



TEACHING WITH SMALL BOATS 2015 CONFERENCE

April 30 ~ May 2, 2015
Port Townsend, WA

**Overview of Marine/Maritime Education
Around the Country**



The Maritime Academy of Toledo Campus
803 Water St. AND 1 Maritime Plaza 2nd Floor
Toledo, Ohio

Grades 5 – 12

- Tuition-Free (Nautical Themed) Public School
- 89% - 91% Disadvantaged (poverty-level income)
- Racial Diversity
 - 37% Caucasian
 - 38% African - American
 - 16% Latino
 - 9% Mixed Race
- Gender Diversity: 50% Male/ Female
- Diploma-Based Curriculum
- College Prep – Common Core/Ohio Standards
- Career Tech Education Programs
 - Professional Mariner
 - Culinary
- 24 - 30 Post-Secondary (College) Credits
- After School Enrichment til 6 p.m.

Our Story

2004

2006

2008
SOCP

2010

AMO

Our Campus



Setting the Stage: Our Campus



Mini Conference Center



Training Pool

Movie Theater

Board Rooms





Accommodations and Amenities



Continuing Our Story

2004

2011 - CTE

2006

2012 - 1st Grad

2008

2013 - BST

SOC

2010

2014 - 4 Grads



Curriculum Design

Grades 5-8	Nautical Traditions
Grades 7-8	Intro to Marine/Maritime Occupations
Grade 9	Maritime Skills
Grade 10	Maritime Curriculum (Deck and Engine)
Grades 11 – 12	Maritime Deck, Engine, Culinary (Owens Community College - welding, electronics, electricity, small engine, diesel engine, hydraulics)
Marine Sciences:	Marine Biology Ecology Environmental Science Limnology Aquatic Capture Water Quality / Pollution Control

Marine Career Tech Education Curriculum

Maritime Occupations

- Seamanship
- Boat Building 1 & 2
- Ships Systems
- Navigation
- Weather for the Mariner
- Rules of the Road
- Maritime Security
- Electronic Navigation
- STCW-Basic Safety Training

Culinary Occupations

- Intro to Culinary
- Pro Serve
- Galley Hygiene
- Recipe Prep
- Dining Room Management
- Food Labs

Career Tech Cadets at Owens Community College

Small Engine Repair Class



Diesel Class





2-Year Culinary Program





Class A Full Mission Bridge Simulator

8 Station Radar Classroom



Mariner I



Research and Education Vessel



**Pass the Ohio Department of
Natural Resources Safe Boating
Course in 9th grade and you can
pilot Mariner I too!**



Joint exercises on the
Maumee River
with the
US Coast Guard





Swimming and Scuba Diving Certification



Kayaking Practice in the pool and then move out into the Maumee Rive!



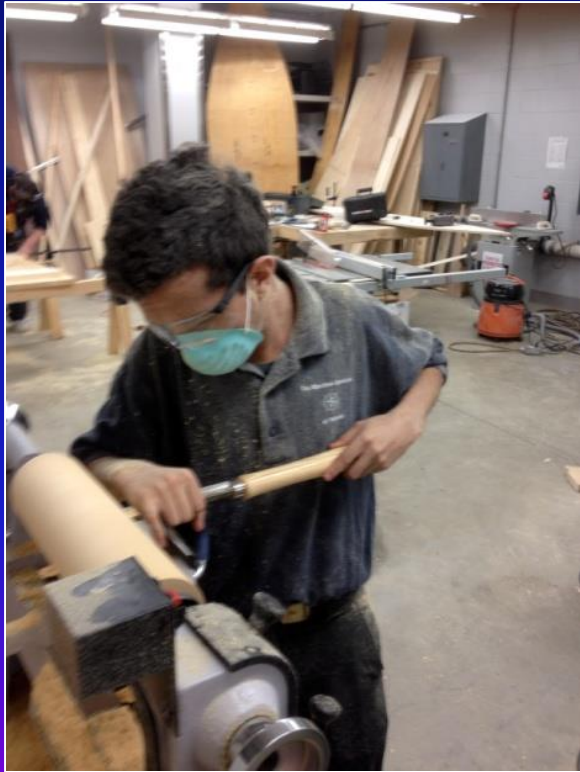


**Learning
to use the
tools of
the trade**



Cadets in the Boat Building Lab

Building the Ships Hatch Tables



Turning the table
legs on the lathe



Routing the hatch
straps



“Antiquing” the hatch
cover with chain

4 Skiffs, 1 Tugboat 4 Cardboard Boat Races





The 4th Annual Great American Cardboard Boat Race

Drumline



USCG Uniforms

Color Guard

Parade Ready!

Partnerships

Great Lakes Maritime Academy

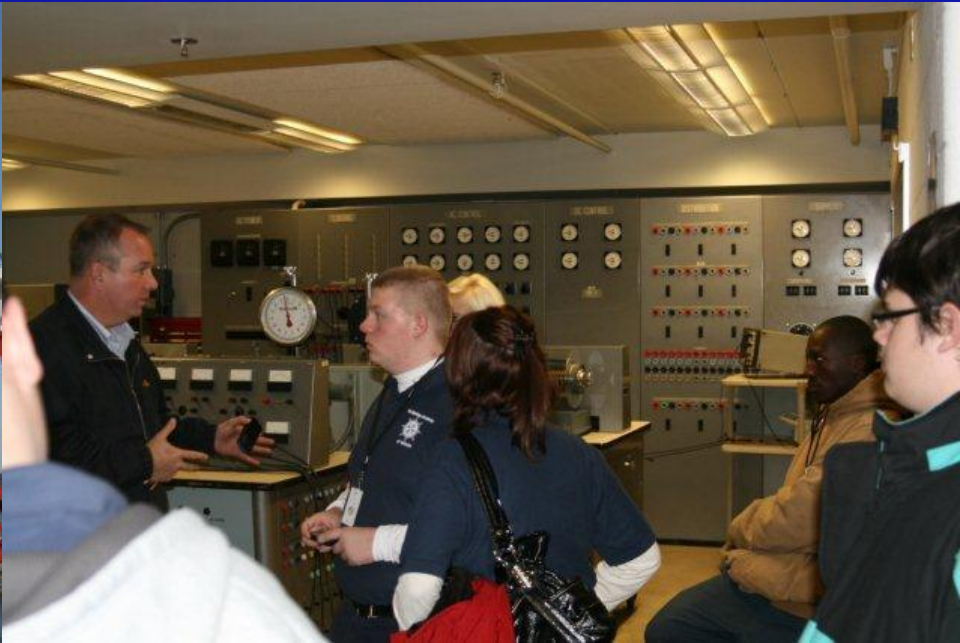
Traverse City, Michigan



Partnerships



**The State of Michigan Training Ship visits TMAAT and
Invites 12 cadets to sail with them from Toledo to Detroit May, 2014**

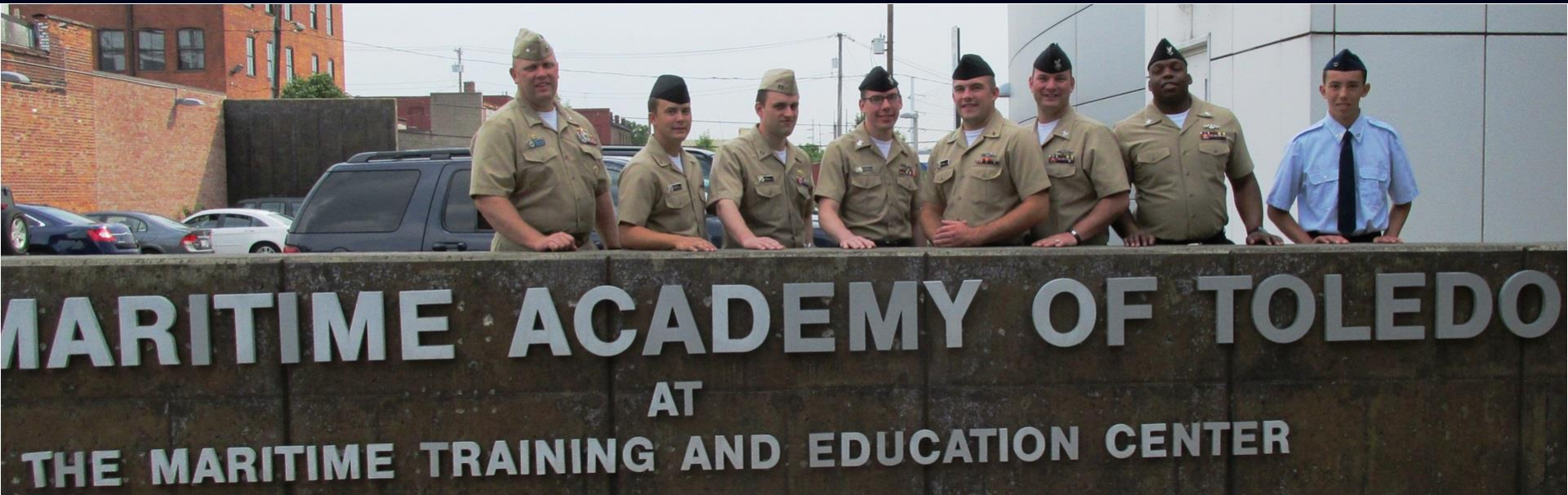


Partnerships

ON BOARD the M/V Manistee



Partnerships



USS Toledo crew and
Commander Mike Majewski
visit TMAT
August, 2014

Future Programming: Agriculture and STEM

Science, Technology, Engineering, Math

- **Science**
 - **Biology**
 - **Ecology**
 - **Environmental Science**
 - **Marine Biology**
 - **Physical Science**
 - **Physics**
- **Environmental and Marina Management**
- **Immersive Simulation Technology**
 - **Welding**
 - **Tugboat**
 - **Crane**
- **Engine Room Simulator (Engineering)**
- **Nautical Mathematics**

TMAT Graduate Credentials

Basic Safety Training

Passport

Transportation Worker Identification Credential

Physical Exam

Drug Test

Merchant Marine Credential

Saving and Checking Bank Accounts

B
S
T



**Personal Survival and
Water Rescue
Required for all Mariner
Career Tech Graduates**



Fire Training and MARAD



First Aid

CPR



Our Successes

School Year	# Graduates	% Graduated	Industry Credentialed	# Maritime Jobs	# In College	# Employed	# In Military
2007	2	100%			1		1
2008	1	100%			1		
2009	6	100%			2	2	1
2010	9	100%			3	2	2
2011	14	93%			5	3	2
2012	16	88%	4	1	5	4	2
2013	18	95%	3	0	6	5	2
2014	19	95%	4	3	6	7	3

One Student is a Freshman at Great Lakes Maritime Academy!

**The next generation of the maritime workforce
They are in K-12 schools right now -- not old enough to
drive but learning how to pilot a boat, rules of the road,
chart reading, engines, welding and more.**



K-12 Marine / Maritime Schools Are Ready to Navigate Through The Perfect Storm With You!



**Are You Ready to Change Course
Marine / Maritime Workforce Development:
Partnerships with Primary & Secondary Schools**

Our Funding Challenges!

How Could The Marine/Maritime Industry and Colleges/Universities Support Us?

If you get to know us, we'll make our needs known to you

Internships	?
Partnerships: include us in grants, employees as volunteers	?
Career Days and Job Placement	?
Guest Speakers and Field Trips	?
Become Trainers for Professional Mariner Professional Courses	?
Purchase a USCG uniform – per student	\$70
Scholarships	\$500–\$1000
Lifeboat and Davit	?
Purchase or Donate Professional Mariner Courses	?
Small Chase Boat for rowing and kayaking activities	?
Graduate Credentials - per graduate	\$500
Checking and Savings Account	\$50



Maritime Primary & Secondary Education Coalition (K-12 Schools)

<http://mpsecoalition.com>



The Perfect Storm

Let's Change Course Together!

