

## **TO ENHANCE MARITIME CADETS JOB MARKET COMPATIBILITY THROUGH INTERNATIONAL COOPERATION BETWEEN MARITIME INSTITUTIONS**

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**Abstract** Beginning during the spring term of 2009, the Massachusetts Maritime Academy (MMA) of the USA launched a student exchange program with Shanghai Maritime University (SMU) of China, and later, in 2013, extending it to the Dalian Maritime University (DMU) of China. Every spring term, about 25 cadets are selected from each institution and sent to the other campus to study and gain experiences. Almost 300 students from both sides have participated in the program and nearly all have demonstrated a strong capability to overcome the language barriers, adapt to the new environments, achieve great things, in the job market and their subsequent career development.

This paper presents an analysis of what accounts for the success of participating cadets in the exchange program, and their subsequent achievements in the job market competitiveness. Applying a case-study method, taking on questionnaires and the data collected over the course of nine years, this paper examines how the MMA-SMU exchange program helps students overcome cultural shock and gain their leadership qualities. This is especially true in comparison to the cadets who do not participate in the international program. The findings suggest that the program has been very effective in helping the participating cadets enhance their self-confidence, broaden their world visions and adapt to new environments with ease and grace. As a result, participating cadets have been continuously standing out in their job market competitiveness and career growth after graduating five years from the academy.

It becomes extremely important to study the successful experiences of the MMA-SMU exchange program, because it has been a big challenge facing maritime institutions that how to bring out the excellent qualities of cadets and enhance their competitiveness at the job market. When the participating cadets in the MMA-SMU program prove that they can survive and

perform well in two completely different cultures, they demonstrate that they have acquired the necessary and sufficient skills to be successful within any type of job they are offered. And this is exactly what potential employers are seeking of all graduating maritime cadets today.

**Keywords:** International programs between maritime institutions, Job Market Compatibility, Cross-cultural education, Language proficiency.

## **I. Introduction**

Since the spring term of 2009, the Massachusetts Maritime Academy (MMA) of the USA has been engaging in a student exchange program with the Shanghai Maritime University (SMU), and later, in 2013, extending it to the Dalian Maritime University (DMU) of China. As the MMA-SMU/DMU exchange program has been conducted in two countries which differ greatly in culture, history, economic systems, social values and government structures, it imposes a huge challenge for the participating students to survive and be successful. Nevertheless, it has been well proved that MMA-SMU program provided students with strategies to move from shock to cross-cultural adaptability, which in turn, will make the students, as Hutchings, Jackson & McEllister refer to, “the new style employees to be cosmopolitan, multilingual, multifaceted and be able to operate across national borders.” (Hutchings, Jackson & McEllister, 2002, p69). Almost 300 students from both sides have participated in the program and nearly all have demonstrated a strong capability to overcome the language barriers, adapt to the new environments, achieve great things in the job market and their subsequent career development.

This paper presents an empirical analysis of what accounts for the success of the exchange program, how the participating students overcome language barriers, outperform in the international programs and get their subsequent achievements in the job market. Applying a case-study methodology, drawing on the school-wide surveys and the data collected over the course of eight years, this paper examines how the setup of the MMA-SUM/DMU exchange program helps students overcome cultural shock, promotes language proficiency and fosters leadership qualities.

The paper is structured as follows: Section II identifies challenges facing the MMA-SMU/DMU Student Exchange Program. Section III presents the positive experiences of visiting MMA cadets in China and their subsequent job market success. Section IV offers a conclusion.

## II. Challenges facing the MMA-SMU/DMU Student Exchange Program

Since the year 2010, the Massachusetts Maritime Academy has sent cadets over to Shanghai Maritime University every spring term and starting from 2013, to DMU. Each year, MMA accepts roughly twenty Chinese students to study at the MMA campus. The following table gives us the numbers of the participating cadets from MMA from the year of 2010 to 2016. In the meantime, SMU always sends pretty much the same number of cadets over to MMA year after year, as does DMU.

**Table 1.** Participating MMA cadets in the MMA-SMU exchange program 2010-2015

Year	2010	2011	2012	2013	2014	2015	2016
MMA Cadets To SMU	11	16	17	22	19	20	19
MMA cadets to DMU	N/A	N/A	N/A	5	4	5	7
Total number of cadets to China	11	16	17	27	23	25	26

Data sources: MMA registrar's office

Table 1 shows a clear rise in the numbers of participating cadets of the MMA-SMU exchange program in the last three years. And yet the MMA-SMU/DMU student exchange program does conduct in two countries which differs so much in many aspects, which imposes huge challenges for participating cadets, administrators and faculties of the institutions in both countries.

### 2.1. Cultural Awareness and World Vision

The Massachusetts Maritime Academy is a principal maritime educational institute in the US, with a focus on excellent ocean-centric majors like Marine Engineering and Marine Transportation. However, as a state college, the great majority of cadets enrolled are from Massachusetts and other local areas in New England, a region in the North-Eastern corner of the United States. The academy has shown, more or less, the features of homogeneity and conservativeness. Thanks to the vision and courage of President Gurnon, MMA stepped out of its comfort zone in response to the proposal of SMU in China, and set up the MMA-SMU exchange program in 2008. The exchange program was the first international exchange program at MMA. Among all American maritime institutes, MMA is still the only institution which

offers a successful international exchange program with Chinese maritime universities. The following school-wide survey of 109 cadets in 2011, show how the cadets perceived the program and how prepared they were in regards to international travel.

**Table 2.** World Traveling of MMA cadets

Destination of travel	Percentage of survey participants
China	3%
Asian Countries (except China)	7%
European Countries	31%
Caribbean, South & Latin American Countries	97%
Canada	78%

Table 2 indicates how extensively (or not quite) American students travelled outside the US and places they felt comfortable going to. Only a few American students had gone to Asian countries (except China), such as Israel, Jordan, India, and Japan. And three had visited China, including one American-born Vietnamese. Around three-fourths of responding cadets made trips to Canada; a country that holds similar political, economic, social and cultural systems to the USA. And yet out of the eighty-five students who had visited Canada, all of them went to English-speaking areas like Toronto, Vancouver and Ottawa, and only one third had gone French-speaking areas like Montreal and Quebec City. About 31% of the respondents toured European countries, and the highly frequented destinations were Italy, Ireland, Portugal and England. To a great extent, this is due to the fact that many of the respondents are descendant of the British, Italian, Portuguese and Irish, can still speak the language, or have family members living in Europe. One cadet explained that his grandfather lived in a village outside of Rome and he has more than 20 Italian cousins.

The statistics in Table 2, also shows that nearly all of the MMA cadets paid visits to Caribbean, South and Latin American countries, such as Mexico, Barbados, Puerto Rico, Ecuador, Panama, Costa Rica and Tortola. That is mainly because cadets at MMA are required to take sea terms, and the countries in Caribbean, South and Latin American regions are usually the planned destination when the cadets take voyages with the school training ship.

Therefore, it is well expected that the MMA exchange students would unavoidably experience some “culture shock” when they go to China and try to blend into the new environment in such a swift period of time. The term, “culture shock”, was first introduced by an anthropologist and economist, Kalervo Oberg, as a disease suffered by individuals living in a new environment. According to Oberg, “culture shock resulted from the loss of well-known signs and symbols, causing individuals to experience anxiety, frustration and helplessness.” (Oberg, 1960). To fully realize the stress MMA exchange cadets might face in China, the MMA-SMU program was designed in such a way which mitigates culture shock to the minimum. The effective measures include assigning one Chinese student and one American student as roommates, free selection of courses, extensive classes of language and culture, and cultural trips to enhance the understanding of the host country.

**Table 3.** Answers to Questionnaires (MMA)

Survey Questions/ Answers	Positive	Negative	Neutral	Year
The impact the China program would impose on MMA?	81.9%	0.9%	17.4%	2011
	84.5%	0%	15.5%	2013
	89.2	0%	10.8%	2016
How will the China program influence you?	33%	2.8%	64.2%	2011
	39%	1.5%	59.5%	2013
	45%	0%	55%	2016
Do you want to go abroad for jobs or studies?	56.0%	22.9%	21.1%	2011
	63.0%	15.1%	21.9%	2013
	67%	10%	23%	2016
What do you think of the Chinese students?	75.2%	0%	24.8%	2011
	78.1%	0%	21.9%	2013
	84.5%	0%	15.6%	2016
Do you want to be roommates of visiting Chinese Cadets?	19.3%	71.5%	9.2%	2011
	21.2%	69.4%	9.4%	2013
	27.6%	59.9%	12.5%	2016

Table 3 presents the 5 major questions in the survey, taken in 2011, 2013 and 2016 respectively, and the answers the participating cadets selected. The sample sizes for the school-wide survey are 109, 103 and 107 participating cadets for the three years. For each of the questions, the cadets had 3 choices, “positive”, “negative” or “neutral”, and gave one answer per question. They were also asked to provide further explanations to each of their choices.

In the surveys of 2011, 2013 and 2016, a great majority of MMA cadets believed that the China program would have a positive impact on MMA, and none had negative opinions about Chinese students. With the development of the exchange program, there is a slight increase in positivity for all questions. Both Tables 2 and 3 clearly state that many MMA cadets have not gone far from where they were born and raised and were still uncomfortable with the unfamiliar.

Most MMA cadets would prefer not to share a room with a visiting Chinese student. When being asked the reason, several MMA students said that they would like to have a roommate who would be closer to themselves, with similar personalities, backgrounds, and hobbies. As one student put it, “I want to room with one of my friends.”

It is also worth mentioning that over the course of nine years, each group of Chinese exchange students brought qualities of diligence, a strong work ethic, and determination to succeed, when they were selected and sent to the MMA campus. Though the Chinese students would experience culture shock and language barriers, they made extraordinary efforts to blend in and excel in the classroom. One MMA professor of Marine Engineering said: “It is a pleasure to have the Chinese students in my class. They work so hard and get the best grades.” With the on-going exchange program, MMA cadets have become more culturally aware and keen on international affairs.

## **2.2. The Unique Features of the Two Engaging Maritime Institutions**

The two institutions, MMA and SMU, are quite different in their scales and their comparative advantages, though both are playing a leading role in fostering maritime professionals. The exchange Program gives a challenge to both schools, and yet provides an opportunity to bring out the potentials of each school and benefit the other.

The SMU exchange students, selected from a large pool of candidates to participate in the MMA-SMU exchange program, are a group of the elite cadets with all the fine qualities to be expected in maritime students. These young Chinese students, though adhering to traditional

Chinese value system, have been impacted more or less by the western cultures, ideology, arts and trends. One student puts it in her personal statement: “I grow up seeing American movies, TV series and shows. My most favorite ones are So You Think You Can Dance, Transformers and Heroes. And I really look forward to seeing America with my own eyes.” The exposures to western cultures, such as involving in other international programs, world travels, attending international schools in China, reading western books, watching western movies, and listening to western music, help the Chinese students understand the western society and recognize its value systems.

There are two more common characteristics about the Chinese students which facilitate them blending in the new environment: being fluent in oral and written English, and coming to MMA as a group. The Chinese students are required to take English from elementary schools (some even from kindergartens). The English proficiency greatly enables the Chinese students communicating smoothly with MMA cadets and performing to their potentials in the classroom. Furthermore, different from other individual foreign cadets studying at the academy, SMU students come as a group of 20, which gives them a large cushion to minimize the cultural discomfort if they do experience any.

Therefore, when proposed for the exchange program, both MMA and SMU believe that it is in the mutual interests to launch the program which would fully utilize the potential of both schools, the excellent SMU students and high quality faculties, and educational and training facilities at MMA.

**Table 4:** Do you prefer American professors to foreign-born professors ( MMA )

Answers	Prefer American Prof.	Prefer Foreign Prof.	No Preferences	Time of Survey
Percentage	18%	9%	73%	May 2015
Percentage	25%	4%	71%	Sep. 2015

We can see that more than 70% of the participating cadets have no preference between American-born professors and foreign-born professors. Table 4 sums up the results of two surveys conducted in May 2015 and September 2015 with 33 and 53 respondents respectively at MMA. It clearly shows that the on-going process of globalization and interactions between

countries and peoples has brought positive changes towards the cultural acceptance and mutual understandings, especially among young generations.

### **III. Positive Experience in China and Job Market Success for MMA Exchange Students**

#### **3.1. Positive Experience at SMU of China**

Each year, the participating cadets from the academy gained very positive experiences during their stay in China. They believed the program helped them in the following three areas: developing good relations with Chinese people by experiencing the country first hand, putting them in more advantageous positions in different cultures and among different people, and meeting cadets of the same major from other countries. One student wrote in his report of the exchange program: “It is a great opportunity to meet people from other countries in similar fields of study.” Another cadet said that “It allows exchange of cultures and offers a new unique experience. It also helps educate everyone in the school about the Chinese culture, not just those who get to go.”

Many participating cadets from the first groups became strong advocates of the exchange program and promote the program in every possible way. The cadets present papers about the program and their own personal experiences at international and domestic maritime conferences, hold positions in the student council, serve as cadet officers of foreign exchange programs, give talks to cadets’ parents, and encourage other MMA students to join the program.

The cadets from MMA have left a strong impression in China. The young men and women not only show their fine academic qualities by expressing their language proficiency, intuitive vision, and genuine curiosity and perseverance, but also their spirit and personality, through determination, cultural adaptability, flexibility, and the capability to overcome all difficulty. Here is a good example: Myra was the only female cadet going to China in the first year. On top of being the best student in the class, averaging 85.2, while the class mean was an 82, Myra joined the soccer team as the eleventh member representing MMA to play against SMU and other university teams in Shanghai. It turns out that she scored the most in the games. She was once injured badly on the field and rushed to the hospital in an ambulance. Her optimism and determination made a deep impression on her teammates, the Chinese cadets and



the doctors who treated her in the hospital. One Chinese faculty at SMU exclaimed, “Wow, fragility, your name is not American women.”

### **3.2. Job Market Success for the Exchange Cadets at MMA**

At this point, we only have five groups of MMA cadets graduating from the academy after studying for one semester in China, and most received good job offers upon graduation. For the purpose of this paper, we will focus on the jobs the cadets entered after they were gilded with China experiences. We will look at the companies the cadets received offers from in their senior year and how much their experiences in China contributed to the jobs and later promotions. We see three things clearly from the available data collected by the Office of Career and Professional Services of the academy: companies the participating cadets now work for tend to be large, with many international elements, a decent salary offer, and they are on a steady rising track of career development.

Here we would like to look into two cases of the program participating cadets who visited SMU in the year of 2010 and see how the China experience help the cadets gain fine qualities and their success in the job market.

Myra , the first female who went to China in 2010, received a job with SpecTec upon her graduation as a regional sales manager. SpecTec is a premier provider of asset management solutions for the marine, offshore & energy, defense and yachting industries all over the world. Her responsibility is to identify and evaluate sales opportunities in the United States, Canada, and Latin America. After working at SpecTec for two and half years, Myra switched to DNV GL Group, the world’s largest ship and offshore classification society of the maritime industry, a leading technical advisor to the oil & gas industry, and a leading expert in the energy value chain, including renewables. The company has 16,000 employees across 300 sites in more than 100 countries and gains revenue of EUR 2,500 million per year. Myra works as Sales Support Manager and she loves her challenging and rewarding job.

Johnathan, who went to China in the Spring year of 2010, was offered a job as a technical coordinator by Canada Steamship Lines (CSL). CSL is a Montreal-based company which brings highly-efficient, gravity-fed, self-unloading capability to bulk shipping and transshipment markets throughout the world. Only two years out of college, Johnathon has completed project work in China for CSL International and is now based in England, working

for CSL Europe and their Technical Operations Director conducting analysis and development of fleet wide operational, financial and energy efficiency improvements. The young graduate also assists in development of a monitoring system to improve the CSL Europe safety program. As put by the front page article of the MMA website, “this young grad hopped on CSL’s sturdy corporate ladder and started climbing!” Currently Johnathan works as the Manager of Strategy and New Business Development at the headquarters of CSL in Montreal of Canada.

The following graphs (from the Office of Career and Professional Services at MMA) present the salary range of MMA seniors from the years 2011 to 2016. There were 81 cadets in 2011, 93 cadets in 2012 and 108 cadets in 2013 who responded to the survey, respectively. The salaries were put into five different ranges; below \$35,000, between \$35,000 and \$50,000, between \$50,000 and \$75,000, and between \$75,000 and \$100,000, and over \$100,000. The vertical bars show the percentages of entry level salaries the responding cadets received for the year 2011, 2012 and 2013. And in the later graphs, we will show the date for the year of 2014, 2015 and 2016.

**Fig. 1** Salary ranges seniors received for the year 2011 -2013

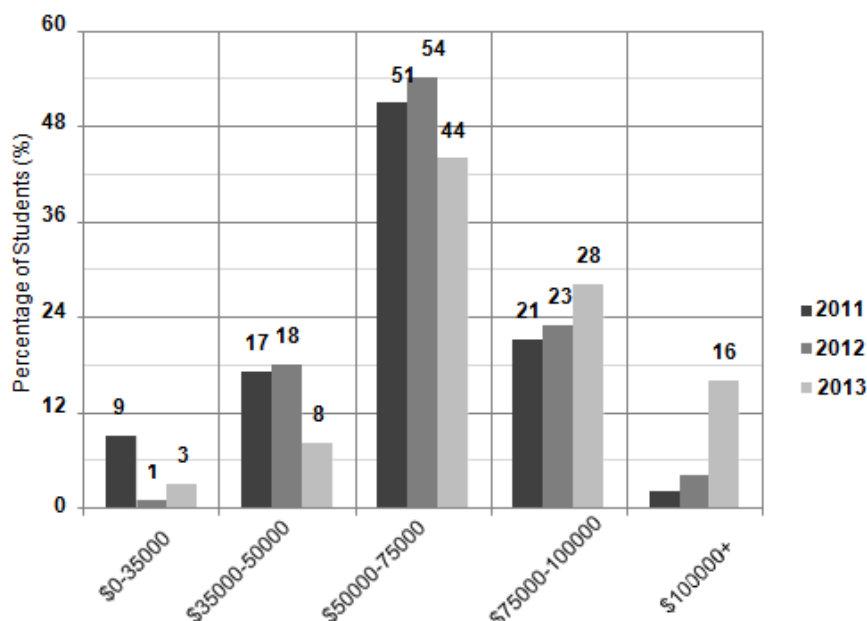
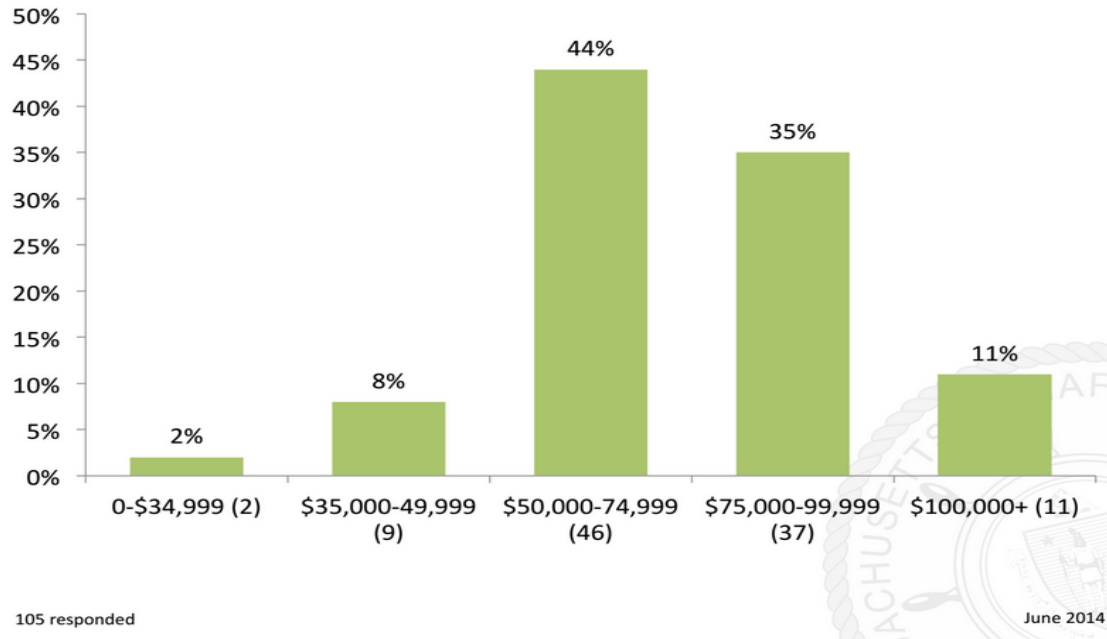


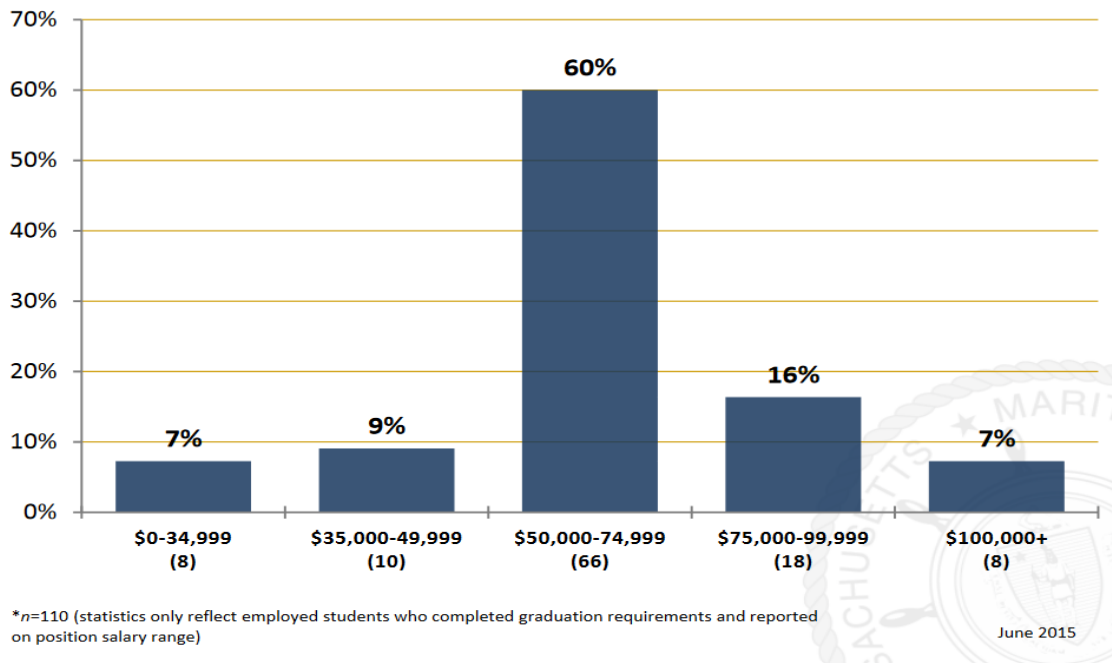
Figure 1 shows that about 50% of MMA seniors have annual salaries that range from \$50,000-\$75,000 for all the three years and well over 20% earn in the \$75,000-\$99,000 range. In 2013, 16% received an initial offer of more than \$100,000. Only three female exchange

students out of the five responded to the surveys; two reported a salary range between \$50,000- \$75,000 and the other \$35,000-\$50,000.

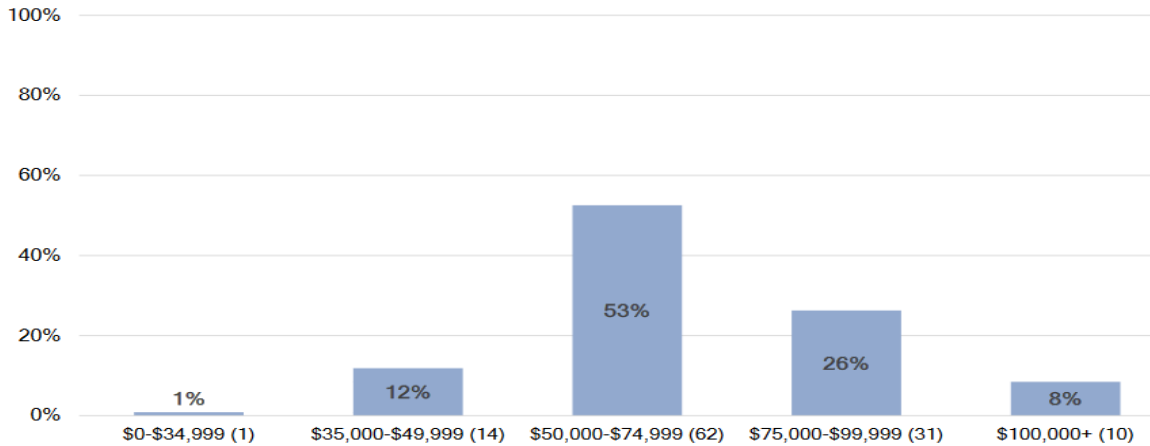
**Fig.2** Salary ranges seniors received on graduation for year 2014



**Fig.3** Salary ranges seniors received on graduation for year 2015



**Fig.4** Salary ranges seniors received on graduation for year 2016



\*n=118 (statistics only reflect students employed full-time who completed graduation requirements and reported on salary range)

June 2016

The three figures above, Fig. 3, 4 and 5 show that in the year 2014, 2015 and 2016, the MMA cadets received pretty much the same salary ranges with much of changes. And they also indicate that cadets of non-sea-going majors like Maritime Business and Maritime Environment constantly get salaries higher than the country's average entry level salary. The average starting salary for a 2017 college grad is just slightly under \$50,000 (\$49,785, to be exact), the study indicates. That's up 3% from last year. ( Money , May 12<sup>th</sup> 2017 , by Brad Tuttle) .

#### **IV. Conclusion**

Looking at the available data, it is clear that the exchange students are given an edge over their peers. In regards to international experience that can easily be applied to future jobs, cadets who choose to take this opportunity find themselves much better candidates within a rapidly expanding job market. When combined with the exchange students' statistically higher grades, broader international vision, the capability to move between cultures with ease, and proficiency in language, it shows how the exchange program gives cadets the tools needed to succeed in the job market, and the development of their career.

The international cooperation between two maritime institutes, such as that in the MMA- SMU student exchange program, is very effective to help the participating cadets enhance their self-confidence, broaden their global visions and adapt to a new environment with ease and grace. The successful experiences of the MMA-SMU program are applicable not only

to the maritime universities of USA and China, but also to the institutions which are located in other culturally diverse countries. When the participating cadets prove that they can survive and perform well in two completely different cultures, they demonstrate that they have all the necessary and sufficient skills to be successful within any type of job they are offered. And this is exactly what the potential employers are seeking of all graduating maritime cadets in these times.

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