THE PERCEIVED BENEFITS OF CABIN TRAINING SIMULATION ROOM: BASIS FOR CURRICULUM ENHANCEMENT AND ACCREDITATION FOR TOURISM PROGRAM

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Abstract

The study aimed to assess the perceived benefits of having a cabin training simulation room as basis for curriculum enhancement and accreditation for Tourism program. The researchers intended to specifically determine the significant relationship between respondents' demographic profile (age and gender) and their awareness of the importance of the cabin simulation; to determine the perceived benefits of the cabin simulation room to Tourism students in terms of acquiring knowledge and skills, and enhancing employment opportunities; to determine the advantage of having such facilities to LPU–Laguna; and to suggest improvements in the curriculum and ensure accreditation of Tourism program by having such facilities.

The researchers used the descriptive type of research to determine the possible perception of 178 respondents from the 4th Year and 3rd Year Tourism students of LPU–Laguna, who have taken up the Airline Business course. The researchers used a survey questionnaire to gather the data. The data were tabulated and analyzed through percentage, Pearson chi-square, and weighted mean.

The result of the study shows that there is no significance relationship between the demographic profile of the respondents and their awareness of the importance of the cabin simulation room. It also shows that the perceived benefits of the simulation room for the Tourism students in their future jobs, in terms of acquiring knowledge and skills, and enhancing employment opportunities, were assessed as strongly agreeable. The same is true with its benefits for the school. The researchers developed a financial plan that indicates the amount that the students are willing to pay in addition to their tuition fee to acquire the simulation room. Based on the findings of the research study, the researchers recommend to implement the cabin simulation room with a two-hour Laboratory per week during Airline Business class that will discuss the basic duties and responsibilities of the cabin crew to further enhance the knowledge and skills of the students that will open them for more employment opportunities.

Keywords: *perceived benefits, simulation room, curriculum enhancement, accreditation, Tourism, LPU–Laguna*

INTRODUCTION

Educators hope that the practical lesson learned by the students can be transferred effectively to the important situation in the real world. As no two situations are the same, it is accepted that frequent practicing of skills with guidance in a simulated environment promotes the successful transfer of these skills into the real world environment (Damassa et al., 2010). Therefore, simulation-based training is the solution to the development of Tourism professional's knowledge, expertise, attitude, and at the same time, protecting the tourists for the possibility of danger. It can be a platform to reduce ethical tension and resolve practical dilemma while, at the same time, the learned techniques, tools, and strategies can be applied in learning experiences, as well as to be used as a tool to achieve teamwork, competencies, and learning objectives (Lateef, 2010).

According to the research of Keengwe (2015), simulation is used to provide a real-life situation in the industry and, when used effectively, it will give a productive learning environment for students, as training from the simulation promotes active learning as it involves different senses, interacting with other people and materials, and respond to solve a problem. Simulation-based learning also gives an actual engagement to the participants wherein they can play a role, read, and analyze. The decision made in the simulation is compared to the responses of the participant as well as the outcomes of the simulations. As simulation produce more energy to students than the normal lecture and case study in the classroom, it also enables the students to incorporate what they read and to make actual decisions based on the fact presented. It also acts as stimulating element, as an opportunity to explore the result of the input overtime (Trade Arabia News Service, 2015). Additionally, simulation helps in forming conditions that promote a level of learning. The ideal simulation places the students in a situation wherein they would expect to perform a real-life setting. The actors in the simulations will act as passengers in which they would act and respond to certain questions. And through the simulation process, the students will use real equipment in performing tasks in a realistic way and are expected to make decisions based on a real scenario (Hsieh, 2013).

The Prince of Songkla University (PSU) Terminal is a brand new, state-of-the-art, check-in terminal and airplane cabin simulator built for the Faculty of Hospitality and Tourism (FHT) at the Prince of Songkla University–Phuket. Its simulation room provides the Tourism and Airline students with a real airport environment. Its terminal consists of check-in counters, a boarding gate and a section of a B737-Max aircraft cabin and will be used to train students in FHT's Tourism Management degree program, as well as Transportation Management majors. In addition, the PSU terminal is being used for PSU courses; the faculty will also be used by the Thai Flight Training Academy (TFTA) to offer a Cabin Crew Training program. The training will be offered by qualified trainers from Thai Airways International at both the PSU terminal as well as the TFTA facilities in Bangkok. With this simulation room, the PSU FHT has been appointed as an

International Air Transport Association (IATA) training center to offer certification course to all and any interested parties (Layne, 2014).

The Lovely Professional University (LPU) in North India has a fantastic Aviation Laboratory in a form of simulation aircraft with business class facilities. In this simulation room, the students are trained to greet the guest, make an announcement, serve food and beverage, and handle special passenger and emergency situations to make an effective cabin crew. The school also provides an opportunity for Airline and Tourism students to develop their academic and industry skills linked to the commercial aviation industry. The simulation room also makes the students understand the structure, nature, and operating characteristics of the international tourism industry (LPU, 2015).

According to Mogel (2011), the simulation aircraft cabin for Tourism and Travel students acquired by the West Cheshire College in England delivers vocational learning in a different way, through real-work environment, as everything is trying to look like work, as the simulation room is comprised of a complete 54 airline seats, oxygen mask, lifejackets, microwaves, and refreshment trolleys. Penny Martin (2015), a student of West Cheshire College, landed in her dream job as a cabin crew member of British Airways. She has gone straight to employment after finishing her cabin crew course at the college. She stated that West Cheshire College is the ideal place to study cabin crew as there is a mock aircraft cabin so one gets fantastic hands-on experience. She also added that during her interview stages with British Airways, she really felt that the skills, knowledge, and experience that she had gained through the college course helped her through the intense training. She also said she was really excited that she had completed her training with her institution and had been presented with her “wings” to start flying (www.chesterchronicle.co.uk).

A cabin simulator called CRJ-900 was launched in Northwest China. The simulator developed a real-life room and offered a series of emergency drills and evacuation training. The simulator allowed the students to practice procedures for a variety of emergency situation and to learn proper responses to an on-board fire, a cabin depressurization, and turbulence, as well as the procedure followed to conduct a ground evacuation (Wang, 2015).

Another school offering a simulation room for Tourism students is the International Management School (IMS), a school that offers the first cabin crew program in Davao and Mindanao with the completion of its seven-storey building. It houses several simulation rooms such as simulated gulley, business class seats, and wine ology. The training for the cabin crew program is handled by a retired personnel from the Philippine Airlines (PAL), who is willing to teach and come to the school. Aside from that, the school will provide an International Air Transport Association (IATA) Certificate, and with this certification, the school offers wide range of opportunities for students to integrate components of studying internationally into their course of study. The program also offers international study opportunities at both undergraduate and post-graduate levels through dual degree program partners. It likewise offers semester exchange and study abroad,

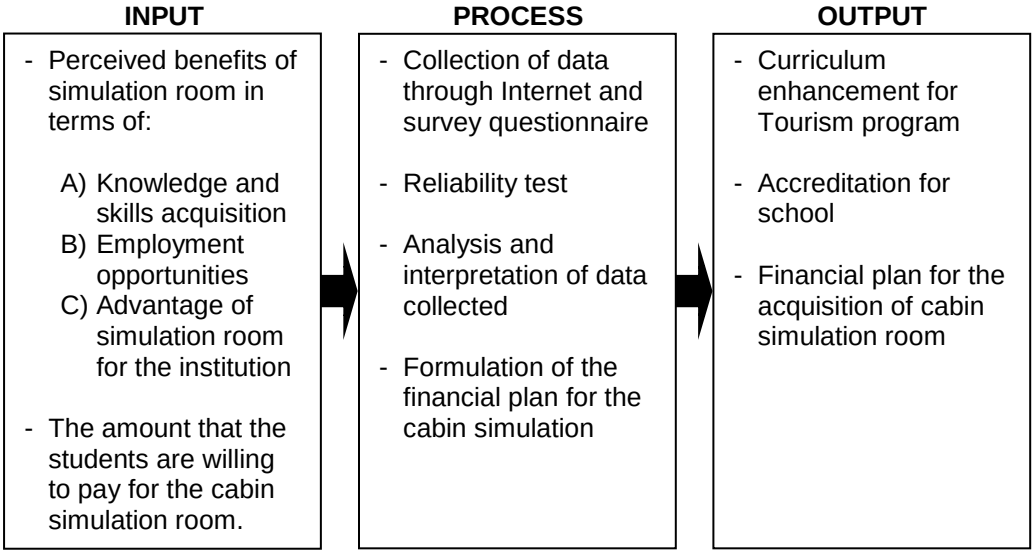
internship, work and travel program, and short-term student's mobility options (Bian, 2015).

The Urdaneta City University (UCU) had created Urdaneta City University (UCU) Airlines that was completed in Academic Year 2013-2014, it has a hands-on specialized laboratory that stimulates service inside the plane. The simulated airlines are where the Tourism students enhance their skills and knowledge before going to the on-the-job training in different airports and tourism industries. It consists of stimulated airplane cabin consisting of swivel chairs with complete seatbelt and airline materials used by airline passengers. The simulated airplane cabin will benefit the students by giving them an outstanding training in terms of where to evacuate when an emergency in the plane comes (Pablico & Caoile, 2014).

In the Philippines, the academic school year covers a period of 40 weeks that starts in June and ends in March. Institutes of higher education operate on a semester system with an optional summer classes. With the adaptation of the K to 12 program, Kindergarten is compulsory and there will still be six years in elementary education. The students graduating from elementary, Grade 6, will be enrolling in Junior High School from Grades 7 to 10. There is also a vocational school that offers a higher concentration on technical and vocational subjects in addition to the core academic subjects studied by students in the general high school. After graduating from Junior High, the students will enroll in an entirely new two-year stage of education which is the Senior High (Clark, 2015). According to the Department of Education (2013), Senior High will be composed of Grade 11 and 12, with 31 subjects, 15 core subjects, and 16-track subjects. Each subject will have 80 hours per semester, while P.E. and Health will have 20 hours per semester for four semesters. In Senior High, there will also be three academic tracks: the BAM (Business, Accountancy, Management), HESS (Humanities, Education, Social Science), and STEM (Science, Technology, Engineering, Mathematics). The schools in the Philippines also undergo an accreditation in which the framework or approach is to improve the quality of educations along with different facets of its operations such as faculty, instruction, library, laboratories, physical plants and facilities, student personnel services, social orientation and community involvement, and organization and administration. An institution that complies from the requirement of an accreditation experiences a significant improvement in the quality of facilities, library, laboratories, services and teachers, increase in the percentage of the board passers, success in employment and higher level of competence graduates, and empowerment of administrators, faculty, non-teaching personnel, and students (www.pacucoa.ph). Based on the curriculum of the Lyceum of the Philippines University–Laguna, the College of International Tourism and Hospitality Management (CITHM) aims to provide the students with knowledge, skills, and competencies that will meet the local and international standards in different tourism and hospitality sectors. The vision and mission of the CITHM of the LPU holds the institutional core values and instituted the program educational objectives for all programs to secure that the graduates gain

competencies that will meet local and international standards in different industries. With this, the program under the BS International Travel and Tourism Management (ITTM) develops its students with professional engagement in the tourism industry which highlights the skills and knowledge of the students to meet the International workforce (lpulaguna.edu.ph).

Conceptual framework



Objectives

This research aims: (1) to determine the significant relationship between respondents' demographic profile (age and gender) and their awareness of the importance of the cabin simulation; (2) to determine the perceived benefits of the cabin simulation room to Tourism students in terms of acquiring knowledge and skills, and enhancing employment opportunities; (3) to determine the advantage of having such facilities to LPU–Laguna; and (4) to suggest improvements in the curriculum and ensure accreditation of Tourism program by having such facilities.

METHODOLOGY

This research used a descriptive research method to determine the perceived benefits of having a cabin training simulation room as basis for curriculum enhancement and accreditation of the Tourism program. According to Johnson & Christensen (2012), descriptive research gives a precise description and characteristic of a specific situation or phenomenon. This research study is used to learn the attitudes, opinions, belief, behavior, and demographics of people.

The process of descriptive research is through selecting a sample from definite population, determining the sample characteristics, and inferring the characteristics of the population based on the sample. Thus, this study does not focus on searching for the cause and effect of a certain situation but in describing the relationship that exists on a variable. The research study was conducted in the premises of Lyceum of the Philippine University–Laguna (LPU–L) located in Km. 54, National Highway, Makiling, Calamba City, Laguna, with the respondents of 178 Tourism students of LPU–L, who have already taken up the Airline Business course. It consists of 87 students from 4th Year enrolled in Airline Business courses during the School Year 2014-2015, and 91 students from 3rd Year enrolled in the same course during the School Year 2015-2016. The main instrument used in the study was a survey questionnaire. The survey questionnaire is composed of the respondents' demographic profile (gender and age), and four (4) sets of questions that include the students' awareness of the importance of cabin simulation, the perceived benefits of the simulation room in the employment opportunities and knowledge and skills of the students, the advantages of the school in having such facilities, and the amount that the students is willing to add to their tuition fee per semester to have such facility. In order to arrive at this research, the researchers made a canvas, through the use of the Internet, to come up with the price of cabin simulation equipment, and asked for the help of the Accounting department of the LPU–L to review the prices to determine the suggested cabin simulation laboratory fee. The data for this research were collected using a survey questionnaire. The survey questionnaire was validated by the statistician, research adviser, and the dean of the College of International Tourism and Hospitality department. After the survey questionnaire was validated, it was distributed to the Tourism students of LPU–L. Before the actual distribution of the survey questionnaire to the 178 respondents, it underwent a reliability test which was answered by 30 Tourism students of LPU–Laguna: the first half was answered by 15 students from 4th Year and the other half by 15 students from 3rd Year. The researchers assured the confidentiality of the data that were gathered from this study. The data were gathered and interpreted using descriptive statistics. The reliability test was generated through the use of Cronbach's alpha with a result of 0.894. The researchers used the chi-square for the relationship between the demographic profile of the respondents and their awareness of the importance of the cabin training simulation room. The weighted mean was used to get the perceived benefits of having cabin simulation to the students and to get the advantages of having such to the institution. The researchers got the percentage of the amount that the students are willing to pay in addition to their tuition fee in order to use the cabin simulation room.

RESULTS AND DISCUSSIONS

In this part, the results of the data analysis are presented. The date were collected and then processed in response to the research problem.

Table 1 shows the resulted p-values which are both greater than 0.05 level of significance. Thus, there is no significant relationship that exists between the respondents' demographic profile (age and gender) and their awareness of the importance of the cabin simulation room. As stated by Beckem (2012), simulation lies on the theory of learning such as the social constructivism and cognitive theory in which the common element between these two theories is the focus of the learners and concern to the learner's experience to be meaningful, engaging, and transferable to the real world.

Table 1. The relationship between the respondents' demographic profile and their awareness of the importance of cabin simulation room

Demographic Profile in terms of:	Pearson Chi-Square Test	p-value	Interpretation
Age	0.120	0.729	Not Significant
Gender	1.761	0.415	Not Significant

Legend: Significant at p-value < 0.05

Table 2 shows the perceived benefits of cabin simulation room for the Tourism students in their future job in terms of employment opportunities. The result shows that the students strongly agreed with the benefits of cabin simulation room in terms of employment opportunities with the average of 3.50. It can be noted that students also strongly agreed that the training in simulation room helps them act professionally in a given situation or dilemma, giving them advantage to employment, with 3.57 mean. The students develop the values of team work in the workplace through the simulation process, thus, making it more fit with the job, with 3.55 mean, and it helps the students develop their self-confidence in applying for a job related to the tourism and hospitality industry, with 3.52 mean. However, the students agreed that they become competitive in applying for a job because of the training acquired in the simulation room, with the mean of 3.48, and the cabin simulation room students can be easily hired by companies that are related to the tourism industry, with the 3.38 mean.

Table 2. The perceived benefits of simulation room for the Tourism students in their future job (employment opportunities)

ITEMS	Weighted Mean	Verbal Interpretation
The students can be trained on how to act professionally in a certain situation or dilemma, giving them advantage in employment.	3.57	Strongly Agree
The students develop the value of teamwork in a workplace through the simulation process, thus, making them more fit for the job.	3.55	Strongly Agree
The students develop their self-confidence in applying for a job related to the tourism and hospitality industry.	3.52	Strongly Agree
The students become competitive in applying for a job because of the training they acquired from the simulation room.	3.48	Agree
The students can be easily hired by certain companies that are related to the tourism industry.	3.38	Agree
COMPOSITE MEAN	**3.50**	**Strongly Agree**

Legend: 1.00-1.49=Strongly Disagree; 1.50-2.49=Disagree; 2.50-3.49=Agree; 3.50-4.00=Strongly Agree

Table 3 shows the perceived benefits of simulation room for the Tourism students in their future job with regard to knowledge and skills. The result shows that the students strongly agree to the benefits of cabin simulation in terms of knowledge and skills acquisition, with a composite mean of 3.56. It can be noted that the students strongly agreed that they will be aware of the basic safety processes in the aircraft and confidently demonstrate them, with the mean of 3.62. The students will be familiarized with the equipment and facilities inside the aircraft and it will train the students to greet guest, make announcements, and prepare food and beverages for the passengers, with the mean of 3.61. The students will have an idea about how an aircraft cabin looks and operates, with 3.57 mean, and the students develop critical thinking skills in order to make decisions based on a scenario presented in the cabin simulation room, with 3.52 mean. However, the students agreed that through the cabin simulation, they will become knowledgeable on how to effectively interact with customers in terms of passengers' special needs, with a mean of 3.49.

Table 3. The perceived benefits of simulation room for the Tourism students in their future job (knowledge and skills acquisition)

ITEMS	Weighted Mean	Verbal Interpretation
The students will be aware of the basic safety processes in the aircraft and, at the same time, confidently demonstrate them because of the knowledge acquired in the simulation room.	3.62	Strongly Agree
The students will be familiarized with the equipment and facilities inside the aircraft and it will train the students to greet guest, make announcements, and prepare food and beverages for the passengers.	3.61	Strongly Agree
The students will have an idea on how an aircraft cabin looks and operates.	3.57	Strongly Agree
The students develop critical thinking skills in order to make decisions based on a scenario presented in the cabin simulation room.	3.52	Strongly Agree
The students will become knowledgeable on how to effectively interact with customers in terms of passengers' special needs.	3.49	Agree
COMPOSITE MEAN	**3.56**	**Strongly Agree**

Legend: 1.00-1.49=Strongly Disagree; 1.50-2.49=Disagree; 2.50-3.49=Agree; 3.50-4.00=Strongly Agree

Table 4 shows the advantage that the school will gain in having a simulation room. It can be noted that the students strongly agreed with that, with a composite mean of 3.60. The table shows that students strongly agreed that by having a cabin simulation room, the school can earn an IATA Accreditation, with a 3.62 mean. The school can be recognized as an institution offering a high quality education and training with regard to the Tourism and Hospitality program, with a 3.62 mean. The cabin simulation room can be used as a marketing strategy to attract students to enroll in the school, with a 3.61 mean. The school can also be a partner of one of the airline industries in terms of training, with a 3.59 mean, and it can add additional programs such as Cabin Crew course, etc., with a 3.56 mean.

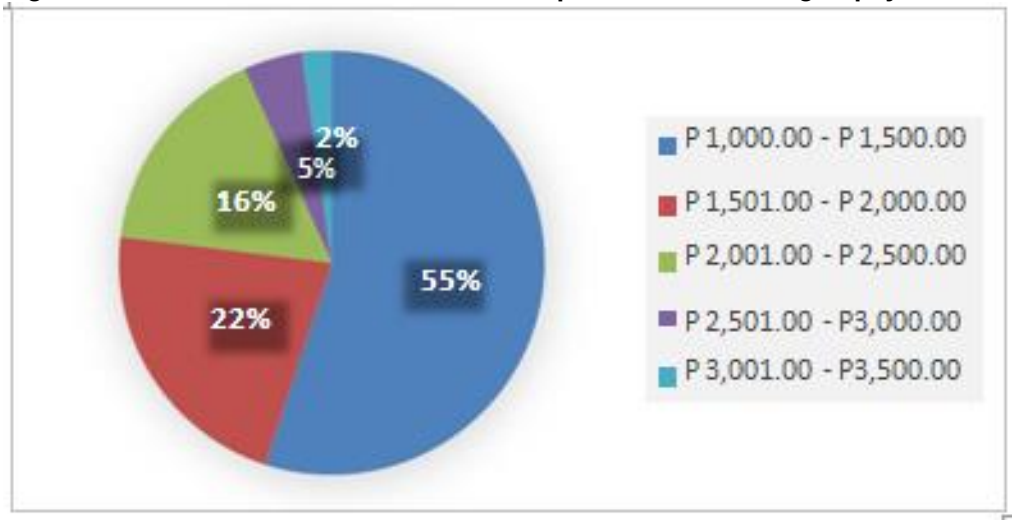
Table 4. The advantages of the school in having a cabin simulation room

ITEMS	Weighted Mean	Verbal Interpretation
The school can earn an accreditation from the International Air Transport Association (IATA).	3.62	Strongly Agree
The school can be recognized as an institution offering a high quality education and training with regard to the Tourism and Hospitality program.	3.62	Strongly Agree
The cabin simulation room can be used as a marketing strategy to attract students to enroll in school.	3.61	Strongly Agree
The school can be a partner of one of the airline industries in terms of training.	3.59	Strongly Agree
The school can add additional programs such as Cabin Crew course, etc.	3.56	Strongly Agree
COMPOSITE MEAN	**3.60**	**Strongly Agree**

Legend: 1.00-1.49=Strongly Disagree; 1.50-2.49=Disagree; 2.50-3.49=Agree; 3.50-4.00=Strongly Agree

Figure 1 shows that most of the respondents are willing to pay P1,000-P1,500, and the least response that the students are willing to pay in addition to their tuition fee in order to use the cabin simulation room is P3,001-P3,500. In the financial plan prepared by the researchers, the estimated simulation laboratory fee is P1,350 per student per semester with the Airline Business course. The fee of the cabin simulation room can be changed depending on the number of students who will enroll per semester in the Airline Business course.

Figure 1. The additional amount that the respondents are willing to pay



Financial Plan

LPU Laguna
Cabin Simulation Laboratory Fee
1st Semester S.Y 2017-2018

Subject: Airline Business
No. Of units: 3

Items	Unit cost	Quantity		Total
Investments				
Space / Utilities			Php	450,000.00
First class seats (double)	20,000.00	5		100,000.00
Aviation Life Vest	3,000.00	10		30,000.00
Aircraft seatbelt	750.00	10		7,500.00
Aircraft Passenger's mask	377.61	10		3,776.10
Fire Extinguisher	5,000.00	1		5,000.00
Food and beverage serving cart	10,000.00	1		10,000.00
Total			**Php**	**602,276.10**
Estimated Life (in years)				**3**
Depreciation/year			Php	**202,092.03**
No. of Students				**200**
Cost / Student			Php	**1,010.46**
W/administrative cost			Php	**1,313.60**
Suggested Lab fee/Student			**Php**	**1,350.00**

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In the financial plan prepared by the researchers, the estimated life span in the investment for cabin simulation made by the Accounting department is 3 years, but the life span of an equipment of an institution can be estimated based on how frequent it will be used.

In the Personal Property Manual of Nevada (2010), a property that is highly susceptible to breakage, loss, rapid wear, tear or extreme obsolesces is recommended to have a life span of 3 years. The aircraft passenger seat has a recommended life span of 15 years.

The inflatable lifejackets or the aviation life jackets have a life span that is limited to 10 years (secumar.com). The aircraft passenger's seatbelt estimated life is 10 years of regular service. The aircraft seatbelt will be known to be defective after years of service if the seatbelt has loose threads or thread ends hanging out (avweb.com).

The estimated lifespan for the fire extinguisher is 10-15 years if the equipment is maintained and serviced properly (rfd.com.au), while the food and beverage cart's estimated life span is 12 years (ww.cde.ca.gov).

CONCLUSIONS

Through this research, the researchers concluded that having a simulation room has no significant relationship between the demographic profile and the students' awareness of the importance of the cabin simulation room. Also, having a cabin simulation room could benefit both the students and the schools, wherein students could enhance their knowledge and skills, and it would open them for more employment opportunities, while for the schools, it could be an instrument to earn accreditation, partnership, and recognition or it could even be used as a marketing strategy. The institution should also consider provisions for cabin simulation room and integrate laboratory hours in subjects like Airline Business to further enhance their knowledge and skills that would equip the students to increase their employment opportunities. The researchers also found out that the financial plan and the amount that the students are willing to yield might be considered for curriculum development to upgrade the quality assurance for instructions.

REFERENCES

Beckem, J.M. (2012). Bringing Life to Learning: Immersive Experiential Learning Simulations for Online and Blended Courses. Retrieved from http://goo.gl/Ca3KW6 on November 26, 2015.

Clark, N. (2015, July 08). Education in the Philippines. Retrieved from http://wenr.wes.org/2015/07/education-philippines/ on December 5, 2015.

College of International Travel and Tourism Management. Retrieved from http://goo.gl/1bPtqn, on November 26, 2015.

Damassa, D., et al. (2010) Simulation Technologies in Higher Education: Uses, Trends and Implication. Retrieved from https://net.educause.edu/ir/library/pdf/ERB1003.pdf on December 8, 2015.

Hsieh. W.C. (2013). Simulation Techniques to Bridge the Gap Between the Novice and Competent Professionals. Retrieved from http://goo.gl/WUtgI on November 28, 2015.

Johnson, B. and Christensen, L. (2012). Education Research Quantitative Qualitative and Mixed Approaches, Fourth Edition. USA, SAGE Publications, Inc.

Keengwe, J. (2015). Handbook of Research on Educational Technology and Active Learning. USA, IGI global.

Lateef, F. Simulation-Based Learning: Just Like the Real Thing. Retrieved from http://goo.gl/lbLUlD, on November 28, 2015.

Layne, S. (2014, June27). PSU Airline Cabin Training Simulator Takes Off. Retrieved from http://www.thephuketnews.com/psu-airline-cabin-training-simulator-takes-off-47098.php, on November 30, 2015.

Limitation on the Life Span of Life Jackets. Retrieved from http://goo.gl/X932bN, on March 4, 2016.

LPU. (2015, July 12). Qatar Airways Appointed LPU Student at Rs 18 Lakh. Retrieved from http://www.1888pressrelease.com/qatar-airways-appointed-lpu-student-at-rs-18-lakh-pr-568378.html.

Mogel, S. (2011, August 31). West Cheshire College opens a new port campus at Ellesmere Port. Retrieved from http://goo.gl/K7OtLf on December10, 2015.

Pablico, P. and Caoile, C. (2014, October 15). UCU Airlines to Take Off. Retrieved from http://goo.gl/xtkSNq on November 30, 2015.

PACUCOA. Retrieved from http://www.pacucoa.ph/pacucoa_faq.htm, on March 11, 2016.

Padillo, M. (2015, June 7). Davao City Business School to Offer Mindanao's First Cabin Crew Program. Retrieved from http://goo.gl/n3agBp on November 30, 2015.

Personal Property Manual of Nevada. (2010, May 26). Retrieved from http://www.clarkcountynv.gov/assessor/Documents/PP%20Manual%2011-12.pdf on March 4, 2016.

Seatbelt Upgrades: No Excuses for Bad Belts. (2012, December 7). Retrieved from http://goo.gl/YSQq1n on March 4, 2016.

Trade Arabian News Service. (2015, May 25). Simulation-Based Learning: New Pedagogical Approach. Retrieved from http://goo.gl/LOMypE on December 8, 2015.

Wang, B. (2015, October 14). World's First CRJ-900 Cabin Simulator Rolls Out in Xi'an. Retrieved from http://www.wcarn.com/news/48/48081.html on November 3, 2015.

West Cheshire College Students Reach for the Sky with British Airways Job. (2015, January 15). Retrieved from http://goo.gl/zbLryf, on December 10, 2015.