"The Effects of 'cross curriculum' training of hotel and restaurant management students on overall student satisfaction with curriculum: The Development of the educational satisfaction with curriculum index' (ESCI)."

Frank Costantino

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"THE EFFECTS OF 'CROSS CURRICULUM' TRAINING OF HOTEL AND RESTAURANT MANAGEMENT STUDENTS ON OVERALL STUDENT SATISFACTION WITH CURRICULUM: THE DEVELOPMENT OF THE 'EDUCATIONAL SATISFACTION WITH CURRICULUM INDEX' (ESCI)."

by

Frank C. Costantino

A thesis submitted to the Faculty of the School of Food, Hotel and Travel Management at Rochester Institute of Technology in partial fulfillment of the requirements for the degree of Master of Science

August, 1992
Name: Frank C. Costantino Date: 8/5/92 SS#: __________________________

Title of Research: "The Effects of 'Cross Curriculum' Training of Hotel and Restaurant Management Students on Overall Student Satisfaction With Curriculum: The Development of the 'Educational Satisfaction with Curriculum Index' (ESCI)."

Specific Recommendations: (Use other side if necessary.)

Thesis Committee: (1) Dr. Richard F. Marecki (Chairperson)

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OR (3) ________________________________

Faculty Advisor: ________________________________

Number of Credits Approved: 3 Credits ________________________________

8/4/92 Richard F. Marecki

Date Committee Chairperson's Signature

8/4/92 Richard F. Marecki

Date Department Chairperson's Signature

Note: This form will not be signed by the Department Chairperson until all corrections, as suggested in the specific recommendations (above) are completed.

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Date
ABSTRACT

Using characteristics inclusive of employment, Grade point average and career orientation; either front of house (Academic) or back of house (vocational), the Educational Satisfaction with Curriculum Index is designed to measure the satisfaction numerically of hotel and Restaurant management students at New York City Technical College (NYCTC) where students, regardless of career orientation, are required to complete both sets of courses (front and back of house.) This requirement is referred to as cross-curriculum training.

FoH students scored greater satisfaction on BoH courses than FoH courses. The same was true of BoH students as they scored1 higher on FoH courses than BoH courses. Employed students scored lower than unemployed students. Finally, students with a GPA greater than 3.0 scored higher than those below 3.0.
ACKNOWLEDGEMENTS

A special thank you to Dr. Alan Freedman who supported and guided me through one false start to another and another...

A very special thank you Dr. John Hudesman, who, for a mere box of assorted pastries and countless thanks, helped me see my final idea to fruition.

Thanks to Dr. Adam Gordon, who in three and a half minutes, taught me how to use SPSS.

To Dr. Dick Marecki and his staff, especially Diana DiLella, for allowing me to experience the research process and assisting me unselfishly with it. Thank you.

Finally, thanks Ilene and Justice for helping me keep my sanity.
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CHAPTER 1

Introduction

What is higher education from a parent's point of view? It could very well be that parents see education as a cherished and a costly commodity. It may be a necessary key to the success in their child's success. Also higher education may be something they could not obtain when they were young.

What is higher education from a student's point of view? Many young people realize the importance of college at an early age. For many, higher education may be viewed as a way to obtain what their parents could not. They, too, see college as the keystone to financial and personal success.

What is higher education from the education institution's point of view? Is education a product or a service? It would appear that education is a service; the service of imparting knowledge. As a service it has these characteristics that are typically used to identify services (Albretch, 1988). Knowledge is intangible. It cannot be seen or touched. It would conversely appear that education could be viewed as a product as well. The tangibility of the product being the curriculum. The extent and pursuit of this research is partly to approach education from it's economic implications. If in
fact education is a product, it would imply that it can be measured, much like the grades of beef served at a restaurant or the firmness of a mattress at one of the Hilton hotels. The basis upon which product is judged are its tangible attributes. The typical measurements Colleges and Universities use are instructor evaluations which serve to rate the instructor; in this case the deliverer of the product. The service can be measured in terms of how well it satisfies, or does not satisfy its educational mission.

Let's Purchase a Vacuum Cleaner

Follow along the process associated with the purchase of a vacuum cleaner. An individual walks into a department store and heads toward the household department looking for a vacuum cleaner. He speaks to a salesman who provides information as to the models and brands that would satisfy his needs. But, stop right there. He must now evaluate the salesperson on the basis of the service provided. Was he courteous, informative, patient and sincere? If so, he gets high marks for delivering a service. The customer selects a vacuum cleaner on the basis of the salesperson's recommendations. Returning home, the individual plugs in the vacuum cleaner and realizes that the cleaner purchased did not do a very good job on the carpet. The product purchased was unsatisfactory. This does not diminish the service received from the salesperson. He was still courteous, informative and the like, but, there is
dissatisfaction with the product received. Service and product are interrelated but yet different.

This vignette does not imply that instructors at higher education are vacuum cleaner salespeople. It merely illustrates that education is not only a service but also a product. Just as a distinction could be made between the two, in the vacuum cleaner story, a distinction between the two can be made in education. The service can be seen as the instruction given, while the product is the curriculum and the customer is the student. It is this reasoning that lends to further the understanding and application of the Educational Satisfaction with Curriculum Index (ESCI).

"Cross-Curriculum Training"

In hospitality management education there are also distinctions, a separation of the curriculum into two parts: 'Front of the House' and 'Back of the House'. This separation parallels that of the industry. Students matriculated into Hotel and Restaurant Management programs will undoubtedly have a sense, particularly as they move towards graduation, of which orientation of the business they wish to pursue. The premise of most Hospitality curricula is to give a well-rounded overview of the industry, integrating courses like Front Office Management and Culinary Arts (Food Preparation
course), to name just two remotely different courses both a part of the same curricula.

At New York City Technical College (NYCTC) these two categories of courses are required of all Hotel Department students regardless of their career orientation. Thus, the term 'cross-curriculum training' is used to describe this curriculum practice in Hospitality Education.

Grasping three very important concepts—students as customers, instructors as service delivery personnel, and curricula as products—then enable us to further our understanding of what this pilot research is pursuing.

The idea of ESCI is to evaluate a student's satisfaction with curriculum as it relates to the satisfaction of their individual educational needs. For the purpose of this study, educational needs will be assumed to be House (BoH, FoH) orientations.

**Documentation of Need: Why Measure Student Satisfaction?**

A program's success within a college or university have, in a very real sense, economic consequences. Education programs are not always evaluated based on merit, but rather, at times, on enrollment of matriculated students. Viability as a program (or a department) is judged on these factors as
well. In New York State there are well over sixty institutions offering higher education programs in Hotel and Restaurant Management. From a marketing point of view, that is extreme competition. In this new age of academia with much thought being given to the treatment of students as customers it would appear beneficial for an institution to have some way of measuring satisfaction with their product. By and large, when committees assemble for curriculum evaluation, usually student generated information is not available to determine what may need to be added, modified or deleted from a curriculum. The average student in higher education is no longer 18 years old, straight out of high school, and unsure of his pursuit. Some credence must be given to his points of view, after all they are the customers. Summarily, this evaluation looks to lend new insight into curriculum philosophy.
A search of periodical guides to literature and computer searches such as ERIC, InfoTrac and Einstein yielded very little information in the area of student satisfaction with curriculum. However, much insight was gained in associated areas such as student tracking, student profiling, academic standards, and survey instrument development which enabled the design of an instrument that would effectively measure the desired field as well as an understanding of the field being measured.

Student Tracking

A great deal of the student survey's used today deal primarily with curriculum effectiveness post-graduation. Many of these surveys fell under the guise of Alumni Tracking Surveys (ATS) (New York City Technical College , '87) which are as effective as exit interviews. Most of the ATS were given graduates considerably after graduation. The extent and context of these ATS were primarily to track how effectively a particular curriculum was in preparing the graduate for their current position. These ATS allow a College or University to make Reactive Changes (where the ESCI allows for Proactive Changes). While the ability to change proactively
is far better than having to react to changing stimuli, there is a definite need for ability to do both.

**Student Profiling**

Research conducted in the area of Student Population Demographics shows a remarkable change in the profile of the average student, particularly at the Community College. As in all areas of the hospitality industry there is a multiculturalism in education as well. We are seeing far more diverse ethnic backgrounds in our student bodies (Shane, 1989).

Another area of change over recent years is the average age of the student. It is not unusual to frequently see 24 and 25 year old freshmen in student bodies. With costs of education, it would appear that students are taking time away from college after high school to earn college money (Shane, 1989). This was never more in evidence than with the series of advertisements made by the U.S. Armed Forces, offering high school students money towards college as a result of their enlistment into a branch of the Armed Forces. Another reason cited for the increased mean age of students is the idea that many high school students don't see the need for college until they are out in the work-force for a few years. The idea of the Graduate Equivalency Diploma (GED) allows high school
drop-outs the ability to enter college long after they would have graduated from high school.

Yet another area of contrast is with the employment status of students. More and more students are a part of the work-force now either by choice or by need. A larger number of students are not only employed but employed in their chosen area of study. The ramifications of this are great. Here you have students that are able to assess their curriculum as a part of the industry that they are studying. This significantly reduces the amount of reaction time on the part of administrators who choose to look at the ESCI as a valuable design tool.

Academic Standards

The following is an exert from the Characteristics of Excellence in Higher Education: Standards for Accreditation, (1983) from the Commission on Higher Education, the Middle States Association of Colleges and Schools:

"...the curricula should be under constant evaluation, with modifications being made as changes in the educational situation or perceived social needs may require. Provisions for this evaluation and the planning which parallel it are essential. Intelligent, directed experimentation
would be encouraged...the intent being to evoke a response from the student and to stimulate participation in the educational process."

There is no doubt that to maintain academic excellence in a college or university, governing administrators must be able to make changes best suited to their student's needs. This excerpt from Middle States tends to fortify that necessity.

Student satisfaction has recently become one of the criteria used in ranking colleges along with reputation, admissions selectivity, financial resources, and faculty-to-resources ratio (Morse, 1991). Also tying in an indirect way to curriculum satisfaction are resources which will be required to deliver the curriculum. These resources are inclusive of, but not limited to, Student services, and Library/Learning resources. Student support services should include some form of counseling services and tutorial services with tutors who are well versed in the subject matter. The Library/Learning Resource center is considered by accrediting bodies as being of paramount important. Provisions for these services should be appropriated through planning and budgeting and a commitment to their institution and maintenance be central to the educational mission of a college or university (Commission on Higher Education, 1983). All of these
resources play an important role in delivering a quality curriculum.
CHAPTER 3
The Survey Instrument Design and Rationale

Scale Development

The survey used in this study was primarily a two part survey. The first part measured student satisfaction with specific courses taken in the college. The second part included the demographics questions.

Because of the multidimensionality of the responses, it was determined that a complex scale was required (Davis & Cosenza, 1988). Most of the ESCI questions reviewed in preparation for this research used complex scaling methods to measure student attitudes about the services they received. While a few used actual rating scales (itemized or comparative rating scales primarily) most others used an attitude scale.

It was for this reason that a Likert Scale was selected to measure students attitudes regarding their level of satisfaction with their chosen curriculum. The Likert Scale would be a five point scale as follows:

1. very dissatisfied
2. dissatisfied
3. neither satisfied nor dissatisfied
4. satisfied
5. very satisfied
Use of this scale allows the index to measure overall satisfaction as well as utilizing cross-tabulations as an analysis between the responses in the demographics of the survey. This method of scaling is frequently called the method of summated results and is considered highly reliable, particularly with regard to a particular attitude measurement. (Davis & Cosenza, 1988)

For the demographics section a simple scaling technique was employed. In many cases just fill-in responses or "Check One" responses, all of which were coded for analysis later. (Backstrom & Hursch-Cesar, 1981)

**Questioning Techniques and Corresponding Hypotheses**

All of the sources of information used in reference to survey design shared the same opinion on questioning: keep them simple, phrase them clearly and fit the type of question (open ended, dichotomous, multichotomous) to the anticipated level of understanding of the respondents, and clearly understand the questions asked (Davis & Cosenza, 1988). The survey attempted to do just that.
Questions were constructed using a few working hypotheses:

**Hypothesis 1**

"Students aspiring to Back of House (BoH) careers are generally satisfied with having taken required Front of House (FoH) courses."

**Hypothesis 2**

"Students aspiring to Front of House (FoH) careers are generally satisfied with having taken required Back of House (BoH) courses."

**Hypothesis 3**

"Students are generally satisfied overall with the Hotel and Restaurant Management Curriculum at New York City Technical College."

The first three hypotheses require questions that segregate courses in Front of House (FoH) and Back of House (BoH). In order to accomplish this, the Degree requirements for the A.A.S. Degree in Hotel and Restaurant Management was categorized into FoH courses, BoH courses, and General Education Electives (GEE). Figure 2-1 outlines the Hotel Curriculum.
Figure 2-1: Analysis of Hotel and Restaurant Curriculum by Type of Course

<table>
<thead>
<tr>
<th>FoH Courses</th>
<th>BoH Courses</th>
<th>Gee Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting I</td>
<td>Culinary Arts I</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Accounting II</td>
<td>Culinary Arts II</td>
<td>English I</td>
</tr>
<tr>
<td>Lodging Terminal Oper.</td>
<td>Culinary Arts III</td>
<td>English II</td>
</tr>
<tr>
<td>Front Office Management</td>
<td>Baking Techniques</td>
<td>Science</td>
</tr>
<tr>
<td>Housekeeping Principles</td>
<td>Pastry I</td>
<td>Psychology</td>
</tr>
<tr>
<td>Sales Promotion &amp; Mktg.</td>
<td>Pastry II</td>
<td>History</td>
</tr>
<tr>
<td>Hospitality Law</td>
<td>Food Purchasing</td>
<td>Computers</td>
</tr>
<tr>
<td>Dining Room Mgmt.</td>
<td>Food Control</td>
<td></td>
</tr>
<tr>
<td>Restaurant Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Keeping all of the questions worded exactly the same, the following questioning format was used:

"Indicate your degree of satisfaction with having taken (enter course name here)."

The constituents of the first and second parts of this survey were eight questions worded exactly as above and grouped categorically where Part I contained eight FoH courses and Part II contained eight BoH courses, numbered consecutively from 1-16.

From the data collection outlined above I would be able to further hypothesize:
Hypothesis 4.

"The overall satisfaction index was higher among students with at least 1 year full-time employment experience in the Hospitality Industry."

Hypothesis 5.

"Students with a G.P.A. of greater than 3.00 had a higher satisfaction index than students with a G.P.A. less than 3.00."

All of the aforementioned hypotheses require demographic data. Part II of the survey (actually, part III in the instrument analysis) contains questions that solicit demographic information. The decision to solicit this classificatory information at the end was made to eliminate possibly scaring respondents off by asking for what could be sensitive information right up front. Also, this section, from a respondents point, is the least interesting.

It should be noted that some of the classifying information was not used directly in this research, but was obtained just in case later synthesis of information was required. Also, appearing in the demographics section is a question regarding career orientation; this question segregates FoH and BoH respondents as well as eliminating invalid respondents (those choosing neither.)
**Demographics Information Rationale**

The demographics section of the survey sought to gather information that would either help in classification or validation of the individual respondents. Age and gender were requested as sample group data for possible evaluation in a cross-tabulation (which was not looked at as part of this research.) A question about number of credits completed at New York City Technical College was asked as a qualifier for a usable response. Graduating AAS students taking the survey should have completed at least 50 credits towards their degree requirements at NYCTC in order for their survey to be considered a valid one. BT students should have completed as many as 50 as well. The question of G.P.A. was used to support the fifth hypothesis which compares the ESCI of students above and below a 3.00 G.P.A. Ethnic Background was merely asked as sample group datum for possible evaluation (it subsequently was not used as part of this research.)

In seeking to segregate the field of respondents into FoH or BoH students a question was designed that tied into parts I and II of the survey. This career orientation question asked students to indicate whether their career orientation closely paralleled the questions in Part I (FoH) Part II (BoH) or neither (in which case the survey became invalid because the student either didn't understand the question or was unsure of their orientation.)
The issue of employment was addressed in the demographics section as students where asked to indicate if they where employed, in what capacity, and for how long. This information was used as part of the fourth hypothesis which sought to compare the ESCI of hospitality industry employed students and those not employed or not employed in the hospitality industry.

The final question asked in the demographics section was a general interest question asking students to indicate the courses they were most and least satisfied with. This question was ultimately not used in the final analysis of results. Figure 2-2 summarizes the Demographic Information and reasons for solicitation.
**FIGURE 2-2**: Demographic Information and Reasons for Solicitation

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>REASON(s) FOR SOLICITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>*sample group datum</td>
</tr>
<tr>
<td>2. Gender</td>
<td>*sample group datum</td>
</tr>
<tr>
<td>3. Number of credits completed at NYCTC</td>
<td>valid response criterium</td>
</tr>
<tr>
<td>4. G.P.A</td>
<td>hypothesis 5 support sample group datum</td>
</tr>
<tr>
<td>5. Ethnic Background</td>
<td>*sample group datum</td>
</tr>
<tr>
<td>6. Career orientation</td>
<td>hypothesis 1-5 support sample group datum valid response criterium</td>
</tr>
<tr>
<td>7. Currently employed</td>
<td>hypothesis 4 support sample group datum</td>
</tr>
<tr>
<td>8. Course most/least satisfied</td>
<td>*sample group datum</td>
</tr>
</tbody>
</table>

Items marked with an (*) are items obtained only for possible use in the actual results of the survey. They ultimately were not used for analysis.

**Design Modifications Post-Pretest.**

This survey was pre-tested on a group of 10 (ten) Bachelors degree students. The survey was proctored by me without a formal introduction. The students were part of a
class in research. After the distribution and return of the survey, a 40 minute question and answer period ensued.

The only fault cited by the pre-test sample group was that the instructions of the survey mentioned that they should evaluate their satisfaction on the basis of the course content. A few students felt that the instruction was not mutually exclusive from the course content. An explanation was given that results were not being viewed on the basis of each course, but by aggregate and with 16 courses being "evaluated" that those types of things will wash out. When asked how to overcome the obstacle of students' filtering in instructional factors, the pre-test group suggested elaborating on the instructions which was completed. Through my collegial proctors of this survey, the importance of verbally instructing the group on this point was emphasized.

The surveys were given out after mid-term examinations in the Spring, 1992 semester for the same reason--as students under exam stress may have clouded judgement in areas that require objectivity.

Miscellaneous Survey Instrument Data.

The surveys were coded. A lower case "a" and "b" appeared in the upper left hand corner of the front page of
the survey. Proctors were instructed to have graduating associates students circle "a" and bachelors students circle "b". No explanation was given by proctors on this directive. No students requested a reason for this directive.

A decision was made to have this survey printed on NYCTC letterhead stationary for the purpose of a more formal document look. This survey was printed with a laser printer for the same reason. There was an exclusion of a "comments" area and none of the respondents wrote any comments in any other areas on the survey.

The survey was distributed during the week of April 13-16, prior to Spring Break. The results were then coded and entered into an SPSS PC software program for analysis.
Sample

The demographics section consisted of eight questions. Overall, 107 surveys were distributed and 97 were returned (91% return rate).

Of the 97 responses, 84 were unusable. This was so because of the requirement of a minimum number of credit hours earned at NYCTC.

Demographics

Of the 84 unusable respondents, the demographic breakdown is shown in Table 4-1:
Table 4-1: Demographic Breakdown

**General Demographics:**

| Age (mean) | 26.6 yrs |
| Ethnic: |
| Asian | 8 (9.5%) |
| Black | 19 (22.6%) |
| Hispanic | 18 (21.4%) |
| White | 36 (42.9%) |
| Other | 3 (3.6%) |
| Gender: |
| Male | 29 (34.5%) |
| Female | 55 (65.5%) |
| Grade Point Average (G.P.A.) |
| Under 3.00 | 40 (47.0%) |
| Over 3.00 | 44 (52.0%) |
| No Response | 8 (1.0%) |

**Career Interests and Experiences:**

| Career Orientation |
| FoH | 53 (63.1%) |
| BoH | 30 (35.7%) |
| Employed Currently |
| Yes | 58 (69.0%) |
| No | 25 (31.0%) |
| Employed in Hospitality Industry |
| Yes | 49 (58.3%) |
| No | 16 (19.0%) |
| No Response | 19 (22.6%) |
| Position |
| FoH | 30 (35.7%) |
| BoH | 18 (21.4%) |
| Neither | 36 (42.9%) |

**Satisfaction with Curriculum:**

| Course Most Satisfied With |
| FoH | 51 (60.7%) |
| BoH | 22 (26.2%) |
| Liberal Arts | 11 (13.1%) |
| Course Least Satisfied With |
| FoH | 41 (48.8%) |
| BoH | 22 (26.2%) |
| Liberal Arts | 11 (13.1%) |
| Course Least Satisfied With |
| FoH | 41 (48.8%) |
| BoH | 22 (26.2%) |
| Liberal Arts | 16 (19.0%) |
| No Response | 5 (6.0%) |
Results: Part I of Survey

The questions in Part I dealt with individual FoH courses. Figure 4-2 shows a breakdown of the eight courses.

Figure 4-2 ESCI for Entire Population with Standard Deviation: Front of House Courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>ESCI (mean)</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting I</td>
<td>3.8</td>
<td>1.02</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>3.7</td>
<td>0.93</td>
</tr>
<tr>
<td>Lodging Operations</td>
<td>3.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Front Off. Mgt.</td>
<td>3.9</td>
<td>0.83</td>
</tr>
<tr>
<td>Accounting II</td>
<td>3.4</td>
<td>1.04</td>
</tr>
<tr>
<td>Sales and Mktg.</td>
<td>3.9</td>
<td>0.91</td>
</tr>
<tr>
<td>Hospitality Law</td>
<td>3.6</td>
<td>1.00</td>
</tr>
<tr>
<td>Dng. Rm. Mgt.</td>
<td>4.4</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Results: Part II of the Survey

Questions 9-16 constituting Part II dealt with satisfaction with BoH courses. Figure 4-3 summarizes the results.
**Figure 4-3:** ESCI for Entire Population with Standard Deviation: Back of House Courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>ESCI (mean)</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culinary Arts I</td>
<td>4.0</td>
<td>1.05</td>
</tr>
<tr>
<td>Culinary Arts II</td>
<td>4.0</td>
<td>1.08</td>
</tr>
<tr>
<td>Culinary Arts III</td>
<td>4.0</td>
<td>1.16</td>
</tr>
<tr>
<td>Baking</td>
<td>3.9</td>
<td>1.18</td>
</tr>
<tr>
<td>Pastry Arts I</td>
<td>4.2</td>
<td>0.95</td>
</tr>
<tr>
<td>Pastry Arts II</td>
<td>4.0</td>
<td>1.12</td>
</tr>
<tr>
<td>Food Purchasing</td>
<td>3.5</td>
<td>1.06</td>
</tr>
<tr>
<td>Food Control</td>
<td>3.5</td>
<td>1.04</td>
</tr>
</tbody>
</table>

**Statistical Analysis of Hypotheses 1-5**

**Hypothesis 1:** "Students aspiring to BoH careers are generally satisfied with having taken required Front Office (FoH) courses."

In a cross-tabulation of career by FoH courses, the students who indicated their career orientation was BoH scored an ESCI of 3.8115 on those FoH courses. The students who indicated their career orientation was BoH scored an ESCI of 3.5851 on BoH courses or 0.3 points lower.
Hypothesis 2: "Students aspiring to FoH careers are generally satisfied with having taken required BoH courses."

Students who had indicated that their career orientation was FoH scored an ESCI of 4.0134 on BoH courses. Students aspiring to FoH scored an ESCI of 3.2969 on FoH courses.

Hypothesis 3: "Student's are generally satisfied overall with the Hotel and Restaurant Management curriculum at New York City Technical College."

A summary of all of the ESCI for every course reveals the following results:

<table>
<thead>
<tr>
<th>Category</th>
<th>ESCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction (entire population)</td>
<td>3.5856</td>
</tr>
<tr>
<td>FoH courses</td>
<td>3.2346</td>
</tr>
<tr>
<td>BoH courses</td>
<td>3.8961</td>
</tr>
</tbody>
</table>

Hypothesis 4: "The overall satisfaction index was higher among students working in the hospitality industry."

A look at the entire population of respondents on the basis of whether or not they were employed in the hospitality industry and only assessing those that were employed in the hospitality industry revealed: Students who were employed in the hospitality industry scored an ESCI of 3.3968 as compared
to students not employed or not employed in the hospitality industry scoring 3.8596.

Hypothesis 5: "Students with a G.P.A. of greater than 3.00 had a higher satisfaction index than students with a G.P.A. of less than 3.00."

The results here, for the entire population separated into students over/under G.P.A. of 3.00, are as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 3.00</td>
<td>3.3476</td>
</tr>
<tr>
<td>Over 3.00</td>
<td>3.9768</td>
</tr>
</tbody>
</table>
Conclusions

While the results of the survey proved that Back of House (BoH) students were generally satisfied with having taken the Front Office (FoH) courses (a mean score of 3.8115), it also shows that the same students, although generally satisfied with BoH courses, were more satisfied with having taken the FoH courses (3.8115 to 3.5851!)

FoH students scored almost a full point higher (4.0134 to 3.2969) on BoH courses than on FoH courses. They generally were satisfied with FoH courses but not as satisfied as with BoH course; conversely, this result is consistent.

Assuming that students taking courses within their respective area of interest would be more satisfied with that area than the other how could one explain this occurrence?

Perhaps one possible conclusion to be drawn is that the level of expectation is higher within a students area of interest and consequently those expectations are not being met. It could also be argued that a students expectations not within their area of interest are being exceeded. And, quite possibly, students may be realizing that from a competitive
standpoint the well-roundedness that cross-curriculum training attempts is a definite job-market advantage for them. One could also view this occurrence as a symptom of a greater problem with a given curriculum.

Summarily, either a shortfall or excess in meeting a students expectations, students seeing a greater value in knowing both FoH and BoH (which happens to be the main premise in cross-curriculum training) or the students possible realization that they are more marketable as a result of knowing both FoH and BoH are possible conclusions drawn from the results of ESCI.

With regards to overall satisfaction, the Hotel and Restaurant Management Curriculum at New York City Technical College scored well on the ESCI; satisfactorily meeting students curricular needs in their judgement. The fact that BoH courses scored higher than FoH (3.8961 to 3.2346) is achieved primarily because the FoH students scored so high on the BoH courses, increasing the overall mean greatly.

Looking at students who were employed in some capacity within the Hospitality Industry we see a lower ESCI when compared to unemployed students (3.3968 to 3.8596.) The "Real World" experience may account for this difference. Students with real world experience may have more insight into what
should and should not be part of a given curriculum—directly applying or being unable to apply what is learned in the classroom into the real world. This is perhaps the most important demographic group then, isn't it? If a curriculum aspires to ready the students for the "Real World" then the best source of information would be those working in it.

Once again, student expectations could play a role in this result. Working students expectations may vary from those unemployed students expectations. If this were the case, then it is obvious working students are not having their expectations met as well as those students who are unemployed.

Looking at students over/under a G.P.A. of 3.00 one can conclude that students who reported their G.P.A. was over 3.00 scored higher than those students who reported their G.P.A. was under 3.00 (3.9768 to 3.3476) therefore, attaining greater overall satisfaction with the curriculum. Students whose G.P.A. are higher than 3.00 probably tend to be more studious and therefore more likely to retain more from a course than a student who may be less studious and therefore have a lower G.P.A. It may be that these students score higher because they are getting more out of the courses they are taking.
**Recommendations**

There are many areas where the ESCI can be used to obtain information about a curriculum. There are many cross-tabulations that can be run to gain further insight into the effectiveness of a curriculum given certain characteristics of the student body. Age, gender, ethnic background and employment all offer opportunity for gaining knowledge about a curriculum through use of the ESCI.

The ESCI run for New York City Technical College students could supply administration and faculty with pertinent information which could aid in curriculum revision. For example, the data run for employed vs. unemployed students shows less satisfaction among working students. In a market like New York City where many students are employed during their full time enrollment in college, it could mean that the hotel and restaurant management curriculum need be reformatted to include more of a real world approach. Does the curriculum include current case studies? Is there an allotment of time given the curriculum to keep with current issues in hospitality? How much theory vs. practice? It's conceivable that some courses could be taught directly from a hospitality journal or the Wall Street Journal or New York Times. Looking at this individual statistic has great implications.
Looking at ethnic groups and their individual satisfaction could yield very interesting results. With the issue of multicultural diversity it may be important, particularly in a vast ethnic market like a city, to identify the ethnicities satisfaction. Do customs play a role in the overall understanding of a given subject or the application of the learning within? Is theory understanding inhibited by language or social barriers? These may be questions drawn from a look at the ESCI.

Information is a powerful tool. The ESCI purports to net this information; how it is used is the sole responsibility of administration. Every college, particularly colleges offering hotel curricula where cross-curriculum training is a curriculum philosophy, should use the ESCI in conjunction with some form of post graduation tracking system to ascertain that the 'product' they serve is the best it could be.
REFERENCES AND BIBLIOGRAPHY


Please Read before Proceeding:
The purpose of this survey is to measure student satisfaction with courses taken in the Hotel department here at New York City Technical College. The measure of satisfaction is to be judged exclusively on course content and not on the instructor. Thank you in advance for taking the couple of minutes out for this very important survey.

Part I
Please respond to these questions using the following scale:

<table>
<thead>
<tr>
<th>very dissatisfied</th>
<th>dissatisfied</th>
<th>neither satisfied nor dissatisfied</th>
<th>satisfied</th>
<th>very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Indicate your degree of satisfaction with having taken Accounting I. (Please circle)
   1         2         3         4         5

2. Indicate your degree of satisfaction with having taken Executive Housekeeping Principles.
   1         2         3         4         5

3. Indicate your degree of satisfaction with having taken Lodging Terminal Operations.
   1         2         3         4         5

4. Indicate your degree of satisfaction with having taken Front Office Management.
   1         2         3         4         5

5. Indicate your degree of satisfaction with having taken Accounting II.
   1         2         3         4         5

6. Indicate your degree of satisfaction with having taken Sales Promotion and Marketing.
   1         2         3         4         5

7. Indicate your degree of satisfaction with having taken Hospitality Law.
   1         2         3         4         5

8. Indicate your degree of satisfaction with having taken Dining Room Management.
   1         2         3         4         5

please to to page two
**Survey, page 2**

**Part II**

Answer the following questions using the same scale:

<table>
<thead>
<tr>
<th>very dissatisfied</th>
<th>dissatisfied</th>
<th>neither satisfied nor dissatisfied</th>
<th>satisfied</th>
<th>very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. Indicate your degree of satisfaction with having taken Culinary Arts I. (please circle)
   1  2  3  4  5

10. Indicate your degree of satisfaction with having taken Culinary Arts II.
    1  2  3  4  5

11. Indicate your degree of satisfaction with having taken Culinary Arts III.
    1  2  3  4  5

12. Indicate your degree of satisfaction with having taken Baking Techniques and Practices.
    1  2  3  4  5

13. Indicate your degree of satisfaction with having taken Pastry I.
    1  2  3  4  5

14. Indicate your degree of satisfaction with having taken Pastry II.
    1  2  3  4  5

15. Indicate your degree of satisfaction with having taken Quantity Food Purchasing.
    1  2  3  4  5

16. Indicate your degree of satisfaction with having taken Food Control.
    1  2  3  4  5

**Part III:** Please tell us about yourself.

17. My age on my last birthday was: ________.

18. Check one: _____Male   _____Female

19. The number of credits I've completed at NYCTC: ________.

20. My Grade Point Average (G.P.A.) is: ________.

Please go to page three
21. My ethnic Background is: (check one)
   ___Asian/Pacific Islander  
   ___Black, non-Hispanic  
   ___Hispanic  
   ___White, non-Hispanic  
   ___Other, specify____________________

22. My career orientation (the segment of the industry that I am pursuing) is best related to:
   (check one)
   ___The courses listed in part I, questions 1-8  
   ___The courses listed in Part II, questions 9-16  
   ___Neither the courses in Part I or Part II

23a. Are you currently employed?   ____Yes   ____No

   b. If employed, is your current employer a Hotel, Restaurant or Foodservice?
      ____Yes   ____No

   c. What is your current position____________________

26. Without limiting yourself to Hotel Department courses, indicate:

   The Course you were most satisfied with__________________.

   The Course you were least satisfied with__________________.

Thank you for your participation in this survey.