

2014

## Annual Impact of Paid Internship Programs at a Hospitality Management Program – a Case of the largest hospitality management program in North America

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### Recommended Citation

Croes, Robertico and Hara, Tadayuki (2014) "Annual Impact of Paid Internship Programs at a Hospitality Management Program – a Case of the largest hospitality management program in North America," *Journal of Tourism Economics, Policy and Hospitality Management*: Vol. 2: Iss. 1, Article 2.

Available at: <http://tourismresearch.econo.yamaguchi-u.ac.jp/jtephm/vol2/iss1/2>

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## **Introduction**

Many colleges in applied fields, such as medical or hospitality studies, include an internship program or experiential learning as part of their curriculum requirements, in other words, as a prerequisite for students to obtain degrees. Internships are opportunities where students can apply their theoretical knowledge to the workplace. Gault et al. (2010) define internships as opportunities to mash work-related experience with educational experience through formal structures of supervision and schedule. These formal structures are designed to enhance students' learning experiences and also assist students in making the transition towards full-time jobs. The benefits of such a system for the company are that internship reduces the search costs of recruiting labor and facilitates talent discovery.

Internships have greater benefits than only those felt by the individual; it also has positive effects on society, such as increased efficiency and reduced friction in the labor market. For example, the process of hiring someone for a position in the company usually implies a sense of friction for employees as well as employers, and both these groups have to invest in efforts aimed at reducing or overcoming these frictions (Howitt & McAfee, 1987). Overcoming or reducing frictions like these is at the heart of the economy of efficiency. The institution of internship is an integral part of this type of efficiency, because employers and employees alike are actively engaged in contacting activities through search and recruiting (Gerken et al., 2012).

Therefore, an overlooked externality of internship is lodged in the economic benefits accrued towards society. Paid internships are an example of ways in which the principle of internships provide tangible benefits to society that, as noted above, extend beyond individual benefit or gain. Learning, especially at higher education institutions, has a positive impact on society, and brings with it benefits such as increased productivity, reduction in criminal participation, and improvement in political participation (Owen & Sawhill, 2013). Additionally, 'academic internships' generate revenue to society at large. This study addresses this last issue by setting out to provide an estimate of the total economic impact of a paid undergraduate hospitality program in Central Florida. In particular, the study makes use of an Input-Output and Social Accounting Matrix analysis to estimate the economic value of the internship program on an annual basis.

The remainder of the study is organized as follows: Section two examines the literature pertinent to the subject of study. Section three describes the methodology, while section four discusses the findings. Section five concludes the study with the implications and suggestions for future research.

## **Literature Review**

Since the idea of internship requirements is not confined to the hospitality management arena, one needs to look into disciplines outside of hospitality management in order to identify preceding research on the various impacts of internships. One such a study that has been conducted in the area of leadership and educational psychology has identified the value of

internships for students in the fact that they acquire tacit knowledge while participating in an internship program. This knowledge was externalized in the process of solving a particular problem or in response to a particular issue, and together these facts suggest that “interns should expand their own awareness of learning opportunities posed by life experiences and gain insight into leadership” (Wasonga & Murphy, 2006). Career-related internships often provide excellent opportunities for students to explore different career options and gain valuable experience. These internships are also associated with higher levels of self-concept crystallization (Brooks, Cornelius Greenfield & Joseph, 1995). Another study has also confirmed that students who have had internship experience are likely to obtain higher salaries and have also tended to experience a greater sense of job satisfaction in their subsequent jobs (Gault, Redington & Schlager, 2000). Based on surveys with 120 employers, the researchers found that employers rated problem-solving experiences as possibly the most salient skills set among candidates who have been involved in internship that enhances employability (Molseed, Alsup, and Voyles, 2003)

Gault et al. (2000) surveyed undergraduate and graduate internship programs in the USA, and found that 92% of business schools included some type of internship experience in their graduate programs. The study suggests that students who have completed such programs benefit from improved insight into the working world, and they also receive more job offers and higher starting salaries than those who have not participated in an academic internship. An additional benefit of the internship program is described by Coco (2000), whose study also suggests that both intern and company can benefit from being able to evaluate the prospective suitability of employment. The author also points out that the academic institution can validate its curriculum and improve its chances of monetary support and access to guest lecturers through its internship programme.

Knouse, Tanner and Harris (1999) have found that students who have participated in internships had a significantly higher overall grade point average; they tended to be slightly younger upon graduation, and were more likely to be employed upon graduation than students without internship experiences. Internships were thus related to both better college performance and to receiving a job offer upon graduation. This research also centered on the role of internship in realistic job expectations and recommendations for improving internships (Knouse, Tanner & Harris, 1999). Knouse has since revisited the issues – particularly those pertaining to the effectiveness of business internships in terms of enhanced employment opportunities, realistic expectations of interns, satisfaction with the internship experience, internship prerequisites, and internship mentoring. Overall, the internship experience was found to be beneficial (Knouse & Fontenot, 2008).

We have identified one study which collected data on the perceived benefits of internship from the viewpoint of educational institutions. Many research studies have examined the benefits that student internships offer students and employers, but few have explored the benefits that internships might lend to educational institutions. A survey instrument was developed and sent to 619 deans of all U.S. business programs. The response rate was 29%. The results indicate that some institutions are indeed gaining from internship programs. Of all respondents, 34% reported that internships inspired students to open new businesses; 87% reported that the business schools

felt a stronger connection to the community; and 81% reported that one's reputation is affected by internships (Weible, 2010). One study (Narayanan, Olk & Fukami, 2010) has combined the findings from preceding studies with insights from the personnel and knowledge transfer literature, and this study identified the roles of three key actors—students, university, and business. This study also proposed a multistage model of determinants of effectiveness.

One study in the field was a quasi-experimental study that examined the impact of practicum training on the clarity of vocational preference, career commitment, self-efficacy and job attainment confidence. The sample consisted of fifth and sixth year Australian psychology students who were at the time enrolled in either a master's, DPsych, or PhD degree. Based on their practicum training, two groups were formed: those with no practicum experience (n = 61) and those with extensive training experience (n = 68). ANCOVA was used to analyze the data. The findings indicated that those who have had extensive practicum training experience had greater clarity of vocational preference compared to those with no practicum training (Carless & Prodan 2003).

Another study explored the question as to whether a required service-learning experience of limited intensity and duration can have an impact on the development of college students as participating citizens of their community. Students who provided community service as part of a one credit (a "community service laboratory") showed a significant increase in their belief that people can make a difference, that they should be involved in community service and particularly in leadership and political influence, and in their commitment to perform volunteer service the following semester. They were also less likely to blame social service clients for their misfortunes and more likely to stress a need for equal opportunities. Furthermore, they indicated that their experience had led them to develop more positive perceptions of the people they worked with (Giles & Eyler, 1994).

In a specific area of educational effectiveness of student teachers, one study suggests that what student teachers bring to their teaching experience gives direction to socialization, but does not entirely determine the outcome of the teacher socialization process (Tabacnick, Zeichner, 1984)

Two studies have been conducted in the field of hospitality-specific research on internship. One dealt with a hospitality-specific topic in which the researchers assessed students' perceptions and overall satisfaction regarding their hospitality internship experiences in Korea. Previous work experience was the most common factor influencing students' perceptions of their internship experiences. Agreement levels increased concurrently with the duration of prior work experience. Type of internship workplace, expectation of an employment offer, age and gender were also found to have a bearing on students' perceptions of the internship experiences (Ju, Emenheiser, Clayton & Reynolds, 2007). The other study in this field used a case study approach in which authors imply that the establishment of strong partnerships between hospitality and tourism organizations and hospitality colleges requires college administrators to work closely with industry in order to build mutual trust, personal friendships, and a common understanding of industry needs and expectations (Pizam, Okumus & Hutchinson, 2013).

This brief review indicates that research thus far has examined academic internships mainly from the perspective of relatively narrow benefits, i.e., benefits accruing to students, businesses and academic institutions. However, the focus on this narrow triangle of beneficiaries has overlooked the wider benefits that academic internship programs may proffer to society. The current study sets out to fill this void by examining the economic benefits to Central Florida resulting from the implementation of a hospitality management academic internship program.

## **Methodology**

The case study that is used for this study is the Rosen College of Hospitality Management, University of Central Florida. The Rosen College of Hospitality Management is located in Orlando and is known to be the largest program of hospitality and tourism management in North America. The college had 2,993 students enrolled in Fall 2012. Out of 2,993, undergraduate students account for 2,886 and graduate students in master's and doctoral programs account for 107 in that semester (University of Central Florida, 2014). The college offers three undergraduate degrees, namely the B.S. Hospitality Management, B.S. Event Management, and B.S. Restaurant & Foodservice Management. It also offers two graduate degrees, an M.S. in Hospitality and Tourism Management, and a PhD in Hospitality Management.

Only undergraduate degrees have requirements for internship credits spread for three semesters (Rosen College of Hospitality Management, 2014). The program requires undergraduate students to take three internship courses, each of which carries 1 credit hour to fulfill the total requirement of 120 credit hours. When a student has complete the internship program, he or she had tallied a total of 1000 hours in the workplace. The program comprises paid internships and it has served to provide a transition to students on their way to gainful employment in her or his chosen career path.

While the internship program has been in operation for years, its annual direct impacts to the local economy has not been officially recorded. Since this is the largest program in hospitality & tourism management field in North America, and arguably one of the largest programs in the world, this study first sets out to verify previous research on various internship impacts, then upon confirmation of lack of such research in the field, it will compile related data to quantify its direct impacts on the local economy.

This study combined desk research and empirical analysis with a view to record the direct economic impact of the Rosen College of Hospitality Management Program. The desk research included a literature review pertaining to previous research on the impact of internship program to students, employers and educational institutions. For the empirical analysis, the study adopted an economic method of calculating the direct impact of the internship as a record, which will be explored at a later stage together with Input-Output and Social Accounting Matrix analysis in order to estimate the economic value of the internship program in an annual basis.

The main data sources for the empirical analysis obtained from the Experiential Learning Unit which manages the entire internship program at the University. There are two main semesters

(Fall and Spring) and a summer semester. The latest data available represents the calendar year of 2012, which will be the basis of our data year. We intend to obtain a total amount of paid-internship wage payments by collecting (1) total numbers of students who were enrolled into credit-earning internship courses in the whole year (2) average hourly wages paid to students in the year, (3) average hours that students worked for internship courses, and will subsequently calculate the aggregate amount of wage paid to our students who were enrolled into internship courses. This process should enable us to calculate the exact amount of total annual wages paid to our student in 2012. This calculation will generate a fairly exact indication of the direct impact that our internship program had on the local community during 2012.

### **[Indirect and Induced Economic Impacts as References]**

Considering the possibility of inaccuracy associated with the estimation of the indirect and induced economic impacts, we will be able calculate the economic impacts with fair accuracy since our best estimates are based on several important assumptions. As for the estimation of indirect and induced economic impacts, we will use the Input-Output tables developed by multiple institutions including the U.S. Bureau of Economic Analysis (BEA) and Minnesota IMPLAN Group Inc. These tables show data from surveys of households and firms that generate estimates specific to tri-counties in Central Florida, i.e., Orange, Osceola and Seminole. For the formulation of the final demand column vector, the households' survey data from the BEA were employed, due to lack of actual expenditure survey data of our students.

The expenditures distribution was estimated from the BEA households' survey from <http://www.bea.gov/iTable/iTable.cfm?reqid=9&step=1&acrdn=2#reqid=9&step=1&isuri=1>. The final demand column vector is based on NAICS 2-digit (20X20 plus Value added) table.

Using the proposed framework of Input-Output and Social Accounting Matrix, two additional impacts were estimated: indirect and induced effects. The direct effects of the expenditure result from the wage earned by internship students thus enabling them to buy more goods and services from a range of suppliers. The indirect effects are the result of increased business transactions provoking the increase of purchases of intermediate goods and services from other suppliers. The induced effects are related to the additional income accrued to households which in turn are then spent on a variety of consumer goods and services, utilizing the framework of Social Accounting Matrix (SAM) in which the Household is treated as endogenous. Detailed discussions on how I-O/SAM models can be used for indirect and induced analysis are displayed well in series of publications by Miller and Blair (1985, 1989, 2009) and by Isard (1998).

This study focuses only on the hourly wages paid to internship students. The study does not consider the impact of social returns to higher education and non-state funded expenditures as these have been implied in one previous study (Moretti, 2004). Only the exploratory analysis on indirect and induced impacts are based on IMPLAN (Impact Analysis for Planning) to measure the effects from the hourly wages. Data for this study was collected from IMPLAN 2010 Florida county-level data adjusted to 2012 level, where tri-county data are aggregated as one region, and

the analyses are made with IMPLAN 3.1. version. Further discussion regarding the I-O/SAM analysis for hospitality industry can be found in Hara (2008) and Croes & Severt (2007).

## **Results**

### **[Annual Wage Payments for Internship Students]**

We obtained relevant data from Experiential Learning coordinator as follows.

- Total number of students who were engaged in internship courses in 2012 was 2,676 – (1)
- Average wage per hour was \$9.34 -- (2)
- Average hours per week was 25.1 hours – (3)
- Average earnings per student per internship course was \$4,244.44 – (4)

Given this data, we can calculate that total wages paid to all internship students in 2012 would be as follows.

- Total wages paid to all students' internship in 2012: (4) x (1) = **\$11,358,121.44** – (5)

The total wages paid to students in internship programs during 2012 accounted for \$11.35 million, which is larger than the annual operating budget of the College in the same year. This figure is not a simulated or estimated one, but the actual one as a record.

### **[Estimating Economic Impact of Internship Wages]**

Once the total of direct annual payments to students in internship program has been determined, we set out to explore to estimate possible economic impacts of those direct wages. Since we did not collect prime data on actual expenditure patterns of students in internship, we use the available secondary data of average expenditure as proxies for students' expenditure patterns. In order to create an estimated final demand column vector representing changes in final demands, we used the data from Bureau of Economic Analysis. We standardized the average expenditure patterns, and using the standardized coefficients, we calculated estimated direct shock to the regional economy over various industrial sectors. The processes are shown in Table 1.

Total direct shock is decomposed into multiple industrial sectors' commodities in accordance with the standardized coefficients, thus we assume \$857,709 must have been spent at food service and dining places (=restaurants) in town, which stimulates the indirect purchases of food and beverage materials by restaurant industry. The economic implication of an increase in this sphere means that the restaurant industry will not only require additional food materials, but also additional labor input by chefs and servers, who would in turn receive wage payments. Those wage payments are expected to be used for consumption, yielding yet another induced impact. While indirect impacts are caused by intermediate purchases of goods and services within the

industrial activities (=within the framework of input-output model), induced impacts are caused by exchanges of labor and capital at the factors of production, namely exchange market for labor and capital (within the expanded framework of social accounting matrix model).

Those two kinds of additional impacts, namely indirect and induced impacts, are shown as a result of impact calculations Table 2.

(Table 2 around here)

The expenditures by students in internship generate additional \$3.1 million of indirect impact and \$3.5 million of induced impact, so that the total impact the regional economy would be \$17.1 million. It is remarkable to note that this impact originates from a mere \$9.34/hour wage, but once this wage is combined with many hours and multiplied by 2,676 students in one year, the result is significant.

With the size of economic activities estimated, we can calculate the estimated fiscal impacts on both federal and state/local levels as displayed in Table 3.

The economic activities generated by wage payments to students in internship contribute a significant amount towards tax revenues, to both federal and local governments.

### **Conclusion, Limitations and Future Research**

This study explores the under-recognized economic impacts of paid academic internship program to the local economy before the graduation of students with degrees. \$11.3 million in total was paid to students who have been enrolled in internship program in one year, and this amount is already larger than the annual operating budget of the entire College to which students belong. To put it in different perspective, the taxpayer-funded annual budget for the College is surpassed by the total direct wage payments to internship students in 2012, and this trajectory is expected to continue for a foreseeable future. This direct economic impact occurs in addition to all other impacts which have been substantiated by preceding researchers, including but not limited to, insight into leadership, higher salaries, higher job satisfaction, evaluation of better suitability for employment, better college performance, and better fit with co-workers.

Income earned through wage receipt would help students financially, which may lead to another round of expenditures, which incurs first indirect impacts via intermediate purchases of goods and services in related industrial sectors. The labor input required to produce the goods and services by students' consumption is expected to generate the next round of wage payments to larger numbers of workers in the local economy, and these effects are captured as induced impacts. All those impacts will amount to \$17.1 million. However, we urge caution when using this estimate due to some limitations deriving from the I-O/SAM models. Those limitations include; constant returns to scale, no supply constraints, fixed commodity input structure, homogenous sector output and industry technology assumption.

The study is predicated on a number of specific limitations, which mainly concern the lack of our population's specific expenditure pattern data. While we are confident regarding the direct

impact amount of \$11.3 million, due to complete collection of population data (all students enrolled in internship courses in 2012), we did not have any sample or population data on students' expenditure patterns of their wage income. Thus one should note that the indirect and induced impacts, plus the resulting total impact number of \$17.1 million should be taken with a measure of caution. Theoretically, however, there should be a sound possibility to use the validity of students' expenditures as an exogenous shock to move the I-O/SAM model, because locations of actual employments can be either within the study region or outside of the study region.

Notwithstanding the issues, there is room for future research on similar issues related to economic impact of paid academic internship programs in the hospitality management field as well as other academic fields who offer paid academic internships. In order to render the study on indirect and induced impacts more accurate, researchers may want to collect primary data on students' expenditure patterns on their wages. The long-term effects of paid internships is a timely research topic due to the recent heightened attention afforded to unpaid internships combined with the long-term effects of the latter on individuals' career opportunities also in light of broader issues of mobility and inequality in society.

**Table 1 : Personal Consumption Expenditure by Function Used for the Impact Analysis**

	<b>Coefficients</b>	shock to be given	Designated sector	Sector description
<b>Personal consumption expenditures</b>	<b>10729</b>	<b>\$11,358,121</b>		
<b>Household consumption expenditures 1</b>				
<b>Food and beverages purchased for off-premises consumption</b>	<b>0.075514959</b>	\$857,709	413	Food service and dining place
<b>Clothing, footwear, and related services</b>	<b>0.034122472</b>	\$387,568	327	Retail Services - clothing and accessories
<b>Housing, utilities, and fuels</b>	<b>0.18216982</b>	\$2,069,109	361	Imputed rental activity for owner-occupied dwellings
<b>Furnishings, household equipment, and routine household maintenance</b>	<b>0.04004101</b>	\$454,791	321	Retail services - furniture and home furnishings
<b>Health</b>	<b>0.200857489</b>	\$2,281,366	394	Office of physicians, dentistry and other health practices
<b>Transportation</b>	<b>0.100605835</b>	\$1,142,695	320	Motor vehicles
<b>Communication</b>	<b>0.022993755</b>	\$261,166	351	Communication
<b>Recreation</b>	<b>0.088731475</b>	\$1,007,824	409	Amusement parks, arcades
<b>Education</b>	<b>0.024783298</b>	\$281,492	392	Colleges and Universities
<b>Food services and accommodations</b>	<b>0.062531457</b>	\$710,241	412	Other accommodations
<b>Financial services and insurance</b>	<b>0.075226023</b>	\$854,427	356	Securities and investments
<b>Other goods and services</b>	<b>0.067443378</b>	\$766,031	387	Other support services
<b>Final consumption expenditures of nonprofit institutions serving households (NPISHs) 28</b>	<b>0.027206636</b>	\$309,017	426	Private household operators

*Source: made by authors based on Personal Consumption Expenditure by Function, Bureau of Economic Analysis, USA*

**Table 2: Summary of Economic Impact of Annual Internship Rosen College of Hospitality Management over Regional Economy in 2012 (Orange, Osceola and Seminole Counties Combined)**

Industrial Sectors	Direct	Indirect	Induced	Total
Agriculture	0	2,167	5,308	7,476
Mining	0	1,469	1,155	2,624
Construction	0	130,901	35,186	166,088
Manufacturing	0	161,451	125,772	287,223
TIPU	0	152,791	128,480	281,271
Trade	622,508	106,430	611,073	1,340,012
Service	9,856,764	2,523,138	2,599,703	14,979,605
Government	0	72,909	52,440	125,349
<b>Total</b>	<b>10,479,273</b>	<b>3,151,256</b>	<b>3,559,118</b>	<b>17,189,647</b>

*Source: Made by the authors based on IMPLAN output*

**Table 3: Total State, Local and Federal Tax generated annually by Internship at Rosen College of Hospitality Management (2012)**

Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations
Social Ins Tax- Employee Contribution	\$257,825	\$22,124			
Social Ins Tax- Employer Contribution	\$335,006				
Indirect Bus Tax: Excise Taxes			\$75,953		
Indirect Bus Tax: Custom Duty			\$32,049		
Indirect Bus Tax: Fed NonTaxes			\$0		
Corporate Profits Tax					\$130,461
Personal Tax: Income Tax				\$407,615	
<b>Total Federal Tax</b>	<b>\$592,830</b>	<b>\$22,124</b>	<b>\$108,001</b>	<b>\$407,615</b>	<b>\$130,461</b>
Description	Employee Compensation	Proprietor Income	Tax on Production and Imports	Households	Corporations
Dividends					\$483
Social Ins Tax- Employee Contribution	\$1,264				
Social Ins Tax- Employer Contribution	\$2,241				
Indirect Bus Tax: Sales Tax			\$158,504		
Indirect Bus Tax: Property Tax			\$414,181		
Indirect Bus Tax: Motor Vehicle Lic			\$1,942		
Indirect Bus Tax: Severance Tax					
Indirect Bus Tax: Other Taxes			\$24,953		
Indirect Bus Tax: S/L NonTaxes			\$37,005		
Corporate Profits Tax					\$6,906
Personal Tax: Income Tax					
Personal Tax: NonTaxes (Fines- Fees				\$13,998	
Personal Tax: Motor Vehicle License				\$1,609	
Personal Tax: Property Taxes				\$3,618	
Personal Tax: Other Tax (Fish/Hunt)				\$616	
<b>Total State and Local Tax</b>	<b>\$3,505</b>		<b>\$636,585</b>	<b>\$19,840</b>	<b>\$7,389</b>

Source: made by authors based on data from IMPLAN, Bureau of Economic Analysis and Experiential Learning at UCF

## **References**

- Abraham, Pizam, Fevzi, Okumus, & Joe, Hutchinson. (2013). Forming a long-term industry-university partnership: The case of Rosen College of Hospitality Management. *Worldwide Hospitality and Tourism Themes*, 5(3), 244-254.
- Brooks, Linda, Cornelius, Allen, Greenfield, Ellen, & Joseph, Robin. (1995). The Relation of Career-Related Work or Internship Experiences to the Career Development of College Seniors. *Journal of Vocational Behavior*, 46(3), 332-349. doi: <http://dx.doi.org/10.1006/jvbe.1995.1024>
- Carless, Sally A., & Prodan, Olivia. (2003). The impact of practicum training on career and job search attitudes of postgraduate psychology students. *Australian Journal of Psychology*, 55(2), 89-94. doi: 10.1080/00049530412331312944
- Coco, Malcolm. (2000). Internships: A try before you buy arrangement. *SAM Advanced Management Journal*, 65(Spring 2000), 4.
- Croes, Robertico R. (2007). Evaluating short-term tourism economic effects in confined economies: conceptual and empirical considerations. *Tourism Economics* 13(2), 289- 307.
- Gault, Jack, Redington, John, & Schlager, Tammy. (2000). Undergraduate Business Internships and Career Success: Are They Related? *Journal of Marketing Education*, 22(1), 45-53.
- Gerken, M., Rienties, B., Giesbers, B., & Könings, K. (2012). Enhancing the academic internship learning experience for business education-a critical review and future directions. In P. Van den Bossche et al. (eds.). *Learning at the crossroads of theory and practice*. Advances in in business education and training 4, Springer.
- Giles Jr, Dwight E., & Eycler, Janet. (1994). The impact of a college community service laboratory on students' personal, social, and cognitive outcomes. *Journal of Adolescence*, 17(4), 327-339. doi: <http://dx.doi.org/10.1006/jado.1994.1030>
- Hara, Tadayuki. (2008). *Quantitative tourism industry analysis : introduction to input-output, social accounting matrix modeling, and tourism satellite accounts* (1st ed.). Oxford: Butterworth-Heinemann.
- Howitt, P. & McAfee, R. (1987). Costly search and recruiting. *International Economic Review* 28(1), 89-107.
- Isard, Walter (Ed.). (1998). *Methods of Interregional and Regional Analysis*. Aldershot: Ashgate.
- Ju, Jeongeun, Emenheiser, Daniel A., Clayton, Howard R., & Reynolds, Johnny Sue. (1998). Korean students' perceptions of the effectiveness of their internship experiences in the hospitality industry in Korea. *Asia Pacific Journal of Tourism Research*, 3(1), 37-44. doi: 10.1080/10941669908722006
- Knouse, Stephen B., & Fontenot, Gwen. (2008). benefits of the business college internship: a research review. *Journal of Employment Counseling*, 45(2), 61-66. doi: 10.1002/j.2161-1920.2008.tb00045.x
- Knouse, Stephen B., Tanner, John R., & Harris, Elizabeth W. (1999). The relation of college internships, college performance, and subsequent job opportunity. *Journal of Employment Counseling*, 36(1), 35-43. doi: 10.1002/j.2161-1920.1999.tb01007.x
- Miller, Ronald E., & Blair, Peter D. (1985). *Input-output analysis : foundations and extensions*. Englewood Cliffs, N.J.: Prentice-Hall.
- Miller, Ronald E., & Blair, Peter D. (2009). *Input-output analysis : foundations and extensions* (2nd ed.). Cambridge England ; New York: Cambridge University Press.

- Miller, Ronald E., Polenske, Karen R., & Rose, Adam Zachary. (1989). *Frontiers of input-output analysis*. New York: Oxford University Press.
- Molseed, Timothy R., Alsup, John, & Voyles, James. (2003). The role of the employer in shaping students' work-related skills. *Journal of Employment Counseling*, 40(4), 161-171. doi: 10.1002/j.2161-1920.2003.tb00867.x
- Moretti, Enrico. (2004). Estimating the social return to higher education: evidence from longitudinal and repeated cross-sectional data. *Journal of Econometrics*, 121(1-2), 175-212. doi: <http://dx.doi.org/10.1016/j.jeconom.2003.10.015>
- Narayanan, V. K., Olk, Paul M., & Fukami, Cynthia V. (2010). Determinants of internship effectiveness: an exploratory model. *Academy of Management Learning & Education*, 9(1), 61-80.
- Owen, S. and Sawhill, I. (2013). *Should every one go to College?* Brookings, Washington DC.
- Rosen College of Hospitality Management. (2014). Degree Programs. Retrieved Feb. 27, 2014, from Rosen College of Hospitality Management,
- Rumberger, Russell W., & Thomas, Scott L. (1993). The economic returns to college major, quality and performance: A multilevel analysis of recent graduates. *Economics of Education Review*, 12(1), 1-19. doi: [http://dx.doi.org/10.1016/0272-7757\(93\)90040-N](http://dx.doi.org/10.1016/0272-7757(93)90040-N)
- Tabacnick, B. Robert, & Zeichner, Kenneth M. (1984). The impact of the student teaching experience on the development of teacher perspectives. *Journal of Teacher Education*, 35(6), 28-36. doi: 10.1177/002248718403500608
- University of Central Florida. (2014). UCF Facts. Retrieved Feb. 27, 2014, from <http://ikm.ucf.edu/academic-reports/ucf-current-facts/>
- Wasonga, Teresa A., & Murphy, John F. (2006). Learning from tacit knowledge: the impact of the internship. *International Journal of Educational Management*, 20(2), 153 - 163.
- Weible, Rick. (2009). Are Universities Reaping the Available benefits internship programs offer? *Journal of Education for Business*, 85(2), 59-63. doi: 10.1080/08832320903252397