



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

SOCP

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

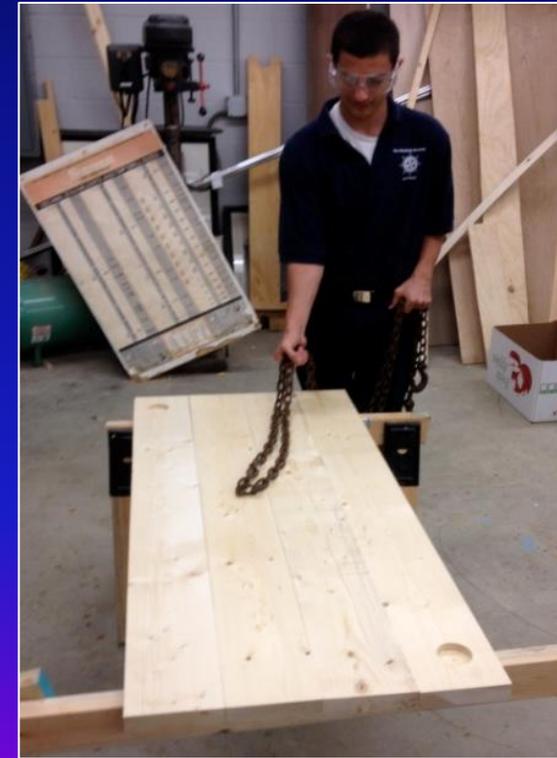
Building the Ships Hatch Tables



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

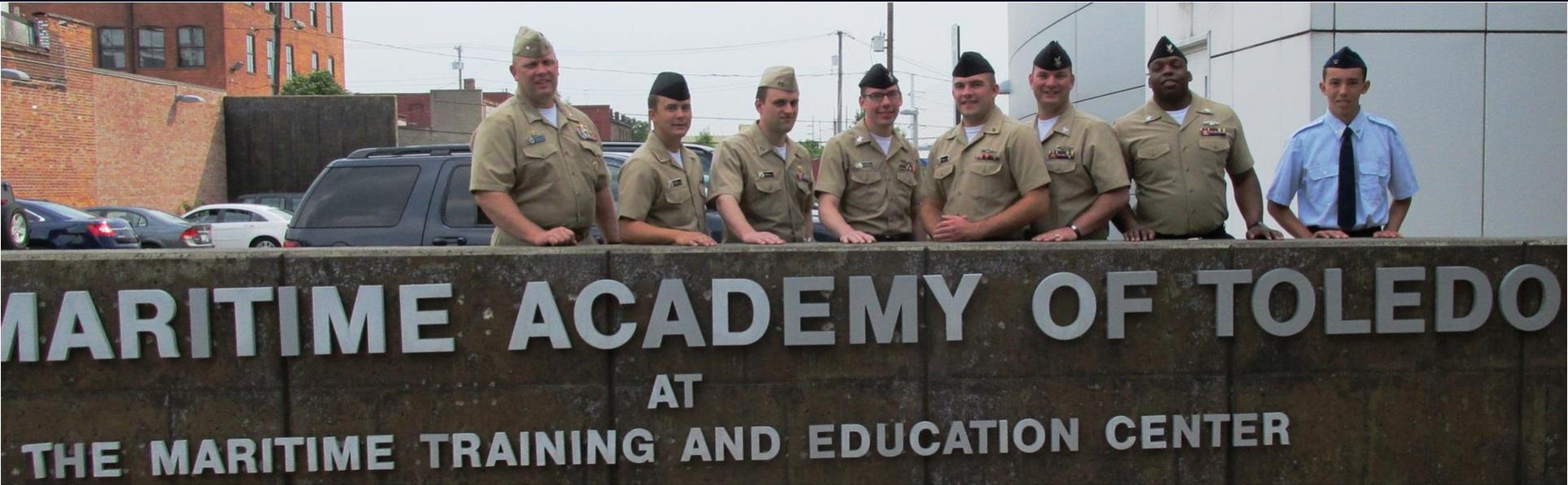


Partnerships

ON BOARD the M/V Manistee



Partnerships



**USS Toledo crew and
Commander Mike Majewski
visit TMAE
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!

