Evaluation.” *Evaluation*



*Journal of Australasia* 6.2 (2006): 6-15.

“Data By Topic: Health.” data.worldbank.org. The World Bank, 2010. Web. 1 December 2010. <<http://data.worldbank.org/topic/health>>.

DFID. *Tools for Development: A Handbook for Those Engaged in Development Activity*. Ed. Performance and Effectiveness Department. Version 15.1, March 2003. Print.

Durlak, Joseph A. and Roger P. Weissberg. “The Impact of After-School Programs That Promote Personal and Social Skills.” *The Collaborative for Academic, Emotional and Social Learning* (2007). Accessed via web at [www.casel.org](http://www.casel.org).

Fleshman, Michael. “Giant step for Kenya’s schools: Progress for both boys girls towards Millennium education goal.” *Africa Renewal* 19.2 (2005): p. 10. Accessed via web 16 December 2010. <[http://www.un.org/ecosocdev/geninfo/afrec/vol19n02/192\\_pg10.htm](http://www.un.org/ecosocdev/geninfo/afrec/vol19n02/192_pg10.htm)>.

Gakuru, Octavian N., Priscilla W. Kariuki and Kennedy M. Bikuri. “Children in Debt: The Experience of Street Children in Nairobi.” *Poverty, AIDS, and Street Children in East Africa*. Ed. Joe L. P. Lugalla and Colleta G. Kibassa. New York: The Edwin Mellen Press, 2002. Print.

Hansen, David M., Reed W. Larson and Jodi B. Dworkin. “What Adolescents Learn in Organized Youth Activities: A Survey of Self-Reported Developmental Experiences.” *Journal of Research on Adolescence* 13.1 (2003): 25-55. Print.

“Info. By Country: Kenya.” [www.unicef.org](http://www.unicef.org). UNICEF, 11 September 2006. Web. 27 November 2010. <[http://www.unicef.org/infobycountry/kenya\\_2621.html](http://www.unicef.org/infobycountry/kenya_2621.html)>.

*International Workshop: Children’s Capabilities and Project Why*. Prepared by Project Why. December 2008. Accessed via web at [http://www.ucl.ac.uk/lc-ccr/downloads/Project\\_Why\\_Workshop\\_Report](http://www.ucl.ac.uk/lc-ccr/downloads/Project_Why_Workshop_Report).

Greenberg, Mark T., Roger P. Weissberg, Mary Utne O’Brien, Joseph E. Zins, Linda Fredericks, Hank Resnik and Maurice J. Elias. “Enhancing School-Based Prevention and Youth Development Through Coordinated Social, Emotional and Academic Learning.” *American Psychologist* 58.6/7 (June/July 2003): 466-474. Print.

- Kandji, Dr. Serigne T. "Drought in Kenya: Climatic, Economic and Socio-Political Factors." *New Standpoints* World Agro-Forestry Centre (November-December 2006): 17 – 19. Web. 18 April 2011.  
<http://www.worldagroforestry.org/downloads/publications/PDFs/NL06291.pdf>
- Kilbride, Philip, Collette Suda, and Enos Njeru. *Street Children of Kenya: Voices of Children in Search of a Childhood*. Connecticut: Bergin & Garvey, 2000. Print.
- Muga, Dr. Richard, Dr. Paul Kizito, Mr. Michael Mbayah, and Dr. Terry Gakuruh. "Chapter 2: Overview of the Health System in Kenya." *Kenya Service Provision Assessment Survey 2004*. National Coordinating Agency for Population and Development, Ministry of Health, Central Bureau of Statistics, and ORC Macro. Nairobi: 2005. Print. Accessed via web 1 December 2010.  
 <<http://www.measuredhs.com/pubs/pdf/SPA8/02Chapter2.pdf>>.
- Murton, John. "Population Growth and Poverty in Machakos District, Kenya." *The Geographical Journal* 165.1 (Mar. 1999): 37-46. Print.
- NE-CF and Katalyst Tales. "Participatory Evaluation Exercises: A Resource for Work with Children and Young People." *The Evaluator's Cookbook* (2005). Print. Accessed via web at  
[http://www.countydurhamsport.com/files/the\\_evaluators\\_cookbook\\_participatory\\_evaluation\\_exercises.pdf](http://www.countydurhamsport.com/files/the_evaluators_cookbook_participatory_evaluation_exercises.pdf).
- Partners Mentoring Services Effectiveness Index*. Version 4.2. Developed by Omni Research and Training in Denver, Colorado for use by Metro Denver Partners. September 2010.
- Resnick, M. D., L. J. Harris and R. W. Blum. "The Impact of Caring and Connectedness on Adolescent Health and Well-Being." *Journal of Pediatric and Child Health* 29.1 (1993): S3-S9. Print.
- Springer, J. Fred and Joël L. Phillips. *Individual Protective Factors Index: A Measure of Adolescent Resiliency*. EMT Associates, Inc (1997). Accessed via web at <http://www.emt.org/userfiles/ipfi.pdf>.
- "Street Children Statistics." [www.streetchildren.org.uk](http://www.streetchildren.org.uk). Consortium for Street Children, n. d. Web. 1 December 2010.  
 <[http://www.streetchildren.org.uk/\\_uploads/resources/Street\\_Children\\_Stats\\_FINAL.pdf](http://www.streetchildren.org.uk/_uploads/resources/Street_Children_Stats_FINAL.pdf)>.

Thonden, Yodon. “Juvenile Justice: Police Abuse and Detention of Street Children in Kenya.” Human Rights Watch Children’s Rights Project. Human Rights Watch, 1997. Ed. Lois Whitman and Binaifer Nowrojee. Print. Accessed via web 1 December 2010. <<http://www.hrw.org/legacy/reports/1997/kenya/>>.

World Health Organization. *Country Health System Fact Sheet 2006: Kenya*. WHO Regional Office for Africa, 2006. Print. Accessed via web 1 December 2010. [http://www.afro.who.int/index.php?option=com\\_content&view=article&id=1036&Itemid=1889](http://www.afro.who.int/index.php?option=com_content&view=article&id=1036&Itemid=1889).

[www.casel.org](http://www.casel.org).

[www.jitegemee.org](http://www.jitegemee.org). Jitegemee, 2010. Web. Accessed 14 December 2010. <<http://www.jitegemee.org/about/field-staff/>>.

[www.mentoring.org](http://www.mentoring.org).

## Appendix

1. Focus Group Guide for Jitegemee Students.....	50
2. Focus Group Guide for Parents of Jitegemee Students.....	53
3. Questionnaire for Primary Students.....	56
4. College Student Interview.....	57
5. Staff Interview.....	59
6. Doctor Interview.....	60
7. Parent Participatory Interview/Focus Group.....	60

8. Secondary School Student Interview.....	62
9. Vocational Student Interview.....	62
10. Primary School Teacher Interview.....	63
11. Survey.....	58
12. Peer Mentoring Guidelines & Questionnaires.....	61

**Phase I: Data-Gathering Tools**

**1. Focus Group Guide for Jitegemee Students**

(6 to 10 students; no more than 1 hour)

**Background/Self-Intro**

Good morning/afternoon/evening everyone. My name is \_\_\_\_\_, and my friend’s name is \_\_\_\_\_. (If note taker, translator or other team members are present, have them introduce themselves as well.) I/We are from Columbia University, a school in New York, and we are working with Jitegemee. Thank you for coming today and taking the time to meet us. We are here to learn about the program, and to listen to your opinions, ideas, and worries. We want to help Jitegemee develop a better way to help you. Based on what you share during today’s meeting, we will talk with the Jitegemee staff and make some suggestions for the program. We are happy that you are all here, and we want to hear what you really think.

We want to talk with you about things like school and your families. We will not talk about anything that you share today with your parents or teachers and, if you like, we can keep the things that you say a secret. And if you don’t understand something or get confused, please ask us and we will explain. We would also like to record this meeting in order to make sure that we remember what you say. Is that okay? Okay, let’s start!

**Ice Breaker Game**

1. A team game that Kenyan children are familiar with (10 minutes)

**Opening Questions:**

- 1) How old are you?
  - a. What grade are you in?
- 2) What is your favorite or least favorite subject at school?
- 3) How long have you been going to Jitegemee?

- 4) What is your favorite thing about Jitegemee?
  - a. Why do you like it?
- 5) Is there anything that you would change about Jitegemee?

*Transition:* Okay, good. Now let's talk about what your life is like since you came to Jitegemee.

### **Main questions:**

#### ***Changes: Life, School & Family***

- 1) What has changed most in your life because of Jitegemee?
- 2) Has Jitegemee made a difference in your life? If so, what type of difference has it made?
  - a. Follow Up: Could you say more? Could you give us an example?
- 3) What has changed most at school because of Jitegemee? Has anything changed?
  - a. Follow Up: Could you say more? Could you give us an example?
- 4) Do you get help at Jitegemee for school?
- 5) What has changed about your family? Because of Jitegemee are there going to be things that you try to change or that will be different if/when you return back home and to your communities?
  - a. Follow up: What do your parents say about Jitegemee? Have they mentioned seeing a change in you or do they believe that Jitegemee has made any type of difference?

*Transition:* Good. Now I'm going to ask you some questions about your health.

#### ***Health***

- 6) Has your health changed at all since coming to Jitegemee? Do you care any more or less about your health now?
- 7) Tell me about the health services you get from Jitegemee.

- a. Do you like or dislike them?
- b. Why?

*Transition:* Okay, now we want to learn about you and your friends.

### ***Social***

- 8) How often do you spend time with other Jitegemee students?
- 9) Do you have friends at Jitegemee? Do you have friends at school that are not in Jitegemee?
  - a. Are there any differences between these friends? If so, what are the differences?
- 10) Are there people in your life that you can trust? Kids? Adults?
- 11) Who do you go to for help?
- 12) Do you feel like you help people? How?
- 13) How does being at Jitegemee make you feel about yourself?
- 14) What do you think your life would be like without Jitegemee?

### **Closing:**

We have talked a lot about your life, and what you think about Jitegemee. It sounds like you feel that \_\_\_\_\_ and \_\_\_\_\_. Is that right?

### **Final questions:**

- 1) Is there anything else you want to say about Jitegemee?
- 2) How was the meeting today? Did you enjoy it?
  - a. Why or why not?

### **Thank you and discussion of follow-up:**

Thank you for talking to us. We enjoyed listening to you and learning about your lives and what you think of Jitegemee. What you said has been really helpful and lets us understand Jitegemee a lot better. Based on today's meeting, we would like to write something to let Jitegemee know how good you did and let them know how they can

help you better. Again, we won't be sharing what you said with your parents or teachers, okay?

It was really fun to meet you and you did a great job. Thanks!

## 2. Focus Group Guide for Parents of Jitegemee Students

(6 to 10 people; no more than 1 hour)

### **Background/self-intro**

Good morning/afternoon/evening everyone. My name is \_\_\_\_\_, and this is \_\_\_\_\_. (If note taker, translator or other team members are present, have them introduce themselves as well.) I/We are from Columbia University, a school in New York, and we are working with Jitegemee. Thank you for coming today and taking the time to meet us. We are here to learn about the program, and to listen to your opinions, ideas, and worries. We want to help Jitegemee develop a better way to help you and your children. Based on what you share during today's meeting, we will talk with the Jitegemee staff and make some suggestions for the program. We are happy that you are all here, and we want to hear what you really think.

We are especially interested in how Jitegemee has affected you and your students' health and social lives. We promise that anything you say today will be shared only with our team, and will not affect your students' ability to participate at Jitegemee. We want to hear your honest opinions because they are very important to us and will help us do our work. If it is okay with you, we would like to record the meeting so that we remember exactly what you say. Is that okay?

### **Opening Question:**

- 1) How many children do you have?
  - a. How old are they?
  - b. What grade(s) are they in?
- 2) How long have your children participated in the Jitegemee program?
  - a. How many of them participate?
- 3) Which Jitegemee programs do your children participate in?
- 4) Which program do you think they enjoy the most? Why?

*Transition:* Okay, good. Now let's talk about what your life is like since your children came to Jitegemee.

### **Main Questions:**

#### ***Changes***

- 1) Have you noticed if anything has changed about your children since they started going to Jitegemee? If so, what?
  - a. Follow Up: Could you say more about the changes?
  - b. Follow up: How have these changes affected your life?
- 2) Has anything changed at school for your children as a result of going to Jitegemee?
  - a. Follow Up: Can you give us examples? You could consider things like school attendance, grades, or attitude toward going to school.
- 3) Has anything changed about your family because of Jitegemee?
  - a. Follow up: What do your other family members think of Jitegemee? Your friends? Neighbors?
- 4) If you have children who do not go to Jitegemee, what do they think of the program?
  - a. Do they want to be involved? Why or why not?

*Transition:* Good. Now I'm going to ask you some questions about your health.

#### ***Health***

- 5) Have there been any changes in your children's health since coming to Jitegemee?
  - a. Do you care more or less about your children's health after the program or opposite?
- 6) Does the program affect your health at all? How?
  - a. Follow up: Can you give us some examples?
- 7) What type of influence has the program had on how you think about health, if any?
- 8) What do you like or dislike about the health services that Jitegemee offers?
  - a. How would you change them?



*Transition:* Okay, now we want to learn about your children and their friends.

***Social***

- 9) How often do your children spend time with other Jitegemee students?
- 10) Do you know if they have friends at Jitegemee? What about friends at school that are not in Jitegemee?
- 11) Who do your children go to for help?
- 12) How do you think going to Jitegemee makes them feel about themselves?
  - a. Have you noticed any difference in their self esteem?
- 13) What do you think their lives would be like without Jitegemee?
- 14) What do you think your life would be like if your children did not go to Jitegemee?

*Transition:* Very good, thank you.

**Closing:**

We have talked a lot about your lives, your children, and what you think about Jitegemee. It sounds like you feel that \_\_\_\_\_ and \_\_\_\_\_. Is that right?

**Final Questions:**

- 1) Is there anything else that you want to say about Jitegemee?
- 2) Do you have any suggestions for Jitegemee staff or for us?

**Thank you and discussion of follow-up:**

Thank you for talking to us. We enjoyed listening to you and learning about your lives and what you think of Jitegemee. What you said has been really helpful and lets us understand Jitegemee a lot better. We will use what you said to make recommendations to Jitegemee’s staff for how to improve their programs. If you can suggest anyone else that you think we should talk to about Jitegemee, we would greatly appreciate it. I’d also like to remind everyone here that your answers today are confidential and that we have agreed not to share what we talked about here with anyone outside of our team. Thank you again.

### 3. Questionnaire for Primary Students

1. How many years have you been in Jitegemee's program? (       ) years
2. Have you had a fever in the last six months? Yes / No
  - a. If so, how many times in the last six months? (       ) times
  - b. Did you take medicine for the fever? Yes/ No
  - c. If so, who provided the medicine?
    - 1) Hospital    2) Jitegemee    3) School    4) Family    5) Pharmacy
3. Have you had a headache in the last six months? Yes / No
  - a. If so, how many times in the last six months? (       ) times
  - b. Did you take medicine for the headache? Yes/ No
  - c. If so, who provided the medicine?
    - 1) Hospital    2) Jitegemee    3) School    4) Family    5) Pharmacy
4. Have you had diarrhea in the last six months? Yes / No
  - a. If so, how many times in the last six months? (       ) times
  - b. Did you take medicine for the diarrhea? Yes/ No
  - c. If so, who provided the medicine?
    - 1) Hospital    2) Jitegemee    3) School    4) Family    5) Pharmacy
5. Do you miss school when you get sick? Yes/ No
6. How many days of school have you missed in the last year? Last month?
7. What are the last three diseases that you have had or had to go the hospital for?
8. Do you currently do drugs? Yes/ No
  - a. If so, how often do you do them?
    - 1) at least once a week    2) at least once a month    3) at least once a year

- b. What type of drugs do you do?
9. Are there things that make you not want to go to school? Yes/ No
- a. If so, please provide a brief explanation. (for older students)
10. Do you currently live with a family or guardian? Yes/ No
- a. If so, with whom do you live?
- b. Do you feel you receive enough support from your family? Yes/ No
11. Have you ever experienced physical violence (been hit by someone)? Yes/ No
- a. If so, by whom?
- 1) Family Member   2) Peer   3) Teacher   4) Other

#### 4. College Student Interview

1. How old are you?
2. How long have you been in Jitegemee?
3. What is your life goal?
4. What are some of the things that you liked in primary school?  
What are some of the things that you didn't like? Why?
5. Now that you are in college, what are some of the major aspects that Jitegemee offered you that helped prepare you for your college experience?
6. What kind of support or services did you receive in the Formal Schooling Program?
7. Did Jitegemee have an impact on your health? If so, how did it impact you?
8. What were some of the things that you benefited from in the Formal Schooling Program?  
-in school life (relationship with friends, and teachers, grades)  
-in family (relationship with parents, )

9. What were some of the things that would have helped you more during your time in Jitegemee?

10. Do you currently live with your parents? Or others?

11. Did your family like the Formal Schooling Program? Why or why not?

What did they like/dislike about it?

12. Did you want to attend college originally?

What was your motivation for wanting to do so?

13. Did you receive encouragement or support to continue on to secondary school?

14. Did you receive encouragement or support to continue onto your college studies?

15. After being in Jitegemee, do you feel that your confidence improved or went unchanged? Why?

16. After being in Jitegemee, do you feel that you have more of a vision for your future? Why?

17. After being in Jitegemee, do you feel it is important to participate in the community?

18. Do you feel that Jitegemee helped to improve your familial relations? Why?

Sensitive questions (regarding before Jitegemee program)

1. Could you tell me about what led you to be on the streets before Jitegemee?

2. How did you find Jitegemee?

3. What were the biggest changes that occurred in your life after you entered Jitegemee?

## Phase II: Data-Gathering Materials

### 5. Staff Interview

#### 1. Curriculum Questions:

1. How is the curriculum structured?
  1. Duration
  2. Frequency
  3. Topics covered
2. Is the curriculum delivered consistently - meaning, are the same topics covered each year or with each group?
3. How is the curriculum recorded - a manual, teacher's notes, etc.?
4. Who reviews/updates/approves the curriculum?
5. What, if any, elements of sexual and reproductive health are covered?
  1. How about hygiene?

### **General Questions for Teachers:**

1. Do you get the impression that teachers at Jitegemee students' schools treat them differently than their peers?

How - do they give them advantages, are they harder on them?

2. Is each students' performance tracked from the time they start a program at Jitegemee?
3. When students are not performing as well in school, how do the Jitegemee teachers handle this?
4. Are there certain targets/metrics (regarding # of students/families/transition to vocational/secondary school) that Jitegemee strives for yearly?

And if so, who sets these targets?

### **6. Doctor Interview**

1. What are your main responsibilities related to Jitegemee students and their families?

2. How often do you see them?
3. What are the main health concerns that students and their parents have?
4. What are the most common medications that you prescribe to students and their family members?
5. Have you noticed any recent health trends among students and their families?  
Specific to certain ages?
6. What is the average weight/height of Jitegemee students?
7. Do you provide any contraceptives/condoms to students?
8. What is your biggest challenge in your role as Jitegemee's doctor?
9. Are there any additional services that you would like to provide that you think would help the students and their families?

## 7. Parent Participatory Interview/Focus Group

1. Which benefits does your family get from Jitegemee? Fill in the circle for all that apply.

- Lunch program
- School uniforms
- School fees (books, tuition, exam fees)
- Field trips
- Medical care
- Tutoring
- Counseling
- Parents group

2. Which 3 of these benefits has had the biggest impact on your family? (Rank them from 1 to 3, with 1 being the most important.)

\_\_\_ Lunch program

\_\_\_ School uniforms

\_\_\_ School fees (books, tuition, exam fees)

\_\_\_ Field trips

- Medical care
- Tutoring
- Counseling
- Parents group

3. Are there any of these benefits that you don't use?

4. Which 3 of these benefits has had the biggest impact on your child going to school regularly? (Rank them from 1 to 3, with 1 being the most important.)

- Lunch program
- School uniforms
- School fees (books, tuition, exam fees)
- Field trips
- Medical care
- Tutoring
- Counseling
- Parents group

5. How has your involvement in your child's education changed because of Jitegemee?

6. Has having a child in the program affected your other children?

If so, how?

7. Has having a child in the program affected your family's money situation?

If so, how?

8. How often does your child see the Jitegemee doctor during the school year? (Fill in the circle for only one.)

- Never                       1-3 times                       4-6 times                       6 or more times

9. What are the main reasons that your child goes to the doctor?

## 8. Secondary School Student Interview

1. Did you always want to go to Secondary School?
2. Do you think you have more opportunity in your life now that you are in Secondary School?
3. Did your parents want you to go to SS?
4. What are your plans for the future?
5. Do you think Secondary School is important for everyone?
6. What level do you attend?
7. What are your favorite subjects?
8. What are your least favorite subjects?
9. What do you do on your break from school?
10. What is your living situation like?

## 9. Vocational Student Interview

1. Do you still intend to go to secondary school without support from Jitegemee?
2. Why didn't you qualify?
3. Is there something that you could have done differently/better to qualify?
4. If you are in the vocational program, what was your reason to enter this program?
5. What kind of support or service did you receive in the Jitegemee's formal schooling program?
6. What were some of the challenges that Jitegemee could have helped you with?
7. What do your parents think of Jitegemee, secondary school, and vocational program?



8. Are you eligible to retake your exam for secondary school? If so, are you planning on taking it?
9. How important do you think secondary schooling is for your future?
10. What were some of the challenges that you faced in primary school? (i.e. peer pressure/social, academic, health)
11. Was English a concern for you in taking your exams and/or for entering secondary school?
12. Do you feel that your family supported your desire to go to secondary school?
13. Did you have desires of doing something more than going to secondary school?
14. Did you have plans ready if you didn't go to secondary school?

#### 10. Primary School Teacher Interview

1. How long have you worked with Jitegemee students?
2. What is your overall impression of the Jitegemee program?
3. How do Jitegemee students interact with their classmates?
4. Do they quarrel or get into trouble often?
5. What are some of the biggest challenges that you think Jitegemee students have at school?
6. How would you describe Jitegemee students' hygiene?
7. Do Jitegemee students get similar marks to their classmates?
8. Do Jitegemee students do their homework regularly?
9. Do Jitegemee students actively participate in class?
10. Are Jitegemee students punctual?

11. How is their attendance? If they miss school frequently, is it because of being sick or something else?

12. Do they behave well?

## Recommendations Materials

### 11. Survey

For each question, please fill in the circle that best fits for you.  
Fill in only one circle.

	YES	NO
Have you ever repeated a level in school?	○	○
If so, which level? _____		
Do you ever skip class?	○	○
Do you have a bed net?	○	○
Do you worry about school work?	○	○

	NEVER	SOMETIMES	OFTEN	ALWAYS
How often do you finish your homework?	○	○	○	○
How often do you get sick?	○	○	○	○
How often do you feel sad?	○	○	○	○
How often do you miss school?	○	○	○	○
If you answered OFTEN or ALWAYS,				

why do you miss school?  
(choose one)

- Sick
- Didn't feel like going
- Family emergency
- Work
- Other \_\_\_\_\_

	NEVER	SOMETIMES	OFTEN	ALWAYS
I have trouble sleeping at night.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel tired.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel hungry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much do you agree with each statement?	YES	yes	no	NO
What I learn in school will be important later in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can do most things I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can work with my classmates without quarreling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can tell my parents the way I feel about things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble concentrating on what I'm doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends respect me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helping others makes me feel good.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If I study hard, I will get better grades.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What I think about things is important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is hard for me to make friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I listen to what my teachers are saying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to follow the rules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I am a good person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family thinks my education is important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I don't understand something, I will ask for an explanation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like I belong at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care if my homework is done correctly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am good at working out arguments with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have someone to talk to when I am in trouble.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I get stressed out, I know how to relax.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can be trusted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to do my best at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often feel lonely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you work hard, you will get what you want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy being in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bad things happen to people like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get along well with other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School is a waste of time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about how my actions affect other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	YES	yes	no	NO
Do you get along with your classmates?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you plan on going to secondary school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can you do the same physical activities (ex. football) as your classmates?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 12. Peer Mentoring Guidelines

### General Guidelines

1. The success of these programs depends immensely on the willingness and engagement of the students involved. Jitegemee’s staff should focus first on explaining the value of the program to all concerned students so that they understand why it is being implemented.
2. Mentors and mentees should be matched not only along gender lines whenever possible, but take into consideration personalities and maturity levels that are likely to be most compatible.
 

Note: it is crucial that the Jitegemee staff properly train and advise mentors as well as continue to provide emotional support to both the mentors and mentees during this process.
3. Based on our research and at the Director’s suggestion, we feel that this program will benefit tremendously from periodic assessments of both the mentors and the mentees. We have provided questionnaires for both groups in the sections that follow.
4. For the Secondary-Primary Mentoring Program, Jitegemee’s staff should determine the ratio of secondary students to those in levels seven and eight, and match each secondary student with a reasonable number of mentees.
 

Note: We understand that most secondary students live on school grounds, and that visits may be only occasional. We encourage Jitegemee staff to take primary students to meet their mentors during the monthly visits to secondary schools, and create opportunities for the students to interact during holiday breaks.
5. For the Primary-Primary Mentoring Program, students should be matched with students who attend the same schools. Their initial meeting sessions should occur at Jitegemee’s offices in order for staff to oversee how things progress.
  - Additional meetings can take place either at the school (perhaps Jitegemee staff can coordinate this with school administrators), or at

- Jitegemee, leaving the discretion up to the students.
6. In the initial stages of the program, mentors and mentees should officially meet twice per school semester, totaling 6 times per academic school year.
  7. Mentors and mentees should be required to keep a time sheet to record when/where and how long meetings were, and which topics were discussed during the meetings.

### Additional Guidelines

*The following was adapted from the National Mentoring Partnership @ <http://www.mentoring.org/>*

- 1. Purpose of Mentoring Program** – Jitegemee staff must devise a clear and positive mission statement for the purpose of the program. Listed below are some general goals of the program.
  - a) To encourage Level 7 and 8 students to sufficiently prepare to pass the qualifying exam for secondary school
  - b) Inter-school peer mentoring between upper class primary students and younger students to provide a positive role model for the mentee and a sense of leadership for the mentor
- 2. Primary Stakeholders**
  - a) Secondary School students
  - b) Level 7 and Level 8 primary students
  - c) Lower level primary students
- 3. Types of mentoring services offered**
  - a) Curriculum based activities - for mentees, i.e. tutoring in subjects such as Math and Reading.
  - b) Positive role models- youth mentors serve as a positive role model for the mentees to provide emotional and academic support
- 4. Setting of the Mentoring Program**
  - a) Jitegemee Offices
  - b) Secondary school – during monthly visits
  - c) Primary school – mentor and mentee can work on homework together after school
- 5. How to promote the Program**
  - a) Success of the program relies heavily on the matching of mentors to mentees. Both the mentors and the mentees must be incentivized to apply and continue with the program as the academic year progresses. Please refer to the General Guidelines section.
  - b) To serve as positive role models, the youth mentors must receive ongoing support and guidance from Jitegemee staff as well as

supervision during preliminary sessions until both parties are settled and comfortable.

## **6. Periodic Assessment from Jitegemee's staff of Mentors and Mentees**

– To be performed after every school semester, 3 times per academic school year

- a) Mentor Questionnaire
- b) Mentee Questionnaire

### Mentor Questionnaire Questions

(To be administered by Jitegemee staff)

1. What is your name and what is the name of your mentee?
2. How many times have you met with your mentee in the last 3 months?
3. Where do you typically meet with your mentee?
4. How long do the mentoring sessions run?
5. Are you providing academic tutoring to your mentee, and if so in which subjects?
6. Are you providing emotional support to your mentee?
7. Have you noticed any changes in your mentee (academically, mentally, socially) since you started meeting with him/her?
8. Do you think your mentee is satisfied with the mentoring program?
9. Are you satisfied with being a mentor? How do you feel about having the responsibility of being a mentor?
10. Do you think the Jitegemee staff has provided you with enough guidance to be a successful mentor?
11. What is your overall impression of the peer mentoring program as a whole?
12. Would you continue to serve as a mentor next school year?
13. Please list any recommendations for the peer mentoring program for the Jitegemee staff.

### Mentee Questionnaire Questions

(To be administered by Jitegemee staff)

1. What is your name and the name of your mentor?
2. How many times have you met with your mentor in the last 3 months?
3. Where do you typically meet with your mentor?
4. How long do the mentoring sessions run?
5. What kind of support is your mentor providing you (academic, social, relationship)?
6. Is your mentor helping you with your schoolwork, and if so in which subjects?
7. Has your schoolwork improved since joining the mentoring program?
8. Do you feel comfortable speaking openly and honestly with your mentor? Do you trust him/her?

9. Do you feel that your mentor is someone you can go to if you have a serious problem?
10. Are you happy with your mentor? What do you think of him/her?
11. Would you like to become a mentor in the future?
12. What is your overall impression of the peer mentoring program?
13. Please list any recommendations for the peer mentoring program for the Jitegemee staff.

**For secondary school-bound students**

14. Do you want to go to secondary school?
15. Do you feel that you are prepared to pass the qualifying exam?
16. Has your mentor encouraged you to go to secondary school?