Lineage Project Research Working Group (LPRWG)

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Initial Evaluation Report
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INTRODUCTION

The following is a report designed to explore the feasibility and set the parameters for an ongoing evaluation of The Lineage Project’s work. Portions of the report will use data from a small sample set and will be noted as such. At this time, consider these results as directional rather than definitive.

The Lineage Project (LP) is a not-for-profit organization in New York City since its founding in 1998 which teaches Awareness Base Practices (ABP) to adolescents and young adults ages 10 to 22. The Lineage Project offers programs designed for youth caught in the interconnected patterns of childhood trauma, negative emotional reactivity, and potentially risky reactive behaviors that may lead to harm to self or to others. The Project has developed a model for working with youth based on research which shows that awareness-based practices such as yoga and meditation can significantly reduce stress and increase the capacity for self-regulation. Lineage Project classes work to teach and support adaptive cognitive, emotional and behavioral patterns.

The teaching of ABP is meant to foster three primary skills: self-awareness, self-knowledge and compassion for oneself and others. Self-awareness includes an accepting, non-judgmental awareness of body and mind, of the internal and external environments. Self-knowledge includes the ability to discern what creates more distress and what relieves it, seeing the repercussions of negative emotions and behaviors, and the benefits of positive emotions and behaviors. Self-knowledge brings with it the increased capacity for making choices that are in the interest of healthy development. Compassion includes cultivating and expressing kindness, empathy and caring for oneself and one’s unique situation, and then to the immediate environment and eventually to the broader social world.

During the spring of 2011 the Lineage Project Research Working Group (LPRWG) conducted a structured assessment of its program. The purpose of the assessment was to discover to what extent the Project was successfully achieving its intended goal of teaching self-awareness, self-knowledge and compassion for oneself and others as a means to reduce stress and increase the capacity for self-regulation in its target population and serve as a baseline measure for a broader study.

The assessment study was conducted at an alternative high school in New York City. The New York City Department of Education created the alternative high schools for students who have had difficulty managing the typical high school experience. Students from the alternative schools have, to varying degrees, been unable to maintain appropriate academic achievement, and/or have particularly challenging environmental stresses that have interfered with learning. The alternative high school administration invited the Project into the school to provide additional support to the high school’s educational mission.
Lineage Project teachers taught ABP in the physical education classes grades 9 through 12 at the high school during the spring term beginning in February 2011. Approximately seventy-five students participated. Students were divided into three 60 minute class sections, for four days a week for seventeen weeks.

Classes followed the standard Lineage Project class format of Awareness Based Practices. There are three key curriculum elements to each class session: movement, typically yoga poses or asana, mindfulness meditation and thirdly, discussion around a theme chosen to promote self-awareness, self-knowledge and compassion for oneself and others. The theoretical underpinnings, practice elements and anticipated outcomes of ABP are based on the model of Mindfulness Based Stress Reduction (MBSR) and the extensive research which has validated its methods and outcomes.

Data to support the study was collected by the LPRWG using both quantitative and qualitative methods:

- Qualitative Data: narrative data was collected from students using free-writing exercises, and from teachers through a written weekly class summary. In addition, four recorded structured focus groups were conducted with two groups of selected students, the supervising high school staff member, and the LP classroom teachers;

- Quantitative Data: the Perceived Stress Scale (PSS), a stress measuring survey instrument, was administered at week one and week fourteen.

**INITIAL EVALUATION SUMMARY**

The Research Working Group found the following results from the assessment. Review and analysis of the student and teacher narratives, and focus groups suggest the students, by participating in the classes, developed an increased capacity for self-awareness, self-knowledge and a more compassionate response to events in both their internal and external environments. In addition, analysis of the PSS indicated a reduction of perceived stress among participating students between week one and fourteen. Findings from both the qualitative and quantitative analysis are discussed in more detail below.

**QUALITATIVE FINDINGS**

**Self-awareness and Self-knowledge**

Through developing the skills of self-awareness, students increased their sensitivity to what is occurring in their bodies and conscious minds. Self-awareness provides more information for making decisions and choices in behavior. One of the first discoveries students made by participating is a sense of calmness and relaxation. A majority of students noted these phenomena. This is a critical skill because a calmer body and mind allows more openness to self-awareness and reflection. From a student’s written reflection:
“This class helps me look deeper inside myself especially when I meditate...I feel more relaxed and like I can get through the day in a different way.”

Other students in the focus group commented:

“The discussions taught us to go back and talk about things I didn’t even notice before. I just notice lots of things I never notice before...notice things you just would have forgotten about, it brings things to mind.”

“I’m just a really hyper person. After the class really calm and laid back...a nice feeling that’s inside, like oh, you’re, like you can breathe and think.”

Calm and relaxed self-awareness may allow the individual the opportunity to create a more thoughtful and considered perspective from which to view the busy activity of their environment. In the focus group a teacher reports:

“After class was over one girl shares how she always looks forward to our class because it is the only time in her life when she can focus and be aware of herself. She mentioned how her home is so noisy and crowded; she has no other place to feel calm and relaxed.”

Students recognized on a more subtle level that self-aware calmness and relaxation are not an escape from their ordinary experiences, but bring a different dimension to it. This is an essential aspect of self-awareness; it puts the individual more in touch with the full range of their response to events in both their internal and external environment.

“As of now I feel a lot more calm and relaxed, yet still have a lot of energy inside of me. The meditation part, focusing on my breath, helped me become a lot more centered.”

To be self-aware even when things are not going well, a student writes:

“I feel like the focus that this class requires you to have/practice...has helped take my mind off of everything else that has happened to me in the past twenty four hours. In my opinion that is a good thing, given the circumstances I am truly grateful. I have no intention of running from what’s bothering me, but not worrying about it for once feels nice. I’m excited...”

Another quality to self-awareness is the ability to be in the present with thoughts, emotions and body sensations from a place of acceptance and non-judgment. Students develop the capacity to step back from their experience, to name it, and reflect less reactively. From a student focus group:

“I was really upset about something and you don’t want to let it get over you and control your whole mood and how you go about the rest of your day so instead you want to just be like okay, this is an emotion. Okay, this feels like anger. Okay, this is how it feels so let me see where it takes me but not let it rule my day.”

Another student wrote:
“I was angry and tense and now I’m not angry. I don’t care about the issue. My body feels calm and relaxed.”

Additionally, students noted learning the skills of calming and relaxing awareness brought benefit to other life situations. A calmer relaxed orientation to experience helped with sleep, preparing to play sports, being less reactive to others emotional provocations, and to being more patient with themselves and others. These observations are an indication of the students’ ability to generalize the skill of self-awareness to other aspect of their experience.

Self-awareness and self-knowledge go hand in hand. With awareness, students begin to build insight and understanding, self-knowledge. They see what creates distress and relieves it, see the results of negative emotions and behavior and the benefits of positive emotions and behaviors. Self-knowledge increases the capacity to make choices.

Students discovered that insight into what causes discomfort is a way to feel less distressed. The only things that changed for this student was a shift in perspective to what they were experiencing, wrote a student at the end of a class:

“During the entire school day, I had felt so uncomfortable and tense, really annoyed. There was no real reason behind the way I felt today, it was just there since I woke up and got out of bed. I don’t have a space and moment to relax, calm down and gather my feelings and thoughts, as well as appreciate this beautiful day.”

A teacher reported this shift in a student’s perspective and level of distress:

“She shared how she changed her view on some of her family members. First she thought they were deliberately being mean to her and now she sees that they are behaving like this to others, so she is not taking it so personal anymore. At the same time it is still hard for her.”

Self-awareness with self-knowledge is a means to understanding and reacting to emotions in a more adaptive way. There is less inclination to reactivity, doing the first thing that comes to mind, which can have negative consequences. This student realized that if she brought patient awareness to an uncomfortable encounter with another person, it had a more positive result for her and led to less discomfort for everyone.

“I’ve learned patience...I mean I can deal with situations differently, which is being patient with people. ‘Cause usually I don’t have patience with people, let’s say it’s just a person the way they speak to me, I don’t like it, I can take a deep breath in and think before I act or talk....Because of the type of person I was before, things wouldn’t be the same. The result would be different, not good, if I didn’t have patience...It’s a more better way to handle a situation when I have patience.”

Additionally this student began to be aware she had a choice, she could respond differently, not with her typical negative reactivity. She discovered a more considered patient response after a deep breath works better. Perhaps as significantly, participating in the program may have taught her the skill of how to develop patience.
This focus group student had a different experience with patience. It helped improve her grades.

“I don’t like yoga and I kind of still don’t like yoga, but instead of like getting up and like leaving class I can sit and be patient. And I feel like it helped me in my classes. Because we have this thing where I have to get up out of class and just run in the hall, but I haven’t done that...I see they (grades) went up, like ever since I’ve done yoga my grades went up because I know how to sit in class and just take it all in, like okay, this is kind of where I’m in, but I’m gonna need to get out of school so I’m gonna have to do this. Like I actually got a 92.”

Self-soothing in distressing and uncomfortable situations is a benefit for students participating in the program. Demonstrating how students use the skills to manage their experience more adaptively, teachers gave these two additional examples in the focus group:

“A student had a SAT test last Saturday; on Friday he came up to me and said: ‘I was so nervous. I started to do the breath, you know mindfulness and breathing.’ I saw he was actually using what we were teaching.”

“Ann (pseudonym) is really struggling with finding peace and a moment for herself in her own home. And she really, because of our classes, started to see what she could do about this: ‘Okay, I’m sharing a room with my sister. I can’t go out...I have to ask permission from my dad to go out to just walk out on the street (student lives in the South Bronx section of New York City which her father knows can present danger and violence on the streets). It’s hard for me to find peace of mind.’ And she said how her sister sometimes gets up early and she would just do one of the calming practices we taught her. Or she said, ‘now I just notice how I can relax myself on the trip back home on the train.’ So she is working with, okay I have a problem in my life. I need more quiet and peace of mind, but I don’t find the conditions to be right. I can’t change my situation, but I can do something.”

This student is feeling less helpless. Her increased capacity to manage her internal environment lessens the impact of her external environment over which she has little or no control. She has found a skill to moderate distress making a more positive adaptation to her life at home and outside of it.

Knowing oneself more fully can contribute to an increase in positive self-esteem. This student gained a different perspective of his capacity to connect with others. A teacher reported this incident in the focus group:

“He was one of my most engaged students. He once said: ‘I really appreciate this class because I feel comfortable sharing my wisdom. And, while sharing it, I noticed that I can even make it more refined. I get even more when I speak it.’

This same student in a subsequent class discussing career plans said he wants to play basketball with a backup plan:
“Maybe psychology or, I don’t know what you’d call this, but when someone helps someone kind of figure out who they are, and what they want to do with their life in this world…listening to people. I’d pay to do that.”

There is an interesting common element to many of the vignettes described here. Students are in one way or another reaching beyond themselves. They see themselves in relationship to others and they appreciate the way in which these classes have changed their perceptions on these relationships.

**Compassion for Self and Others**

Cultivating and expressing kindness, empathy and caring for oneself and others, compassion, is the third skill the Lineage Project intends to teach. Perhaps a precursor to compassion is the opportunity to know another person more intimately. A strong sentiment expressed by students in the focus groups was that by participating in program classes they got to know fellow students in a way atypical to other school encounters.

“I’d say the class really helped me to relieve that (barrier). A lot of people in the class I hadn’t really communicated with them before...In a million years I wouldn’t think that I would hang out with these people because I’m like an only child, I like to be by myself but I’m also friendly, and we’re doing things, it brought us a lot closer together in class and I saw a difference between that, everybody was friendly.”

Another student in the focus group observed that by students sharing their experiences he was able to see himself and others from a different perspective.

“People like opened up and said things you wouldn’t know about someone, and sometimes they make you think about yourself. Things you don’t usually think about...You never know a person until you actually know what they think. Just to know who people are.

He also might be saying that you don’t know yourself until you have the opportunity to hear, know, and reflect on what you are thinking with others. In response to this comment another student added:

“I agree, the discussions were good, because it was nice to talk...because you learn the experiences of other people you don’t know.”

In the focus group a teacher recalled a discussion about compassion toward the end of the semester. It was a difficult concept for some of the students to comprehend, but as the topic developed it resonated.

“A student recalled receiving compassion from her friend ---, and how it made her feel heard and understood. She saw how much she appreciated this friendship. Another shared how she thought she couldn’t be compassionate toward herself and now realizes she was not aware of how she takes care of herself. Another student shared how the
discussion made him aware that he hardly realized how many compassionate acts his mom has done for him. The discussion was poignant.”

There were many examples of caring, kindness and empathy throughout the data sources. “I thought I was a nerd but now I see I’m not.” Students talked about how they were able to trust others more after they got to know them and changed their attitude about them, dropping their prejudices. Students learned to reflect and take responsibility for past events with insight rather than with worry and guilt. A boy seeing his father in pain from a shoulder injury showed him yoga stretches and was happy to hear his father’s gratitude. Another student became more accepting of a disgruntled and sometimes nasty family member.

It would be a mistake to assume or represent that every student gained mastery of all the skills. Some students’ attendance was poor or spotty, some students attended classes but refused to participate, or participated only occasionally. But this too presented an interesting finding. In the teacher’s focus group there was an extended conversation about these less involved individuals. The teachers noticed that over the course of time, and especially in the last weeks of the semester some students who seemed absent, sometimes disruptive or inattentive were “getting it.” Some slowly moved into the circle of conversation and made comments that showed they had been listening. Others continued to sit on the sidelines but were attentive, perhaps secretly practicing awareness. One particularly talkative disruptive student said she recognized how students could interfere with the class and on her own made the decision to tone it down.

Researchers Note: This qualitative analysis of the data and the data collection methods certainly does not survey the entire cohort of participants. This is a representative sampling. However, the Research Working Group (LPRWG) believes it validly represents themes and patterns of thought and behavior that appear and resonate throughout all of the data sources. When looking at the student writings, teacher classroom reflections, and the focus groups of students and teachers the researchers found a consistency which suggests the preceding analysis reflects a valid description of the Project’s effectiveness in achieving its objectives in teaching the skills of Awareness Based Practices.

QUANTITATIVE FINDINGS

Data in this section comes from a small sample source and should be considered directional. No significance testing was performed.

To further validate the effectiveness of ABP, the LPRWG used a quantitative survey instrument, the Perceived Stress Scale (PSS-10) as an assessment measure. Examining levels of stress was selected as an indication of the degree to which the study participants are adapting more positively to their life situation as an outcome of participating in ABP. On an intrapersonal level, stress is typically experienced on a continuum between a challenge or a threat. Experienced as a challenge, stress leads to a sense of mastery and control over stressful events, a positive experience. Experienced as a threat, stress leads to an intrapersonal sense of powerlessness.
and helplessness, a negative experience. The study hypothesis suggests the negative response(s) to stress will be reduced and the positive response(s) increased.

The Perceived Stress Scale (PSS-10), a 10-item self-report questionnaire (Cohen & Williamson 1988) that measures a person’s evaluation of the stressfulness of the situations in the past month of their life was administered to participating students during the first Lineage class meeting and then re-administered again near the fourteenth week of the semester.

The possible answers to the ten questions are scaled on a 0-4 Lickert frequency scale (where 0 means “never, 1 means “almost never,” 2 means “sometimes,” 3 means “fairly often” and 4 means “very often”).

Due to concerns over protecting the privacy of participating students, surveys were done anonymously. Therefore we were not able, in this pilot study, to match the pre and post surveys for individual students and track changes in individual responses. Alternatively, 15 pre-surveys and 15 post-surveys were randomly selected for analysis from among the 40 completed surveys.

Despite the limitations in tracking individual responses, the aggregate data demonstrate a reduction in perceived stress among students, an increase in students’ perceived ability to cope with stressors and challenges and an increase in their ability to cope with anger. While there may be a variety of factors that influence levels of perceived stress in students’ lives, the PSS-10 data strongly indicate a shift in students’ perceptions of stress over the 14 weeks of contact with awareness based practices.

**Reduction in Perceived Stress**

Despite the limitations noted above, the results of the PSS-10 show a reduction in perceived stress among students over the 14 weeks. In the pre-survey 60% reported that they felt nervous or “stressed” fairly often/very often, compared to 47% in the post-test (see figure 1).

In the pre-survey, 53% of students answered “fairly often” or “very often” to the question, “In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?” compared with only 27% in the post-survey (see figure 1).

Similarly, 47% of students surveyed in the pre-test reported that they fairly often or very often felt that they were unable to control the important things in their lives, compared with only 20% in the post-survey (see figure 1).
Increase in Perceived Ability to Cope with Stress and Challenges

In addition to a reduction in perceived stress, the survey data indicate an increase in students’ perceived ability to cope with stress and challenges in their lives. In the pre-survey, 33% reported that they fairly often/very often felt they were on top of things. In the post-survey this rose to 60% (see figure 2).
Coping with Anger

Results of the PSS-10 show an increased ability among participating students to cope with anger. In the pre-survey, 73% of youth reported that they were fairly often/very often angered because of things outside of their control. In the post-survey this declined to 47% (see figure 3).
CONCLUSION

The purpose of this structured assessment was to determine if the Lineage Project utilizing ABP was successfully achieving its intended goals. Analysis of both the qualitative and quantitative data suggests the goal of teaching the skills of self-awareness, self-knowledge and compassion to the adolescent students at the alternative high school was successfully achieved.

Overall, students demonstrated a higher degree of self-awareness. They learned to calm and relax their bodies and minds, which increased their sensitivity to the content of their thoughts and emotions. They gained some capacity to be aware of thoughts and emotions from a place of acceptance and non-judgment. The development of these skills provided the students with a more thoughtful and nuanced perspective from which to view themselves and their environment.

Self-knowledge also increased. Students discovered that insight into what causes distress is a way to feel less stressed. They learned ways to be less reactive to their own thoughts and emotions, like anger, and to the emotions and behaviors of others. Students became more aware they had choices and felt less helpless in how they respond to or manage events and situations in their environment. Students learned the skills of self-soothing and patience. This knowledge was used to develop a more positive attitude toward school and to improve performance.

The study also showed that students became more conscious of their fellow students. Their understanding of others increased, they felt more empathic, and the value of their relationships was affirmed. Some students noticed that by deepening their understanding of others they gained a fuller understanding of themselves. Teachers and students noticed an increase in compassion. Kindness, empathy and caring were expressed more frequently during the course of the semester.

Findings from the PSS-10 suggest that students, after participating in the program, reported a decrease in a negative stress response. There was a reduction of perceived stress among students, an increase in the students’ perceived ability to cope with stressors and challenges and an increase in their ability to cope with anger. These findings tend to validate and support the positive outcomes as noted in the analysis of the narrative data. Both the teachers and students saw the positive benefits of participating in ABP as taught by the Lineage Project.
### Appendix A

Perceived Stress Scale (PSS-10) aggregate results (combined “fairly often” and “very often” responses)

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre Survey</th>
<th>Post Survey</th>
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<tbody>
<tr>
<td>Q1 In the last month, how often have you been upset because of something that happened unexpectedly?</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Q2 In the last month, how often did you feel that you were unable to control the important things in your life?</td>
<td>47%</td>
<td>20%</td>
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<tr>
<td>Q3 In the last month, how often did you feel nervous and “stressed”?</td>
<td>60%</td>
<td>47%</td>
</tr>
<tr>
<td>Q4 In the last month, how often did you feel confident about your ability to handle your personal problems?</td>
<td>67%</td>
<td>67%</td>
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<tr>
<td>Q5 In the last month, how often did you feel that things were going your way?</td>
<td>47%</td>
<td>40%</td>
</tr>
<tr>
<td>Q6 In the last month, how often did you find that you could not cope with all the things that you had to do?</td>
<td>60%</td>
<td>53%</td>
</tr>
<tr>
<td>Q7 In the last month, how often have you been able to control irritations in your life?</td>
<td>40%</td>
<td>27%</td>
</tr>
<tr>
<td>Q8 In the last month, how often did you feel that you were on top of things?</td>
<td>33%</td>
<td>60%</td>
</tr>
<tr>
<td>Q9 In the last month, how often have you been angered because of things that were outside your control?</td>
<td>73%</td>
<td>47%</td>
</tr>
<tr>
<td>Q10 In the last month, how often did difficulties were piling up so high that you could not overcome them?</td>
<td>53%</td>
<td>27%</td>
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