METACOGNITION LAB AT MILES COLLEGE TAKES PEER MENTORING TO A HIGHER LEVEL

Dr. Emmanuel Chekwa

Professor Miles College Fairfield, AL

Tina Dorius

Director, Metacognition Lab Miles College Fairfield, AL

ABSTRACT

Albert Einstein famously said, "I never teach my students. I only attempt to provide the conditions in which they can learn." At the Miles College Metacognition Lab, we follow a similar philosophy. In the Metacognition Lab, we teach our students to think about how they are thinking. We have created a system of student interactions that monitors and assesses student progress and concurrently teaches our students how to monitor and assess their own progress. To this end, we have four main focuses: 1) Creating meaningful relationships of trust based on honest communication 2) Emphasizing the importance of short term and long term goals 3) Teaching students the Study Cycle and how to do Intense Study Sessions and 3) Creating Action Plans that outline simple steps for the students to follow on their own.

STUDENT ACADEMIC COACHES MAKING A DIFFERENCE

Our Academic Coaches are students who not only excel in academics, but also excel in communicating and building relationships with their peers who come to the Lab for academic support. When students initially come in for help, our first focus is building connections with them. During that first meeting, after introductions and small talk, we address their problems and find out why they have come for help. We also establish each student's goals and dreams and emphasize that it all ties into what the student is doing now in school and why academic success is a stepping stone toward the ultimate goals.

Also during that first meeting, we ask the students what expectations they have of the Lab and ask them if they have any concerns or apprehensions. We also share our own expectations for our students and what we hope they get out of this experience. The goal of this Lab is to teach students to take control of their learning and learn how to fine-tune the way they study to achieve the best results. The students will learn about Bloom's Taxonomy (the different levels of learning) and reflect on what level of learning they are currently using. Students also learn about the Study Cycle and how using the Study Cycle helps them

climb up the higher levels of learning. Finally, we go over the Intense Study Session and how that allows the mind to work at higher levels of learning.

As we work with students and review and teach them the substantive material they are learning in their classes, we try to remind the students to use metacognition and be mindful of which learning and study strategies are working for them and which are not working. Our one-on-one meetings with students model the Intense Study Session format so that students become comfortable with it and begin to use it when they study on their own. At every session, we set specific goals so that when the student is ready to leave, the student and coach are ready to create an action plan for the student to accomplish on their own. This system allows our Coaches as well the students to continually assess the students' progress and whether the current strategies for learning are working. The Metacognition Lab has now been operating for 4 years, growing from serving 38 students the first year to now getting more than 1800 student visits per semester with over 200 students each semester coming regularly for one on one study sessions. Considering that our student population is around 1750, we are serving a large percentage of our student body.

METACOGNITION LAB CONTINUES TO MAKE A DIFFERENCE

The Metacognition Lab continues to increase services and performances of students every single semester. During the Fall 2014 semester, the Lab had over 1,884 student visits. Over 800 students attended presentations and workshops given by the Lab. Academic Coaches performed approximately 1,100 one on one study sessions to 287 students. Out of those students, 89% ended the semester with over a 2.0 GPA and 54% ended with over a 3.0 GPA. The average semester GPA for students served by the lab was a 2.9. The Lab saw a retention rate of 89% of the students who received one on one help. The true retention rate was probably even higher because many of those who did not return had GPA's over 3.5 and it seems likely that they transferred schools.

So far, during the spring 2015 semester, we have already had over 2,023 student visits. We have presented 13 workshops, which include workshops on Test Anxiety, Learning Styles, Motivation and Study Strategies, How to Study for Math, and Passing the English Proficiency Exam. Over 381 students have attended these workshops. Generally, fewer students attend our Spring workshops because most of these workshops are presented to new, incoming students and we have less students enrolling for the first time in the spring semesters. Since the Metacognition Lab collaborates with First Year Enrichment Orientation and Freshman Year Academy, all freshmen, at the very least, attend both the Learning Styles and Study Strategies workshops. There are over 190 students who are coming in for one-on-one sessions with Coaches so far this semester. The Coaches have completed over 500 of these oneon-one sessions. Since we have not hit our busiest time of the semester (right before finals) yet, we predict that the number of students we serve will substantially increase by the time the semester is over.

This spring 2015 semester, the Lab initiated a Pre-Midterm Push where we collaborated with the Retention Assistants to contact the 470 students who had been flagged by their instructors as "at-risk" in February. Of these students, 43 students came to the Lab to receive academic coaching. The Lab also continues to collaborate with the Quality Enhancement Plan (QEP) to provide academic help to students during the QEP Intense Study Sessions held the week before midterms each semester.

OTHER ACTIVITIES OF THE **METACOGNITION LAB**

This semester, we had the privilege of coordinating the Miles College submission to First Lady Michelle Obama's #ReachHigher initiative. We compiled photographs, vid-

eos and narratives of Miles College's efforts to reach out to high school students and encourage them to strive to attend college. We were able to produce a compelling 4 minutes video to submit for the contest to have Michelle Obama speak at a Miles College graduation.

The Lab also recruited and submitted 3 high school students to the Coca Cola Pay It Forward contest to win. Winners have the chance to attend a 3 day Leadership Academy with Steve Harvey and a \$5000 scholarship. We helped the teenagers explain why they deserve to attend this Academy and what they will do to pay it forward.

We also continue to coordinate Miles College's collaboration with Dr. Condoleezza Rice's initiative, The Center for a New Generation. Last year, the students that we selected and worked with on their interviewing and resume building skills were able to gain employment as CNG mentors to Hayes Elementary School students. As mentors, they build work experience teaching and working with children and also network with the non-profit and education communities. Miles College students compose the backbone of the CNG and have helped this initiative become very successful. Miles mentors are building excellent reputations within the school and the AG Gaston Boys and Girls Club. This year, we will again recruit students and work with them so that they are prepared to submit resumes and interview with CNG for summer and fall positions.

For the second year, we coordinated Dr. Hattie Myles' visit to Miles College. She is the Assistant Dean of the University of South Alabama's Medical School and is also on the Board of Trustees for Alabama A&M. Every year, she promotes the University of South Alabama Medical School's DREAM program which is an all expenses paid two year summer enrichment and MCAT preparation program for aspiring medical school students. The program has rigorous criteria that require students to apply by March of their sophomore year so we are trying to recruit freshman students early enough that they can plan their classes accordingly. One of our Miles graduates who attended the DREAM program went on to attend the Mayo Clinic and is a now on her way to receiving not only her MD but also her PhD.

The mission of the Metacognition Lab continues to be centered on teaching students how to study and how to become lifelong learners. We focus on building relationships of trust with our students so that they can build the skills and the confidence to achieve academic success on their own. The is an old adage that adeptly describes our approach: "Feed a man a fish and he will eat for a day. Teach a man to fish and he will eat for a lifetime." We strive to fill our students with the desire to become lifelong learners. Our coaches have compiled a few stories on kind of work that occurs daily in the Lab. These stories are presented below:

TESTIMONIES SHARED BY THE ACADEMIC PEER COACHES

Student A is a bright young man, originally from La Banda, Argentina, who migrated to the United States in 2011 not knowing a single word of English. Now he is not only proficient in his second language, but he is an aspiring writer. His official major is Computer Information Systems (CIS); he hopes to become a successful programmer utilizing the skills and knowledge he acquires here at Miles College. During this semester I have had the pleasure of helping A navigate through his CIS, American Government and Pre-Calculus II courses. I also met with him regularly last semester to work on English and Pre-Cal I, which allowed us to build upon the knowledge base we both gained last semester to ensure his success this semester. Because I speak Spanish, I was able to communicate very effectively with A and broaden his comprehension of difficult concepts in a way that none of the other coaches in the lab could. Because of this, I think A and I were able to build a stable coach-student relationship, which I am convinced encouraged him to come in regularly to work not only with me, but individually as well (which shows immense discipline, especially since he is also a student athlete—with basketball taking up much of his time outside of his studies). A has been able to maintain a 4.0 GPA during his enrollment at Miles, and plans to continue making straight A's during the remainder of his matriculation. While I'm sure A has learned many things during his tutoring sessions with me, I too have learned an incredible amount from him as well, about myself-my diligence, goals and my willingness to work to achieve them.

Though Student B is not a "traditional student" in the sense that she did not come to Miles College straight from high school like the majority of the students that visit the Metacognition Lab, her story is just as relevant and impressive as that of any other student. B has battled through some tough life experiences which have made her a stronger woman and more adept to taking her classes and her time at Miles in general, more seriously. Because of this, at the first sign of having difficulty with writing for a communications class, she came right into the lab to receive assistance. During her first visit, I did not formally instruct her, but more so guided her brainstorming and planning steps of her paper; that day we discussed social issues and how they related to many of the things we found we have in common, ultimately leading to the connection we now have and what I feel made our work-

our most compelling students to provide a glimpse of the ing together a success. B struggled at first to articulate her thoughts on paper, though her ideas, once polished were magnificent. We worked on her sentence structure, thesis placement and composition, and overall context of her writing until her improvement was not only reflected in her Flesh Kinkaid scores, but directly from her instructor's praises as well. Though helping B proved challenging at times, I feel that the bond we established the first day we met and seeing her improvement was well worth it.

> Student C is also a non-traditional student who has persevered to achieve her president's list status here at Miles College. C and I worked diligently over the course of the semester on Math, allowing her to complete her only remaining math credit, and what she saw as her biggest obstacle in her journey here at Miles College (so far). C faced the challenge of working as a Nurse and balancing her stressful, busy schedule with not only attending all of her classes and also doing well in them, but also finding time to come in to the lab for extra help on a regular basis. Since it had been so long since C had received a formal math education we had to go back and review the basics before we could move on and concentrate on the content of her coursework. Slowly but surely, we moved from working on the rules of computing with negative numbers, to finding the GCF, to factoring polynomial equations. I enjoyed taking a slow approach with her, and her grateful, dedicated approach made my sessions with her, though long, seem to fly by. After a turbulent beginning to her semester, filled with grief after the death of a loved one, it was good to see C smile after she received her first exam back with a big red "A" at the top of it. Even after she began to do consistently well on her exams, C did not frequent the lab less often; she would come in to solidify her skills and review what she had learned in class, following our Study Cycle model to a tee.

> Student D was one of the first students I had helped since I began working in the lab. He sought help in Intermediate Algebra and Biology 101. He is only a freshman and was trying to maintain a C average because he was working as well as going to school. I saw more potential than just C's from this young man though. D was very polite and patient when he came in the lab. He always understood when I was working with multiple students and never once complained. His willing attitude made me want to work harder to help him more. A major milestone this semester was when he made a B on his Intermediate Algebra Midterm. I saw how much he was improving and I think he began to believe in his ability to study and see that he should have never underestimated himself in the beginning. Student D began to see that he could do his work on his own. In his Biology class, he shared that he felt completely overwhelmed. I showed him how to pace himself and to take his papers one step at a time. I watched

working on it himself and I was proud of that achievement. I was able to monitor him and answer his questions. In the end, it was his grade and he earned it. I was very proud of how far he came.

Student E is a freshman and is also a part of the Purple Marching Machine Band. I have helped him in English 101 for the fall semester and currently English 102 for the spring. He is very enthusiastic when it comes to drafting an essay. I would always help him in his prewriting and drafting stages. He would always come to me with well written paragraphs and his work was pretty good. In fact, he would always let me read his instructor notes on some of the things he would write in class. His instructor always told him his work was good, but E must have wanted to do great. I admired his zeal to be a great writer. E would come to the Metacognition Lab after his English class to begin working on his papers. He asked questions and made sure he understood what I was saying before I could even ask him any questions. Currently, E is excelling in his English 102 class and is able to write a draft on his own. I am personally proud of E because he has not let the band affect his academics and he works hard to maintain a good academic average.

Student F is a junior and a classmate of mine. I personally saw him struggling in our classes that we had together. He is on the football team and suffered from a knee injury. His physical therapy caused him to miss a couple of class meetings and he fell behind. I insisted he come to the Metacognition Lab to work on his assignments. He resisted at first and then he finally came in. He expressed to me that he felt lost in class and overwhelmed because of his football schedule. I gradually brought F up to speed in the class. At the end of the fall semester, F raised his grades in those classes to an A and B. He was so excited he got through the semester. He personally thanked me for getting him through the most difficult semester he has experienced at Miles College. This filled my heart with joy knowing I was not just an academic coach for him but a mentor as well.

Student G is a freshman non-traditional student who visits the lab regularly to get help with his math assignments. I have been working with him over the past semester so I have gotten to know a little about his personal life. He resides in Birmingham, AL where he was raised on west side. He describes the struggles that he faced while growing up such as drug abuse, gang violence, and dealing drugs. He finally decided to get his life on the right path by enrolling into Miles College. He has explained numerous times that he is not the strongest in math so I have to go slow with him. G is a challenging individual to work with because of his strong personality and street mental-

D come in almost every day to work on his paper. He was ity. At times he would forget that I was here to help him and he would attack me because he felt like I was judging him. However, we persevered and I have seen his math skills greatly improve.

> Student H is from Chicago, IL and a junior majoring in communications. H at times believed that he didn't need help form the academic coaches in the Metacognition Lab and refused to get help until this semester when he decided to come into the lab for the first time to work on a writing assignment. I was able to show him the correct way to complete an essay in the APA format. Since then, H has been coming in the lab for writing help and Spanish tutoring. He has told me that his skills in writing a paper in APA format have increased dramatically.

Student I came into the lab one day for help with calculus. I have not taken calculus since my fall semester of my junior year but I decided that I would be up to the challenge. He and I spent four hardworking hours tackling 15 problems with me breaking down each step. About a week later he came back in the lab to show me the grade he received on his math grade and it was an A. He was so ecstatic that I was able to help him accomplish that letter grade.

Student J is a second semester sophomore, from Sebring, Florida, majoring in Political Science. I has not always loved English, though he often excels when it comes to academic. When he got to English 201, he had difficulty when it came to physically writing the assignment. Often times J would get frustrated because he knew what he was trying to say, but could not put his thoughts on paper. We sat down together numerous times until he finally began to grasp the concept of writing down everything that comes to mind then editing the paper at the end. He has come a long way, because like many of us he struggled with writing anxiety. Now instead of panicking, he just edits his thoughts later.

Student K is a sophomore from Georgia majoring in Education. K is a bright individual, but his thoughts are not always cohesive. We worked together on editing some of his writing assignments for his education class. A simple issue that K had to deal with was not using colloquial terms in his paper. We had to work on using proper grammar but still keeping the terms the way he wanted to say it. He would use terms that he was used to saying verbally, but could not always explain himself so that others may comprehend what he was talking about. As we worked together, he began to understand how to put what he wanted to say on paper while still retaining his original meaning. As time went on, I had to correct him less, because he was able to correct himself. K made immense progress from the beginning of the semester to now.

Student L is a non-traditional freshman from Alabama, majoring in Criminal Justice. L is very open to learning, though at times has a hard time focusing, and simply does not always grasp the material clearly. I help him with Ms. Bray's Math class, because he does not understand the material that has been given to him in class. When we work together, he often understands the material after the first few times, though when it comes to retaining the information, he usually has a problem. Throughout the semester, we worked on retention and fully understanding what has been taught in class. He takes initiative to come in daily and attempt to grasp the material. He has shown great improvement in the subject material, because he is starting to retain the information and equations necessary to be try my best when working with N and hopefully we will successful in math.

Student M is a freshman that began coming in the Lab during the fall of 2014. M came in seeking help with intermediate algebra. During his first visit I could really see that he was struggling in the subject. After our first session he immediately demonstrated that he was committed to making it to his appointments. If I was unable to help him he would receive help from one of the other coaches. By coming into the lab regularly M began to improve his test scores in his class. I enjoy working with M because he recognizes his weaknesses and doesn't mind asking for help. After receiving help in math, he began to ask for help in his other subjects. Not only M a full time student, but he works as well. It means a lot to me to know that he doesn't let his busy schedule be an excuse for not coming into the lab. He always makes time for what is important and I truly respect him for that.

Student N is a nontraditional freshman. He began coming into the lab during this semester. After graduating high school he decided to take a year off and now he has decided to continue his education. N came in seeking help with Math 099. During his first session he admitted that he was in serious need of help because he had taken a break from school. When we began working with fractions, our interactions became strained. I quickly learned that N has a problem with admitting that he is wrong. Our sessions started off great, but then he developed an attitude. I believe that he wants to improve academically, but I also believe that there are outside factors that are holding him back that he needs to free himself from. I will continue to see improvement soon. He has already made progress by coming in the Lab continuously.