Building the First Gaming Master's Program: An Industry Perspective[1]

Toni Repetti, Ph.D.*
SoYeon Jung, M.B.A.

Introduction

Since the early 1990s, casino gaming has become one of the most popular forms of entertainment in the United States (Walker, 2007). With the emergence of mega-casinos with hotels, shopping, restaurants, shows, and conventions, most casinos have gone from being perceived as a gaming business to being viewed as an entertainment business (Tsai, McCain, & Hu, 2004). Bernhard (2009) indicates that the market is broadening and gaming is becoming a socially and economically acceptable activity. According to a 2013 public opinion poll by VP Communications, Inc. and Peter D. Hart, 85% of Americans think that casino gaming is acceptable. This is the highest acceptability level in the past decade (American Gaming Association, 2013).

All U.S. states, excluding Hawaii and Utah, operate some form of legalized gaming (American Gaming Association, 2013). Even with a lull in the gaming industry due to the economic downturn from 2007 to 2009, the gaming industry has expanded in a variety of ways, both in the brick-and-mortar and the online market. Some of the growth is due to the perception changes and new people playing while some of it is due to new markets. For instance, driven by the opening of new properties or casinos that had their first full year of operations, Kansas (603.7%), Maryland (142.6%), Maine (66.9%), and New York (43.1%) experienced the largest increase in their gross gaming revenues during 2012 (American Gaming Association, 2013).

Globally, the gaming industry has a net worth of over $125 billion (ReportLinker, 2013). Asia, including Macau and Singapore, has been experiencing an exponential gaming boom with Macau growing 264% from 2007 to 2012 (Gaming Inspection and Coordination Bureau, 2013). Macau generates about six times the gaming revenue of the Las Vegas Strip, which had historically been the heart of the world gaming industry (O'Keeffe, 2013). In 2012, Macau collected more in commercial casino gaming revenue than the entire U.S. (Stutz, 2013). While the largest growth over the next couple years is anticipated in Asia-Pacific, gaming is growing in almost all international markets. It is estimated that gaming will grow 3-5% each year from 2013 through 2015 in Europe, 8-9% growth in Latin America and 2-4% per year in Canada (PwC, 2011). Recently, gaming has also increased online. While still partially illegal in the U.S., Internet gaming has grown dramatically from 15 online casinos in 1996 to nearly 3,000 Internet gaming sites across 85 nations (Schwartz, 2006; Stewart & Ropes & Gray, LLP, 2011). These sites generated an estimated $30 billion in worldwide gross online gaming win in 2012 (H2 Gambling Capital, 2013).

Along with the large amount of gaming revenue generated, comes major employment. In 2012, U.S. commercial casinos generated $37.34 billion in gross gaming revenue with more than 332,000 employees who earned a total of $13.2 billion in wages, benefits, and tips (American Gaming Association, 2013). Because of its dramatic growth in domestic

Toni Repetti Ph.D.*
Assistant Professor
William F. Harrah College of
Hotel Administration
University of Nevada, Las Vegas
4505 S. Maryland Parkway
Las Vegas, NV 89154
Email: toni.repetti@unlv.edu

SoYeon Jung, M.B.A.
Ph.D. Student
William F. Harrah College of
Hotel Administration
University of Nevada, Las Vegas
4505 S. Maryland Parkway
Las Vegas, NV 89154
Email: jungs5@unlv.nevada.edu

*Corresponding Author

and international markets as well as on the Internet, the gaming industry has undoubtedly massive potential for additional employment. The increased legalization and expansion of gaming has changed the landscape of gaming career opportunities. Macau struggles with a serious shortage of employees because of the casino industry's exponential growth (King & Hang, 2011). Moreover, emerging issues such as regulation matters and fierce competition make the industry more complex. Bernhard and Ahlgren (2011) indicate that as the gaming industry continues to evolve, the focus of executive decisions on the global gaming industry changes from less complicated decisions such as casino floor configuration to more complicated decisions such as the configuration and allocation of development capital. Therefore, the need for more qualified management candidates has increased. However, despite the potential growth and increasing complexity of the gaming industry, gaming education is still at an early stage.

Few gaming programs are offered at the undergraduate level either as a degree, concentration, or certification. Some such programs include: University of Nevada, Las Vegas – concentration; University of Nevada, Reno – minor; University of Southern Mississippi – major and certificate; University of Massachusetts – online certificate. A larger variety of universities also offer minimal gaming courses each year. The area that is lacking though is that there is currently no master's program offered in gaming management anywhere in the U.S. or internationally. Furthermore, no studies have been conducted on curriculum that addresses the needs of the gaming industry at the undergraduate or graduate level. The majority of curriculum research has focused on the overall hospitality industry (Gursoy & Swanger, 2004), or the subsectors of hotels (Kay & Russette, 2000; Tesone & Ricci, 2006) or food service (Horng & Lu, 2006). In addition to the lack of higher level gaming programs, Nevada's economic development agenda states that the focus for the state should be "Nevada as the U.S. online gaming center" and "Las Vegas as the intellectual capital of global gaming" (Brookings Mountain West, 2011, p. 6). One way to accomplish this would be implementing the only gaming management master's program in the world. Due to the importance of the gaming industry and the absence of a gaming master's, a comprehensive study examining a master's program in gaming management appears highly needed.

Prompted by the needs and opportunities resulting from the expanding gaming industry, this study intends to provide information on the feasibility of building a master's program in gaming management. More specifically, the current study will highlight industry professionals' expectations of a gaming master's program. The specific research questions for this study are:

■　　How important do gaming industry professionals consider a master's degree to a successful career in gaming?

■　　What is the current level of interest by gaming industry professionals regarding a master's program in gaming management?

■　　What is the most preferred delivery format for a master's in gaming?

■　　Should gaming work experience be required for admittance into a gaming master's program? If so, how many years?

■　　Should management experience in gaming be required for admittance into a gaming master's program? If so, how many years?

■　　How important do gaming industry professionals believe certain course content is to a successful gaming master's program?

■   Are there significant differences in the level of importance for each content area based on demographic sub-groups of gender, age, education, years of experience, department, and salary?

Literature Review

Pursuing a master's degree

The main objective of every academic program is that their graduates leave more proficient in their fields than when they entered. Hospitality programs are not the exception. It is commonly held that "the multidisciplinary nature of hospitality education, its diverse institutional origin, and its increased connection to the industry make hospitality programs a unique field of study" (Gursoy, Rahman, & Swanger, 2012, p. 41). Several stakeholders have interests in hospitality programs (Ramakrishna & Nebel, 1996). The authors note that "to state an analogy, hospitality programs may be seen as "factories," with students being the "raw materials" which need to be transformed into the "final product" that the hotel industry, the "consumer," is willing to buy" (p. 47). After all, the ultimate objective is for graduates to learn the right skills needed in the workplace, which will enable them to get jobs that are challenging and financially rewarding.

According to the Graduate Management Admission Council (2012), a global nonprofit education organization of leading graduate business schools and the owner of the Graduate Management Admission Test (GMAT), the top five motivations for pursuing a graduate management education are to: 1) increase job opportunities, 2) increase salary potential, 3) develop business knowledge, skills, and abilities, 4) accelerate career paths, and 5) develop managerial skills. Nevertheless, Cargill (1995) finds that less than 25% of respondents agree that a management candidate with a master's degree is offered a higher salary, a higher position, or are more promotable than one with a four-year degree, if other qualifications are equal. With regard to a question whether there are any immediate benefits to pursuing a master's degree, the research finds that 19% of the respondents state that there are no immediate benefits to the master's degree and 36% left the question blank.

An issue to examine when considering whether the industry should encourage the pursuit of a master's degree is it's future importance in gaming. Eadington (1995) explains "there is not another industry in the world that has experienced a transformation like that of the casino industry over the past 40 years" (p. 58). The brisk and extensive spread of gaming across brick & mortar, online, and international markets have opened the doors for solid careers in gaming. This remarkable change has had dramatic effects on demands for and the required skills of casino employees. In examining higher education in gaming, Cummings and Brewer (1996) conclude that as gaming continues to become economically vital, competitive, and complicated in regulatory requirements, the demand for professionally educated casino employees will grow. The increasing complexity in the hospitality industry requires employees to be better prepared with prolonged education (Tsai et al., 2004). Complex, specialized problems will best be solved by those with advanced educations; therefore, a graduate education will become increasingly important to hospitality industry professionals in the future (Smith, 1990).

Cargill (1995) indicates that in order for hospitality master's degree programs to be successful, it is essential that hospitality industry professionals be informed of the benefits of hiring managers with a master's degree in the field. The author suggests that administrators should honestly question whether the master's degree program they are contemplating have been inspired by faculty concern for academic prestige or in response to hospitality industry demand. When recruiters can easily differentiate between students with and without a master's degree, then the master's programs can truly call themselves

successful. Universities should consider what role a master's program could do to polish prospective students. Bosselman and Fernsten (1989) recommend the contemplation of both programs and student goals before taking on the risk of a new program. Pizam (1985) stipulates that it is necessary to evaluate whether master's degree programs satisfy a desire to glorify academic institutions or rather to advance the state of hospitality management. He contends that their usefulness depends on the benefits to the student and congruence with industry and academia needs.

The gaming industry, a subsector of hospitality, is no different. However, gaming education is still in an initial stage. As noted earlier, there are few universities with gaming programs and no known colleges with a master's in gaming. Gaming education programs can play a significant role in bridging the gap between the gaming industry and hospitality academia. Bernhard and Ahlgren (2011) state that Las Vegas must be active in culminating talent that can handle the complex future of the gaming industry and the main way to do this is by bridging the gap between UNLV and the "gaming laboratories" that are less than a mile away. The Las Vegas Strip alone has 42 unrestricted gaming licenses while Nevada as a whole has 336 (Nevada Gaming Control Board, 2012, 2013). When taking into accounting restricted operators, slot route operators, and manufacturers, Nevada has 2,933 active licenses as of June 30, 2013 (Nevada Gaming Control Board, 2013).

Industry insight into curriculum development

Hospitality professionals expect academia to have students prepared with a practical sense of the industry as well as a relevant skilled ability (Lefever & Withiam, 1998). Educators realize the need of planning a curriculum from the industry's point of view and support the importance of industry in developing curriculum (Assante, Huffman, & Harp, 2007; Dopson & Nelson, 2003; Solnet, Robinson, & Cooper, 2007). The complex nature of the industry along with modern economic circumstance has resulted in many programs adopting curricula that not only focuses on traditional management and operations course work but which also include a comprehensive tactic to the "business of hospitality" (Rappole, 2000).

Milman (2001) suggests that when building curriculum the institution, program, and external constituents should be involved. One of the more important external constituents for a hospitality program are the industry leaders who are responsible for hiring the students from the program. In an effort to redesign the Master of Professional Studies (MPS) program in the School of Hotel Administration at Cornell University, Enz, Renaghan, and Geller (1993) survey four groups of stakeholders of the program: senior hospitality industry professionals, MPS alumni, incoming MPS students, and hospitality faculty. The study attempts to identify the skills these stakeholders consider to be critical for success in hospitality organizations and what they look for when hiring a graduate with a master's degree.

To deliver high-quality, industry-relevant hospitality education, educators must continually identify and investigate competencies the industry recognizes as being essential for successful managers (Okeiyi, Finley, & Postel, 1994). Despite the soft economy, the hospitality industry is constantly short of skilled workers and one major reason is that "education and training systems are often ill-adapted to industry's needs" (Solnet, 2003, p. 386). The disconnect between hospitality education and hospitality industry's need caused the labor shortage. Hence, active interaction between educators and the industry is essential in hospitality education. For a hospitality program to successfully prepare its graduates for industry employment, the ever-changing needs of this enormous industry must be reflected in the curriculum. It is now up to the hospitality programs to incorporate them and the hospitality students to maximize their understanding

and application of them (Gursoy et al., 2012). Nelson and Dopson (2001) suggest that industry relevant curriculum needs to be one of the top strategic concerns of a hospitality program. Gursoy et al. (2012) also indicate that it is necessary to incorporate the perspectives, needs, and demands of industry professionals into the hospitality curriculum.

Tsai et al. (2004) also indicate that as the gaming industry expands, the demand for managerial staff from the gaming industry grows dramatically. Despite the increasing demand, the job requirement is becoming severe at the same time because gaming employees are subject to unique circumstances, issues, and regulations. A thorough groundwork for the gaming industry requires "a little more than business 101" or knowledge of lodging operations alone (Jerrett, 1995). There are many challenges executives face including regulations, competition, financing, customer development, and public relations (Cumming, 1996). In fact, the casino executive needs to be the expert in more fields than most other executives (Cumming, 1996).

To be feasible and successful, it is imperative that the master's of gaming management be highly valued by the industry. Nelson and Dopson (2001) suggest "curriculum relevancy to industry needs is one of the top strategic concerns in hospitality education" (p.58). Paulson (2001) further proposes "postsecondary education institutions must reach a working relationship with business and industry to create educated competent workers… the result must be a partnership" (p.51). Therefore, the top hospitality schools are aware of the necessity of modifying curricula to a changing environment in conjunction with the industry, leading students to be better prepared to be successful (Freed, 2010). Gursoy and Swanger (2004) suggest a curriculum model for hospitality programs in business schools and propose curriculum based on industry professionals' perceptions of the importance of course area. Gursoy and Swanger (2005) further propose specific content areas that should be addressed in each course area from the industry's perspective. In the Brookings Mountain West (2011) report on Nevada's economy it is mentioned that Nevada higher education needs to engage business leaders to understand the skills needed for the high demand occupations and that business leaders should participate in the design of the curricula.

Hospitality educators face a challenge to incorporate the needs of the industry as well as identify clear objectives for the curriculum (Dopson & Tas, 2004). It is imperative to close or, at least, narrow the gap between what kinds of courses are offered at universities and what the industry expects (Dopson & Tas, 2004; Okeiyi et al., 1994). The process of development and review of curriculum must also be ongoing (Gursoy & Swanger, 2004; Gursoy & Swanger, 2005; Pavesic, 1993). The current study intends to explore the feasibility of a master's program in gaming by providing practical insights from the industry and by finding out what the gaming industry would look for from a master's program.

Methodology

Questionnaire Development

A quantitative survey was developed using a multiple step process. In the first step, UNLV's current Master of Science in Hotel Administration requirements and curriculum were evaluated and analyzed. Following a similar degree structure, a list of courses was developed around the specifics of the gaming industry and it's interdisciplinary nature. In the next step, UNLV gaming faculty were asked to evaluate and give feedback on the proposed courses based on their extensive industry and academia experience. These courses were converted to main course content topics to give more specifics of what a course would cover rather than just a course name. In the next step, a survey was built in which respondents were asked to evaluate the importance of each of these core content

areas on a Likert scale of 1-5 (1 = Extremely unimportant, 2 = Somewhat unimportant, 3 = Neutral, 4 = Somewhat important, 5 = Extremely important). The survey was then pilot tested on industry and academic professionals at the 15th International Conference on Gambling and Risk Taking. Based on the pilot study additional course content was added and other content was clarified for the final survey. The final survey included not only these course content areas, but participants thoughts on admission and degree structure.

Data Collection

The survey was developed as an online survey and was distributed using non-probability sampling techniques. Distribution of the survey occurred in two ways. Judgment sampling was used to send emails requests to specific individuals who had expressed interest in participating during the pilot study, professional contacts of the researchers and UNLV faculty, and a listserv of current and recently graduated UNLV hotel college students. Judgment sampling was also used to select which groups on various social media sites, including Facebook, Twitter, and LinkedIn, on which to post a link and call for participants for the survey. The link was posted on over 25 different gaming specific groups within these sites. A snowball technique was also used by asking all participants to forward the survey to anyone they thought would also be interested in participating.

Data Analysis

All data was analyzed using a two-step process. First, descriptive statistics were run to determine demographic information of participants. Frequency and mean scores were also run for the admission and degree structure questions. Overall mean scores for the importance of each content area were also computed. A series of independent sample t-tests and one-way analysis of variance (ANOVA) comparisons were performed to see if there were any significant differences in the importance of each course content area among various demographics groups. All t-tests and ANOVA comparisons were conducted using an alpha level of .05.

Results

The survey was active from June 24, 2013 to July 30, 2013. During this period 275 participants started the survey and 214, 77.8%, completed the survey. Of the 214 that were completed, 13 were deleted from the analysis because the participants had no work experience in the gaming industry. All analysis was based on the 201 completed surveys from participants with some amount of gaming industry experience. The 201 surveys equated to a 73.1% completion rate. A response rate cannot be computed since the number of people who saw the link to the survey via the snowball technique or on the social media groups is unknown.

Demographics

Of the 201 participants, 67.7% were male and 32.3% were female which is in line with the representation of women in the gaming industry. The youngest participant was 18 and the oldest was 81, with a mean age of 45 years. Over 78% of the participants were 35 years or older. The majority of the participants, 69.7%, obtained a 4 year degree or higher with 30.9% holding a Master's or Professional degree. The most common salary range was $50,001 - $75,000 with 19.9% of the participants making this much in their current position. The next most common salary range was those making over $200,000 which accounted for 17.9% of the respondents. Respondents were also asked how many years of work experience they had in the gaming industry. The minimum was less than a year and the maximum was 47 years with a mean of 16.2 years. Table 1 shows the full

descriptive profile of the participants.

Table 1
Demographics

	N	% of total
Gender		
Male	136	67.7
Female	65	32.3
Total	201	100.0
Age		
Under 25	7	3.5
25-34	37	18.4
35-44	54	26.9
45-54	59	29.4
55-64	32	15.9
65 and Over	12	6.0
Total	201	100.0
Education		
High school & below	9	4.5
Some college	28	13.9
2 year degree	24	11.9
4 year degree	78	38.8
Master's	56	27.9
Professional (JD, PhD)	6	3.0
Total	201	100.0
Salary		
$0 - $25,000	10	5.0
$25,001 - $50,000	23	11.4
$50,001 - $75,000	40	19.9
$75,001 - $100,000	34	16.9
$100,001 - $125,000	22	10.9
$125,001 - $150,000	14	7.0
$150,001 - $175,000	9	4.5
$175,001 - $200,000	9	4.5
Over $200,000	36	17.9
Refused to answer	4	2.0
Total	201	100.0
Years of Gaming Experience		
0 – 5	40	19.9
6 – 10	32	15.9
11 – 15	33	16.4
16 – 20	39	19.4
21 – 25	25	12.4
Over 25	32	15.9
Total	201	100.0

Respondents were from a variety of departments and gaming regions.

Participants were only able to select one department and the results are shown in Table 2. The most common department was Executive with 20.4% of the participants. Participants were asked for job titles, and the job titles were matched to the department selected for validity of the selection. A couple respondents selected other as their

department, but had a job title of President. They were left in other as it was believed these were those who owned their own consulting companies and/or presidents of gaming machine manufacturing companies. To make sure the survey was better representative of the entire gaming region and not just Las Vegas, participants were asked to select which geographic region their companies operate in. Table 3 shows the number of participants that operate in each region. Since participants were able to select more than one region the percentages will add up to more than 100%. All 48 U.S. states with legalized gaming were represented in the survey. An example of those categorized as other international locations included Russia, Korea, South America, Central America, Mexico, Singapore, Philippines, India, and Africa, in addition to cruise ships.

Table 2
Department

	N	% of total
Gaming		
Table games	29	14.4
Slots	11	5.5
Other gaming	1	.5
Internet gaming	3	1.5
Non-gaming operations		
Hotel	6	3.0
Food & beverage	4	2.0
Administrative & general		
Accounting/Finance	22	10.9
Audit	8	4.0
Human resources	9	4.5
Information technology	8	4.0
Surveillance	6	3.0
Sales & marketing	23	11.4
Executive	41	20.4
Regulators	13	6.5
Other	17	8.5
Total	201	100.0

Table 3
Region of Operation

	N	% of total
Las Vegas Strip	41	20.4
Las Vegas, non-Strip	57	28.4
Atlantic City	13	6.5
Other US commercial gaming	49	24.4
Indian gaming	34	16.9
Australia	11	5.5
Canada	13	6.5
Caribbean	9	4.5
Europe	18	9.0
Macau	8	4.0
Other international	24	11.9

Program Specifics

Participants were asked how interested they would be in a gaming master's. Based on a Likert scale of 1 (extremely uninterested) to 5 (extremely interested), the mean score was 3.48. Table 4 shows that the majority of respondents, 37.3%, stated that they were somewhat interested in the master's and 62.7% were somewhat or extremely interested.

Table 4
Interest in Gaming Master's

	N	% of total
Extremely uninterested	27	13.4
Somewhat uninterested	26	12.9
Neutral	22	10.9
Somewhat interested	75	37.3
Extremely interested	51	25.4
Total	201	100.0

Participants were also asked how important they believed a master's degree in general was to a successful career in gaming in today's environment. Results are shown in Table 5. The mean score was 3.61 and over half, 50.2%, of respondents believed that a master's degree was somewhat important for a successful career in gaming in 2013. An additional 16.4% believed it was extremely important.

Table 5
Importance of a Master's to a Career in Gaming

	N	% of total
Extremely unimportant	15	7.5
Somewhat unimportant	14	7.0
Neither unimportant nor important	38	18.9
Somewhat important	101	50.2
Extremely important	33	16.4
Total	201	100.0

There are a variety of formats available when setting up a program. Table 6 shows the potential formats and which was the most preferred by respondents. Respondents were only allowed to select one option. Almost half of the respondents preferred an online program. The executive format was stated as "designed for working professionals and typically includes in-person classes on weekends" and was preferred by 37.8% of those surveyed. Some that selected other stated that they prefer a hybrid of executive and online

.

Table 6
Most Preferred Format

	N	% of total
2 year full time	13	6.5
4 year part time	7	3.5
Executive	76	37.8
Online	94	46.8
Other	11	5.5
Total	201	100.0

Many master's programs within hospitality have some level of industry experience required for admittance. Respondents were first asked if they believe that industry experience should be a requirement and then were given an open-ended question about how much time. The majority of respondents, 72.1%, stated that they believed industry experience should be required for admittance into any gaming master's program. The average number of years was 3.7, with a range of 1-12. The question was followed up by asking respondent if they believed there should be a work requirement at the management level for admittance. Less respondents agreed with this statement, with only 45.8% stating they believed management experience in gaming should be required for admittance into a master's program. Of those that stated yes, the average number of years was 3.5.

Content Areas

Participants were asked to evaluate 13 content areas on a Likert scale of 1-5 (1 = Extremely unimportant, 2 = Somewhat unimportant, 3 = Neutral, 4 = Somewhat important, 5 = Extremely important). Financial analysis had the largest mean score of 4.37, followed closely by gaming operations (4.31) and gaming regulations (4.29). Eight of the thirteen content areas had mean score over 4 which indicates they are believed to be slightly higher than somewhat important. Human resources had the lowest mean score of 3.63. Table 7 shows the mean responses for all content areas surveyed. Participants were also asked if there was any other content areas they believed should be included. The majority of participants, 59.7%, said no. If respondents said yes, they were asked to list up to four more and rank them on the same Likert scale. For those that said yes, only three areas were stated 5 or more times. Responsible gaming and customer service were each stated by six participants and psychology of gaming was stated by five participants. Each respondent ranked these content areas at least a 4.

Table 7
Gaming Master's Content Area Mean Responses

	N	Mean	Std. Deviation
Financial analysis	201	4.37	1.155
Gaming operations (tables, slots, poker, etc.)	201	4.31	1.074
Gaming regulations, law & compliance	201	4.29	1.170
Casino marketing, including players clubs	201	4.21	1.094
Statistical analysis	201	4.19	1.130
Current trends in gaming operations	201	4.16	1.099
Gaming technologies	201	4.14	1.105
Casino accounting	201	4.10	1.077
Case studies in gaming management	201	4.04	1.076
Internet & mobile gaming	201	3.92	1.097
Sociology of gaming	201	3.74	1.061
Government & community relations	201	3.68	1.043
Human resources	201	3.63	1.120

Note: Likert scale: 1 = Extremely unimportant, 2 = Somewhat unimportant, 3 = Neutral, 4 = Somewhat important, 5 = Extremely important

Further analysis was conducted to see if there were significant differences in the mean scores of the content areas between differing respondent groups. Groups based on gender, age, education, salary, years of gaming experience, and department were analyzed. An independent sample t-test was conducted to examine if there was a difference based on gender. There were no significant differences between males and females for any of the content areas.

All other groupings required one-way ANOVA analyses to determine if there were significant differences in the groupings. For the age groupings, there was only significant differences in the content area of case studies in gaming management, $F(5,195) = 2.310$, $p = .046$. Based on Levene's test of homogeneity of variances, $p = .472$, equal variances are assumed so Tukey's HSD was used to determine which age groups differed. The additional analysis found that respondents under 25 differed from those that were 65 and over. Respondents under 25 believed that case studies are more important than those 65 and over believed. Table 8 presents all significant difference found in one-way ANOVA analyses.

The next demographic grouping analyzed was education. Two content areas were found to have significant differences, gaming regulations, $F(5,195) = 3.016$, $p = .012$ and gaming operations, $F(5,195) = 3.230$, $p = .008$. Based on Levene's test of homogeneity of variances, $p = .000$, equal variances are not assumed for each content area so the more robust test of Dunnett T3 was then used to determine which education groups differed. For gaming regulations, those with some college believed this content area was more important than those who had a 4 year degree or a Master's. In addition those who did not attend past high school believed that gaming regulations were more important than those with a 4 year degree. For gaming operations, respondents with some college believed this was more important than those with a 4 year degree.

When evaluating years of experience, human resources was the only content area that had significant differences, $F(5,195) = 3.859$, $p = .002$. Based on Levene's test of homogeneity of variances, $p = .688$, equal variances are assumed so Tukey's HSD was used to determine which groups differed. Those respondents with less than 5 years of experience and those with 6 to 10 years of experience believed that human resources was less important than those who had over 25 years of experience.

For the salary and department groupings there were no content areas that had significant differences. A slight modification was made to the department grouping for the ANOVA to be run. The other gaming and Internet gaming were combined into one group and classified as other gaming.

Table 8.
Summary of Significant Differences in Content Area Mean Response by Demographic Groupings

Content Area	Demographic Groupings	N	Mean	Std. Deviation	One-Way ANOVA Sig.
Case studies in gaming operations	Under 25 [a]	7	4.86	.378	.046
	65 and Over [a]	12	3.33	1.231	
Gaming regulations, law & compliance	High school and below [b]	9	4.78	.441	.012
	Some college [c, d]	28	4.93	.262	
	4 year degree [b, c]	78	4.08	1.307	
	Master's [d]	56	4.13	1.207	
Gaming operations	Some college [e]	28	4.86	.356	.008
	4 year degree [e]	78	4.03	1.206	
Human resources	0-5 years [f]	40	3.22	1.143	.001
	6-10 years [g]	32	3.34	1.125	
	Over 25 years [f, g]	32	4.19	.965	

Note: Matching letters specify groups with significant differences

Discussion

If there is minimal interest in the program, there are a couple concerns: 1) industry will not support the program and hire graduates and 2) enrollment will be low if interest is demand. This survey did not ask about enrollment intentions, just general interest, and it appears this program has great interest. If industry, and more specifically those that do the hiring or select the appropriate candidates, have an interest in a gaming master's and support it there may be more benefits given to those who pursue the degree. This could assist in decreasing the high percentage of people such as those from Cargill's (1995) study who do not believe there is immediate benefits to obtaining a master's degree. Approximately 63% of respondents were interested in a master's in gaming. This interest in a gaming master's is not just by those with a 4 year degree and below. For those that already have a master's degree, 55% stated that they were somewhat or extremely interested in a gaming master's. Comments from some respondents concerning a potential master's in gaming include:

- "Great idea. It is time that the gaming industry will educate their own." - Surveillance, no title given

- "Gaming is such a unique industry; a Masters program would be a great way to open doors." - Internal Audit Manager

- "This would be an excellent and interesting program to participate in." - Senior Internal Audit

- "I think this is a brilliant idea. The gaming industry definitely needs a masters program geared toward grooming executive level employees to understand how the

operations work." - Executive Director of Compliance

Getting industry's perspective on a new master's program is crucial to the success of the program since industry representatives are the ones that will or will not hire the graduates (Gursoy et al., 2012; Gursoy & Swanger, 2004; Nelson & Dopson, 2001). If industry does not find value in the program they will not hire the graduates (Cargill, 1995). In addition to being the ones that hire the graduates, those currently in the industry will have a better idea of what is necessary for success in the gaming industry. A table games supervisor stated, "For the proposed program to be credible and provide a proper return on investment it will take the endorsement and close relationship of gaming companies."

Results of this survey show that over 66% of respondents believe that a master's is somewhat or extremely important to a successful career in gaming. If two thirds of the respondents believe a master's is important, they may be more likely to hire graduates with this degree. While a majority of respondents believed a master's was important a table games employee believed that currently a master's degree was not important, but he thought that would change in the future.

> While in 2013 I do not believe a master's degree is valuable to the gaming industry, this trend will change as more competition (including local, foreign & online) emerges, and the margins become tighter. Many current industry leaders do not posses (much) formal education, which trickles down to the hiring, managing, etc. processes, but I do believe this will change in the next 20 years. When this dynamic changes and (more) educated persons become executives, the higher level of education one achieves will make those persons exponentially more valuable. It is then that I would recommend a person obtaining a Master's degree, but not at this moment.

The degree alone is not sufficient though. With almost three fourth of respondents believing that some level of work experience should be required for admittance into the program it shows the importance that industry puts on working in the industry not just knowing about it from a theoretical perspective. Ineson, Rhoden, and Alexieva (2011) found similar results of the importance of work experience although these results of 3.7 years are almost four times the amount of time that study found. A table games director stated "a combination of work and school is important. Knowledge is great but the unique nature of the industry requires hands on experience" while a slot product manager wrote that "gaming experience should be a requirement." The Executive Director of Compliance noted earlier that supported the master's degree also said "gaming is a different breed and having actual gaming knowledge and experience is extremely beneficial at an executive level." Even those relatively new to the industry agree with this as an intern stated "more weight should be placed on industry experience."

The success of any program is also affected by the format in which it is offered. If a program is not offered in the right format, industry may not support their employees attending. Approximately 85% of all respondents believed the program should be offered as online or executive. Even those whose job responsibilities occurred in Las Vegas preferred these formats, 82%, although more preferred executive (57%) over online (24%). These results are not surprising since almost three fourths also stated that work experience should be a requirement for admission and that gaming has become a global industry and is no longer Las Vegas centric. A table games supervisor stated that "the gaming industry is expanding rapidly and all over. Online is the key to success here." Another table games manager stated a similar thing: "Considering our location and the fact that the center of the gaming universe has shifted to Asia, please put some thought in offering this course online." A few general managers also support the idea of an online

program due to the flexibility it brings.

Involving industry in curriculum development in addition to the type of program is also very important to the success of the program (Gursoy et al., 2012; Nelson & Dopson, 2001). The fact that there were only minimal significant differences in the content areas is a good indicator. This is an indication that the content surveyed is similarly important to those across all demographics and departments. Not only is the content similarly important to most groups it also falls higher on the importance scale, with the lowest content area falling closer to somewhat important than neutral. In addition, nine of the content areas were rated as somewhat important and higher. The fact that there were only a few respondents, 2.5%, who stated other content areas other than the ones surveyed may be an indication that the current curriculum courses are on the right track.

Conclusion, Limitations, and Future Research

Industry feedback on university curriculum is important to the success of a program because without support from industry, the degree may not be valuable to those responsible for hiring or selecting candidates. In addition to the general importance to involving industry when building curriculum, this is further supported in Nevada's belief of higher education to have "frequent communication with industry stakeholders to best respond to their needs" (Brookings Mountain West, 2011, p. 129). This paper presents key findings about a potential master's in gaming from a variety of personnel in the gaming industry. The respondents are from a wide range of ages, experience, departments, and regions. Even with the wide range of respondent experiences, the average number of years the respondents worked in gaming was 16 years. The high number of years of work experience in gaming gives support that the sample would have a good idea of what content a gaming master's should include. Results of this study show that respondents prefer an online or executive program with over 3 years of industry experience required before admittance to the program. Results also show that there are only a few significant differences on the importance of certain content areas among differing demographic sub-groups.

Although this study gives some good insight into the demand for a gaming master's and what that program should look like, care should be taken in implementing a master's in gaming based solely on these results. While this study involves 201 respondents and may be large enough to analyze as a whole, some sub-groups based on demographics may not be large enough for meaningful results. In addition some sub-groups are overrepresented as a percentage compared to the industry. For example, in this study 20.4% of respondents were from the Executive department and making larger salaries. While this is not representative of the industry in that 20.4% of all employees are not executives, the executive interest is crucial to the success and support of a master's in gaming. As a preliminary study though, the results are meaningful to know what to further analyze. This study could be replicated to get a larger sample and could be targeted toward certain departments or regions. This additional study could then be analyzed to investigate actual demand in the program from those who would enroll.

Another limitation concerns this list of course content provided. While much preliminary work was done prior to selecting what to include in the survey, without overburdening the respondents, some content areas may have unintentionally been excluded. By allowing respondents to type in other content this limitation was somewhat addressed, but some respondents may not think of content to fill in and believe that all the content listed was sufficient. This could be alleviated in a couple ways: 1) replicate the survey will a new list of content that either extends the original survey or just includes the new content or 2) use results of this survey to do focus groups or interviews with gaming employees to get a more in-depth understanding of the content needed.

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