



MARINE BIOLOGY RESEARCH PROGRAM IMPACT AND SUSTAINABILITY

Contents

To Our Community	3
To Our Post-Secondary & Industry Partners	4
Inside Work-Based Learning Programs	5
Aligning WBL to Learning Standards	6
Benefits of WBL Programs	7
21st Century Curriculum	3
MBRP by the Numbers	
WBL Partners	11
Professional Advisory Committee Members	12
Where are they now?	14
Contact Information	16
Company Information	16



GOALS

FOR PAC

- 01. Create a thriving Work-Based Learning Program with 20% more student WBL experience by next year.
- 02. Strengthen our Professional Advisory Committee by adding 20% new members and creating subcommittees by next year

FOR MBRP

- 01. Increase college credit awards by 10%
- 02. Increase # of career plans completed by 20 students.
- 03. Begin implementing job shadowing and youth apprenticeships as WBL experiences.
- 04. Begin implementing ePortfolios with resumes and cover letters.
- 05. Increase the # of WSEPs to 60% of total students.

To Our Community

Thank you for supporting our dynamic "Career Ready" programs. Your dedication, participation, and donations for all our career programs have made a huge impact on preparing all students for career readiness.

Parents, thank you for your support of these authentic learning opportunities for our children. Your donated time in event planning is greatly appreciated. Our children are being given the career resources to succeed in their future endeavors.

Staff, thank you for your dedication in providing the best related curriculum to prepare our students for the new 21st century work world. Your goal to have all students master the content and skills has led to many of our students receiving industry credentials.

Our counseling staff has done a wonderful job in making all our students aware of their Career DNA. With this knowledge our students have been able to make good sound decisions about high school courses, clubs and internships. These experiences translate into future career decisions after they leave our campus.

All of the above activities and support has allowed me to make a year's high in placements.

We all should be very proud of our College and Career Readiness Team!



Mauricio Gonzalez

Marine Biology Science Research Work-Based Learning Coordinator December 5, 2014

To Our Post-Secondary & Industry Partners

STRATEGIC HIGHLIGHTS

This year the Marine Biology Research Program (MBRP) was certified by the New York State Education Department as a Career and Technical Program of Study. Also this year, the director of the MBRP obtained his Work-Based Learning Coordinator License. This license allows our students to be placed in internships and ensures a quality delivery of career and financial management lessons. Lastly, the MBRP lab was upgraded and repaired to ensure a safe and functional space for marine research projects.

COLLEGE HIGHLIGHT

To date, 40 college credits have been awarded to research scholars in the MBRP through our partnership with SUNY Albany and the University in the High School Program. In June 95% of our students graduated. Our students have gone on to attend SUNY Albany, Fordham University, SUNY Cobbleskill, CUNY Hunter, Brown, and City College among others. All of our students are now required to write a college level research paper and present a poster board of original research in order to obtain program certification.

WORK-BASED LEARNING HIGHLIGHTS

15 of our 19 seniors from the class of 2015 have been involved in one or more internships. We've partnered up with The Nature Conservancy, Wildlife Conservation Society, Manhattan College, Roger Williams University, The Harbor Foundation, Governors Island Alliance, and Columbia University, among others to offer unique experiences in the environmental science fields. Students have also been exposed to other career development opportunities such as job site visits (*i.e.* CONEDISON, Earth Matter, and the River Project) and classroom visits by professionals. This year we've had students from the program present to regional-wide audiences at the Omega Institute and national-wide audience at the AFT/AFL-CIO CTE Summit where Vice President Joe Biden gave a keynote address.



SMART GOAL - LOOKING AHEAD

In the year to come it is our main goal to create a thriving Work-Based Learning Program with streamlined and committed partnerships from industry and post-secondary institutions. We look forward to creating a stronger Professional Advisory Committee that is willing to connect the program with relevant partners to achieve this goal. By the end of next year we hope to grow our PAC membership by 20% and place all of our students in at least one Work-Based Learning experience.

Inside Work-Based Learning Programs

"The term 'work-based learning' means coordinated, sequenced, and scaled applied learning opportunities for students that are integrated with academic and technical coursework, including but not limited to service-learning projects, mentorships, job shadowing, school enterprises,



internships, and apprenticeships, including virtual apprenticeships."

The New York Harbor School's Marine Biology Research Program (MBRP) provides Work-Based learning (WBL) experiences to its students in the 10 through 12th grades through the SEA WORKS Program. WBL gives our marine scholars opportunities to study complex subject matter as well as vital workplace skills in a hands-on environment. WBL experiences also provide students with career awareness, career options exploration, appropriate workplace skills development, and the opportunity to relate academic skills to real-life applications.

Some WBL activities appropriate for every grade level are: self-assessments, work skills employability profile development, career and financial management, guest speaker visits to the classroom, career fairs, job site tours, job shadowing, work with professional mentors on research projects, and internships. Internships are considered the pinnacle of the WBL spectrum.

As students see the connections between their lab/field work and what is required at the work site, they gain an understanding of the importance of learning and are able to make better decisions about their futures.

Aligning WBL to Learning Standards

WBL addresses Career Development and Occupational Studies (CDOS) New York State standards by creating authentic, customized learning experiences for students. These experiences are based on students' exploration of their interests, aptitudes, skills and strengths. WBL programs develop and apply students' technical knowledge to master transferable skills that can be used in the workplace after high school and/or college.

Work-Based Learning programs address the following standards for Career Development and Occupational Studies:

- **Standard 1 Career Development:** Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.
- **Standard 2 Integrated Learning:** Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.
- **Standard 3a Universal Foundation Skills:** Students will develop mastery of the foundation skills and competencies essential for success in the workplace.
- **Standard 3b Career Majors:** CTE students who continue in a major will acquire the career-specific technical knowledge and skills to progress toward gainful employment or post-secondary training.

MBRP & WBL

WBL
SUPPORTS THE
NEW
COMMON CORE
STANDARDS
&
MEETS THE
NYS
CAREER
DEVELOPMENT
STANDARDS



- 1 Career Development
- 2 Integrated Learning
- 3a Universal Foundation Skills
- **3b Career Majors**

Benefits of WBL Programs

Benefit to Students	Benefit for Employers	Benefit for Schools	Benefit for Community
- Provides a real-world learning environment to develop interests and abilities -Develops an understanding of employment opportunities and responsibilities through direct worksite experiences - Promotes the development of positive work habits and attitudes - Provides a real-world setting for developing marketable skills - Provides opportunities to apply classroom learning (both academic and CTE) - Provides real life interaction with other employees, which leads to better understanding of the human factors in employment - Provides an opportunity to participate in, and profit from, two types of learning environments—school-based and work-based - Increases motivation to remain in school, graduate, and pursue postsecondary education/training (lifelong learners) - Provides financial rewards in paid CO-OP while career focused skills are being developed	- Fosters involvement in the CTE curriculum development process - Provides an opportunity to experiment with new programs, projects, and/or activities with student assistance and input - Improves employee retention - Provides a pool of potential future employees - Can reduce training/recruiting costs - Provides a community service	- Brings employers and schools together in a training effort to develop strong CTE programs - Enhances the ability to meet the needs of a diverse student population - Makes education more relevant and valuable for students - Promotes school/faculty interaction with the business community - Increases relevant schoolbased learning by helping students clarify career goals and provide a practical means of reaching them - Bridges the gap between school and the world of work	- Provides an effective way of helping young people become productive citizens in the community - Increases the economic health of the region and state as students help employers meet the need for skilled workers - Promotes respect and tolerance between various groups in the community - Provides a method of introducing high school students to local employment opportunities - Promotes closer cooperation and understanding between community and schools - Encourages students to remain in the local community after graduation, thus promoting a more stable workforce

PREPARING PROFESSIONALS FOR THE 21ST CENTURY

This Report articulates our desire to expand work-based learning opportunities for students, strengthen partnerships with business and community leaders, and effectively integrate 21st century skills and technology into instruction.

21st Century Curriculum

Provided is a list of modules and topics for general classroom instruction and training site content to augment instruction already within the CTE program.

Career Planning – Junior Year Over First 20 Weeks

Self-Assessment Foundation – Academic Theory Career Exploration Career Plan and Portfolio

Pre-Employment Skills – Junior Year Over Second 20 Weeks

Preparing for the Interview Applying for the Job Follow-up after the Job

Job Success Skills - Senior Year Over First 10 Weeks

Problem Solving, Success Skills
Ethics, Rights and Your Job
Becoming a Professional
General Related Safety
The Employer
Performance Evaluations
Unions
Financial Literacy
Entrepreneurship

Career Planning - Senior Year Over Second 10 weeks

Employability Skills Career Strategy Post-Secondary Training Career Plan and Portfolio

Pre-Placement

Essential Documents Training Plan Child Labor Laws Safety

Internship - First to Second Weeks

Workplace Orientation Hours of Employment Workplace journal

Internship - Third to Fourth Weeks

Workplace Journal
Begin Industry Profile – WBL
Interview/Research Project
Performance Appraisal

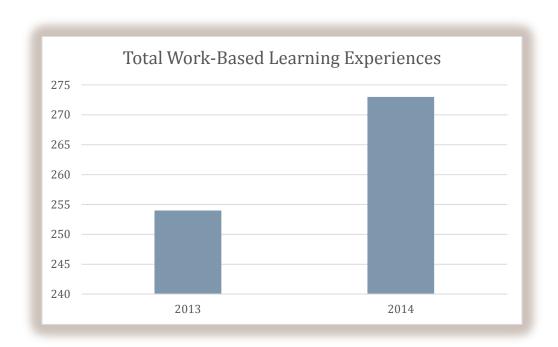
Internship - Fifth to Sixth Weeks

Industry Profile – WBL Interview/Research Project Performance Appraisal



MBRP by the Numbers

WORK-BASED LEARNING EXPERIENCES		
	2013	2014
Total Students	57	55
Female	29	26
Male	28	29
Special Education Services	5	4
Worksite Tours	5	4
Youth Apprenticeships	0	0
On-Site Projects	44	36
Off-Site Projects	5	13
Job Shadowing	0	0
Internships - Summer	15	11
Internships - School Year	1	1
Service Learning	19	17
Visits by Industry Professionals	74	74
Scholar Professional Presentations - Off-site	6	5
Scholar Professional Presentations - On-site	57	48
Self-Assessment - Career DNA	0	0
Portfolios	24	28
ePortfolios	0	0
Career Plan	0	0
Work Skills Employability Profile	0	19
Financial Management	0	14
Career Management (<i>i.e.</i> career self-assessment, preparing for the job, keeping the job, <i>etc.</i>)	0	0
ACADEMIC ACHIEVEMENTS		
	2013	2014
Awarded College Credit (# Credits)	6	32
Final Assessment: NOCTI NRS (% Pass)	100	100
Final Assessment: Research Paper or GIS (% Pass)	100	100
CTE Technical Endorsement (% of Seniors)	0	69





WBL Partners

- The Nature Conservancy
 - o Blaze Jones-Yellin
- Wildlife Conservation Society
 - Courtney Wiggins
- Manhattan College
 - o Mike Judge
- Columbia University
 - o Bob Newton
- NY Harbor Foundation Harbor SEALs & Billion Oyster Project
 - Sam Janis
 - o Matt Haiken
- New York University
 - o Alberto Stolfi
- Cornell University
 - Matthew Hare
- Earth Matter
 - Marisa DeDominicis
- CIVITAS
 - o Maura Smotrich
- Governors Island Alliance
 - Masha Berek





















Professional Advisory Committee Members

E1 0	Administration				D
Education	Principal	UANYHS	Kimberly	Swanson	Principal
Education	CTE Dept. Chair	UANYHS	Brendan	Malone	CTE
Education	Teachers	UANYHS	Mike	Moshos	Math
Education	Students	UANYHS	Rachel	Anderson	Student
Education	Students	UANYHS	Averille	Ramos	Student
Education	Students	UANYHS	Jenlani	Wiltshire	Student
Education	Parents	UANYHS	Nerissa	Alvarez	Parent
Education	Parents	UANYHS	Paulette	Roberts	SLT
Education	Parents	UANYHS	Ronnie	Woodhouse	Parent
Education	Alumni	FDA	Jah-Vin	Vaughn	Alumni
Education	Alumni	UANYHS	Cecilio	Benn	Alumni
Education	Alumni	FDA	Randy	Garcia	Alumni
Post-Secondary	Marine Resources	Manhattan College	Mike	Judge	Professor
Post-Secondary	Marine Resources	Roger Williams University	Tim	Scott	Professor
Post-Secondary	Marine Resources	Stevens Institute of Technology	Philip	Orton	Research Scientist
Post-Secondary	Marine Resources	St. Francis College	Kathleen	Nolan	Professor
Post-Secondary	Marine Resources	NYU	Alberto	Stolfi	Post Grad
Industry	Marine Resources	Sea Savers Inc	Matt	Leahey	President
Industry	Marine Resources	DOE	Jim	Hall	GIS Analyst
Industry	Marine Resources	ESRI	Charlie	Fitzpatrick	Schools Program Manager
Industry	Marine Resources	TNC	Brigitte	Griswold	Director
Industry	Marine Resources	TNC	Blaze	Jones-Yellin	Regional Coordinator
Industry	Marine Resources	SeArc	Shimrit	Perkol-Finkel	Chief Scientist
Industry	Marine Resources	SeArc	Ido	Sella	CEO

Industry	Marine Resources	Hudson River Foundation	Jim	Lodge	Research Scientist
Industry	Marine Resources	Xylem-YSI	Benjamin	Clarke	Regional Rep
Industry	Marine Resources	DEP	Beau	Ranheim	Research Scientist
Industry	Natural Resources	Earth Matter	Marisa	DeDominicis	CEO
Not-for-profit Groups	Restoration	CIVITAS	Maura	Smotrich	Project Manager
Community Based Org.	Human Services	Citizen Science	Bart	Chezar	Citizen Scientist
Community Based Org.	Parks	CB10/HRPTF	Richard	Toussaint	Community Organizer
Government	CDC	HCDC - NYS	Thomas	Lunke	Director



Where are they now?



Kimberly is studying Biology at SUNY Albany



Stephanie is studying Math and Ileana is studying Pre-Med at Hunter



Bala is studying Business Administration at SUNY Albany





Bazl is studying Biochemistry



Ameena is studying Environmental studies at SUNY Cobbleskill



Cecilio is studying Political Science at Fordham University



Pablo is studying Graphic Design

Contact Information

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WBL COORDINATOR
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Company Information

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