Youth Empowerment Program
Evaluation Report

KENYA

NairoBits

March 2010

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ACRONYMS

ACWICT	African Center for Women, Information, and Communications Technology
CBO	Community-Based Organization
CV	Curriculum Vitae
DOT	Digital Opportunities Trust
ICT	Information and Communications Technology
ISBI	Informal Sector Business Institute
ILO	International Labor Organization
IYF	International Youth Foundation
MFI	Microfinance Institution
MOYAS	Ministry of Youth Affairs and Sports
NGO	Nongovernmental Organization
WSWM	World Starts With Me
YEP	Youth Empowerment Program

EXECUTIVE SUMMARY

The youth population in the Republic of Kenya accounts for 75% of the country's total population of over 38 million people. Of this number, 14 million are between the ages of 15 and 35, of which over 2.5 million are classified as unemployed. Employment trends in Kenya also reveal that youth make up almost 40% of underemployed workers in the country. Additionally, 37.5% of youth between the ages of 15 and 34 are classified as inactive, meaning they are neither working, looking for work, nor in school. Although 500,000 youth enter the labor market from training institutions around the country each year, less than 100,000 are absorbed into the formal sector.

It is within this context that Microsoft and the International Youth Foundation (IYF) partnered to help disadvantaged youth in Kenya to unleash their potential through the Youth Empowerment Program (YEP). Launched in 2007, YEP sought to adapt to the African context the comprehensive approach to youth employability developed by IYF through its successful *entra21* program in Latin America. Focused on four target countries in Africa – Kenya, Nigeria, Senegal, and Tanzania – the program provides demand-driven training in information and communications technology (ICT), life skills, and entrepreneurship, with a goal to improve the employability of disadvantaged African youth ages 16 to 35.

The study is an independent evaluation of YEP in Kenya, managed by IYF, financed by Microsoft, and executed in Kenya by three implementing partners: the African Center for Women, Information, and Communications Technology (ACWICT), the Informal Sector Business Institute (ISBI), and NairoBits. This report focuses on the YEP program implemented by NairoBits, a nonprofit Kenyan youth organization which was founded in 1999 by Dutch professionals with a goal to improve the conditions of youth from the informal settlements of Nairobi. The objective of the YEP program in Kenya is to provide training to 2,500 youth between the ages of 18 and 35 from settlement areas around Nairobi. The program aimed to improve the employability of young men and women by training them in ICT, life skills and entrepreneurship. The NairoBits curriculum is structured to provide each participant with at least 204 hours of ICT training, 132 hours of life skills, and 160 hours of entrepreneurship training. All students are required to take both the life skills and entrepreneurship classes, both of which are offered during the first month of the training program, as part of NairoBits' 'Course 1'. Course 2 and Course 3 focus primarily on Internet skills and techniques, and web design. Media Lab, the highest and final level at NairoBits, is a six-month intensive web design course which focuses on art and techniques, business communication, and portfolios.

The YEP program implemented by NairoBits began in 2007 with the objective to train 300 young men and women from the informal settlements of Nairobi in ICT, life skills, and entrepreneurship; and place at least 62% of the trained participants in IT jobs (56 participants), self-employment (90 participants), and community activities (40 participants).

The report presents the overall results of the program using available data from baseline and exit surveys included in the program database, and the overall results from the sample follow-up cohort that was interviewed in February 2010 – a total of 50 participants. In this regard, questionnaires were developed by adapting the IYF Entra21 program questionnaires to gather the opinions and suggestions of participants and employers. A focus group was also organized to gather participants' views on the program and on their overall environment. As of December 2009, the program had surpassed its target of training 300 youth and had trained 1,224 youth.

The evaluation revealed the following findings on the sample follow-up cohort:

- The evaluation of the 50 participants in the sample follow-up cohort reveals a placement rate of 78.72%.[1] Participants who were placed after the training stated that they were either involved in an internship (48.72%), worked in a job (53.85%) or independently (12.82%), or performed community service (35.90%), or in many cases, a combination of these activities. Another 10.63% of the participants from the sample follow-up cohort (5 respondents) continued with their studies or participated in another training program outside of NairoBits. All together, 82.98% of the respondents were employed, self-employed, participated in an internship or community service, or continued their studies after the training.

- At the time of the evaluation, 65.95% (31 respondents) of the participants from the follow-up cohort were employed, of which 73.55% were working as employees, 16.67% as interns, and 6.45% were self-employed.

- An analysis of the status of participants who were not working at the time of the evaluation (36.17% or 16 respondents) was also conducted, and found that 76.47% (12 respondents) of these participants indicated that employers were asking for more experience than they had though they were still looking for work. Also, 77% of these participants had only completed basic ICT training (Course 1) at NairoBits and stated that if they had advanced through the entire ICT training program at NairoBits, they would have had the skills required by employers. One respondent was in school; two respondents had submitted applications to various employers and were awaiting an outcome; and one respondent could not find a job that interested them.

- Although NairoBits was successful in placing over 70% of the participants in the follow-up cohort in employment, self-employment, internships and/or community service work, those not working face constant constraints within the Kenyan employment market including lack of available employment opportunities, particularly in regards to the inability of the labor market to absorb youth into the formal sector. Other reasons may also include a lack of entrepreneurial drive on the part of participants who were expected to create their own enterprises after their training, and a lack of opportunities for participants who only completed basic ICT training (Course 1), entrepreneurship and life skills.

- The average monthly salary of interviewed participants who were employed at the time of the evaluation was 10,586 Kenyan Shillings (equivalent to USD 138). It is important to note that these incomes revealed that participants were on average earning more than three times the national minimum wage (3,043 Kenyan Shillings); and indicates that the program may have helped improve the living conditions of its beneficiaries.

- The evaluation also found that 95.65% of the participants believed that the life skills training had a positive effect on their employment prospects, while 4.35% of the participants did not believe they were affected by the life skills training. Those who indicated that they were not affected by the training stated that they were already familiar with many of the training modules.

- Additionally, 95.74% of the participants in the sample follow-up cohort stated that the ICT training had a positive effect on their employment prospects, while 4.26% felt that it had not.

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[1] Per terms of the Microsoft-IYF Youth Empowerment Program agreement and overall program objectives of empowering youth by enhancing employability as well as engagement/citizenship, placement is defined as dependent or self-employment or participation in an internship or voluntary community service activity. If a youth beneficiary was employed in one or more jobs, was self-employed, or participated in an internship or community service activity since completing the program, the beneficiary is counted in the program's overall placement rate. In addition, the evaluation provides specific information on employment and self-employment placement rates and outcomes.

Those who believed that they were not affected stated that it was because they had not yet found a job that had allowed them to use their ICT skills.

- Furthermore, 85.11% of the participants in the sample follow-up cohort believed that their employment prospects were affected by the entrepreneurship training while 14.89% believed they were not. Several of the participants who believed their employment prospects were *not* affected by the entrepreneurship training stated that they had not been able to apply what they had learned, they were not business-oriented, and/or did not have an interest in starting their own business.

- As a result of the high levels of interest of the participants in the training and the positive influence it has had on their lives, 97.87% of the participants in the sample follow-up cohort stated that they would *definitely* recommend the program to other youth.

- All of the participants interviewed rated the quality of their life after the training as better than compared to before the program. Of these, 76.60% rated it as "much better" and 23.40% rated is as "better".

- Concerning the implementation of the program by NairoBits, interviews with employers in particular revealed that they were satisfied with the job performance of program graduates. However, they wished to see more training for participants in more specialized skills, such as programming, Adobe and design, in order to better meet market needs.

- Also in regards to the implementation of the program, placement services were provided for 55.32% of the participants in the sample follow-up cohort. However, the analysis revealed that placement services were provided primarily to participants who advanced through all four levels of ICT training offered at NairoBits. Although criticized by students, this focus of placement services on Media Lab graduates is intentional in order for the organization to use its resources more efficiently.

To enhance the outcomes of future NairoBits youth empowerment programs, the following recommendations are made:

- ***Expand training in ICT to include maintenance and repair –*** since the program is able to provide placement for some participants due to the specialization offered in Media Lab training, another leg of the program should be offered to include training in installing, maintaining, and repairing hardware and software. These specialized courses will allow non-Media Lab students to develop other technical skills in ICT and still have the opportunity to work for some of NairoBits' existing partners.

- ***Expand entrepreneurship program to offer more specialized courses –*** for students who are interested in the entrepreneurship track, the entrepreneurship courses should be expanded to provide training in areas such as marketing, accounting, and management. This will allow students to increase their employability by having skills in specialized areas.

- ***Expand business services to students who do not continue through to the advanced ICT courses –*** expanding services for these students would include providing business development services such as mentoring, business plan review, and incubation services for enterprises.

- ***Create linkages with other centers and organizations that are specialized in business development –*** it would also benefit the organization to form linkages and partnerships with other centers and programs, such as Digital Opportunities Trust (DOT), who specialize in entrepreneurship so that students have other avenues available to them. This would reduce costs for the organization and increase students' options to develop enterprises.

- ***Develop partnerships with financial institutions –*** for students who *are* in fact interested in starting their own businesses, relationships should be fostered with microfinance institutions (MFIs) or other financing agents that would be able to provide support to these individuals.

- ***Create partnerships with placement agencies –*** this will allow the Center to increase its reach in offering placement services for all participants. By partnering with placement agencies in Nairobi, the Center can offer this option to participants who do not advance to Media Lab as another means to search for potential jobs.

- ***Restructure the system designed to collect student information*** (particularly baseline and exit information) by developing a systemized method of capturing student data prior to training. This includes ensuring that resources and tools provided by funders are used consistently, providing students and/or partner community-based organizations with the necessary forms for students, and ensuring that a quality control system is put in place, which would ensure that data is collected effectively.

Overall, NairoBits surpassed its objective of training 300 youth and exceeded its program target of placing at least 62% of the participants in jobs, internships, self-employment, and/or voluntary community service. The program has had a tremendous influence on the participants, and has made some dramatic changes in the lives of the youth who have participated in the program. They have dramatically improved their overall outlook on their futures and understand the potential within themselves to live a happy and fulfilling life.

A. SECTION I: INTRODUCTION

The youth population in the Republic of Kenya accounts for 75% of the country's total population[2] of over 38 million people[3]. Of this number, 14 million are between the ages of 15 and 35[4], of which over 2.5 million are classified as unemployed[5]. Employment trends in Kenya also reveal that youth make up almost 40% of underemployed workers in the country[6]. In addition to this, 37.5% of youth between the ages of 15 and 34 are classified as inactive, meaning they are neither working, looking for work, nor in school[7]. Although 500,000 youth enter the labor market from training institutions around the country each year[8], less than 100,000 are absorbed into the formal sector[9].

These disheartening figures are a reflection of the underlying issues facing the youth population. The educational system in Kenya has yet to answer to the real needs of a continually growing labor market, as well as the need for a workforce that is not only technically competent, but is also equipped with soft skills in time management, communication skills, problem solving, and adaptability. The challenges facing Kenyan youth led the Government of Kenya to create a ministry to address the various needs of the youth population. The Ministry of Youth Affairs and Sports (MOYAS) was created in 2005 to 'represent and address youth concerns in Kenya'[10]. Despite MOYAS's attempts to promote employment through programs such as Youth Learning Resources Centers and the Youth Economic and Social Empowerment Project, along with the Government of Kenya's programs such as Kazi Kwa Vijana and the Marshall Plan for Youth, youth unemployment in Kenya is still at staggering levels as job creation has not been rapid enough to meet the needs of yearly entrants into the labor market. According to MOYAS, 'one of the greatest challenges in youth empowerment and participation is how to ensure that young people are passionate about causing transformation in Kenya'. Youth empowerment, according to the Ministry, is 'the quintessential force for causing such transformation'[11].

It is within this context that Microsoft and the International Youth Foundation (IYF) partnered to help disadvantaged youth in Kenya to unleash their potential through the Youth Empowerment Program (YEP). Launched in 2007, YEP sought to adapt to the African context the comprehensive approach to youth employability developed by IYF through its successful *Entra21* program in Latin America. Focused on four target countries in Africa – Kenya, Nigeria, Senegal, and Tanzania – the program provides demand-driven training in information and communications technology (ICT), life skills, and entrepreneurship, with a goal to improve the employability of disadvantaged African youth ages 16 to 35. The specific objectives of this two-year program are to improve the employability of young people in the four target countries by:

- Strengthening the capacity of at least six implementing organizations to deliver high quality employability programs to reach at least 40,000 individuals, with 10,000 young people

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[2] Figure provided by the Republic of Kenya Ministry of Youth Affairs and Sports.

[3] Kenya National Bureau of Statistics, http://www.knbs.or.ke/#.

[4] UN Population Division of the Department of Economic and Social Affairs, http://esa.un.org/unpp/p2k0data.asp.

[5] Daily Nations, 'High Unemployment Rate Could Evolve Into Revolution, Experts Warn', May 2, 2009. Statement made by Isaac Kamande, Chief Economist at the Ministry of Youth Affairs and Sports.

[6] World Bank Kenya Poverty and Inequality Assessment Executive Summary and Synthesis Report, p. 93. Underemployment is defined by the World Bank as working less than 28 hours per week.

[7] International Labor Organization, Department of Statistics, Key Indicators of the Labor Market Database (KILM) 2008.

[8] International Labor Organization Decent Work Country Program: Kenya 2007 – 2011, p. 10.

[9] World Bank Kenya Poverty and Inequality Assessment Executive Summary and Synthesis Report, p. 90.

[10] Daily Nations, 'High Unemployment Rate Could Evolve Into Revolution, Experts Warn', May 2, 2009. Statement made by Isaac Kamande, Chief Economist at the Ministry of Youth Affairs and Sports..

[11] Ibid.

benefiting directly from ICT, life skills, entrepreneurship, and marketable job skills training;

- Achieving at least 70% placement[12] of those who receive training under the program through internships, jobs, self-employment, and/or voluntary community service;

- Assisting youth with job placement in the formal and informal sectors, and providing enterprise development services including access to credit through alliances with other providers. The program also seeks to encourage continuing education and training.

The YEP program in Kenya was implemented by three nongovernmental agencies in Nairobi: the African Center for Women, Information, and Communications Technology (ACWICT), the Informal Sector Business Institute (ISBI), and NairoBits. The overall goal of the three centers combined was to train 2,500 youth in ICT, life skills, and entrepreneurship. In order to measure the outcomes of the program on the participants, IYF, following an open tender, contracted FocusAfrica, a management consulting firm based in Senegal, to conduct an independent evaluation of YEP in each of the four target countries of the program. This report will focus on the evaluation of the NairoBits program. The objectives of the evaluation are to:

- Review the implementation process for the program pilot and its outcomes;

- Assess the outcomes of the training for the youth in terms of acquisition of skills, placement, and creation of businesses;

- Gather the opinions of employers on the performance of trainees and employees, as well as gaps to be filled; and

- Gather recommendations from employers and stakeholders in order to improve the implementation of the program.

Subsequent sections of the report describe the YEP program implemented by NairoBits, the evaluation methodology, the profile of the youth participants, and the findings based on an analysis of the responses of the participants who were interviewed in person to assess the outcomes of the program on their employability. The last sections summarize the feedback from the participants and various stakeholders on the administration of the program, and propose recommendations to strengthen the NairoBits program in Kenya.

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[12] Per terms of the Microsoft-IYF Youth Empowerment Program agreement and overall program objectives of empowering youth by enhancing employability as well as engagement/citizenship, placement is defined as dependent or self-employment or participation in an internship or voluntary community service activity. If a youth beneficiary was employed in one or more jobs, was self-employed, or participated in an internship or community service activity since completing the program, the beneficiary is counted in the program's overall placement rate. In addition, the evaluation provides specific information on employment and self-employment placement rates and outcomes.

B. SECTION II: DESCRIPTION OF THE NAIROBITS YOUTH EMPOWERMENT PROGRAM IN KENYA

NairoBits is a Kenyan youth organization founded in 1999 by Dutch professionals with a goal to improve the conditions of youth from the informal settlements of Nairobi. Initially set up as a one-year endeavor to provide training in web design for disadvantaged youth, the project resulted in the first digital exhibition at the National Museum of Kenya and caught the attention of local and international media. The tremendous success of the initiative prompted the continuation of the program that, over time, developed into an extensive curriculum, which has trained over 1,200 Kenyan youth.

The organization's primary objective is to provide youth from the informal settlements of Kenya with technical, life, and entrepreneurial skills that will allow them to improve their prospects in life. With a focus on Information and Communications Technology (ICT) aimed at bridging the digital divide that youth face in Kenya, the organization provides youth with the tools necessary to express and develop their creativity. By partnering with community-based organizations (CBOs) in identifying vulnerable youth to train, the organization also imparts to its beneficiaries the importance of community service. As such, students in turn act as a multiplier and impart the skills they acquired from NairoBits to their communities and CBOs.

A. General program description

NairoBits uses ICT to empower youth to be more creative and innovative by focusing their efforts in five key areas:

- **ICT multimedia** – by gradually introducing youth to the possibilities associated with ICT, the organization formulated a training program composed of four modules, which ultimately focuses on providing youth with technical skills in web design and development.

- **Reproductive health and HIV/AIDS program** – NairoBits trains youth in an interactive digital reproductive program dubbed 'the World Starts With Me' (WSWM). It focuses on basic ICT, youth reproductive health and rights, HIV/AIDS prevention and mitigation, among other skills that are critical to the youth.

- **Micro-entrepreneurship program** – with a focus on basic business skills ranging from how to write a business plan to accounting for small businesses, the micro-entrepreneurship program provides the youth with business skills required to identify opportunities, start, run and grow a business.

- **Set up of 'information resource centers' or 'Vijana Tufahamike'** – the information resource centers have seven computers per center, and provide information through a digital information portal. In this manner, NairoBits is able to further assist youth in dealing with the challenges that affect their lives. Information relating to issues such as HIV/AIDS, abortion, drugs, peer pressure, unemployment, and job opportunities are made available through the portal to help youth cope with the challenges that they face on a regular basis.

- **Life skills and employability** – NairoBits prepares the youth for formal and informal employment by empowering them with life and employability skills. This program follows a curriculum designed by the International Youth Foundation (IYF) and adapted to the local context by NairoBits.

Through its partnership with IYF, NairoBits has been able to provide youth with training in ICT, entrepreneurship, and life skills. The YEP provided US$24,500 in grant funding to NairoBits, leveraging

funds provided by other donors. The Youth Empowerment Program at NairoBits had the following objectives:

- Train 300 young people between the ages of 16 and 25 in ICT, entrepreneurship and life skills.

- Place at least 62% of the trained participants as follows:

    o 56 placed in IT jobs;

    o 90 placed in self-employment; and,

    o 40 placed in community activities.

B. Curriculum

The NairoBits curriculum is structured to provide each participant with at least 204 hours of ICT training, 132 hours of life skills training, and 160 hours of entrepreneurship training. All students are required to take both the life skills and entrepreneurship classes, both of which are offered during the first month of the training program, as part of NairoBits' 'Course 1'. The NairoBits curriculum is developed with the assistance of employer partners. The organization consistently conducts face-to-face interviews with employers every three months to receive feedback in order to stay up-to-date on labor market trends.

The ICT training is structured in four main levels. The first three levels are composed of: an introduction to computers (Course 1), which included 204 hours of training; navigating the Internet (Course 2), which included 120 hours of training; and designing websites (Course 3), which included 456 hours of training. The fourth level, Course 4 or 'Media Lab', is designed to provide students with intensive training in web design and development and includes 1,152 hours of training. Each of the students participates in the introductory course; however, only select students advance on to the subsequent levels. Entrepreneurship and life skills are integrated into the first module so as to provide students who do not advance to Course 2 or 3 with skills necessary to start their own business. The introductory computer module, Course 1, is structured to provide students with a basic knowledge of computers. Training in Course 1 includes:

- Introduction to Microsoft Office;

- Digital Photography Introduction;

- E-mail, its basics and its use;

- Introduction to Photoshop;

- Internet – Surfing.

Course 2 and Course 3 focus primarily on Internet skills and techniques, and web design. Media Lab, the highest and final level at NairoBits, is a six-month intensive web design course which focuses on art and techniques, business communication, and portfolios. The curriculum for this level includes training in web design and technology such as Action scripting, CMS, Flash, PHP, and MYSQL. This last module is structured so that students work independently with guidance from the trainers. Students in the Media Lab course are also required to present a final project which entails designing a website for real clients. At the end of the training, students are placed in internships with partner organizations and firms with the objective of being hired as permanent full-time staff after the internship.

The entrepreneurship training portion of the program was provided by one of the NairoBits partners until June 2009: Digital Opportunities Trust (DOT), a Canadian-based international organization which provides communities with the necessary tools and resources to promote locally driven social and

economic development through the use of ICT[13]. The entrepreneurship courses are intended to provide students with additional skills that will allow them to create their own employment, particularly for those that do not advance to the next ICT training module after Course 1. NairoBits now teaches these courses and covers topics such as:

- How to develop a business plan;

- How to develop business opportunities; and

- Bookkeeping for small enterprises.

The life skills training provides participants with the skills necessary to succeed in school, to find gainful employment, and to increase their participation in their communities. The NairoBits life skills program also concentrates heavily on health, particularly reproductive health education for youth. By leveraging its partnership with the World Population Foundation, the organization has been able to incorporate training on reproductive health by using an interactive software entitled 'the World Starts With Me' (WSWM) – 'a web-based CD Rom curriculum on IT and Sexual and Reproductive Health and Rights for youth'[14]. A life skills manual designed by IYF was modified to reflect the Kenyan context and includes courses on:

- Creative and critical thinking;

- Decision making and problem solving;

- Self confidence;

- Communication and interpersonal skills;

- Interviewing skills;

- Managing one's emotions.

Training for three of the courses is provided in five-week increments for Course 1, two-week increments for Course 2, and three-month increments for Course 3, with an average of 30 students for the first group. Training for Media Lab is conducted in a span of six-month increments. Training took place primarily in NairoBits facilities. Training schedules, cohort sizes, and number of training hours are included in the annex of this report.

C. Recruitment and selection process

NairoBits works with a number of partners and particularly with Community-Based Organizations (CBOs). By leveraging its relationship with CBOs that operate in informal settlements in Nairobi and its outskirts, recruitment is organized through these organizations. Youth are identified, selected and recruited from these partner CBOs.

The process for selecting participants for the program was based on specific criteria. NairoBits' selection criteria for youth participants in the YEP Program are:

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[13] Digital Opportunities Trust website: http://www.dotrust.org/who-we-are

[14] World Starts With Me website, http://www.theworldstarts.org/start/begin.html

- *Age (between 17 and 21 years)*
- *Be a registered and active member of a community based organizations which is already in partnership with NairoBits; have been an active member in the partner organization for more than one year*
- *Be a good role model and a mentor to other youth in the organization*
- *Have completed high school*
- *Be able to communicate in English both in writing and verbal*
- *Be underprivileged and living in a non formal settlement*
- *Be prepared to share one's skills and experiences after the training with other CBO members*
- *Be available for the training for one year*

NairoBits at times makes exceptions for participants without a high school diploma as there are at times exceptional cases. Admission for these individuals is considered on a case-by-case basis at the discretion of the administration.

Additional selection criteria are instituted after participants complete Course 1. Students who demonstrate certain characteristics are chosen to advance to Courses 2 and 3. After Course 3, another selection of talented students is made to advance to the fourth course: Media Lab. The selection criteria for Media Lab are:

- Be a good team player;
- Be active in class (e.g. finishing assignments on time, participating in class, etc.);
- Demonstrate commitment in class along with a positive attitude towards education, work, and peers;
- Have a high level of creativity, innovation and design skills;
- Have designed and developed high quality websites from Courses 1, 2 and 3;
- Possess good communication, presentation and time management skills;
- Successfully complete and pass Courses 1, 2 and 3 at NairoBits;
- Be willing to build a career in Web design.

D. Placement

Placement services provided by NairoBits are very comprehensive. This service is primarily designed for students who advance to Media Lab. The organization has partnered with 28 reputable web design and IT companies in Kenya for internships and employment of these graduates. While still in the program, employers from design and IT firms are invited to assess the work of Media Lab students and provide feedback on the quality of their work. Companies are then given the opportunity to identify students who will become interns within their firms. The objective of the internships is to have them evolve into full-time positions for participants. NairoBits stays up-to-date with students through feedback forms that are distributed to students who are placed in an internship.

Students who do not advance through to Media Lab receive assistance in looking for other internships, job opportunities, or in starting their own business and accessing credit through microfinance institutions. Additionally, NairoBits works with its partner CBOs in training non-Media Lab students to return to their communities to perform community service as peer reproductive health educators.

The following section describes the evaluation methodology. The evaluation included face-to-face interviews with the participants from a sample cohort. The approach to select the sample cohort is also described below.

C. SECTION III: METHODOLOGY

A. Sampling methodology

The evaluation selected to focus on a sample cohort for direct interviews, referred to as the sample follow-up cohort. The choice of the target cohort for evaluation was guided by the requirement for a post-training period of approximately six months in all countries at the time of the evaluation to account for sufficient time for placement, as well as sufficient time for the participants to apply what they had learned.

For NairoBits, 50 participants were targeted for the sample follow-up cohort to be interviewed. Cohort numbers 29, 31, and 32 were selected, with participants trained between March 2009 and June 2009. However, due to contact information changes and the challenge of reaching certain participants, not all participants were available for interviews. Cohorts 30 and 33 were therefore added to the sample follow-up cohort in an effort to meet the number of targeted interviews.

A total of 170 youth were registered to participate in the training during the timeframe noted above. Within the 170, interviews were conducted with a total of 50 participants from the program. It is important to note that the individuals that were selected for the evaluation are in fact not a structured group and the youth beneficiaries who were interviewed were selected randomly. Baseline and exit forms from the organization's entire database of participants were used to draw comparisons between the sample follow-up cohort and overall participants. A comparison of the profiles of the participants in the database and the sample follow-up cohort (see Section IV) indicates that the sample follow-up cohort is representative of all the trained youth from the NairoBits YEP program.

B. Data collections tools

Document review

The evaluation was initiated by a review of program documentation and discussions with IYF and the NairoBits management team. The review provided the evaluation team with a better understanding of the program's objectives and served to modify the sample questionnaire provided by IYF to address the specificities of each of the country programs. The key documents that were reviewed for the NairoBits YEP program include the following:

- Entra21 report;

- IYF quarterly "Africa Citizenship Project Status Reports" to Microsoft;

- NairoBits Project Proposal;

- NairoBits Project Description;

- Grant Agreement between Microsoft Community Affairs for West, East, Central Africa and Indian Ocean Islands and IYF;

- NairoBits quarterly reports to IYF.

Participant database

The program used an outcomes measurement system (OMS) in which participants were surveyed at three points as they moved through the program — at baseline, at program completion (or after finishing the main parts of the program), and approximately six months after completion of the program. IYF and NairoBits adapted both the baseline and exit surveys to specific program/country circumstances based on tested models IYF developed in its *Entra21* program in Latin America. Each survey includes the participant's unique identification number (assigned at baseline), personal and

contact information, demographic and socioeconomic data, and self-assessments of participants' abilities in life skills. Capturing this data at baseline and exit enables the program to assess changes from a participant's entry into the program to the time of program completion. The information from both surveys is captured in a participant database. A sample of the contents of the participant database was reviewed to verify data accuracy, and revealed the following:

- NairoBits did not have hard copy baseline forms for their students. Students' baseline data was immediately captured in soft copy; therefore, hard copies do not exist.

- Hard copies of the exit surveys were available for analysis and were therefore compared to the soft copies. At the time of the evaluation, there were too many discrepancies between the hard and soft copies to conduct further analysis. This includes discrepancies in names, student ID numbers, contact information, and ratings on the self-assessment portion of the database. Although the implementing partner was later able to update the information in the overall database for this evaluation, only a few aspects of the updated database were used. This includes conducting a general comparative analysis of the program population profile to the sample follow-up cohort.

- An analysis of the sample follow-up cohorts' self-assessments of life skills at baseline in comparison to their self-assessment at the time of the evaluation was not feasible due to the fact that evaluators were not able to verify baseline information prior to the writing of this report.

Participant questionnaire

The evaluation included face-to-face interviews with participants from the sample follow-up cohort from February 2 to February 6, 2010 at the NairoBits training center using an adapted version of the validated and tested survey questionnaire from the *Entra21* program. The objectives of the questionnaire were to assess the outcomes of the program in terms of employment including work, internship, voluntary work, and entrepreneurship, as well as to gauge their overall perception of the program's achievements.

The questionnaire was structured as follows:

- Socio-demographic and background information about the participant;

- Quality of life;

- Educational attainment;

- Training outcomes;

- Employment profile;

- Perception of self; and

- Evaluation of the program.

Employer questionnaire

Employers of program participants were also interviewed to gauge their perception of the program, and to assess the skills of program participants from their perspective. An employer questionnaire also based on the entra21 survey was used to this effect and addressed the following:

- General information about the employer organization;

- How the participant was recruited (interview, the role of the implementing agency, etc.);

- The performance of the program participants who had interned or were employed within the organization;

- The willingness of the employer to continue and recruit participants from the program;

- Recommendations from the employer to strengthen the program.

The purpose was mainly to collect opinions and suggestions from the employers in regards to the performance of trainees or recruits and recommendations for NairoBits to improve the training. The employer questionnaires were administered both face-to-face and via telecommunications due to time constraints. Five employers were interviewed for the NairoBits program.

Focus group

In addition to the interviews with the participants, one focus group was held to gain further insights into the effects of the program on the participants, and gather participants' general impressions on the program, and potential areas of growth. Focus group participants were selected by FocusAfrica based on their level of engagement during individual interviews. The comments and findings from the focus group are highlighted throughout the report.

Meetings with key stakeholders

The evaluation included face-to-face meetings with NairoBits to understand their experiences, perspectives, and the challenges they faced in implementing the program, as well as areas of improvement and strengths. The evaluation team also met with Microsoft Kenya to understand their assessment of the program and gather recommendations on how it can be strengthened; and to hear their views on youth employment in Kenya and Microsoft's current and potential role in improving employability of youth in Kenya.

C. Data capture and analysis approach

The data was captured using a commercial online database. The data capture phase included three levels of quality control: (1) a review of the completed questionnaires prior to data entry; (2) a cross check of the hardcopies with the data entered in the database before transferring the data onto Excel; and finally, (3) an analysis of any other data inconsistency using a statistical analysis software after the data was transferred from the data capture software. The data analysis included two types of statistical analysis - univariate and bivariate descriptive analysis methods - as well as an analysis of correlations between two or more variables.

The sections below present the results of the program based on the sample follow-up cohort, including descriptions of the profile of the sample follow-up cohort, the outcomes of the training, an assessment of the implementation of the program, and recommendations.

D. SECTION VI: FINDINGS ON THE NAIROBITS YOUTH EMPOWERMENT PROGRAM

The following section provides in-depth analysis of the NairoBits participants who participated in the training program. This analysis is of 1,224 participants using the baseline and exit surveys, which were synthesized into a comprehensive database. The findings on the 1,224 students are followed by an analysis of the 50 participants in the sample follow-up cohort based on their responses on the evaluation questionnaire. Of the 50 participants interviewed, 94% (47 respondents) completed the program while 6% (3 respondents) dropped out before completing the training. The results are all based on the specific number of respondents (n), which varies across tables and graphics. Discussions held with employers, stakeholders, and the focus group will be presented throughout the report.

A. Overall profile of program participants

Socio-demographic characteristics of the program population

An analysis of NairoBits' entire database was made to determine the general characteristics of program participants. The table below is an outline of participants' socio-demographic profile.

Table 1: Socio-demographic distribution of program population

Age group	n	%
16-24	1,205	98.69
25-30	14	1.15
31-35	2	0.16
Total	*1,221*	*100.00*
Gender	**n**	**%**
Female	623	51.45
Male	588	48.55
Total	*1,211*	*100.00*
Social Status	**n**	**%**
Single	1,220	99.67
Married	4	0.32
Total	*1,224*	*100.00*
Area of residence	**n**	**%**
Rural	6	0.49
Suburban	1,154	94.59
Urban	60	4.93
Total	*1,220*	*100.00*

As the table indicates, the socio-demographic make-up of the participants trained in NairoBits is as follows:

- 98.69% of the program population are between the ages of 16 and 24 while 1.15% are between the ages of 25 and 30, and 0.16% are between the ages of 31 and 35.

- The program population's gender balance is composed of 51.45% female and 48.55% male.

- The social status of participants shows that 99.67% are single while 0.32% are married.

- 94.59% of program participants live in suburban areas while 4.93% live in urban areas, and 0.49% live in rural areas.

The general characteristics of the program' participants reveal that it is predominantly composed of youth between the ages of 16 and 24 who live in suburban areas, which are mainly informal settlements. These characteristics fall in line with NairoBits' target base.

Educational attainment

One of the main criteria to join the program pertains to the level of English language and literacy skills of participants. Table 2 provides a breakdown of participants' educational attainment using the information provided in the NairoBits main database.

Table 2: Educational level of program participants

Highest level of education	n	%
Less than secondary school	14	1.15
Secondary school completed	1,199	98.36
University/tertiary institute completed	6	0.49
Total	*1,219*	*100.00*

The educational attainment of participants in the program reveals that 98.36% completed secondary school while 0.49% completed university or other tertiary studies, and 1.15% had not completed secondary school. Those who had not completed secondary school were considered for the program on a case-by-case basis. These characteristics are in line with NairoBits' selection criteria.

The work status of participants at baseline was analyzed and found that 35.87% of program participants were employed at the beginning of their training (at baseline). Table 3 below outlines the employment status of program participants. Though work status is not a part of the selection criteria, it is important to note that focus group participants and respondents in the sample follow-up cohort noted that most of their peers held jobs primarily to pay for their transportation to and from the training.

Table 3: Employment status of participants at baseline

Employment status	n	%
Currently employed	438	35.87
Not employed	783	64.13
Total	*1,221*	*100.00*

An analysis was conducted on the percentage of students who completed the various courses at NairoBits. Table 4 outlines this information.

Table 4: Breakdown of courses completed by program population

Courses completed	n	%
Course1 only	377	31.42
Courses 1 & 2 only	438	36.50
Courses 1 & 2 & 3 only	235	19.58
All four ICT courses	150	12.50
Total	*1,200*	*100.00*

As indicated by the table, 12.50% of program participants completed all four ICT courses including Media Lab. As noted earlier, the NairoBits program is designed to provide advanced training in media design to a limited number of youth. The analysis found that 31.42% completed Course 1 only, 36.50%

advanced up to Course 2, and 19.58% advanced through to Course 3. In addition to this, it was found that 16.50% (202 participants) completed the WSWM program.

B. Analysis of program's outcome on participants

Participants completed baseline and exit surveys to assess their perceptions of themselves in specific life skills. For each program implemented by IYF and its partners (local nongovernmental organizations), a set of life skills are selected for the beneficiaries based on locally identified needs. Taking into consideration the subjective nature of self-assessments, the challenges associated with measuring life skill changes include a lack of a control group which would provide for a comparative analysis along with a lack of measured behavioral changes of program participants. The self-assessments were, therefore, corroborated through employer interviews, participant anecdotes, and conversations with the NairoBits administration. This increased the validity of the life skills data collected through the Program.

Graph 1 below presents the outcomes and changes in participants' perceptions of their life skills based on the baseline and exit surveys.

Graph 1: Evaluation of life skills at baseline (before) and at exit (after the program) of the overall program population
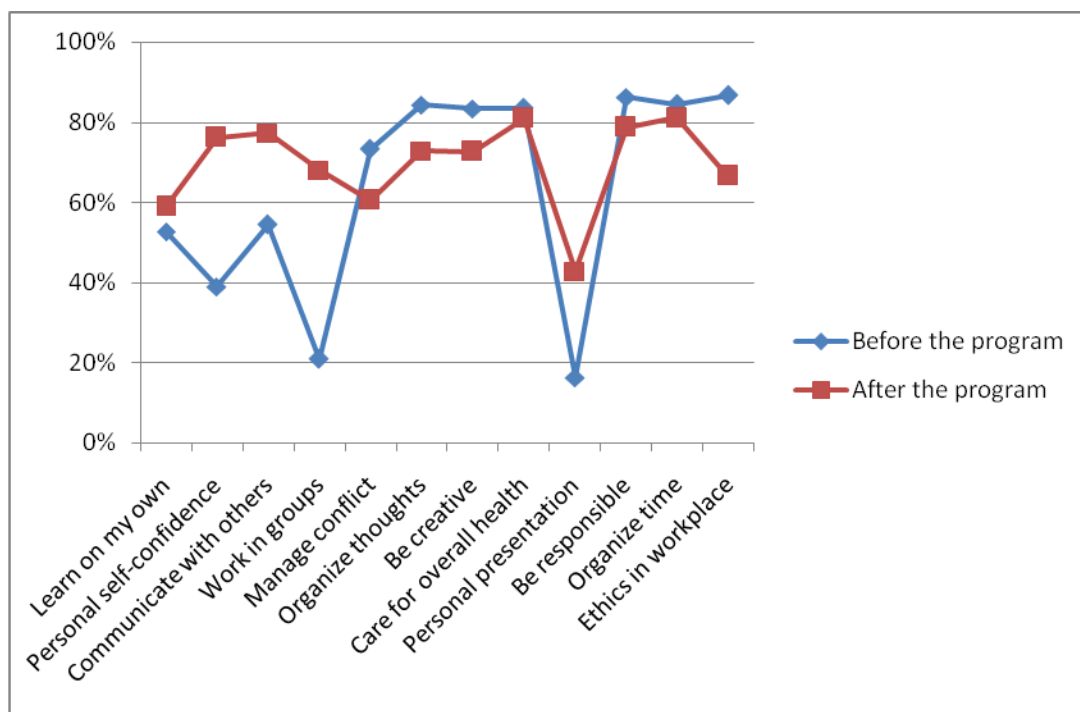
NB: The percentages on the Y-axis are the proportion of the evaluations that are rated as excellent and very good.

As the graph indicates, participants' perception of themselves in life skills has increased in five attributes, particularly in personal self confidence, communicating with others, and working in groups. There has, in fact, been a significant change in participants' perception of their life skills. Table 5 below outlines the statistical changes in each of the life skills attributes before (baseline survey) and after the program (exit survey).

Table 5: Statistical analysis of program population life skills assessments at baseline and at exit

Life skills	Probability
Learn on my own	0,0026*
Personal self-confidence	0.0000*

Life skills	Probability
Communicate with others	0.0000*
Work in groups	0.0000*
Manage conflict	0.0000*
Organize thoughts	0.0000*
Be creative	0.0000*
Care for overall health	0.0065*
Personal presentation	0.0000*
Be responsible	0.0000*
Organize time	0.0006*
Ethics in workplace	0.0000*

Note: Statistical analysis present if p≤ 0.05 based on a marginal error of 5%.

As indicated in the table, there have been positive significant statistical changes in five of the life skills attributes, specifically in participants' ability to learn on their own, ability to communicate with others, ability to organize time, and personal presentation. Although there have been positive changes to participants' self-assessments, the analysis also indicates that there has also been a decline in participants' perceptions of some of their life skills, particularly in their ability to manage conflict, organize their thoughts, be creative, and care for their overall health. Possible reasons for the decline may include participants having gained a better understanding of these attributes *after* the program and their abilities in relation to these areas.

C. Findings regarding the sample follow-up cohort

The interviews conducted with the 50 participants revealed a number of observations on how the program was able to affect students. Focus group discussions also allowed participants to openly express themselves and provide insights on how they viewed the implementation of the program, the courses, placement services, and overall impressions of the program. Employers also contributed to the analysis in order to broaden the perceptions on the program and gather objective suggestions to render the training even more responsive to labor market demands. This section will mainly focus on the following points:

- Socio-demographic profile of the interviewed participants in the sample follow-up cohorts;

- Placement analysis;

- Participants' activities since the training including employment status;

- Program's outcome for participants;

- Quality of training;

- Quality of life

- Participants' perception of their future; and

- Employers' feedback on the program.

Socio-demographic profile of the sample follow-up cohort

As stated above, the evaluation was conducted on cohorts 29 to 33 from which 50 participants were interviewed by FocusAfrica one-on-one, of which 47 completed the entire training program. This indicates a dropout rate of 6% for the sample follow-up cohort. The following table outlines the socio-demographic characteristics of the 50 interviewed participants who were trained by NairoBits.

Table 6: Socio-demographic description of participants in the sample follow-up cohort

Age group	Men (%)	Women (%)	Aggregate (%)
16-24	100	100	100
25-30	0	0	0
31-35	0	0	0
Total	*100.0*	*100.0*	*100.0*
Average of age	**21**	**21**	**21**
Social Status	**Men (%)**	**Women (%)**	**Aggregate (%)**
Single	100.0	95.65	98.0
Married	0.0	4.35	2.0
Total	*100.0*	*100.0*	*100.0*
Area of residence		**Percent**	
Urban		29.79	
Suburban		63.83	
Rural		6.38	
Total		*100.00*	

The social-demographic characteristics of the sample follow-up cohort reveal that 100% of the participants were between the ages of 16 and 24 at the time of the evaluation. Compared to the age characteristics outlined in Table 1 for the population of participants in the database (98% between the ages of 16-24), **the ages of the participants in the sample follow-up cohort are representative of the program's population**. As the table also indicates, 98% of the sample follow-up cohort is single while 2% are classified as married. These characteristic are also similar to the social status of the program population outlined in Table 1, which shows that 99.67% of participants are single and 0.32% are married. Furthermore, 63.83% of the respondents lived in suburban areas while 29.79% lived in urban areas. Again, this is similar to the area of residence of the program population outlined in Table 1 in which the majority of participants (94.59%) live in suburban areas, which are mainly informal settlements.

Acceptance into the NairoBits program follows a number of criteria to ensure that participants have the requisite background to grasp the training. This includes having completed secondary education and being able to communicate in English. Table 7 below provides a breakdown of the educational attainment of the participants in the sample follow-up cohort.

Table 7: Educational level of participants in the sample follow-up cohort

Highest level of education	Male (%)	Female (%)	Aggregate (%)
Less than secondary school	3.85	0.00	2.13
Secondary school completed	88.46	85.71	87.23
Some university/tertiary institute studies	7.69	14.29	10.64
University/tertiary education completed	0.00	0.00	0.00
Total	*100.00*	*100.00*	*100.00*

The analysis of the sample follow-up cohort reveals that:

- 2.13**%** of the participants had less than secondary school. This is similar to the program population of which 1.15% had not completed secondary school;

- The aggregate percentage of participants who completed secondary school (87.23%) is relatively close to the program population of which 98.36% completed secondary school;

- More female participants had completed some university or tertiary studies compared to male participants, 14.29% and 7.69**%** respectively. This particular analysis is not comparable to the program population due to the fact that this information was not provided in the database.

Participants in the sample follow-up cohort who had some university training were asked why they participated in the NairoBits YEP program. They responded that they chose the program because it offered them specialized ICT training. Other participants stated they came to the program because of the low cost. **Overall, the information from this data indicates that the sample is representative of the entire program population.**

Apart from YEP and formal education, 21.28% of the participants in the sample follow-up cohort had received certificates from other training institutions or programs. The types of certificates participants received include HIV/AIDS certificates, Boys Scouts, First Aid, and Leadership certificates.

During the interviews, participants were also asked to provide information on their economic conditions including household income and their household status. Table 8 below outlines the economic conditions of participants in the sample follow-up cohort.

Table 8: Household status of participants in the sample follow-up cohort

Household status	Male (%)	Female (%)	Aggregate (%)
Head of house or spouse	11.1	13.0	12.0
Child	70.4	69.6	70.0
Extended family	3.7	8.7	6.0
Other	14.8	8.7	12.0
Total	*100.0*	*100.0*	*100.0*

As the table demonstrates, only 12**%** of the participants are either the head of their household or spouse, with more female participants in this classification than men, 13% to 11.1% respectively. Also, **70% of the participants in the sample follow-up cohort classify themselves as a child within the household**. The data also shows that 6**%** of the interviewed participants classify themselves as extended family, while 12**%** classify themselves under 'other'. As the table shows, 14.8% of male participants are classified under 'other' compared to 8.7% of females.

Also, 70% of the participants are classified under 'child' within the household, which is reflective of the average age of participants - 21 years old - an age at which most youth in Kenya are found to be living with their parents or guardians. In regards to the overall program population, it is not possible to make comparisons to the sample follow-up cohort due to the fact that this information was not available in the database.

In addition to the age and household status, participants were asked to provide their household income along with the number of people living in their house. Table 9 provides a breakdown of this information.

Table 9: Monthly household income of participants in the sample follow-up cohort

Average monthly income in Kenyan Shillings	%
2,000 – 10,000	18.00
10,001 – 20,000	26.00
20,001 – 35,000	56.00
Total	*100.00*

Number of people in household	%
[0 to 4]	40.43
[5 to 9]	57.45
[10 or more]	2.13
Total	*100.00*

The monthly income of the participants is important to be able to understand their economic situation. As Table 4 demonstrates, 18% of the households in the sample follow-up cohort had a monthly income between 2,000 and 10,000 Kenyan Shillings[15] at the time of the evaluation, 26% earned between 10,001 and 20,000 Kenyan Shillings per month, while 56% of the participant households had a household income between 20,001 Kenyan Shillings and 35,000 Kenyan Shillings. Additionally, over 57% of the participants in the sample follow-up had between 5 and 9 people in their households. Juxtaposed to the monthly household income, the number of people in a household gives an indication of the relative economic conditions of participants. With a household income of, for example, 35,000 Kenyan Shillings per month providing for nine people within a household, this gives an average of 3,889 Kenyan Shillings per person. The minimum wage in Kenya, according to the Ministry of Labor, is 3,043 Kenyan Shillings (approximately USD 39.70) for an unskilled employee[16], which, according to the Ministry, is the minimum amount needed for each person to live sufficiently in Nairobi. As the data indicates and given the example, households within the sample follow-up cohort are earning just above the minimum wage in Nairobi.

Placement analysis

Under the YEP program, placement is defined according to the target placement outcomes set by the Microsoft-IYF Youth Empowerment Program agreement at the outset of the program. Placement includes participation in an internship, a job, self-employment (including enterprise creation), and voluntary community service, as the program sought to empower youth both in employability and employment outcomes as well as in youth engagement / productive activity following training. In addition, the YEP program sought to encourage further education and training as appropriate (based on youth needs and interests), so the evaluation has also assessed whether youth have continued their education or pursued further training following the program. The report therefore provides information both on these general placement outcomes and on specific placement outcomes, including detailed information on employment and self-employment outcomes.

Interviews with NairoBits participants focused on five cohorts as per the sampling methodology described in previous sections. The analysis below highlights overall placement along with the types of placement of participants.

Participant activities since the training

Participants were asked to describe their activities since the end of the program. Table 10 first gives a breakdown of the percentage of participants who participated in an internship, worked (as an employee/wage-earner or self-employed), and/or performed community service, since the end of training, while Table 11 outlines the types of activities participants were engaged in.

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[15] Equivalent to USD $26.09 to 130.36. Exchange rate is 1 USD = 76.6500 Kenyan Shillings.
[16] Government of Kenya Ministry of Labor 2009 Regulation Wage Order, minimum wage for unskilled workers in Nairobi. Minimum wage for skilled workers in Kenya is categorized by city, sector of activity, and occupation. Looking at the minimum wage for a junior clerk, for example, it is 7,931 Kenyan Shillings per month. However, for a telephone clerk or receptionist, it is over 9,000 Kenyan Shillings per month.

Table 10: Placement rate of participants in the sample follow-up cohort

Engaged in an activity after the training	Male (%)	Female (%)	n	Aggregate (%)
Yes	88.46	66.67	37	78.72
No	11.54	33.33	10	21.28
Total	*100.00*	*100.00*	*47*	*100.00*

As shown in the table, the program achieved a placement rate of 78.72%. Of the 26 men interviewed, 88.46% (23 respondents) were engaged in an activity after the training whereas 66.67% (14 respondents) of the women were engaged in an activity. This is a clear indication that NairoBits met its target objective of placing at least 62% of its beneficiaries in jobs, internships, self-employment, or community services activities. Participants who were engaged in an activity stated they were either involved in an internship, worked in a job or independently, or performed community service, or, in many cases, a combination of the activities noted. In addition to these various activities, it must be noted that 10.63% of the participants from the sample follow-up cohort (5 respondents) continued with their studies or participated in another training program outside of NairoBits, including two respondents who worked at the same time. In total, 82.98% of the respondents were employed, self-employed, participated in an internship or community service, or continued their studies after the training,

Table 11: Activities since the training for participants in the sample follow-up cohort

Activities since completing program	Male (n)	Male (%)	Female (n)	Female (%)	Aggregate (%)
Participated in an internship	15	65.22	4	25.00	48.72
Worked in a job	11	47.83	9	62.50	53.85
Volunteered/performed community service activities	8	34.78	5	37.50	35.90
Worked independently	5	21.74	0	0.00	12.82

It must be noted that students did not generally engage in one single activity after the training, therefore the table does not equal to 100%. For example, some participants worked in a job while volunteering in their communities, or a range of other activities.

As the Table 11 notes:

- 48.72% of the participants or 19 in the sample follow-up cohort participated in an internship – of this number, 15 were men and 4 were women;

- 53.85% of the participants or 20 in the sample follow-up cohort worked in a job – of this number 11 were men and 9 were women;

- 35.90% of the participants in the sample follow-up cohort volunteered in their communities. As noted earlier, participants are recruited through community-based organizations. Participants who volunteered after the training stated they went back to the CBOs, which had connected them with NairoBits;

- 12.82% of the participants worked independently, all of whom were male participants.

As the table demonstrates, participants engaged more in working in a job and interning compared to other activities. Participants also noted that they volunteered with their CBOs primarily to stay active and impart the skills they learned at NairoBits to other youth in their communities, a requirement that is in fact part of their original agreement with NairoBits to be able to participate in the program.

Use of placement services

The placement services provided by NairoBits are comprehensive due to the organization's partnerships with a number of companies in order to provide internships to participants. Table 12 below gives a breakdown of the percentage of participants in the sample follow-up cohort who used the placement services offered by NairoBits.

Table 12: Use of placement services by participants in the sample follow-up cohort

Use of placement services	Male (%)	Female (%)	*n*	Aggregate (%)
Yes	69.23	38.10	26	55.32
No	30.77	61.90	21	44.68
Total	*100.00*	*100.00*	*47*	*100.00*

As the table indicates, 55.32% of the participants in the sample follow-up cohort used the placement services offered by NairoBits, while 44.68% did not. Of those who did use the placement services, 68% rated them as excellent while 32% rated them as good. Of those who *did not* use the placement services, 54.55% stated that they did not meet the requirements to access those services. The remaining 45.45% of the participants in the sample follow-up cohort who did not use the services stated that they did not use them because they either went on to another program or school, did not come back to the Center, or were offered a job through their own efforts before being able to use the services.

Further analysis reveals that the use of placement services is reserved primarily for those who advanced through to the Media Lab module. Table 13 outlines the percentage of participants who completed all four modules of the training (Courses 1, 2, 3, and Media Lab) and benefited from the placement services compared to those who completed all four modules and did not use placement services.

Table 13: Comparisons of the use of placement services and courses completed for participants in the sample follow-up cohort

Use of placement services	Did you complete all ICT courses including Media Lab?	
	Yes	No
Yes	82.14	10.53
No	17.86	89.47
Total	*100.00*	*100.00*

As the table indicates, there is a significant disparity in the use of placement services by those who had completed all courses and those who had not. In fact, over 82% of the participants who completed all four courses used the placement services compared to only 10% of participants who did not complete all of the ICT courses. Also, 89.47% of the participants in the sample follow-up cohort who *did not* complete the four courses did not use the placement services. The placement services appeared to have primarily targeted Media Lab graduates.

Employment analysis

Participants were also asked to note their current work status at the time of the follow-up evaluation. Table 14 below outlines the current work status of the sample follow-up cohort.

Table 14: Work status at the time of the evaluation of participants in the sample follow-up cohort

Current work status	Male (%)	Female (%)	Aggregate (n)	Aggregate (%)
Currently employed	73.08	52.38	31	65.95
Not working	26.92	47.62	16	34.05
Total	*100.00*	*100.00*	*47*	*100.00*

As the table shows, 65.95% of all participants in the sample follow-up cohort were working at the time of the evaluation while 34.05% were not working. Additionally, of the male respondents interviewed 73.08% were currently employed while 52.38% of the female respondents were currently employed.

This shows that there has been a positive outcome with regards to the employability of youth, despite the fact that these outcomes have been stronger among Media Lab graduates. The analysis shows that though there is only a slight statistical correlation[17] between having advanced through to Media Lab versus *not* completing all four ICT courses and employment status, the percentage of employed participants who completed all four ICT courses is higher than nonworking participants who did not complete Media Lab. Table 15 below provides a more detailed breakdown of participants who have completed the ICT courses compared to those who did not and their employment status.

Table 15: Comparison between work status at the time of the evaluation and completion of all four ICT courses for participants in the sample follow-up cohort

Completion of all four ICT courses		
Work status	Yes	No
Currently employed	75.00	47.37
Not working	25.00	52.63
Total	*100.00*	*100.00*

As the table demonstrates, 75% of the participants in the sample follow-up cohort who completed the Media Lab were employed compared to only 47.37% of participants who did not complete all four courses but were working. Although the entrepreneurship courses are designed to provide students who do not move on to the subsequent ICT courses with skills to start their own enterprise, opportunities for these students seem to be more limited. More specifically:

- Of the 52.63% participants in the sample follow-up cohort who are not employed and did not complete all four ICT courses, only 5% (one respondent) started their own business.

- Placement opportunities are concentrated on students who graduate from Media Lab, as 75% of these graduates are employed compared with 47.37% of those who do not go through to Media Lab.

- Unlike Media Lab students, these participants have not been partnered with companies for internships or microcredit banks for financing.

Participants who were not employed at the time of the follow-up evaluation were asked by evaluators the reasons why they were not employed. Table 16 shows the responses to this question.

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[17] Note: Statistical analysis reveals that the correlation between having completed all ICT courses and employment to be P=.053 given a 10 percent margin of error.

Table 16: Reasons for not working at the time of the evaluation for participants in the sample follow-up cohort

Reasons why not currently working	n	%
There are no openings in his/her occupational field	1	5.88
Employers are asking for more experience or skills than he/she has	12	76.47
Submitted applications to various employer and awaiting responses	2	11.76
Currently in school	1	5.88
Total	*16*	*100.00*

As the table shows:

- 76.47% (12 respondents) of program participants stated employers are asking for more skills or experience the applicants had. These applicants noted that in their opinion, had they advanced to Media Lab, they would have had the necessary skills employers wanted.

- Two participants noted that they had submitted applications to various employers and were awaiting outcomes.

- One of the applicants was unable to find a job that interested them.

- One of the participants interviewed was in school.

"I was fortunate enough to find a job after the training program and now earn enough money to support myself and my family. I am able to provide for my father and brothers, and it is all because of NairoBits."

In regards to the skills and experience required, participants noted that employers were looking for more technical skills in ICT. Additionally, it was found that of the 76.47% participants who stated employers were asking for more experience or skills than they had, 77% (9 respondents) were participants who did not complete all four ICT courses (through to Media Lab). These respondents also noted that although they had acquired basic skills in ICT, these skills have not been enough to secure a job. As such, they would like more training in this area.

Although participants are cognizant of the need for experience and skills to secure employment, there is an underlying premise as to why placement has been difficult for participants, particularly when viewed in the sphere of the challenges currently facing Kenyan youth today. These challenges include:

- ***High unemployment rate for youth between the ages of 18 and 35 years of age –*** statistically, the unemployment rate is much higher for Kenyan youth as compared to the rest of the population. With over 2.5 million youth classified as unemployed and with an additional 400,000 coming from training institutions around the country not being absorbed into the labor market, participants are faced with the daunting task of competing with their peers who in many cases have the technical skills but no job opportunities;

- ***Lack of entrepreneurial drive –*** although the training program implemented by NairoBits aimed to enable certain students to start their own businesses, it seems that the majority of respondents in the sample follow-up cohort have not started their own businesses mainly due to the fact that not all students *want* to start their own business. Many of the students noted they were not entrepreneurs and did not want to be entrepreneurs;

- ***Lack of opportunities created through the organization –*** as noted by the focus group, students who do not advance to Media Lab do not have the same opportunities for internships or employment. This is to say that these students have not been able to follow through on their business ideas or plans because, as related by the focus group and discussions with interviewed

participants, they were not put in contact with financial institutions that would be able to help them with their business ventures nor was there a proactive effort made to place these students in internships with companies. Focus group participants noted that there should be additional effort to create opportunities for these students by creating partnerships with organizations that can help them.

Working participants

Within the percentage of participants working (65.95% of respondents) at the time of the follow-up evaluation, 76.67% work as employees or wage earners while 16.67% are currently working as interns. Table 17 provides a general description of working participants' employment status classified by gender.

Table 17: Specific activity at the time of the evaluation for participants in the sample follow-up cohort

Activity at the time of the evaluation	Male (%)	Female (%)	Aggregate (%)
Self employed or work independently	10.52	0.00	6.45
An employee or wage-earner	73.68	72.73	73.55
Intern	15.79	18.18	16.67
Domestic worker	0.00	9.09	3.33
Total	*100.00*	*100.00*	*100.00*
Number of respondents	19	11	31

The analysis shows that the two working participants in the sample follow-up cohort who are self-employed or work independently are men. The analysis also reveals that:

- 73.55% or 23 of the participants are employees or wage earners.
- 16.67% or five are currently working as interns.
- One is a female domestic worker.

Within the 23 who are employees, eight stated they had permanent staff positions while 11 stated they worked in temporary and fixed duration positions. The remaining four worked as interns. This figure is also aligned with the realities within Kenya's employment market. Only 1.2 million people are employed in the formal sector[18], whereas 6.4 million people are primarily employed in the informal sector. Considering the employment trends in Kenya, the number of participants working as temporary or occasional employment is in context.

Along with job placement of participants, the evaluation also analyzed the quality of jobs participants were able to obtain after the training. The quality of jobs is measured by participants' salaries along with the types of employee benefits received by participants. Table 18 gives a breakdown of participants' salary ranges.

Table 18: Salaries of participants in the sample follow-up cohort

Salaries of participants	n	%
2,000 – 8,000	13	44.83
8,001 – 15,000	11	37.93
15,001 – 25,000	5	17.24
Total	*29*	*100.00*
Average salary		***10,586 Ksh***

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[18] US Department of State, Kenya Overview on Economy.

As the table indicates, within the 65.95% or 31 participants in the sample follow-up cohort who were employed at the time of the evaluation, 44.83% or 14 of them earned between 2,000 Kenyan Shillings and 8,000 Kenyan Shillings per month[19]; 37.93% or 12 participants earned between 8,001 Kenyan Shillings and 15,000 Kenyan Shillings per month; and 17.24 % or five earn between 15,001 Kenyan Shillings and 25,000 Kenyan Shillings per month. The average monthly salary of participants is 10,586 Kenyan Shillings. Again, these salaries are individual and *not* household monthly incomes. It is important to note that these incomes reveal that participants were on average earning more than three times the national minimum wage (3,043 Kenyan Shillings); and indicates that the program may have helped improve the living conditions of its beneficiaries.

Despite the increased earnings of program participants, a concern that was bought up by both interviewed participants and the focus group revolves around salaries, particularly for interns. Participants noted that the salaries of NairoBits interns in comparison to interns from local universities and other training programs are in fact *lower*. Focus group participants, in response to whether this was in fact true or not, stated that employers tend to pay NairoBits students less than their counterparts from other programs or training centers because NairoBits interns are from informal settlements. These participants stressed the need for the Center to work with their employer partners to ensure that equal pay is across the board for all participants despite their economic or living situation.

Along with salaries, the types of employee benefits received by participants are another indication of the quality of jobs they hold. Table 19 outlines the types of benefits received by participants who work.

Table 19: Employment benefits or bonuses of participants in the sample follow-up cohort

Benefits or bonuses	*n*	%
Do not receive benefits or bonuses	22	73.33
Vacation	3	10.00
Health insurance	2	6.67
Year-end bonus	2	6.67
Performance bonus	2	6.67
Others	1	3.33
Number of respondents		*29*

Note: Multiple choice question with more than one response, therefore, responses do not equal to total number of respondents.

As shown in the table, 73.33% of the participants (22 participants) did not receive any benefits or bonuses from their employers. In contrast:

- 10% of employed participants (3 participants) received vacation benefits.

- 6.67% of the participants (2 participants) received health insurance benefits, year-end bonuses, and performance bonuses.

- 3.33% or one participant received another form of benefit in the form of transportation expenses and housing.

Participants who received employee benefits fall under both part-time and full-time employment. Although salaries and employee benefits were used as a measure for rating the quality of jobs, interviewed participants were also asked whether they were satisfied with their current employment. Table 20 shows the responses to this question.

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[19] Equivalent to USD 26.09 and USD 104.37. Exchange rate is 1 USD = 76.6500 Kenyan Shillings

Table 20: Job satisfaction levels of participants in the sample follow-up cohort

Are you satisfied with your current position?	*n*	%
Yes	19	63.33
No	11	36.67
Total	30	100.00

The evaluation revealed that 63.33% of the participants who are employed stated they are satisfied with their current position. These participants stated that the reasons why they are satisfied with their jobs are because their salaries were good in comparison to their counterparts. Additionally, participants who were satisfied with their position noted that they were able to apply the skills that they had learned from NairoBits. The 36.67% of participants who responded that they were not satisfied with their current position stated this was primarily due to their pay, which did not meet their personal needs.

As noted in Table 12 above, 6.45% of currently employed participants (2 respondents) are self-employed. Each participant started their business by receiving training on the topic from NairoBits and by purchasing supplies. Additionally:

- One of the participants started his business prior to commencing training at NairoBits. The other started his business approximately five months after their training at the Center;

- Both of the participants who started their enterprise are in the services sector, both of which are ICT-related.

These businesses have on average one employee and are not registered with the Chamber of Commerce. Entrepreneurs also did not apply for loans for their businesses.

An analysis of life skills self-assessments of participants that were employed and participants that were not employed shows that there are variances between employed and non-employed participants. The analysis reveals that nonworking participants tended to rate themselves lower in their life skills assessment than working participants. Graph 2 outlines the assessment levels of these two groups.

Graph 2: Comparison of life skills assessment between working and non-working participants in sample follow-up cohort
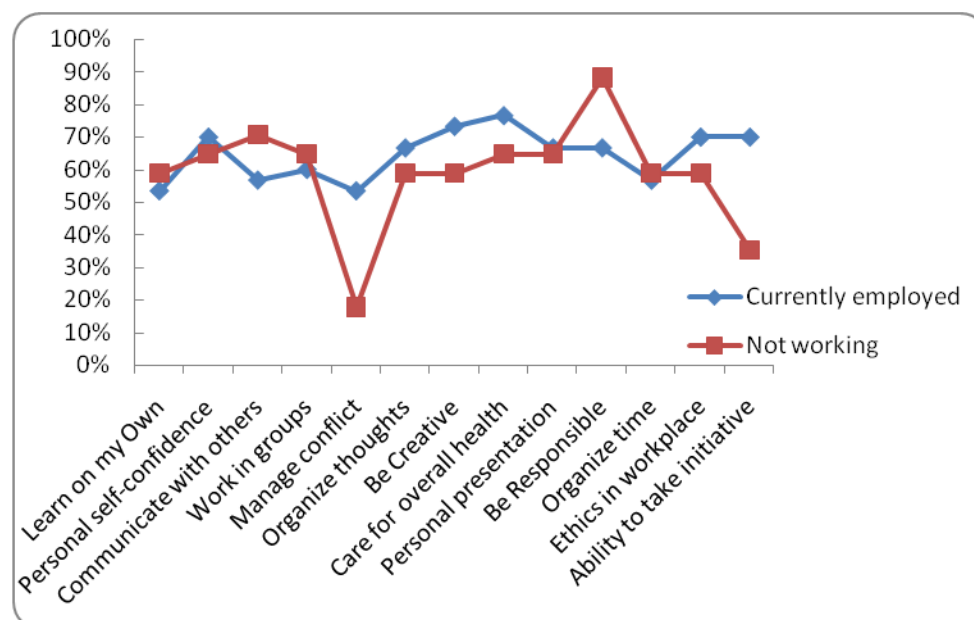
Note: The percentages on the y-axis are the proportion of the evaluations that are rated as excellent and very good.

As predicted, working participants assessed themselves higher in seven life skill attributes compared to nonworking participants, while non-working participant's assessed themselves higher in three attributes. These two groups rated their skills marginally differently in their ability to organize their time and personal presentation.

Despite differences in the assessment levels of these two groups, there is only one statistical correlation found between non-working and working participants. Table 21 below outlines the correlation of the life skills assessment of working and non-working participants. As the table notes, there is a correlation between being employed or not being employed, and the ability to take initiative.

Table 21: Correlation of life skills self-assessment and working and non-working participants in sample follow-up cohort

Statistical analysis of life skills assessment between working and non-working participants	Probability*
Learn on my own	0.716
Personal self confidence	0.708
Communicate with others	0.345
Work in groups	0.750
Manage conflict	[20]-
Organize thoughts	0.591
Be Creative	0.305
Care for overall health	0.378
Personal presentation	0.892
Be responsible	-
Organize time	0.886
Ethics in workplace	0.437
Ability to take initiative	0.021*

Note: Statistical analysis present if p≤ 0.05 based on a marginal error of 5%.

Assessment of the outcomes of the program

The YEP program implemented by NairoBits was designed to equip participants with skills that would increase their employability in the labor market. These skills also include soft skills such as communicating with others, personal confidence, and time management. Participants were asked to rate themselves in regards to various life skills during the evaluation process. Graph 3 outlines the entire sample follow-up cohorts' overall perception of themselves during the evaluation.

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[20] The modalities of these variables are not sufficiently represented to complete a statistical analysis between working and nonworking participants' ability to manage conflict and ability to be responsible. In order for this test to be effective, there must be a minimum set of conditions met including the overall number and size of each variable. The proportion of working participants who rated themselves excellent or very good far exceeded the number of nonworking participants who rated themselves excellent or very good in these attributes (16 participants compared to 3 participants, for example, in ability to manage conflict).

Graphic 3: Life skills self evaluation of sample follow-up cohort during evaluation
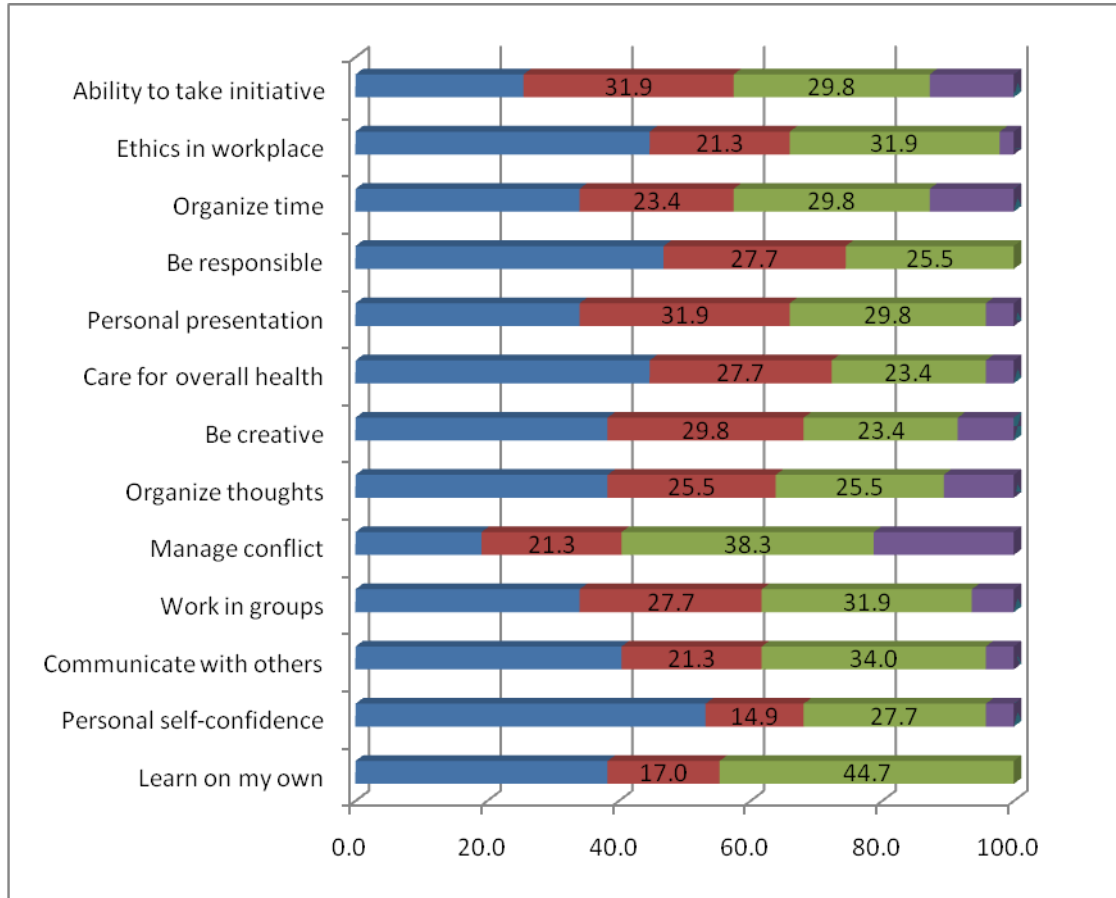
Note: The percentages on the X-axis are the proportion of the evaluations that are rated as excellent or very good.

An analysis of this graph shows that at the time of the evaluation, at least 93% of the participants from the sample follow-up cohort rated themselves good or higher in 10 out of the 13 attributes listed above. Additionally:

- All or 100% of interviewed participants rated themselves good or higher in their ability to learn on their own. All participants also rated themselves good or higher in their capacity to be responsible. None of the interviewed participants gave themselves a 'poor' rating on any of the listed attributes.

- 53.2% of the interviewed participants rated their personal self-confidence as excellent, while only 19.1% rated their ability to manage conflict as excellent.

- 72.3% of the interviewed participants rated their ability to care for their overall health as excellent or very good. This, in effect, is due to NairoBits' focus on health in its life skills curriculum along with incorporating the 'World Starts With Me' program. This opinion was also stressed by the focus group participants who noted that the life skills training heavily emphasized reproductive health.

The results of this graph also demonstrate that the youth's perception of themselves in regards to life skills is strong, particularly for self-confidence and motivation. This motivation is evident in the anecdotes that were given during the interviews along with those provided by focus group participants.

Focus group participants stated that the life skills courses were in fact the best and most important in the program. These participants also noted that they would like to see the life skills training extended because the courses helped them increase their self-esteem, gave them courage to tackle the day-to-day issues in life, and most importantly for them, gave them the opportunity to speak with each other openly about the various problems they face. Participants stated that having an open platform for discussions allowed them to learn from each other and understand that they were not alone in the problems they face.

In addition to the general assessment of life skills of interviewed participants, an assessment was made in regards to gender and life skills. The analysis reveals that women generally assess themselves higher than men. Graph 4 shows the life skills assessment by gender.

Graph 4: Comparison of male and female life skills self-evaluation in sample follow-up cohort
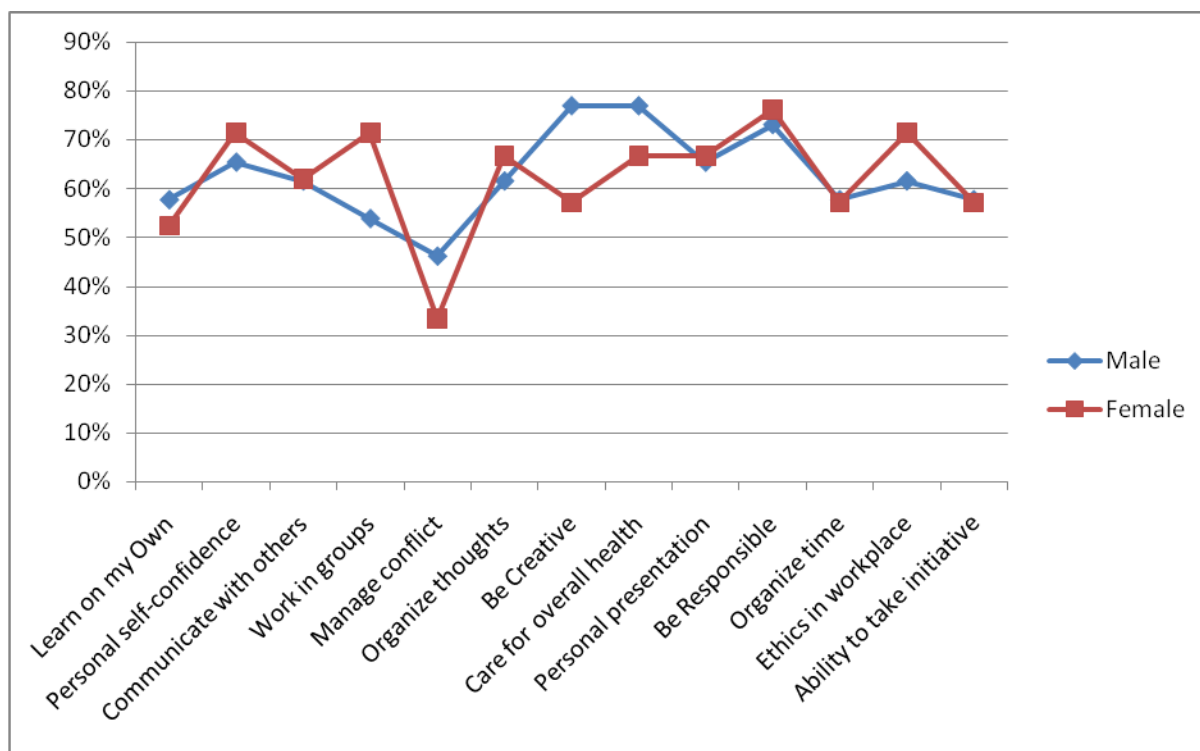
Note: The percentages on the y-axis are the proportion of the evaluations that are rated as excellent or very good.

As the graph demonstrates, women rated themselves higher in five attributes while men rated themselves higher in three attributes. Coincidentally, the two groups rated themselves equally in their ability to work with others, personal presentation, organizing their time, and their ability to take initiative. Focus group participants, who represented equal numbers of males and females, noted there are no differences, in their view, between the sexes. Rather, for them, NairoBits boosts people's morale and does not distinguish between men and women.

Effects of the life skills training on employment prospects

Further evidence of the program's effects on participants is demonstrated in interviewees' responses on whether they personally believe that the life skills training has had an effect on their *employment prospects*. Graph 5 provides the results of this question, to which there were 46 respondents.

Graph 5: Life skills training impact on employment prospects of participants in sample follow-up cohort
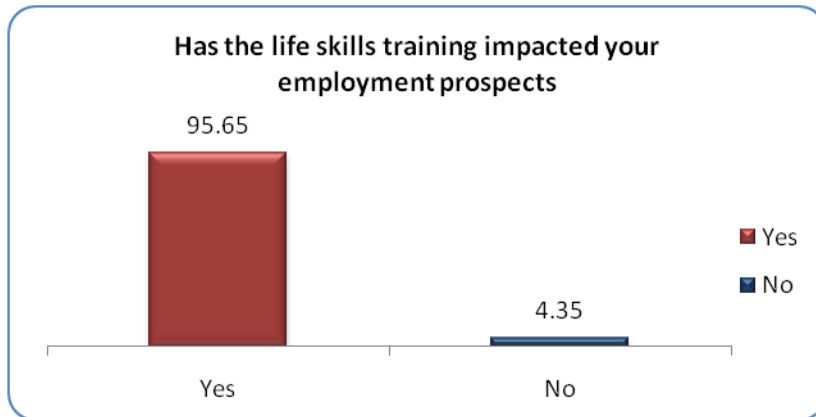
As demonstrated by the graph, 95.65% of the interviewed participants believed that the life skills training had a positive outcome relative to their employment prospects, while 4.35% of participants did not believe their employment prospects were affected by the life skills training. Those who stated that they were not affected by the life skills training stated that they were already familiar with many of the topics contained in the training modules.

The 95.65% interviewed participants whose employment prospects were affected by the life skills training stated that it had helped them to better interact and relate with others. Participants also stated that due to the life skills training, they learned how to present themselves during interviews and how to manage their time. Other comments provided by participants include:

- *'I am now more confident in talking to people, and I know how to be more presentable, and it has helped in economic aspects as well. I learned how to do interviews better and because of that, I got the job.'*

- *'The life skills training has made me be able to look at life more positively.'*

- *'It has helped me learn how to set goals in life and develop good morals.'*

Anecdotes provided by focus group participants also reveal that the effects the life skills program has had on the students also extend into their personal lives and not just employment prospects. Focus group participants stated that the life skills training allowed them to build relationships with each other and created a support system based on trust and confidence. The focus group noted that they consider each other brothers and sisters thanks to the life skills training.

Box 1: Ishmael's* Story

"I am so grateful to NairoBits for changing my life. People used to tell me that I wasted space and was useless. And I believed them. Because of the program I was not only lucky enough to do Media Lab, but I have turned my hobby of raising pigs into a business and was able to hire a friend to run it for me while I work. I can already see changes in the business and now know how to do the accounting correctly. I know now that I can plan for the future and I plan expand into manufacturing and supplying to major hotels. My confidence is better, I am no longer afraid to say what is on my mind. I hope to initiate an information center in my community in 5 years. This is all because of the program. It was super. Thank you, NairoBits.*

*Name has been changed to protect participant's identity

Effects of the ICT training on employment prospects

Participants were also asked whether the ICT training has had an effect on their employment prospects. Graph 6 provides the results of this question, to which there were 47 respondents.

Graph 6: ICT training impact on employment prospects of participants in sample follow-up cohort

As shown in the graph, 95.74% of interviewed participants stated that the ICT training has had a positive outcome relative to their employment prospects, while 4.26% felt that the ICT training did not affect their employment prospects. Those who believed their employment prospects were not affected by the ICT training stated that they had not yet found a job that has allowed them to use their ICT skills. These participants also stated that they had the necessary knowledge in ICT but had not been able to apply it.

The 95.74% of interviewed participants who were affected by the ICT training stated that they had acquired specialized skills that are valuable – specifically web design and development. It must also be noted that 70% of the participants interviewed stated that the ICT training was the one tool that helped them the most in the training program.

Participants were also asked to rate their technical skills in ICT. Table 22 below shows how participants rate themselves in their ICT skills as a result of the training they received at the time of the follow-up evaluation.

Table 22: ICT self-rating of participants in sample follow-up cohort

In %	Using Microsoft Office	Navigating the Internet	Designing Websites
Excellent	38.30	55.32	40.43
Very good	25.53	23.40	19.15
Good	31.91	17.02	21.28
Average	4.26	4.26	4.26
Poor	0.00	0.00	14.89
Total	*100.00*	*100.00*	*100.00*

As the table shows, participants' perception of their ICT skills demonstrates a level of comfort in using the skills they acquired from the Center. Furthermore:

- 78.72% of interviewed participants rated themselves excellent or very good in navigating the Internet. As noted by focus group participants, the telecommunications industry in Kenya has made it possible for people to use their cellular phones to access the Internet. Participants noted that prior to the training they were not familiar with how to use this service. However,

after the training from NairoBits, participants stated they are now capable of accessing the Internet through their cell phones.

- 95.71% of interviewed participants rated themselves good or higher in their ability to use Microsoft Office.

- 14.89% of the participants rated themselves poorly on designing websites. These participants stated that it is mainly due to the fact that they did not advance to Media Lab, therefore their knowledge and ease in this area is low.

As noted earlier, not all participants completed Media Lab. Of the 50 interviewed participants, 57.45% graduated from Media Lab. Considering the difference in technical training provided to these participants, they too were asked to rate their skills in certain specialized areas.

Table 23: ICT skills self-rating of participants in sample follow-up cohort who completed Media Lab

In %	Content Management Systems (CMS) (%)	Action scripting (%)	PHP (%)	MySQL(%)
Excellent	40.74	37.04	14.81	18.52
Very good	25.93	22.22	11.11	22.22
Good	29.63	29.63	40.74	25.93
Average	3.70	11.11	22.22	25.93
Poor	0.00	0.00	11.11	7.41
Total	100.00	100.00	100.00	100.00

As demonstrated in Table 23, 66.67% of the participants who went through Media Lab rated themselves very good or excellent in their abilities in content managements systems (CMS). Additionally, 11.11% and 7.41% of interviewed participants rated themselves poorly in PHP and MySQL respectively. Discussions with participants revealed that the ICT market in Kenya is increasingly developing; therefore, their skills in these areas are becoming outdated. This sentiment was confirmed by focus group participants, noting that the market is heading towards development, particularly in PHP and CMS and skills need to be adapted to meet market demands.

Effects of the entrepreneurship training on employment prospects

Interviewed participants were also asked whether the entrepreneurship training had an effect on their employment prospects. Graph 6 provides the results of this question, to which there were 47 respondents.

Graph 7: Entrepreneurship training impact on employment prospects of participants in sample follow-up cohort

The entrepreneurship training affected 85.11% of interviewed participants. As compared to the other two training areas, there were more participants (14.89%) who believed they were not affected by the entrepreneurship training. Those who believed their employment prospects *were* affected by the entrepreneurship training stated that the training helped them learn how to relate to clients and write proposals, and gave them the necessary skills on how to start a business. Participants who believed their employment prospects *were not* impacted by the entrepreneurship training stated that:

- They had not been able to apply what they had learned;

- They were not business-oriented and did not have interest in starting their own business;

- They believed employers were more interested in design skills and not entrepreneurial skills; and/or

- The courses were not in-depth enough. When asked to elaborate on this, participants noted that although they were taught the basics of entrepreneurship, they would have liked more training on how to identify financing.

In regards to entrepreneurship training, participants' perception of the skills they acquired as a result of the training is high. Table 24 outlines their self-ratings in various entrepreneurship skills.

Table 24: Entrepreneurship skills self-rating of participants in sample follow-up cohort

In %	How to develop a business plan (%)	How to identify business opportunities (%)	Bookkeeping for small enterprises (%)
Excellent	14.89	14.89	21.28
Very good	38.30	46.81	21.28
Good	38.30	29.79	42.55
Average	8.51	8.51	14.89
Poor	0.00	0.00	0.00
Total	*100.00*	*100.00*	*100.00*

As the table shows, 76.60% of the interviewed participants rated their ability to develop a business plan and identify business opportunities as very good or good. Also, 63.81% rated their abilities in bookkeeping as very good or good. Only 14.89% of interviewed participants rated their abilities in developing a business plan as excellent. Compared to participants' self-assessment of their ICT skills (Table 23), students rated their entrepreneurship skills a bit lower. This, according to both interviewed participants and the focus group, is because students view NairoBits as an ICT training center and come to the center *not* to gain skills in entrepreneurship but in ICT.

Participants' perception of their future and quality of life

Participants in the sample follow-up cohort were asked to rate their perception of their future in comparison to before they started the YEP Program at NairoBits. Table 25 summarizes the feedback from this question.

Table 25: Participants' perception of future for family at the time of the evaluation compared to before the program

How the future will be for participant and family	n	%
Better	46	97.87
Worse	0	0.00
The same	1	2.13
Total	*47*	*100.00*

The analysis shows that the majority of participants see a better future for themselves now as compared to before they stated the training program. 97.87% believe their futures will be better now due to the program while 2.13% believe it will be the same. This opinion also resonated in focus group participants as they noted that compared to before the program, they were not hopeful of their futures. Participants also noted that before the program they were not sure of what they would do with their lives nor how they would support themselves. Yet now, after having gone through the YEP training in NairoBits, they have the skills needed to find employment, are more confident and optimistic about their future, and have 'made friends for life'.

In addition to their perception of their future, participants were also asked to rate the quality of their lives in comparison to before they started the training program at NairoBits. Table 26 outlines participants' responses to this question.

Table 26: Participants' perception of quality of life at the time of the follow-up evaluation

Compared to when you started the training program, how would you now rate the quality of your life?	*n*	%
Much better	36	76.60
Better	11	23.40
The same	0	0.00
Worse	0	0.00
Much worse	0	0.00
Total	*47*	*100.00*

As the table demonstrates, all, or 100%, of the participants interviewed believed that the quality of their lives was better at the time of the evaluation compared to before the program. The distinction made by participants was in whether their lives were "*much better*" (76.60% of interviewed participants) compared to "*better*" (23.40% of interviewed participants). This sentiment was echoed by focus group participants, who stated that their lives were more enriched because they had been able to learn from each other's experiences, and they believed their lives were much better because of the life-long bonds they had formed with people they would have not had the opportunity to meet had it not been for NairoBits.

Quality of training

As a measure to analyze the quality of the YEP Program, participants were asked to rate the individual courses along with certain aspects of the quality of the training as a whole. Table 27 below outlines participants' ratings for the ICT, entrepreneurship, and the life skills training.

Table 27: Participants' rating of individual courses

Overall rating of training	ICT (n)	ICT training %	Entrepreneur-ship (n)	Entrepreneur-ship training %	Life skills (n)	Life skills training %
Excellent	21	44.68	11	23.40	16	34.78
Very good	23	48.94	31	65.96	31	65.22
Average	3	6.38	5	10.64	0	0
Poor	0	0.00	0	0.00	0	0.00
Total	*47*	*100.00*	*47*	*100.00*	*47*	*100.00*

As shown in the table, 44.68% of interviewed participants rated the ICT training as excellent, 23.40% rated the entrepreneurship training as excellent, and 34.78% gave the life skills training an excellent rating. Additionally, 65.96% of interviewed participants rated the entrepreneurship training as very good while 65.22% and 48.94% gave the ICT and life skills training a rating of very good, respectively. Another 6.38% rated the ICT training as average while 10.64% gave an average rating to the entrepreneurship training.

The life skills training received the highest rating out of the three programs. All or 100% of the participants in the sample follow-up cohort rated the life skills training as very good or higher. This, as noted by the focus group, was because the life skills training helped them improve their lives in various areas including:

- Helping them increase their self-esteem and morale. Focus group participants stated that prior to the program they believed their futures were dark, with no options for improvement.

- Helping them create a network of support. The participants stated that there was a strong alumni network outside of NairoBits. This network had enabled many to find jobs but, most importantly, as noted specifically by the participants, it has created a support system in which graduates continually connect with each other for emotional support.

- Changing their perception on life. This includes being more optimistic about the future and setting goals for oneself that can be realized.

Participants were asked to rate the quality of the material used for training. Table 28 gives a breakdown of the rating on the materials, instructions, exercises, methodology and the teaching quality.

Table 28: Tools used during the training

Rating of tools	The materials	The rules and regulations	The exercises	The methodology	The teaching quality
Excellent	40.43	36.17	29.79	46.81	42.55
Very Good	44.68	42.55	53.19	36.17	40.43
Good	12.77	17.02	12.77	12.77	10.64
Average	2.13	4.26	4.26	4.26	6.38
Poor	0.00	0.00	0.00	0.00	0.00
Total	*100*.00	*100*.00	*10.000*	*100*.00	*100*.00

As the table demonstrates, there is a strong appreciation for the tools used during the training. Notably, 82.98% of the participants in the sample follow-up cohort rated the methodology used for the training as excellent or very good. This, as noted by respondents and the focus group, is due in part to the practical way in which participants were able to learn by doing including using applications on their own along with having freedom to learn at one's pace with guidance from trainers. The materials – including course materials and computers – used during training received a score of excellent or very good by 85.11% of the participants. The teaching quality was also rated fairly highly by 82.98% of interviewed participants; however, the teaching quality also received the lowest rating of average by 6.38**%** of the interviewed participants. This again, as noted by the focus group, is because the industry is constantly advancing and instructors need to stay up to date with market trends by getting more training. Overall, participants were content with the materials used as there are no participants that rated the tools used during the training as poor.

Participants were also asked to comment on the duration of the entire training program. Table 29 below outlines participants' rating on the length of the training program.

Table 29: Assessment of training duration by participants in the sample follow-up cohort

What do you think of the training duration?	n	%
Too long	0	0.00
The right duration	27	51.06
Not long not enough	20	48.94
Total	*47*	*100.00*

> *It has changed my life, not just financially. Before coming to NairoBits I was afraid to talk to people because I was afraid they would make fun of me or my ideas. But here I met people that had the same thoughts I did, the same ideas. I'm not afraid of anything anymore. The way I view life now is very different from before doing the program. Now I see there are so many possibilities.*

As the table shows, the majority of the participants believed that the training was just the right duration (51.06%). However, 48.94% of participants stated that, for them, the training program was not long enough. Out of the 48.94% participants who stated that the training was not long enough, 47.83% only completed Course 1. Several of the participants in this category stated they would have wanted to continue with the training; however, they did not meet the criteria for advancement in the program, hence they rated the training duration as not long enough.

Focus group participants also noted that the training duration for basic ICT graduates was in fact not long enough. In fact, these participants asked for further clarification on *what* the selection criteria was, as they as students did not know. The focus group expressed concern on how the selection process was carried out to advance to Media Lab as well as the lack of internships or partnerships for basic ICT graduates. Moreover, focus group participants also stated that, for them, the life skills courses were the best and most important and need to be extended.

Participants' overall rating of the YEP Program has been positive. Table 30 below summarizes the evaluation of the quality of the training by program participants.

Table 30: Participants' assessment of the training

Training in general	n	%
Excellent	27	57.45
Good	14	29.79
Average	7	12.77
Poor	0	0.00
Total	*47*	*100.00*

Overall, 87.24% of the interviewed participants gave the training a high rating. Additionally, 57.45% of them rated the overall training as excellent while 29.79% rated the training as good. Another 12.77% of the participants gave the program an average rating.

The analysis also found that 97.87% of the participants in the sample follow-up cohort stated they would *definitely* recommend the program to other youth. Only 2.13% stated they would recommend the program to other youth with some changes. These changes, as expressed by participants in this category, are primarily to allow all students to advance through to Media Lab.

The opinion of the 97.87% of participants who would definitely recommend the program to other youth also resonated with the focus group participants – these participants stated they would like to see the program have larger training facilities and be expanded to include more youth, especially those from Westlands – a suburb of Nairobi which also has a number of informal settlements. Focus group participants also stated they would like to see the program expanded to teach technical skills and not just ICT. For example, those who do not go on to Media Lab could acquire other skills such as how to fix a computer or other IT fields that are not focused on development or design.

Focus group participants also noted that due to the close alumni base and network, alumni should be included in the decision-making process for the program, be tapped to make donations, and used more to teach courses, and also be used to stay current on market trends. This, in the opinion of the focus group, will allow NairoBits to format their curriculum to meet the demands of the labor market. It must be noted, however, that NairoBits does in fact systematically receive information on labor market trends by conducting face-to-face interviews with its employer partners. The organization also receives feedback every two weeks from guest lecturers who are also employers, and has a created an online network which allows alumni to stay up-to-date on NairoBits, job opportunities, and with each other.

Employers' feedback on the program

Evaluators were able to meet with five employers who had hired interns or employees from the NairoBits program. Four out of the five employers were IT companies working in design while one was a cosmetics company that hired a NairoBits graduate to work on their website. Each of the employers was fairly well informed about the YEP Program implemented by NairoBits and stated their principal motivation for offering internships or jobs to youth from the program was based on social commitments. Each of the employers had an existing relationship with NairoBits and noted interns and employees were selected by their respective companies based on the candidates that were sent by NairoBits. Three out of the five employers hired interns while two hired youth as employees from the program.

The employers that took on interns had an average of four interns and were all satisfied with the performance of the youth during the internship. This is evident as all of the employers who took on interns hired them all as employees at the conclusion of their internships.

Employers were eager to provide feedback on the program and their employees. In regards to the program participants, employers rated the life skills of graduates very highly – particularly in their ability to take initiative, ability to learn, and their motivation. Each of the employers rated their respective employees fairly highly in basic skills, while office and ICT skills varied from one employee to another. Two of the employers stated that compared to their other employees, participants from the program generally performed better at their jobs. Only one employer who hired interns from NairoBits stated that they were comparable to other interns, while two were not in a position to compare interns in their company.

All save for one employer were eager to share their thoughts and recommendations for the program. Employers stated that although they were satisfied with the technical skills of graduates, they would recommend providing participants with more specialized skills, particularly in programming such as Adobe and design basics such as art history and other foundation courses. Employers also noted that the program should upgrade the curriculum to meet market trends which would equip participants with up-to-date skills appropriate for the market. Employers also noted that specific soft skills such as professionalism, social maturity, integrity, and CV writing should be emphasized more in the YEP Program.

Employers stated that the visibility of the program is very good as they are constantly in contact with NairoBits. There were variant views on employees' potential for professional advancement; however,

employers noted this was based more on personality traits and individual career objectives and goals of employees, which they were all not able to comment on. Despite the varied views on employees' potential for professional advancement, all of the employers interviewed responded positively when asked if they would hire other young people trained by the program in the future.

E. SECTION V: OBSERVATIONS ON PROGRAM IMPLEMENTATION

The general observations concern the program's implementation in regards to the selection and recruitment strategies, the program's visibility, as well as the follow-up with participants after the training. These are detailed below:

- **Placement services provided primarily for Media Lab graduates.** As noted in Table 12, 44.68% of the respondents did not use the placement services. Of these participants, over 54% did not meet the criteria for placement services and expressed their disappointment in not being able to use the service. Based on interviewed participants and the focus group's perceptions, access to the placement services is reserved for participants who advance to Media Lab. Although NairoBits set in place a set of criteria necessary to advance through to all ICT courses, several interviewed participants noted that the criteria was not clear, nor did they understand *why* they were not able to advance to the next level of the ICT course. This sentiment was also expressed by focus group participants. Participants in the focus group were made up of students who had advanced to Media Lab as well as students who did not complete all ICT courses. All of the participants in the focus group noted there were clear distinctions between Media Lab and non-Media Lab students in regards to placement services. Additionally, focus group participants noted that it is discouraging to see fellow classmates move on to the next level while others do not advance to the next course. Although it is NairoBits' intention to have the most talented and creative students advance to Media Lab, the organization is in fact limited on the number of computers and resources available to accommodate all students. However, placement services for non-Media Lab graduates need to be expanded to offer participants more options.

- **Systematize application and entrance process.** The administrative organization of the program has not been appropriately set up to sufficiently measure outcomes on all participants. This is evident in the lack of baseline surveys given to a number of students along with the ad hoc system of assigning ID numbers to participants of the YEP Program. The lack of an organized system might be the result of misunderstandings on instructions and forms given to partner information centers that provide Course 1 training. Nevertheless, a systematic process is necessary in order to ensure an effective monitoring and evaluation of the program and its outcomes.

- **Enhance follow-up after the training.** Of the 50 participants interviewed, 29.79% believed that the follow-up was poor. Also, 47.06% of the women gave the follow-up a poor rating, while 20% of male interviewees did the same. Table 31 outlines participants' views on follow-up after the training.

Table 31: Participants' assessments of follow-up after the training

How was the follow up after the training?	Male (%)	Female (%)	Aggregate (%)
Excellent	60.00	47.06	55.32
Good	20.00	5.88	14.89
Average	0.00	0.00	0.00
Poor	20.00	47.06	29.79
Total	*100.00*	*100.00*	*100.00*
Number of respondents	*30*	*17*	*47*

As noted in the table, overall, 70.21% of the 50 interviewed participants stated that the follow-up after the training was either excellent or good: 55.32% and 14.89%, respectively, while 29.79% rated the follow-up as poor. These participants stated that after the training, they did

not hear back from NairoBits. In many cases, the follow-up evaluation was the first time they heard back from the program after their training was completed. Focus group participants noted that the follow-up is usually for students who were placed by the program. However, the focus group noted that the follow-up is consistent only until the next Media Lab class was ready to graduate – once these new graduates complete their training, follow-up is concentrated primarily on them. Focus group participants also stated that follow-up for non-Media Lab students is not as consistent.

F. SECTION VI: RECOMMENDATIONS

The following section outlines the recommendations based on the findings in the previous sections. The recommendations are presented with the intention of providing feedback on how to improve the Youth Empowerment Program offered by NairoBits in the future.

Create additional concentrations for students

As noted in the analysis above, there are a number of students who do not advance to Media Lab that have yet to find employment or further develop their skills. In order to accommodate those who are not able to advance to Media Lab, NairoBits should consider creating additional concentrations for these students, for example:

- *Expand training in ICT to include maintenance and repair –* since the program is able to provide placement for some participants due to the specialization offered in Media Lab training, another leg of the program should be offered to include training in installing, maintaining, and repairing hardware and software. These specialized courses will allow non-Media Lab students to develop other technical skills in ICT and still have the opportunity to work for some of NairoBits' existing partners.

- *Expand entrepreneurship program to offer more specialized courses –* for students who are interested in the entrepreneurship track, the entrepreneurship courses should be expanded to provide training in areas such as marketing, accounting, and management. This will allow students to increase their employability and business prospects by having skills in specialized areas.

- *Expand business services to students who do not continue through to the advanced ICT courses –* expanding services for these students would include providing business development services such as mentoring, business plan review, and incubation services for enterprises.

- *Create linkages with other centers and organizations that are specialized in business development –* it would also benefit the organization to form linkages and partnerships with other centers and programs, such as DOT, who specialize in entrepreneurship so that students have other avenues available to them. This would reduce costs for the organization and increase students' options to develop enterprises.

Develop an all-inclusive placement service for all participants

Participants who were interviewed for this evaluation noted that there were clear distinctions in the placement services for participants. As the analysis notes, 44.68% of the interviewed participants did not use the placement services, of which over 54% stated they did not fulfill the requirements to access those services. Participants who do not advance to Media Lab are expected to be entrepreneurs; however, many of these students either are not fully equipped with the tools necessary to start their own business, are lacking the necessary support to do so, or simply do not want to become entrepreneurs. Placement services should be extended to these students by:

- *Developing partnerships with financial institutions –* for students who *are* in fact interested in starting their own businesses, relationships should be fostered with microfinance institutions (MFIs) or other financing agents that would be able to provide support to these individuals.

- *Creating partnerships with placement agencies –* this will allow the Center to increase its reach in offering placement services for all participants. By partnering with placement agencies in Nairobi, the Center can offer this option to participants who do not advance to Media Lab as another means to search for potential jobs.

Restructure system of collecting student information

As noted above, the administration of the program has not been implemented appropriately to capture all the necessary data on participants. In order to adequately track the participants and measure the outcomes of the program, it is recommended that NairoBits:

- ***Develop a systemized method of capturing participant data prior to commencing training.*** The center used a sign-in sheet for participants, which does not ask participants for critical information prior to the program. Although baseline and exit forms, instructions and a database format were all provided to NairoBits after the start of the YEP Program, the organization should ensure that these resources are used consistently. Baseline forms which request socioeconomic data, contact information, and self-assessment of participants should be distributed to all participants either at NairoBits or the CBOs *prior* to the program. Exit forms requesting the same information should also be handed out to every participant in order to appropriately measure program outcomes. NairoBits must also ensure that their partner CBOs are equipped with these tools and ensure that a quality control system is set in place, which would guarantee that data is collected efficiently.

Overall, NairoBits greatly surpassed its objective of training 300 youth and exceeded its target of placing at least 62% of the participants in jobs, internships, self-employment, and/or voluntary community service. The program has had a tremendous influence on the participants, and has made some dramatic changes in the lives of the youth who have participated in the program. They have dramatically improved their overall outlook on their futures and understand the potential within themselves to live a happy and fulfilling life.

G. APPENDIX: YEP TRAINING SCHEDULE FOR NAIROBITS

Cohort No.	Training Start Date	Training End Date	No. of Youth	Training Hours	Course	Location
1	12-Aug-07	14-Sep-07	20	204 hrs		NairoBits centre
2	17-Sep-07	19-Oct-07	20	204 hrs	Course One	NairoBits centre
3	22-Oct-07	14-Dec-07	20	456 hrs	Course One	NairoBits centre
4	4-Jul-07	14-Dec-07	16	1152 hrs	Course Three	NairoBits centre
5	22-Oct-07	26-Nov-07	20	204 hrs	Course Four – Media Lab	NairoBits centre
6	15-Jan-08	15-Feb-08	30	204 hrs	Course One	NairoBits centre
7	15-Jan-08	20-Jun-08	20	1152 hrs	Course One	NairoBits centre
8	18-Feb	21-Mar-08	30	204 hrs	Course Four – Media Lab	NairoBits centre
9	28-Jan-08	25-Mar-08	30	204 hrs	Course One	NairoBits centre
10	28-Jan-08	15-Feb-08	30	204 hrs	Course One	NairoBits centre
11	18-Feb-08	21-Mar-08	30	204 hrs	Course One	NairoBits centre
12	3-Mar-08	31-Mar-08	30	204 hrs	Course One	NairoBits centre
13	25-Mar-08	18-Apr-08	30	204 hrs	Course One	NairoBits centre
14	21-Apr-08	20-Jun-08	30	456 hrs	Course One	NairoBits centre
15	3-Nov-07	23-Feb-08	16	456 hrs	Course Two-Three	NairoBits centre
16	8-Mar-08	31-May-08	60	456 hrs	Course Two-Three	NairoBits centre
17	7-Jun-08	30-Aug-08	60	456 hrs	Course Two-Three	NairoBits centre
18	1-Jul-08	1-Aug-08	30	204 hrs	Course Two-Three	NairoBits centre
19	7-Jul-08	28-Jul-08	30	204 hrs	Course One	NairoBits centre
20	4-Aug-08	5-Sep-08	30	204 hrs	Course One	NairoBits centre
21	4-Aug-08	15-Sep-08	30	204 hrs	Course One	NairoBits centre
22	4-Jul-08	1-Aug-08	30	204 hrs	Course One	NairoBits centre
23	8-Aug-08	5-Sep-08	30	204 hrs	Course One	NairoBits centre
24	1-Jul-08	12-Dec-08	30	1152 hrs	Course One	NairoBits centre
25	19-Sep-08	3-Oct-08	30	204 hrs	Course Four – Media Lab	NairoBits centre
26	7-Oct-08	12-Dec-08	30	456 hrs	Course One	NairoBits centre
27	20-Sep-08	15-Nov-08	20	456 hrs	Course Two-Three	NairoBits centre
28	12-Jan-09	13-Feb-09	30	204 hrs	Course Two-Three	NairoBits centre
29	24-Feb-09	27-Mar-09	30	204 hrs	Course One	NairoBits centre
30	6-Apr-09	1-May-09	30	204 hrs	Course One	NairoBits centre
31	4-May-09	26-Jun-09	30	204 hrs	Course One	NairoBits centre
32	19-Jan-09	26-Jun-09	20	1152 hrs	Course One	NairoBits centre
33	6-Jul-09	8/7/2009	30	204 hrs	Course Four – Media Lab	NairoBits centre
34	10-Aug-09	11-Sep-09	30	204 hrs	Course One	NairoBits centre
35	6-Jun-09	11-Dec-09	20	1152 hrs	Course One	NairoBits centre
36	21-Sep-09	16-Oct-09	30	204 hrs	Course Four – Media Lab	NairoBits centre
37	19-Oct-09	11-Dec-09	30	456 hrs	Course One	NairoBits centre
38	4-Jul-09	29-Aug-09	60	204 hrs	Course Two-Three	NairoBits centre

Cohort No.	Training Start Date	Training End Date	No. of Youth	Training Hours	Course	Location
39	26-Sep-09	28-Nov-09	60	456 hrs	Course One	NairoBits centre
40	1-May-05	1-Dec-07	28	204 hrs	Course Two-Three	Information centers
41	20-Jan-08	21-Apr-08	30	204 hrs	Course One	Information centers
42	8-May-08	18-Jul-08	31	204 hrs	Course One	Information centers
43	25-Jul-08	26-Sep-08	29	204 hrs	Course One	Information centers
44	1-Oct-08	18-Dec-08	26	204 hrs	Course One	Information centers
45	20-Jan-09	3-Apr-09	66	204 hrs	Course One	Information centers
46	14-Apr-09	3-Jul-09	54	204 hrs	Course One	Information centers
47	21-Jul-09	25-Sep-09	93	204 hrs	Course One	Information centers
48	6-Oct-09	4-Dec-09	146	456 hrs	Course One	Information centers
TOTAL			**1,685***	**17,052**		

*The discrepancy in the number of youth trained at NairoBits compared to the number of youth in the training schedule is due to the organization's system of tracking beneficiaries. According to NairoBits, the organization was instructed to **count individual names within the YEP program**, however, within the cohort list they were **expected to count group totals within the different course levels**. Therefore, an individual who participated in Course 1 and advances to Course 2 is counted twice in the cohort schedule, once for each course in which they participated.

H. BIBLIOGRAPHY

- NairoBits Project Proposal

- NairoBits Project Description

- Grant Agreement between Microsoft Community Affairs for West, East, Central Africa and Indian Ocean Islands and IYF

- NairoBits Quarterly Reports to IYF

- International Labor Organization (2007) 'Decent Work Country Program: Kenya 2007 – 2011' http://www.ilo.org/public/english/bureau/program/dwcp/countries/index.htm

- International Youth Foundation (2009) 'Final Report of the *entra21 Program* Phase I: 2001-2007'. Baltimore: International Youth Foundation. www.iyfnet.org

- International Youth Foundation Quarterly "Africa Citizenship Project Status Reports" to Microsoft

- Kenya Ministry of Youth Affairs and Sports. Strategic Plan 2008-2012 March 2007 http://www.youthaffairs.go.ke/index.php?option=com_docman&task=cat_view&gid=20&Itemid=23

- Kenya, National Bureau of Statistics, Kenya Labor Statistics, 2007 http://www.knbs.or.ke/#

- Kumba, Sawel. "High Unemployment Rate Could Evolve Into Revolution, Experts Warn" Daily Nation 2 May, 2009. 3 February 2010 http://www.nation.co.ke/News/-/1056/593060/-/u6682h/-/index.html

- United Nations Population Division of the Department of Economic and Social Affairs (2008), '2008 Revision Population': http://esa.un.org/unpp/

- World Bank (2009) 'Kenya Poverty and Inequality Assessment Executive Summary and Synthesis Report'. Report No. 44190-KE, April 2009 Washington, DC