

# **A Systematic Approach for Developing Elective Courses in Finance**

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## ***ABSTRACT***

*The main goal of this study is to measure the student attitudes majoring in Finance at Metropolitan State College of Denver about their perceptions and preferences on elective courses in finance and other academic and professional issues. The results suggest that most students agree with the offering of courses covering topics evaluated on professional certification examinations in finance such as the CFP, Chartered Financial Analyst (CFA®), etc. The results also suggest that students have a strong preference for investment management and corporate finance, followed by financial software, as their preferred areas for additional elective courses. In addition, the results provide evidence that most students have considered pursuing the CFP and the Chartered Financial Analyst (CFA®) professional designations. Moreover, most students consider important or very important that Metro State's School of Business get accredited by the Association to Advance Collegiate Schools of Business (AACSB). The results also provide evidence that most students have plans of studying either a Master in Business Administration or a master degree in finance after graduation..*

## **INTRODUCTION**

The goal of this study is to survey the students currently majoring in Finance at Metropolitan State College of Denver to determine their perceptions and preferences on elective courses in finance and other academic and professional issues. The purpose of this paper is to assess students' perceptions of the desirability of obtaining professional certifications (e.g. Certified Financial Planner®, Chartered Financial Analyst, etc.), salary expectations after graduation, and preferred financial industry sectors for employment post-graduation. The study also identifies specific learning tools that students have been exposed to, such as financial software, financial simulators, etc. The study also measures the level of student satisfaction about current academic offerings in terms of available concentrations, elective courses, extracurricular activities, prerequisites, evening and weekend courses, online courses, etc.

This paper provides useful information to program directors about what content undergraduate students desire in their undergraduate financial courses. It is imperative to realize that, as academicians, we live in a world in which multiple educational providers exist. As always, in a competitive marketplace, consumers will choose the provider that offers a product most consistent with their needs and desires. This research is a first attempt to clearly identify the

nature of finance students' preferences in elective coursework and their perceptions about important academic issues.

## **LITERATURE REVIEW**

One of the goals of this research is to identify specific learning tools that students have been exposed to, such as financial software, financial simulators, etc. Peng, (2006) studied student perceptions of finance faculty who apply internet-based tools and the effect on their learning experiences in corporate finance and investment courses at both the undergraduate and graduate level. They found that online teaching tools enhanced students' learning experiences and that assistant professors tended to adopt these Internet-based tools more often than professors with higher ranks. Saunders, (2001) surveyed corporate finance faculty teaching methods and assessment techniques. He found that 84% of faculty applied some type of computer-based tool in class. Among these tools, he found instructor computer demonstration (68%), computer-based assignments (57%), PowerPoint slides (57%), and computer-based group assignments (32%) to be most common.

Among the specific learning tools mentioned above, we evaluate the financial simulators to which Metro State students have been exposed. Burns and Gentry (1992) and Mitchell (2004) find that computer-based simulators have pedagogical value. Devasagayam and Hyat (2007) studied students' perceptions of computer-based simulations in their learning experiences in finance and marketing courses. Their overall conclusion is that simulations are an effective pedagogical tool that enhances different abilities among the students. Rebeiz (2007) evaluated the advantages and disadvantages of using online investment games in the classroom. He concluded that online investment games improve the learning experience in the classroom.

Another goal of our research is to identify the students' perceptions of the academic offerings of the Finance Department. We attempt to measure the students' perceptions about the internship opportunities offered by the Finance Department. Maskooki, Rama, and Raghunandan (1998) surveyed 93 chairs about the use of internships as part of the undergraduate educational experience of finance majors. They found that less than 25% of the finance undergraduates participate in internships.

## **DATA**

Our survey was sent the Metropolitan State College of Denver's students with a declared major in finance by August, 2008. We sent a total of 537 invitations by e-mail to these students. The e-mail contained a link to our Internet-based survey. We could get 73 participants in our survey; however, the fact that we applied the survey in summer may introduce some bias in the sample. For example, students working in internships or traveling overseas were not able to participate and this constitutes a limitation of the results of this article.

## **RESULTS**

Demographic information related to the sample is presented in Table 1. About 65% of the participants are male while just 35% are female. Most respondents are seniors (70.6%) that go to school full time (63.2%). Regarding ethnic heritage, most students identify themselves as Caucasian (76.5%), followed by Hispanic/Latino students (14.7%). Students tend to be non-

traditional in age, with 60.30% being 26 or older. Most respondents are currently working in finance-related jobs (51.5%). Finally, with respect to work experience, students with less than 5 years of experience in the finance field (44.1%) constitute the largest portion of the sample.

Table 1.

*Demographic Information*

<b>Demographic Variable</b>	<b>Responses</b>	<b>Percentage</b>
<b>Gender:</b>		
Male	49	67.1%
Female	24	32.9%
<b>Class:</b>		
Freshman	0	0%
Sophomore	9	12.3%
Junior	13	17.8%
Senior	51	69.9%
<b>Part-time vs. full-time student:</b>		
Part time	26	35.6%
Full time	47	64.4%
<b>Ethnic Background:</b>		
African American	3	4.1%
Asian or Pacific Islander	3	4.1%
Caucasian	55	75.3%
Hispanic/Latino(a)	10	13.7%
Native American	0	0%
Other	2	2.7%
<b>Age:</b>		
16 - 25	29	39.7%
26 - 35	35	47.9%
36 - 45	8	11.0%
46 - 55	0	0%
56 - 65	1	1.4%
66 or higher	0	0%
<b>Students currently working in finance-related jobs:</b>		
Yes	38	52.1%
No	35	47.9%
<b>Years of work experience in the finance field:</b>		
None	26	35.6%
Less than 5 years	32	43.8%
Between 5 and 10 years	13	17.8%
More than 10 years	2	2.7%

Table 2 shows the mean responses of twelve statements contained in our survey and related to the academic offerings of the Finance Department. Each statement is measured using a

Likert-type scale ranging from one to five, where one is “strongly agree” and five is “strongly disagree.”

Table 2.

*Descriptive Statistics*

<b>Statement</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>N</b>
The FD should expand the number elective courses currently offered	2.12	0.99	68
The FD should offer courses covering the topics evaluated on professional examinations in finance such as the Certified Financial Planner® (CFP®), Chartered Financial Analyst (CFA®), etc.	1.61	0.78	71
The FD should offer more evening classes	2.20	1.05	71
The FD should offer more weekend classes	2.41	0.99	70
The FD should offer more online courses	2.38	1.26	71
The FD should offer more opportunities for internships	1.71	0.81	68
The FD should reduce the number of students per course	3.01	0.89	71
The FD should provide more tutoring services and resources	2.32	0.86	71
The FD should offer more extracurricular activities	2.42	0.75	71
The FD should put more emphasis on teaching basic research in finance	2.48	0.92	71
I am satisfied with the concentrations currently offered by the FD within the finance degree	2.76	1.01	71
The FD should increase the number of concentrations currently offered	2.21	0.80	70

Note: FD stands for “Finance Department” and Std. Dev. stands for Standard Deviation.

Although the descriptive statistics of Table 2 suggest that, on average, students have a neutral perception on most of the surveyed statements; however, they agree with some of these statements, particularly with the statement concerning the offering of courses covering topics evaluated on professional designations in finance such as Certified Financial Planner® (CFP®), Chartered Financial Analyst (CFA®), etc.; followed by more internship opportunities. Students seem to be neutral about the statements related to the number of students per course. A detailed description of the results for each statement can be found in the appendix to this paper.

Table 3.

*Independent Samples Test, Part I*

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
<b>Statement #3: "The Finance Department should offer more evening classes" (Full vs. Part Time)</b>							
Equal variances assumed	1.131	0.291	-3.889	69	0.000	-0.918	0.236
Equal variances not assumed			-4.160	63.018	0.000	-0.918	0.221
<b>Statement #4: "The Finance Department should offer more weekend classes" (Full vs. Part Time)</b>							
Equal variances assumed	0.000	0.984	-2.549	68	0.013	-0.598	0.235
Equal variances not assumed			-2.585	54.922	0.012	-0.598	0.231
<b>Statement #5: "The Finance Department should offer more online courses" (Full vs. Part Time)</b>							
Equal variances assumed	0.266	0.608	-2.856	69	0.006	-0.843	0.295
Equal variances not assumed			-2.899	54.734	0.005	-0.843	0.291
<b>Statement #6: "The Finance Department should offer more opportunities for internships" (Full vs. Part Time)</b>							
Equal variances assumed	0.196	0.659	2.437	66	0.018	0.476	0.195
Equal variances not assumed			2.359	47.664	0.022	0.476	0.202
<b>Statement #7: "The Finance Department should reduce the number of students per course" (Full vs. Part Time)</b>							
Equal variances assumed	4.246	0.043	2.806	69	0.007	0.585	0.208
Equal variances not assumed			3.201	68.943	0.002	0.585	0.183
<b>Statement #12: "The Finance Department should increase the number of concentrations currently offered" (Full vs. Part Time)</b>							
Equal variances assumed	0.866	0.355	1.709	68	0.092	0.332	0.194
Equal variances not assumed			1.839	64.031	0.071	0.332	0.181
<b>Which of the following best describes your salary expectations five years after graduation? (Full vs. Part Time)</b>							
Equal variances assumed	0.035	0.852	3.185	70	0.002	1.492	0.468
Equal variances not assumed			3.248	51.855	0.002	1.492	0.459
<b>Statement #3: "The Finance Department should offer more evening classes" (Currently working in finance-related jobs vs. not working)</b>							
Equal variances assumed	1.464	0.230	-2.106	69.000	0.039	-0.513	0.243
Equal variances not assumed			-2.110	68.147	0.039	-0.513	0.243
<b>Statement #4: "The Finance Department should offer more weekend classes" (Currently working in finance-related jobs vs. not working)</b>							
Equal variances assumed	2.785	0.100	-3.062	68.000	0.003	-0.681	0.223
Equal variances not assumed			-3.076	67.397	0.003	-0.681	0.222
<b>Statement #5: "The Finance Department should offer more online courses" (Currently working in finance-related jobs vs. not working)</b>							
Equal variances assumed	1.292	0.260	-2.064	69.000	0.043	-0.602	0.292
Equal variances not assumed			-2.061	67.556	0.043	-0.602	0.292
<b>Statement #6: "The Finance Department should offer more opportunities for internships" (Currently working in finance-related jobs vs. not working)</b>							
Equal variances assumed	2.937	0.091	2.688	66.000	0.009	0.507	0.189
Equal variances not assumed			2.728	64.910	0.008	0.507	0.186

Table 4.

*Independent Samples Test, Part II*

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
<b>Statement #8: "The Finance Department should provide more tutoring services and resources" (Less than 26 years old vs. greater than or equal to 26 years old)</b>							
Equal variances assumed	0.083	0.774	-2.271	69	0.026	-0.463	0.204
Equal variances not assumed			-2.250	53.468	0.029	-0.463	0.206
<b>Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance" (Less than 26 years old vs. greater than or equal to 26 years old)</b>							
Equal variances assumed	1.215	0.274	-1.866	69	0.066	-0.414	0.222
Equal variances not assumed			-1.783	47.371	0.081	-0.414	0.232
<b>Which of the following best describes your salary expectations five years after graduation? (Less than 26 years old vs. greater than or equal to 26 years old)</b>							
Equal variances assumed	0.010	0.920	-3.260	70	0.002	-1.478	0.453
Equal variances not assumed			-3.192	55.769	0.002	-1.478	0.463
<b>Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance" (Currently working in finance-related jobs vs. not working)</b>							
Equal variances assumed	0.182	0.671	2.039	69.000	0.045	0.437	0.214
Equal variances not assumed			2.042	68.553	0.045	0.437	0.214
<b>Statement #5: "The Finance Department should offer more online courses" (Seniors vs. No seniors)</b>							
Equal variances assumed	5.673	0.020	1.614	69	0.111	0.529	0.328
Equal variances not assumed			1.799	44.433	0.079	0.529	0.294
<b>Statement #8: "The Finance Department should provide more tutoring services and resources" (Seniors vs. No seniors)</b>							
Equal variances assumed	1.971	0.165	1.707	69	0.092	0.381	0.223
Equal variances not assumed			1.820	39.963	0.076	0.381	0.210
<b>Statement #1: "The Finance Department should expand the number elective courses currently offered" (Caucasian vs. Non Caucasian)</b>							
Equal variances assumed	3.525	0.065	-2.349	66	0.022	-0.627	0.267
Equal variances not assumed			-1.957	21.316	0.064	-0.627	0.321
<b>Statement #6: "The Finance Department should offer more opportunities for internships" (Caucasian vs. Non Caucasian)</b>							
Equal variances assumed	5.181	0.026	1.752	66	0.084	0.392	0.224
Equal variances not assumed			2.049	37.666	0.047	0.392	0.191
<b>Statement #9: "The Finance Department should offer more extracurricular activities" (Caucasian vs. Non Caucasian)</b>							
Equal variances assumed	14.279	0.000	-2.822	69	0.006	-0.550	0.195
Equal variances not assumed			-3.886	60.547	0.000	-0.550	0.142
<b>Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance" (Caucasian vs. Non Caucasian)</b>							
Equal variances assumed	0.569	0.453	-1.920	69	0.059	-0.475	0.247
Equal variances not assumed			-1.896	28.776	0.068	-0.475	0.250

Table 5.

*Group Statistics, Part I*

		N	Mean	Std. Deviation	Std. Error Mean
Statement #3: "The Finance Department should offer more evening classes"	1 (Part Time)	26	1.615	0.804	0.158
	0 (Full Time)	45	2.533	1.036	0.154
Statement #4: "The Finance Department should offer more weekend classes"	1 (Part Time)	26	2.038	0.916	0.180
	0 (Full Time)	44	2.636	0.967	0.146
Statement #5: "The Finance Department should offer more online courses"	1 (Part Time)	26	1.846	1.156	0.227
	0 (Full Time)	45	2.689	1.221	0.182
Statement #6: "The Finance Department should offer more opportunities for internships"	1 (Part Time)	26	2.000	0.849	0.166
	0 (Full Time)	42	1.524	0.740	0.114
Statement #7: "The Finance Department should reduce the number of students per course"	1 (Part Time)	26	3.385	0.571	0.112
	0 (Full Time)	45	2.800	0.968	0.144
Statement #12: "The Finance Department should increase the number of concentrations currently offered"	1 (Part Time)	26	2.423	0.643	0.126
	0 (Full Time)	44	2.091	0.858	0.129
Which of the following best describes your salary expectations five years after graduation?	1 (Part Time)	25	6.960	1.814	0.363
	0 (Full Time)	47	5.468	1.932	0.282
Statement #3: "The Finance Department should offer more evening classes"	1 (Currently working )	36	1.944	1.094	0.182
	0 (Not working)	35	2.457	0.950	0.161
Statement #4: "The Finance Department should offer more weekend classes"	1 (Currently working )	36	2.083	0.996	0.166
	0 (Not working)	34	2.765	0.855	0.147
Statement #5: "The Finance Department should offer more online courses"	1 (Currently working )	36	2.083	1.156	0.193
	0 (Not working)	35	2.686	1.301	0.220
Statement #6: "The Finance Department should offer more opportunities for internships"	1 (Currently working )	36	1.944	0.860	0.143
	0 (Not working)	32	1.438	0.669	0.118
Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance"	1 (Currently working )	36	2.694	0.951	0.158
	0 (Not working)	35	2.257	0.852	0.144

Table 6.

*Group Statistics, Part II*

		N	Mean	Std. Deviation	Std. Error Mean
Statement #8: "The Finance Department should provide more tutoring services and resources"	1 (<26 years old)	27	2.037	0.854	0.164
	0 (•26 years old)	44	2.500	0.821	0.124
Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance"	1 (<26 years old)	27	2.222	1.013	0.195
	0 (•26 years old)	44	2.636	0.838	0.126
Which of the following best describes your salary expectations five years after graduation?	1 (<26 years old)	29	5.103	2.006	0.373
	0 (•26 years old)	43	6.581	1.803	0.275
Statement #5: "The Finance Department should offer more online courses"	1 (Senior)	51	2.529	1.317	0.184
	0 (No Senior)	20	2.000	1.026	0.229
Statement #8: "The Finance Department should provide more tutoring services and resources"	1 (Senior)	51	2.431	0.878	0.123
	0 (No Senior)	20	2.050	0.759	0.170
Statement #1: "The Finance Department should expand the number elective courses currently offered"	1 (Caucasian)	51	1.961	0.848	0.119
	0 (Non Caucasian)	17	2.588	1.228	0.298
Statement #6: "The Finance Department should offer more opportunities for internships"	1 (Caucasian)	51	1.804	0.849	0.119
	0 (Non Caucasian)	17	1.412	0.618	0.150
Statement #9: "The Finance Department should offer more extracurricular activities"	1 (Caucasian)	53	2.283	0.794	0.109
	0 (Non Caucasian)	18	2.833	0.383	0.090
Statement #10: "The Finance Department should put more Statemen00	1 (Caucasian)	53	2.358	0.901	0.124





Table 8.

*Nonparametric Test: Mann-Whitney Test, Part II*

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
<b>Less than 26 years old vs. greater than or equal to 26 years old:</b>				
Statement #8: "The Finance Department should provide more tutoring services and resources"	432.5	810.5	-2.054	0.040
Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance"	438.0	816.0	-1.953	0.051
Which of the following best describes your salary expectations five years after graduation?	374.5	809.5	-2.895	0.004
<b>Caucasian vs. Non Caucasian:</b>				
Statement #1: "The Finance Department should expand the number elective courses currently offered"	300.5	1626.5	-1.980	0.048
Statement #9: "The Finance Department should offer more extracurricular activities"	279.0	1710.0	-2.865	0.004
Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance"	351.0	1782.0	-1.760	0.078
<b>Seniors vs. No seniors:</b>				
Statement #8: "The Finance Department should provide more tutoring services and resources"	382.5	592.5	-1.750	0.080

Independent sample test and the nonparametric Mann-Whitney test were performed using several grouping variables directly obtained from including gender, part-time versus full-time, and students currently working in finance-related jobs. Additionally, we use three new grouping variables based on the gathered demographic information. These additional grouping variables include Caucasian and non Caucasian students, senior and non senior students, and students that are less than 26 years old versus older students. These grouping variables were selected according to the category of the original variables with the largest number of responses.

The variable gender does not provide significant results on any of the statements related to the academic offerings of the Finance Department that were evaluated in our survey. The variable part-time versus full-time generates significant results in seven statements. Table 5 shows that part-time students strongly support the statements the Finance Department offering more evening classes (mean of 1.615), weekend classes (mean of 2.038), and online courses (mean of 1.846); while full time students are almost neutral about them (means of 2.533, 2.636, and 2.689 respectively). Table 3 shows that these results are significant at 1, 5, and 1 percent level of confidence respectively. Table 7 also shows that these results are also significant at 1 percent level of confidence in the Mann-Whitney test. Clearly, part time students have to deal with conflicts between work and school schedules, so more evening, weekend, and online classes would benefit this group directly.

Table 5 also shows that full-time students strongly support the statement about more internship opportunities offered by the Finance Department (mean of 1.524); while part-time students are more indifferent (mean of 2.000) about this statement. Tables 3 and 7 show that this

result is significant at 5 percent level on both the independent sample test and the Mann-Whitney test. In this case, full-time students are more concern about their lack of work experience compared to part-time students.

On the other hand, table 7 shows that the about the reduction of the number of students per course is strongly rejected by part-time students (mean of 3.385); while full-time students are more neutral (mean of 2.8) about this idea. Tables 3 and 7 show that this result is significant at 1 percent level on both the independent sample test and the Mann-Whitney test. On possible interpretation of this result would be that part-time students rely more on their student network to deal with missing classes and notes. The smaller the class size, the more inefficient these networks would be.

The last statement that part-time and full-time students perceive differently is about an increase in the number of concentrations currently offered by the Finance Department. Table 5 shows that full-time students support this idea (mean of 2.091); while part-time students (mean of 2.423) are more indifferent about it. Tables 3 and 7 show that this result is significant at 10 percent level on both the independent sample test and the Mann-Whitney test. Most part-time students probably already have a job that may fit in one of the current concentrations offered by the Finance Department, while full-time students probably want a wider menu of concentrations to select from.

Finally, part-time students have higher salary expectations (mean of 6.960 that correspond to the \$71K - \$80K interval) than full-time students (mean of 5.468 that correspond to the \$61K - \$70K interval). Tables 3 and 7 show that this result is significant at 1 percent level on both the independent sample test and the Mann-Whitney test. Most part-time students are currently working, which provides them with a different perspective about salary expectations than part-time students.

The variable associated with whether or not the student is currently working in a finance-related job, generates significant results in five statements. Table 5 shows that students currently working in finance-related jobs strongly support the statement that the Finance Department should offer more evening classes (mean of 1.944), weekend classes (mean of 2.083), and online courses (mean of 2.083); while students without this type of jobs are indifferent about these statements (means of 2.457, 2.765, and 2.686 respectively). Table 3 shows that these results are significant at 5, 1, and 5 percent level of confidence respectively. Table 7 also shows that these results are also significant at 5, 1, and 5 percent level of confidence respectively on the Mann-Whitney test. These results can be interpreted in the same way as that for full and part-time students on the same statements explained above.

Table 5 also shows that students currently working in finance-related jobs show a weaker support to the statement about more internship opportunities offered by the Finance Department (mean of 1.944) than students without this type of jobs (mean of 1.438). Tables 3 and 7 show that this result is significant at 1 and 5 percent level on the independent sample test and the Mann-Whitney test respectively. This result can also be interpreted in the same way as that for full and part-time students on the same statement explained above. The last statement that these two groups of students perceive differently is about more emphasis on teaching basic research by the Finance Department. Students currently working in finance-related jobs slightly reject this idea (mean of 2.694) while students without this type of jobs partially support this statement (mean of 2.257.) Tables 4 and 7 show that this result is significant at 5 and 10 percent level on the independent sample test and the Mann-Whitney test respectively. On possible interpretation

of this result would be that students currently working in finance-related jobs may perceive that basic research has not many practical applications in their current jobs.

The variable that classifies students as those less than 26 years old versus those 26 or older generates significant results in three statements. Table 6 shows that students less than 26 years old support the statement about more tutoring services and resources provided by the Finance Department (mean of 2.037); while students that are 26 years or older are indifferent to this statement (mean of 2.500.) Tables 4 and 8 show that this result is significant at 5 percent level on both the independent sample test and the Mann-Whitney test respectively. This result suggest that younger students perceive tutoring services and resources as a critical academic success factor, while older and more experienced students are indifferent about these services.

Table 6 also shows that students less than 26 years old support the idea that the Finance Department should put more emphasis on teaching basic research in finance (mean of 2.222); while students that are 26 years old or older slightly reject this idea (mean of 2.636. ) Tables 4 and 8 show that this result is significant at 10 percent level on both the independent sample test and the Mann-Whitney test respectively. This result can be interpreted in the same way as that for students currently working in finance-related jobs versus students without this type of jobs, on the same statement explained above.

Finally, students less than 26 years old have lower salary expectations (mean of 5.103 that correspond to the \$61K - \$70K interval) than students that are 26 years old or older (mean of 5.468 that correspond to the \$71K - \$80K interval). Tables 4 and 8 show that this result is significant at 1 percent level on both the independent sample test and the Mann-Whitney test. This result can be interpreted in the same way as that for students currently working in finance-related jobs versus students without this type of jobs, on the same statement explained above. This result suggests that the lack of work experience of young provides them with a different perspective about salary expectations than part-time students.

The ethnicity-based variable that group students as Caucasian and non Caucasian students generates significant results in four statements. Table 6 shows that Caucasian students strongly support the idea that the Finance Department should expand the number of elective courses currently offered (mean of 1.961); while non Caucasian students slightly reject this idea (mean of 2.588). Tables 4 and 8 show that this result is significant at 10 and 5 percent level on the independent sample test and the Mann-Whitney test respectively. Table 6 also shows that non Caucasian students strongly support the idea that the Finance Department should offer more opportunities for internships (mean of 1.412); while Caucasian students show a weaker support for this idea (mean of 1,804). Table 4 shows that this result is significant at 5 percent level on the independent sample test only. Additionally, table 6 shows that Caucasian students support the idea that the Finance Department should offer more extracurricular activities (mean of 2.283); while non Caucasian students slightly reject this idea (mean of 2.833). Tables 4 and 8 show that this result is significant at 1 percent level on both the independent sample test and the Mann-Whitney test respectively. The last statement where Caucasian and non Caucasian students have different perceptions is the one about more emphasis on teaching basic research in finance by the Finance Department. Table 6 shows that Caucasian students slightly support this idea (mean of 2.358); while non Caucasian students slightly reject it (mean of 2.833). Tables 4 and 8 show that this result is significant at 10 percent level on both the independent sample test and the Mann-Whitney test respectively. Table 1 suggests that non Caucasian students are mainly Hispanic/Latino students (10 out of 18, or 55.55% of all non Caucasian students.) Therefore, the

interpretation of these ethnic-related results might be associated with cultural differences, among many other possible factors that are beyond the scope of this article.

The last grouping variable that classifies students as senior versus no senior students generates significant results in two statements. Table 6 shows that senior students are indifferent about the idea that the Financial Department should offer more online courses (mean of 2.529); while no senior students support this idea (mean of 2.000.) Table 4 shows that this result is significant at 10 percent level on the independent sample test only. This result suggests that senior students have one or two semesters before graduation, so the options available are not as important as no senior students. Finally, table 6 shows that non senior students support the idea that the Finance Department should provide more tutoring services and resources (mean of 2.050); while senior students slightly support this idea (mean of 2.431). Tables 4 and 8 show that this result is significant at 10 percent level on both the independent sample test and the Mann-Whitney test respectively. This result can be interpreted in the same way as that for students less than 26 years old versus students that are 26 years or older, on the same statements explained above.

Table 9 contains a summary of the students' preferred areas for additional elective courses. Investment management and corporate finance are the two categories with the highest preference among the surveyed students, followed by financial software.

Table 9.

*Preferred Areas of Potential Elective Courses*

<b>If more elective courses are added, what should be their focus?</b>	<b>Percentage</b>	<b>Responses</b>
Financial Software	9.7%	40
Real Estate	2.9%	12
Behavioral finance	3.9%	16
The history of finance	1.0%	4
Options, Futures and other Derivatives	7.7%	32
Financial mathematics	5.8%	24
Insurance	3.4%	14
Public finance	5.6%	23
Advanced Financial Planning	9.0%	37
Investment management	11.9%	49
Corporate finance	10.2%	42
Commodity markets	6.5%	27
Financial regulation	6.1%	25
Banking and other Financial Institutions	9.2%	38
Financial Econometrics and research	5.6%	23
None; the current offerings are extensive enough	0.2%	1
Other (includes the following answers: wealth management, private equity, Forex (currencies), financial software applications; option and derivatives maybe with commoditys ( <i>sic</i> ); any that would assist with attaining certs ( <i>sic</i> ); student run investment portfolio; a series 7 class; maybe teach something where a student can get more real world experience in some of these areas.)	1.5%	6

Table 10 shows the results pertaining to the financial simulators that students have been exposed at the college. The list was designed to be as comprehensive as possible, with the open alternative “Other” to allow the student to name any missing simulator.

Table 10,

*Financial Simulators*

<b>What financial simulators have you used at school?</b>	<b>Percentage</b>	<b>Responses</b>
Stock-Trak	46.2%	36
Virtual Stock Exchange	1.3%	1
The Great Game	0%	0
Stock Market Game SMG2000	3.8%	3
Stocksquest	1.3%	1
Marketocracy	1.3%	1
None	46.2%	36
Other	0%	0

The two largest groups are students that have used Stock-Track (46.2%) and students that have not been exposed to any financial simulator (46.2%). A few of students have been exposed to the Stock Market Game SMG2000 (3.8%), Virtual Stock Exchange (1.3%), Stocksquest (1.3%), and Marketocracy (1.3%).

Table 11 shows the results of the question about the software packages that students have used while taking classes at Metro State. This is an open ended question that allows students to enter the name of any software package that they have been exposed to at Metro State. The software package that most students named was the statistical package Minitab (23.08%), followed by Microsoft Office (17.31%).

Table 11.

*Software Packages*

<b>Software packages that students have used while taking classes at Metro State:</b>	<b>Percentage</b>	<b>Responses</b>
Minitab	23.08%	12
Microsoft Office	17.31%	9
Stock-Trak	11.54%	6
Excel	11.54%	6
None	9.62%	5
Microsoft Word	5.77%	3
Power Point	3.84%	2
Access	3.84%	2
BSG online game	3.84%	2
Others (includes the following answers: money tree, n/a, Turbo Tax, QuickBooks, and statistics applications)	9.62%	5

Table 12 shows the professional designations considered important by the respondents. The professional designations cited most frequently are the Certified Financial Planner® (CFP®) and the Chartered Financial Analyst (CFA®) with 29.41% and 20.59% respectively of the sample responding that they had- cons

Table 13.

*Awareness of Professional Organizations*

<b>Which of the following professional organizations are you aware of?</b>	<b>Percentage</b>	<b>Responses</b>
Chartered Financial Analyst (CFA) Institute of USA	22.8%	38
Certified Financial Planner Board of Standards	22.2%	37
The Institute of Business & Finance (IBF)	4.6%	8
Investment Counsel Association	0.6%	1
Investment Management Consultants Association	1.2%	2
Association of Certified International Investment Analysts (ACIIA)	2.9%	5
National Association of Mortgage Professionals	4.0%	7
American Academy of Financial Management	1.2%	2
Association for Financial Professionals	5.8%	10
National Association of Mortgage Brokers.	9.2%	16
Association of Corporate Treasurers	0%	0
Chartered Alternative Investment Analyst Association	0%	0
Market Technicians Association (MTA)	0.6%	1
American Institute of Certified Public Accountants	15.6%	27
None	9.2%	16
Other	0%	0

Table 14 displays the results pertaining to the importance that the surveyed students assign to the Association to Advance Collegiate Schools of Business (AACSB) accreditation. Most students (65.7%) consider important or very important that Metro State’s School of Business being accredited by the Association to Advance Collegiate Schools of Business (AACSB). However, 34.3% have no opinion or have never heard about the AACSB.

Table 14.

*Importance of the Association to Advance Collegiate Schools of Business*

<b>In your opinion, how important is it that Metro State’s School of Business be accredited by the Association to Advance Collegiate Schools of Business (AACSB)?</b>	<b>Percentage</b>	<b>Responses</b>
Not important	0%	0
Somewhat important	0%	0
No opinion	9.6%	7
Important	26.0%	19
Very important	39.7%	29
I’ve never heard of AACSB	24.7%	18

Table 15 shows the results of the student’s perceptions about their future educational plans. Most students (61.6%) have plans of pursuing a masters degree, either a Masters in Business Administration (35.2%) or a masters degree in finance (26.4%).



Table 15.

*Future Educational Plans of the Surveyed Students*

<b>Which of the following best describe your future educational plans?</b>	<b>Percentage</b>	<b>Responses</b>
MBA	35.2%	32
Masters Degree in Finance	26.4%	24
Ph.D./Doctorate	4.4%	4
Another bachelors degree	8.8%	8
None	14.3%	13
Other (includes the following answers: courses in international business, maybe MBA, J.D to practice estate planning, Bachelor, Masters in something yet to be decided, CPA, JD, LLM, Series 6 and 7 certification, Masters Degree in Accounting, plus CFP, Law)	11.0%	10

Table 16 shows the results of the student’s salary expectations five years after graduation. The results are not clustered around any particular interval, but rather are distributed among several intervals. The option with the highest percent of responses is \$61K - \$70K with 20.5%, followed by the intervals \$71K - \$80K, \$81K - \$90K, and “More than \$100K”, each with 12 responses or 16.4% respectively.

Table 16.

*Students’ Salary Expectations Five Years after Graduation*

<b>Which of the following best describes your salary expectations five years after graduation?</b>	<b>Percentage</b>	<b>Responses</b>
Less than \$30K	1.4%	1
\$30K - \$40K	1.4%	1
\$41K - \$50K	9.6%	7
\$51K - \$60K	9.6%	7
\$61K - \$70K	20.5%	15
\$71K - \$80K	16.4%	12
\$81K - \$90K	16.4%	12
\$91K - \$100K	6.8%	5
More than \$100K	16.4%	12
Other (includes the following answer: presently retired)	1.4%	1

Table 17.

*Students' Preferred Industry Sectors*

<b>If you had your choice, which industry sectors would you like to work in immediately after graduation?</b>	<b>Percentage</b>	<b>Responses</b>
Financial Planning/Advising	13.64%	12
Banking	11.36%	10
Investment Banking	7.95%	7
Investment/Portfolio management	5.68%	5
Real Estate	4.55%	4
Not sure	4.55%	4
Corporate Finance	4.55%	4
International Banking	3.41%	3
Mortgage	2.27%	2
Financial Analyst	2.27%	2
Consulting	2.27%	2
Market Analyst	2.27%	2
Government	2.27%	2
Stock Brokerage	2.27%	2
Non Financial Industry Sectors (includes the following answers: marketing consultation, law enforcement, teaching, imports/exports, auto, engineering construction, logistics, communications, energy, tax planning, and accounting fraud investigation)	12.50%	11
Miscellaneous Industry Sectors (includes the following answers: finance departments, options, insurance, private wealth management, fund manager, private equity, financial services, risk management, hedging, foreign currencies, exchange rates, personal finance, financial institutions, finance, and business)	1.14% each	16

Table 17 shows the results of the student's perceptions about those industry sectors they would like to work in immediately after graduation. The industry sectors with the largest number of responses are financial planning/advising (13.64%), non financial industry sectors (12.5%), and banking (11.36%).

## CONCLUSIONS

The results of this study suggest that most students agree with the offering of courses covering topics evaluated on professional certification examinations in finance such as the CFP, Chartered Financial Analyst (CFA®), etc. The results also suggest that students have a strong preference for investment management and corporate finance, followed by financial software, as their preferred areas for additional elective courses. In addition, the results provide evidence that most students either have been exposed to Stock-Track or have not been exposed to any financial simulator at all. However, most students have been exposed to a wider variety of software packages including Minitab and the different component of Microsoft Office: Word, Excel, and Power Point.

Part-time students and students currently working in finance-related jobs strongly support the statements the Finance Department offering more evening classes, weekend classes, and online courses; while full time students and students without finance-related jobs are indifferent about them. Full-time students and students currently working in finance-related jobs strongly support the statement about more internship opportunities offered by the Finance Department; while part-time students and students without finance-related jobs are neutral about this statement. The reduction of the number of students per course is strongly rejected by part-time students, while full-time students are more neutral about this idea. Full-time students support an increase in the number of concentrations currently offered by the Finance Department, while part-time students are more indifferent about this idea. The salary expectations of part-time students and students that are 26 years old or older are higher than full-time students and students less than 26 years old. Students currently working in finance-related jobs and students that are 26 years old or older slightly reject the idea of more emphasis on teaching basic research by the Finance Department, while students without finance-related jobs and students less than 26 years partially support this idea. Students that are less than 26 years old and non senior students support the idea about more tutoring services and resources provided by the Finance Department, while students that are 26 years or older and senior students are indifferent about it.

The results furthermore suggest that most students have considered pursuing the CFP and the Chartered Financial Analyst (CFA®) professional designations. Similarly, the professional organizations that most students are aware of include the Chartered Financial Analyst (CFA) Institute of USA, the Certified Financial Planner Board of Standards, and the American Institute of Certified Public Accountants. Moreover, most students consider important or very important that Metro State's School of Business get accredited by the Association to Advance Collegiate Schools of Business (AACSB). The results also provide evidence that most students have plans of studying either a Master in Business Administration or a master degree in finance after graduation. Regarding to the salary expectations, the results are dispersed among several intervals, which suggest that students lack of a reliable source of information regarding to the average salary for their profession. Finally, the preferred industry sectors immediately following graduation include financial planning/advising, non financial industry sectors, and banking.

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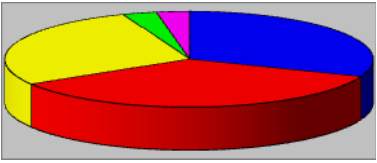
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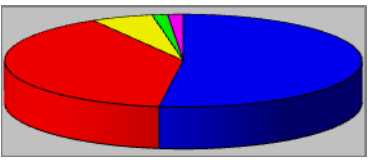
## APPENDIX

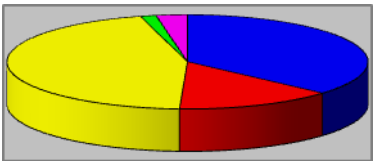
Table 12 shows the students' perceptions about a series of statements related with the academic offerings of the Finance Department. Regarding elective courses currently offered, most students either agree or strongly agree (66.2%) that the number of these courses should be increased. The next statement is about the offering of courses to cover topics evaluated on professional examinations such as CFP® and CFA®. The vast majority of the students either agree or strongly agree (91.5%) with this statement.

Table 12.

### *Students' Perceptions about Some Statements*

<b>Statement #1: "The Finance Department should expand the number elective courses currently offered"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	21	30.9%
	Agree	24	35.3%
	Neutral	19	27.9%
	Disagree	2	2.9%
	Strongly Disagree	2	2.9%

<b>Statement #2: "The Finance Department should offer courses covering the topics evaluated on professional examinations in finance such as the Certified Financial Planner® (CFP®), Chartered Financial Analyst (CFA®), etc."</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	37	52.1%
	Agree	28	39.4%
	Neutral	4	5.6%
	Disagree	1	1.4%
	Strongly Disagree	1	1.4%

<b>Statement #3: "The Finance Department should offer more evening classes"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	26	36.6%
	Agree	10	14.1%
	Neutral	32	45.1%
	Disagree	1	1.4%
	Strongly Disagree	2	2.8%

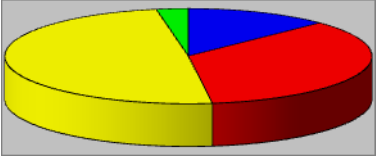
<b>Statement #4: "The Finance Department should offer more weekend classes"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	17	24.3%
	Agree	13	18.6%
	Neutral	36	51.4%
	Disagree	2	2.9%
	Strongly Disagree	2	2.9%

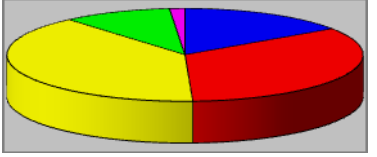
<b>Statement #5: "The Finance Department should offer more online courses"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	22	31.0%
	Agree	19	26.8%
	Neutral	17	23.9%
	Disagree	7	9.9%
	Strongly Disagree	6	8.5%

<b>Statement #6: "The Finance Department should offer more opportunities for internships"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	35	51.5%
	Agree	18	26.5%
	Neutral	15	22.1%
	Disagree	0	0%
	Strongly Disagree	0	0%

<b>Statement #7: "The Finance Department should reduce the number of students per course"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	5	7.0%
	Agree	10	14.1%
	Neutral	37	52.1%
	Disagree	17	23.9%
	Strongly Disagree	2	2.8%

<b>Statement #8: "The Finance Department should provide more tutoring services and resources"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	14	19.7%
	Agree	23	32.4%
	Neutral	32	45.1%
	Disagree	1	1.4%
	Strongly Disagree	1	1.4%

<b>Statement #9: "The Finance Department should offer more extracurricular activities"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	9	12.7%
	Agree	25	35.2%
	Neutral	35	49.3%
	Disagree	2	2.8%
	Strongly Disagree	0	0%

<b>Statement #10: "The Finance Department should put more emphasis on teaching basic research in finance"</b>			
Chart	Perception	Responses	Percentage
	Strongly Agree	11	15.5%
	Agree	24	33.8%
	Neutral	28	39.4%
	Disagree	7	9.9%
	Strongly Disagree	1	1.4%

**Statement #11: "I am satisfied with the con**

finance-related jobs, so the demand for evening, weekend, and online classes is greater in those students that have to deal with the school and job schedule at the same time.

The following statement is about the internship opportunities offered by the Finance Department. The vast majority of the students either agrees or strongly agrees (78%) with this statement; however, 22.1% of the participants are indifferent or neutral about it. This result suggests that getting work experience before graduation is very important for most students. According to the demographic information described in Table 1, 64.3% of the surveyed students have some work experience in the finance field. The importance given to internship opportunities by most students might be explained by the relevance that work experience has in the local job market.

The next statement is about the reduction of the number of students per course. Some students either agree or strongly agree (21.1%) with this statement; most students (52.1%) are indifferent or neutral; while some students 26.7% either disagree or strongly disagree with a reduction of the number of students per course. These results suggest that the number of students per course currently offered by the Finance Department should not be reduced. The following statement is about additional tutoring services and resources to be provided by the Finance Department. About half of the students either agree or strongly agree (52.1%) with the statement that the Finance Department should provide more tutoring services and resources; however, 45.1% is indifferent or neutral about this statement, while just a couple of students either disagree or strongly disagree with it. The next statement deals with extracurricular activities. Some students either agree or strongly agree (47.9%) with the statement that the Finance Department should offer more extracurricular activities; however, half of the surveyed students are indifferent or neutral with this statement; while just a couple of students disagree with it.

The following statement is about the emphasis that the Finance Department should place more emphasis on teaching basic research. Almost half of the students either agree or strongly agree (49.3%) with the statement that the Finance Department should put more emphasis on teaching basic financial research; however, 39.4% is indifferent or neutral about this statement, while some students (11.3%) either disagree or strongly disagree with it. The next statement is about the students' satisfaction with the concentrations currently offered by the Finance Department within the finance degree. Almost half of the students either agree or strongly agree (46.4%) with the statement that they are satisfied with the concentrations currently offered by the Finance Department within the finance degree; however, 28.2% of them are indifferent or neutral about this statement, while some students (25.3%) either disagree or strongly disagree with it. The final statement is about the students' perceptions on the increase the number of concentrations currently offered by the Finance Department. Most students (64.3%) either agree or strongly agree with the statement that the Finance Department should increase the number of concentrations currently offered; however, 31.4% is indifferent or neutral about this statement, while just three students (4.3%) either disagree or strongly disagree with it.

