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The Future of Culinary Arts Education

Jamie C. Rotter

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Specific Recommendations: (use other side if necessary)

Thesis Committee: (1) Dr. Joan Johnson, Ph.D. (Chairperson)
(2) Dr. James Jacobs, Jr., Ph.D.

Faculty Advisor: Dr. Joan Johnson, Ph.D.

Number of Credits Approved: 4

Committee Chairperson’s Signature ____________________________ Date 9/18/07

Committee Signature ____________________________ Date 9/4/08

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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The Future of Culinary Arts Education

Jamie C. Rotter, CEC

A thesis/project submitted to the
Faculty of the School of Hospitality and Service Management

At

Rochester Institute of Technology
In partial fulfillment of the requirements
For the degree
of
Master of Science

07.19.07
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The Future of Culinary Arts Education
Jamie C. Rotter, CEC

Problem Statement
The students described in the paragraph above surely do not seem to be much of a fit when compared to the chefs of old. In fact, it seems that they would have hard time with the industry as a whole. This disconnect is very real and is leading to an exodus of young talent from the industry. How can this disconnect be bridged and the gap between customer, in this case the student, and provider, the culinary program training students for the industry be reconciled?

Purpose
The answer to this question is twofold. It is clear that the world of culinary arts often operates in an archaic, anachronistic way. However, it is clear that the industry as a whole is not going to change overnight. This study focuses on educating future culinarians and the results may provide valuable insights that connect the educational experience of the students with the reality of the industry. This will enhance retention at both ends of the continuum; more students will stay enrolled in their course of study at college as well as enjoying longer, more meaningful careers in the industry.

Methodology
The study led to the development of a survey analyzing quantitative and qualitative data garnered from freshman enrolled in the fall 2006 semester at the SUNY College of Technology at Delhi. The study attempted to ascertain career interests of students enrolled in the culinary program to enable them to better use their education to support a career, both academic and professional, that engages them to a greater degree.

Outcomes
The results of the survey tool were fairly inconclusive, and many improvements to the instrument would be necessary to utilize this tool. The literature strongly supports that the plan would be successful with a more precise instrument. The ideas that have been presented have been implemented in a less formal manner through academic advising as well as classroom discussions and have been successful. Students are entering a greater diversity of career paths upon graduation and it is anticipated that their careers will be longer as well.
Introduction

It is 8am in MacDonald Hall on the SUNY Delhi campus. As the fall morning mist starts to burn off the valley floor below, students walk into the building and into the lab for CULN 115, the freshman culinary lab for culinary arts majors at SUNY Delhi. The looks on their faces vary; some rubbing sleep from their eyes, some looking around with nervous apprehension, still others eager; waiting to get started. This August morning bears witness to the beginnings of careers, the realizations of hopes and dreams. The students come from a wide span of backgrounds, with students hailing from the rural northern reaches of New York State to the vast sprawl of New York City. They all have one thing in common: they are seeking a career in culinary arts.

These students are not uncommon. All over the country, many are starting the same journey at colleges and universities nationwide. Culinary arts is a "hot" major in the hospitality field today, with many different avenues in career choice open. TV networks with celebrity chefs combined with sociological trends that see more Americans dining away from home than ever before are leading many to seek employment in the field. The future for the profession looks equally as promising. As America’s population gets older, more and more Americans will be headed for retirement, leading most industry experts to paint a rosy picture for the hospitality industry as whole in the coming years. Still other students have been drawn by other stimuli. Many young people enjoyed that part-time summer job so much that they have decided to make a career of it, while still others are preparing to open their own businesses or take over family businesses. Many students are also looking for work in the corporate arena, working in the seemingly endless array of chain/franchise restaurants and hotel corporations, where talented hard workers with an eye up the ladder can do very well.
Literature Review

It would seem that the stage would be set for these students marching into lab on this fall morning to have a profession very quickly; a long career in a field that will continue to grow. Statistics available through the New York State Department of Labor reinforce this position, as do national statistics.

New York State Department of Labor Opportunity Outlook

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Entry Level Salary</th>
<th>Mean Salary</th>
<th>Estimated Growth % (Through 2012)</th>
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<tr>
<td>Frontline Foodservice Supervisor</td>
<td>18690</td>
<td>26910</td>
<td>13.90%</td>
</tr>
<tr>
<td>Chefs and Head Cooks</td>
<td>27500</td>
<td>41470</td>
<td>13.90%</td>
</tr>
<tr>
<td>Restaurant Cooks</td>
<td>17400</td>
<td>22190</td>
<td>14%</td>
</tr>
<tr>
<td>Foodservice Managers</td>
<td>31850</td>
<td>44510</td>
<td>10.40%</td>
</tr>
</tbody>
</table>

Source: NYS Department of Labor, 2006

Brad Barnes is an ACF certified master chef who co-authored a book in 2005 entitled *So You Want To Be A Chef?* The book is a well written, easy to understand guide to the many different facets of the culinary arts industry today. The book gives recommendations for students in terms of requirements for different positions. It describes typical responsibilities as well as salary range for different positions. In addition, the book provides an excellent framework in terms of recommendation for length of service in subordinate positions to successfully understand the next step. The book also provides US Bureau of Labor Statistics with regard to starting salary, mean and median salary, as well as opportunity outlook for the next 10 years. Bureau of Labor Statistics closely resemble the New York statistics illustrated on the table above. Demand for all positions in the restaurant field remains strong. The general population of the United States is
getting older, and more so than ever before, has discretionary income to spend outside the home on dining and entertainment.

Restaurants and hotels are not the only industry segments eager to receive new culinary talent. Retail operations from small boutique style food shops to large supermarket chains are seeking culinary professionals to supervise and innovate for consumers seeking home meal replacements, such as the Rochester, NY based market chain, Wegmans. Wegmans is a very dynamic food retailer, employing culinary graduates in positions ranging from entry level production to regional executive chefs. (www.wegmans.com) Casinos, resorts, and spas are on the rise in many locales as well. Still other strong growth opportunities exist in healthcare and the upstart personal chef industries. The personal chef industry is growing particularly well. The leading professional organization for these growing industry segments is the APPCA, or American Personal and Private Chef Association. APPCA’s website indicates that the organization has 3000+ members nationwide and clearly illustrates the profession as being more entrepreneurial with greater quality of life than the restaurant chef enjoys. (www.personalchef.com) With this in mind, it would seem that the students walking to this lab on a fall morning would have a clear career path in sight, and a strong sense of dedication to getting the training to be successful in the culinary field.

Yet statistics on the SUNY Delhi campus paint a different picture. Since fall 2003, some 171 students have embarked on this journey at SUNY Delhi. 75 of those 171 did not complete the associate’s program (Hospitality Department Statistics, SUNY Delhi, 2003-2006). The question is why, especially in light of such a solid future of employment ahead.
Background of the Culinary Field

The field of culinary arts is a relatively new profession. In the days of Careme, chefs were servants of the nobility and restaurants as we know them did not exist. The first restaurant is said to have opened in Paris in 1765 by a M. Boulanger (Culinary Fundamentals, 2006, 13). He served a "restorative" which in essence was a soup made from sheeps' trotters. This broke the guild regime that was gripping the culinary world at the time. The guilds operated much like the labor unions of today in that they were groups of artisans that were given legal protection to practice their craft without competition from other outside influences. In other words, if one wanted to serve sausage of any type, they had to purchase it from the local charcuterer. When the French Revolution occurred a few short years later, most chefs fled the country and settled in other more stable countries in Europe as well as in the United States. Thus, the concept of food being an artesian product spread despite not having the "protection" of the guilds. Despite the lack of "protection" enjoyed by the artisans producing foods, the model for high end food production world wide was that of the French chef.

Culinary history continued to move on and chefs gained much notoriety, particularly August Escoffier. Escoffier authored Le Guide Culinaire, a book that sought to standardize the industry by providing standardized recipes and required ingredients in order to provide a standard framework to build the menu around. It seemed like a great idea. However, as not everyone could agree on the validity of his ideas, Escoffier was in fact reviled by many of his colleagues at the time for taking the creative autonomy away from the individual chef. Escoffier's book is held to be much more valuable today and is the basis for any classical cuisine reference.
Escoffier's influence in the industry continued to grow substantially. He is credited with the invention of the brigade system, which allowed cooks working in each station to develop specialties and greatly improve the organization and efficiency of the kitchen. This invention revolutionized kitchens everywhere. Escoffier is also known for being one of the first to elevate the chef to the position of a professional craftsman. He had very high standards for both deportment and decorum and held his staff to these standards of professionalism. Even as Escoffier's name invokes the image of the brigade system that remains today, he stated at the release of the first copy of his landmark work *Le Guide Culinaire*, "At a time when all is undergoing modification and change, it would be foolish to claim to establish the future of an art which is connected in so many ways to fashion and is just as changeable" (Escoffier, *Le Guide Culinaire*, as translated by Craknell and Kaufman, 1982, p. x).

As restaurants continued to grow and through the middle part of the 20th century, business boomed. The restaurant was no longer an urban experience or something associated with a large hotel as it was in the days of Escoffier and Ritz and their Savoy Hotel in London in 1898. As the transportation infrastructure in America grew rapidly in the 50's and 60's, restaurants of all kinds grew with them, springing up along highways to serve diners on the move. A famous example of this was a drive in restaurant operating in San Bernadino, CA owned by two gentlemen, Dick and Mac McDonald (www.mcdonalds.com). People with culinary skills were in demand, although many of the new positions featured cuisine offerings that required much less technical skill, such as the now famous McDonald's cheeseburger. The distinction between cooks, people who produced food, and chefs, people who produced dining experiences was born. This dichotomy still exists in the business today.
Many restaurant operations do not have an executive chef of any kind, yet remain vibrant, growing and highly profitable businesses. Consider the case of a local restaurant that has been operating in the Oneonta area for more than fifty years. This restaurant’s menu is built around products that are cooked on an outdoor BBQ pit. The operation is highly successful, yet no one in the organization claims the title of "chef". Interestingly, when five second year students at SUNY Delhi were shown the menu that have also patronized this establishment, all five students indicated that they probably would not seek career employment there, citing reasons including lack of input into the menu (which has remained fairly static for many years) as well as no distinct path for advancement and the apparent inability of the experience to contribute meaningfully to their resumes. The students indicated that they value the title of chef, and would rather seek employment in a venue that values this title (Focus Group Interview, 2006).

The state of affairs has remained the same in many kitchens today. The chef has, in many cases, been able to retain their position of the tyrannical artist; temperamental and eccentric. Recipes and procedures are designed by chefs and are often extremely proprietary. This in turn makes for working environments that are often extremely challenging. In many cases, chefs get away with behavior patterns that make human resources directors cringe. Many chefs are known for bad tempers and abusive personalities, yet are accepted; all under the guise of creative license and coping with the stress of providing fine food to a public that grows ever more knowledgeable and consequently demanding. This creates a great deal of stress for the staff as a perfect meal and a substandard meal are often only seconds apart, and much rides on the perfect execution of delicate timing. Marie Antonin Careme, 1783- 1833, was known as the "chef of kings, and the king of chefs". Careme died at the age of 50 with his contemporary Laurent Tailhade lamenting that he
had died "burnt out from the flame of his genius, and the charcoal of the roasting spit" (Larousse, 1998, p. 194).

Much is made, and always has been, about the temperament of chefs. This has been the case since the days of Careme. Careme was a talented sculptor and artist and was successful in his ability to "wow" his patrons, the nobility of the day. Yet most chefs today are not artists, but craftsmen. This distinction is subtle, yet essential. Where the artist seeks to create new meanings, perspectives, and concepts through the use of various media, the craftsman creates a product through the use of objectively evaluated skills. A British TV chef in the 50's and 60's addresses this point with the following quote in the context of cuisine from Europe versus food from Britain. He states,

"On the continent of Europe they compose dishes (and very well they do it, too). In Britain, we produce, prepare, and serve food. That is a very different thing. Continental cooks regard the ingredients as means to an end. They want them to be good of course, otherwise the end cannot be. No painter uses dud paints. But a means to an end, a medium of expression is what they are. It is not so with British food. With us the foodstuff is almost an end in itself. We ask the cook to add nothing to it— all we ask is that not too much shall be taken away" (Mennel, 1985, pg.17).

Perhaps chefs have less in common with the art world, and more to do with skilled labor professions. The romantic image of the temperamental chef has lingered on, but as is often the case in our society, it may soon be litigated and controlled out of existence. Noel Cullen, CMC, Ed.D perhaps says it best in his book, The World of Culinary Supervision, Training, and Management. He states,

"Increasingly, the role of the chef requires not only high quality culinary skills, but also skill sets that enable the supervision, leadership, and management of people and their work environment"(Cullen, 1996, xvii)
Challenges in the Industry Today

The business control aspect of the industry does little to help the situation. As guests' tastes grow and become more sophisticated, it takes the restaurateur more and more effort to create that positive differentiated experience for their guests. Margins grow smaller and smaller and new ways of presenting offerings grow more and more difficult to implement. The mortality rate for restaurant operations nationally hovers around the 60% mark, with 2006 statistics indicating a mortality rate of 57% for corporate/chain restaurants, and 61% for self operated restaurants (Grassa, 2006). More and more operators are also realizing the value of exit strategy and whereas many who opened restaurants years ago planned to run them until they retired, many today plan to close in a relatively short period of time to be able to start anew with a different concept down the road. The result is that entry level positions in culinary arts frequently are low paying to start, and often do not have insurance or other benefits attached to them. The hours are long and hard, and the stress level associated with the job is high. People in the restaurant field have odd hours, as well as long hours. The work in many situations is simply brutal. It is a hard way to make a living even when things are going well. Entry level people, rather than be encouraged by their superiors, are often simply told that they have it far better today than in yesteryear, so they should be grateful. The result of all of these factors is that employee turnover in the culinary field is extremely high. This in turn makes the employer that much slower to offer meaningful training, monetary compensation, or insurance benefits to the next new hire.

Succession/career planning is another challenge for the new hire in the culinary world. The structure of career paths is often very circuitous. The culinary field is still dominated today by a strict top
down very vertical hierarchical management style. The chef is the ruler of the kitchen and there are often many layers of management in between the top and the bottom of this pyramid. It is often not easy to advance in a foodservice operation. In many cases, the chef is an owner or partner and is not expected to leave. If in fact that “top position person” does leave, they are rarely replaced from within. Often the top layers of kitchen management are replaced along with the top position, resulting in the up and comers being excluded. The reasons for this are many. In some cases, when the chef leaves, it is a result of the operator looking for a new concept, or a person who can run the same concept in a more cost effective way. Youngsters, in other words those new to the business, are often not in a position to make the necessary impact in a short period of time. It is much like the position of the coach on a professional sports team. In most cases, when the team is not winning, the coach and his assistants are often fired. Team owners go after a new coach with experience at that level, rather than promote a lesser experienced, more specialized assistant. The idea is that the ownership cannot financially support the team when they are losing until the new person gets situated. With this in mind, people getting started in this field rarely get opportunities to grow their management ability, but rather wait in the wings until another owner fires their “coach” and they get an opportunity somewhere else. A look at the staff in NFL head coach’s Bill Parcell’s 1999 book, The Final Season illustrates this well. The appendix B section of the book lists Parcells’ staff at the end of 1999. Out of the 12 coaches listed, three have since accepted jobs as head coaches with other NFL teams (Parcells, 2000).

Still others leave the security of working at a lower “rank” in an established operation to then go open up their own operation. These operations also have a high risk associated with them and tend to be undercapitalized. They are often created in the reactionary mold to the
first operation and seek to correct perceived organizational or management issues that have caused the new operator to go on their own to begin with. All too often, managers and chefs are true products of their environments and history repeats itself.

Many chefs looking to move up the ladder look to the corporate realm. In this realm, the future seems to be a little brighter. These restaurants are tightly managed and have a strong focus on cost controls rather than creative expression. Work processes are more structured, there are more reports required, data on customer preferences is collected and used, as well as state of the art technology. The difference here is that these structures rarely allow for creative expression, rather the emphasis is on execution of corporate standards and the push is consistency and cost control. Although it may be true that there is more promotion or earnings potential in these types of operations, it is all too often at the expense of soul, creativity, and expressive ability (Darder, 2007). The long hours remain the same, but the focus shifts from the chef being the driving creative force to being the kitchen manager, wrapped up in a world of facts and figures rather than innovation and development. Says, Certified Executive Chef Michael Morgan, "I wish I were still at the Club [Binghamton City] some days, waiting for the rush, feeling the energy and the creative fire of both me and the crew, ready to turn out another creation." (Morgan, 2007) Moving up in the organization is more difficult, as the corporate realm places more emphasis on credentials than do independently owned operations. In smaller, independently owned operations, business volumes are typically smaller, allowing greater flexibility in terms of molding jobs around people.

Why, in light of all of these factors illustrated before them, do these students still walk into the lab this fall morning? What will or can their
instructors do to make the difference? What is the students’ take on this information? Will it change their minds about this career? Here at SUNY Delhi, we, as a faculty, take every opportunity to show students how the business is in the world today. I tell them about my own experiences and how I grew up working in the business; discussing both the rewards and the sacrifices. We work our students hard, in and out of the classroom and kitchen so that they will have the endurance to last the long shifts day in and day out. We teach them to be critical and to look at situations as learning experiences. We teach them to be open to what others may have to offer them. We teach them teamwork and synergistic attitudes that they can take into the business with them when they leave. We work hard every day to give our students the kind of learning experience we wish that we had when we were at that point in our careers.

Before the question above can be answered, more background information is needed. Who are our students? If the industry that they are working so diligently to be a part of doesn’t appreciate them or its direct customer base, how can this industry continue to be successful? The answers to these questions are closely linked.

The culinary industry as a group of professionals is, as stated above, relatively new. In the early parts of the 20th century, many people still regarded chefs as domestic help. The industry was populated with people who were often chefs because their families were involved in the business or were closely related to food somehow. The culinary arts were once governed by the same sorts of training that construction and other trades featured. You decided that you wanted to enter the profession and you were apprenticed to a master. Over the course of the next few years you would train at the master’s side; learning to see the world through his eyes and hopefully train your hands to replicate his work.
That was all there was to it. There were no culinary academies, television show hosts; no glossy magazines glistening with the flair of food stylists or the gushing exaltations of the wine columnist. It was a simple world, a world governed with the iron hand of seniority, which ruled uncontested. When the master was content that you could possibly go into the world of work without embarrassing him, you would begin your career. Proficiency of technical skill was the pinnacle; all else could be forgiven.

Anthony Bourdain, author of the book *Kitchen Confidential*, for example, recalls first thinking about food as something more than sustenance on the way over to Europe from America. He recalls in his book, *Kitchen Confidential*, that he was served vichyssoise, a soup traditionally served cold. He was intrigued by the experience and this fascination found a fertile ground to grow in as his family traveled through Europe, particularly France. He began working in the restaurant field at a young age in Rhode Island and has gone on to have a largely successful career, both as a chef and as a *Food Network* host. His books describe the business in a true to life, extremely blunt way; both the glory and the ugly side of things. He points out many things, but one point that rings home is the strong sense of camaraderie that he felt in the various kitchens that he worked. He points out that many people persist in the industry because “they can not exist on the outside” (Bourdain, 2000). Indeed, this seems to be the case. For decades, the qualifications for being a chef did not include anything to do with human resources or strategic management, but strictly culinary skill. Because this skill was in high demand, many managers and owners would forgive bad behavior that would get a stockbroker sued, much less fired. This created a haven for many who understood that all they needed to do was produce food to be rewarded. The job was thought to be more like a trade than a profession and kitchens everywhere rang out with blue-
collar pride and disdain for any who did not believe in the same things. Chefs were supposed to be the "tough guys". The harder and longer that you could work, the more valuable you were. The more scars that you could show, the more seasoned the veteran you were. Many young people enjoyed this type of camaraderie, and began to work in the business. As a result, an industry kept growing. The demand was high and there seemed to be no end in sight.

As the product focused economy began to shift toward a service economy, the ripples of change began to work on the kitchens of America. Service staff members were "promoted" from being simply food bearers to being recognized as emissaries between the kitchen and the customer. People began to realize that the service component in food was just as important as the food itself. These events coincided with a renewed interest in food preparation and cooking as a hobby. The guests became more knowledgeable and as a result, more demanding. Customers wanted food prepared their way and the new mantra of 'service, service, service!' gave servers new voices. The chefs adjusted, though in many cases grudgingly. Food was their primary focus and how could these customers ever understand what went into the preparation. Recipes were still very proprietary, and if you wanted to keep your recipes, you needed to keep the chef.

The state of affairs today is different still. The customer of almost any foodservice operation is very knowledgeable when compared to their peers two decades ago. In today's world, high quality properly prepared food in an essential part of a dining experience. Service and food are no longer enough to sell seats consistently. Guest experience is the key and customization is expected. Technology in the areas of food production, holding, as well as the influx of convenience food products is changing the foodservice landscape. Franchise operations begin to address this
area, yet the quality of their offerings in many cases lacks quality. A July 2006 Consumer Reports issue ranked several restaurant chains on many criteria, one of which was product quality. Franchises that featured the most interaction between humans and food products not surprisingly fared better than those which feature more pre-prepared foods (Consumer Reports, July 2006, p. 12).

**The Chefs of Tomorrow**

Guest expectations remain high, but the chef has to be more of a team player than ever before. Many of the young people getting into today’s culinary field have a much better grasp on this than do the people that will be managing them. This, in turn creates a workforce that is not always in unison with its leadership. Two decades ago, a new line cook would never criticize the chef; strong blue-collar loyalty was the glue that kept the kitchen together. What has changed to make it so much more probable that a new line cook would speak out in today’s world?

The people going into the field have changed and changed significantly. Post secondary culinary education is at an all time high in the United States today. Years ago, there were few culinary schools and most of them focused almost solely on developing technical skills. Culinary programs, often built on the iconic model established by the CIA, began to develop on a larger scale. Public education came on board to join the private institutions and culinary programs sprang up at community college campuses across the country. Chefs were being trained to meet industry need at a rapid rate, but most of the students that went to these schools were aspiring to a position as a restaurant chef or eventual ownership. They were content to exist in their world and didn’t need additional training outside the kitchen. Today’s students want many different things and are far less likely to stick around if they
are not getting what they want. They do not think of a career as being a thirty-five year trip through the same industry. They know that they may have many shorter careers during their working years. They want options and they want to have a life outside of work. They want flexibility both in the classroom and beyond. Above all, they want respect. They are not content to simply wait 12 hours a day for knowledge to be imparted at the discretion of the master, rather, they want to tell the master what knowledge they want as well as the time frame for delivery.
**Problem Statement**

A disconnect between the perceptions, values and the realities of the culinary industry is resulting in many talented young people choosing to leave careers in the culinary field. How can the gap between the student and the culinary program training students for the industry be reconciled? The gap exists in three areas; the first between the student and the culinary program, but a gap also seems to exist between the industry hiring these students as well as between the educational model and the industry. While these gaps are also significant, this paper focuses on the gap between the student and educational program.
Purpose

The answer to this question is twofold. It is clear that the world of culinary arts often operates in an archaic, anachronistic way. However, it is clear that the industry as a whole is not going to change overnight. The best way to effect the necessary change is to change the players in the game, even if that means change by one person at a time and a great way to do this is through the college ranks. The culinary industry respects and expects credentials in much the same way that other industries do. Therefore, it is certainly viable to think that the graduates of today will be the leaders of tomorrow. The industry can change and the best way to make this happen is through educating the leaders of tomorrow. This study focuses on educating future culinarians and the results may provide valuable insights that connect the educational experience of the students with the reality of the industry. This will enhance retention at both ends of the continuum; more students will stay enrolled in their course of study at college as well as enjoying longer careers in the industry.

The Educational Model

The Culinary Institute of America opened in 1946 with the mission of advancing post secondary culinary education for the American chef. American chefs were still undervalued in the profession, simply because the Americans did not hold the extremely rigid rules of structure and hierarchy that the Europeans, particularly the French, did. The CIA’s curriculum was designed around the training models of French chefs. Wine production was in a similar situation, for similar reasons, as Americans had little issue with calling any red wine burgundy. American chefs were thought of in the same light; as half-trained Saracens incapable of producing quality food. The CIA was the cutting edge in
culinary education until 1973, when Johnson and Wales joined the mix (cookingschools101.com). Graduates were almost assured of a good position in a prominent property, restaurant, hotel, or club. These graduates were still more technicians than managers, but more emphasis was being placed on both management and front of the house service. Graduates from these programs often still had to pay their dues; working under a seasoned veteran, but the curve to top positions was much tighter.

The educational model in culinary arts training over the years has most closely resembled military combat training. Commands were to be issued, never questioned, and executed with precision and efficiency. The span of control was expected to be very tight indeed. The model was the work of the executive chef and complete compliance was the only available option. The training focuses on the elements of culinary arts, techniques and product recognition, as the main thrust of the degree. The desired result is the "good soldier", an operations person who never questions authority, thinks strictly on the tactical plane, and is yet somehow expected to maintain intimate customer relationships requiring flexibility and improvisation. They learn controls and tactical management in an industry that constantly demands customization. Students are taught in this way because in most cases, their instructors have been trained that way and production quality control targets require a short span of control. Many degree programs place a heavy emphasis on participation in industry simultaneously with college education via internships or part-time jobs, with the idea that students will pick up practical knowledge on the job. Here in many cases, they meet line level employees with little or no formal training other than on the job, and are compared to these employees. The students see reward and promotion given to people with technical skills acquired while making a living while they feel somewhat handicapped by being at
school. The result is often disengagement on the part of the student and unless faculty seek out the reason for this schism and reinforce the value of education, they are at risk of losing the student.

The students preparing for entrance into these culinary programs have their share of problems as well. Many had academic difficulty in their secondary school programs and were steered into BOCES or other trade oriented training programs that did not require rigorous academics. Many have learning disabilities that often make traditional college education difficult to the point of impossibility. Others have followed interests sparked by an incredibly wide array of stimuli. Most have been counseled in how a college education will benefit them down the road, and many are the first in their family to attend college. These students are expected to find a balance between the future value of education versus learning the technical aspects of cooking while earning a paycheck. In many models where students are working while going to school, it is a temptation that they can’t resist. Many degree programs try to balance this dichotomy and guide students between the two worlds, but in many cases, money simply wins the battle.

Associate degree programs are generally 18-24 months long and come in two basic types. Associate in Occupational Studies, or AOS degrees, are offered on many two year college campuses, particularly community college campuses. They are designed to be very much hands on, skill building programs to prepare students for entry into the industry at the line level. There are few, if any, general education requirements, and most classes are degree focused. These programs have great appeal to students who perhaps are not academically strong in the classroom, but are better technicians as well as part-time students who can live nearby and still hold a job. The drawback with this type of program is that the industry is often looking for baccalaureate degrees.
with a management focus as a minimum requirement for management positions. Students coming out of AOS programs are at a disadvantage to gain this degree for two reasons. They need general education classes at the associate’s level for a bachelor’s degree in addition to the degree requirements, resulting in more semesters spent on school as well as more expense incurred. In many cases, students would also have to relocate to another area with a four-year school to pursue a bachelor’s degree, as many two-year colleges do not and/or cannot offer bachelor’s degrees.

The prime alternative to the AOS degree is the Associate in Applied Science, or AAS degree. This degree program is focused in a more traditional academic focus. Students are required to finish general education requirements in addition to coursework for their major. These programs typically run 18-24 months, as do AOS degrees, but are often far less lab based and are more robust academically. The distinct advantage of the AAS degree is that in many cases, there is minimal, if any additional coursework necessary to enter a bachelor’s degree program, an essential credential in many cases, for entry into management. Because of the layout of schedules and the addition of liberal arts classes, full-time students frequently simply cannot maintain full-time employment while working on a degree. AAS degrees are also offered at far fewer colleges than are AOS degrees as illustrated in the following table (www.suny.edu, 2006).
### Post Secondary Culinary Associates Programs

<table>
<thead>
<tr>
<th>Name of College/Institution</th>
<th>Cost per year</th>
<th>Degrees offered</th>
<th>Length of program</th>
<th>F/T</th>
<th>Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culinary Institute of America</td>
<td>29775</td>
<td>AOS</td>
<td>21 mos.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>New England Culinary Institute</td>
<td>31950</td>
<td>AOS</td>
<td>2 years</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Johnson and Wales</td>
<td>30325</td>
<td>AAS</td>
<td>2 years</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Art Institute of NYC</td>
<td>21018</td>
<td>AOS</td>
<td>2 years</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Paul Smith’s</td>
<td>27410</td>
<td>AOS/AAS</td>
<td>2 years +</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>SUNY Delhi**</td>
<td>13478</td>
<td>AAS</td>
<td>2 years</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>SUNY Cobleskill**</td>
<td>14236</td>
<td>AOS</td>
<td>2 years</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>SUNY Alfred**</td>
<td>14408</td>
<td>AOS</td>
<td>2 years</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Erie CCC</td>
<td>3217</td>
<td>AOS</td>
<td>2 years</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Niagara CCC</td>
<td>3261</td>
<td>AAS</td>
<td>2 years</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Schenectady CCC*</td>
<td>3750</td>
<td>AOS/AAS</td>
<td>2 years</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sullivan CCC</td>
<td>7606</td>
<td>AOS</td>
<td>2 years</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Mohawk Valley CC*</td>
<td>2517</td>
<td>AOS/AAS</td>
<td>2 years</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

* AAS degrees are in Hospitality Management, not culinary arts
** Price reflects in state tuition rate
Source: Individual college sites accessed through the SUNY website

There are many areas in which to elicit change. Students going through culinary schools are subjected to intense, technical skill building regimens that are geared to emphasize product and process quality. They traditionally spend little time in the areas of management, strategy
development and marketing; instead focusing on historical perspectives of product and process. The management skills that they are taught are largely supply side cost controlling, operational types of skills. Because they spend little classroom time on more abstract sorts of skill building, they typically undervalue these skills and learn them on the job in a reactionary situation instead of an academic setting where these needs can be addressed and real time, real life examples and models can be examined and discussed.

The next obstacle that can be addressed to help more students get through the program and indeed be more successful in the industry is through more effective engaged discussion about career choices and selecting the right “niche” of the industry in which to plan their careers. The model that most discussions center on in the culinary classroom is the traditional restaurant/hotel model. Students are exposed to this model through the use of a capstone restaurant operations class in most cases. While this model does provide real time exposure and experience that are very valuable to the student, many figure out at this point that they do not want to spend their careers in this unforgiving and stressful work environment. This leads many students to participate at a much lower level of engagement, which in turn leads to many leaving school via academic dismissal. There could simply be a more concerted effort to expose students to the many faces of the culinary industry that are experiencing positive organic growth. Examples of this would include special event catering, the personal chef concepts as well as gourmet food retailing to name a few. This could rectify the situation by showing the student that their skill sets learned at school are far more versatile and valuable than they had thought. At SUNY Delhi, no such class exists at this time. There really is no way for students to see models of existing successful businesses that they may be interested in unless they
alone take the time to do it on their own. In many cases, they do not; they simply change majors or careers after they leave school.

The curriculum at SUNY Delhi features two distinct strengths to help in the creation of a solution to many of these questions. We have an externship requirement that is generally completed between the first and second years. At this point, the student seeks a position of their choice with an organization of their choice. They must complete a 480 hour work experience, upon which they write a reflective paper as well discuss the employer evaluations with their faculty advisor. This allows for discussion of what the student thought of the experience and more importantly, why they felt this way. It allows for discussion of whether a student enjoyed (or detested) the discipline or the circumstance. That formulates the discussion of the looming future and more realistic career paths. Delhi’s program also features a capstone restaurant operations class as discussed earlier in this document. The restaurant is a hands-on real time setting where students and faculty interact in real time. It serves not only as an academic course; it is vital to the culture of the program. Many students begin to define their identities as cooks at this point, as they compare this experience to their externship experience. The robust interaction thoroughly reinforces what is occurring in the lecture hall, and also sums up a full three semesters of lab experience. The students are not handled with “kid gloves”; they are directed as employees for the day.

Although both of these tools are very powerful, the externship experience is the more powerful of the two, as it identifies industry segments that they student is interested in. The restaurant class is powerful, but can often alienate students who seek employment in other aspects of the industry.
**Methodology**

No study of the problems discussed in this work can be validated without first finding out if the hypothesis that was made regarding the student body and their views were accurate. The best way to achieve this was through the closest available thing to a candid interview. Interviews can be a flawed tool to use to ascertain students' opinions as students can never seem to shake the idea that their grade is somehow attached to the "correct" answer given. Consequently, an anonymous survey was appropriate. The survey was developed to reveal information about students' career exposure at the time the survey was given as well as what perceptions the respondents had of the college's role in career exposure and assistance in securing jobs. The premise was that armed with more knowledge of what the respondents were seeking or had previously been exposed to, course offerings and content could be better tailored to engage students more completely in their coursework.

This premise came after interviews with two different industry professionals, each following different career paths. The first interview was with Nathan Darder. Mr. Darder is a Delhi alumnus who is currently a manager for Uno's Chicago Grille. Mr. Darder has been a manager for different foodservice operations ranging from Coldstone Creamery to Dining Services at the University of Buffalo. While Mr. Darder graduated from Delhi with a BBA in Restaurant Management, he reported a similar disconnect phenomenon. He felt that at graduation, he did not fit into any of the "molds" that had been illustrated here at the college. The second interview was conducted with Michael Morgan, CEC. Mr. Morgan is on our advisory board at SUNY Delhi and has enjoyed a long and successful career as a restaurant and club chef as well as his current endeavor in the corporate dining sector. Chef Morgan is a great example of redirecting a career that in many cases is a "young man's
game" in the restaurant industry to an easier schedule in the corporate world. A focus discussion was also held with students that are now in their second year to ascertain where areas for study might be.

This study was designed to gain further insight into the thoughts of freshmen in our culinary programs with the goal of better serving them as students. Data collected during the interview phase of the study was used to develop the draft survey instrument. This draft was reviewed by the interviewees and then revised to insure clarity. A mix of quantitative as well as qualitative data was to be collected. The data gained from the survey related to the problem statement. The study was submitted to the IRB Committee in October 2006 as an exempt study and was approved for use at that time.

The final survey instrument included three sections. The first section sought demographic information. Questions were included to gauge who the respondents were in terms of prior education, degree program enrolled in, age/gender, and how they acquired their interest in the field.

The second part of the survey was a tool to try and ascertain what the respondents were looking for in a career choice. Students surveyed were asked to describe what they were looking for in a job and what direction they were most interested in for the future; the path of a technician, or the path of management.
This part of the questionnaire featured 25 questions attached to a Likert scale. These questions sought information in four basic groups.

- The first group ascertains what segment of the industry the respondent was most interested in.
- The second set addressed what skills the respondents had come to college to build.
- The third addressed interest in exploring previously unknown career fields.
- The last section ascertained preferences in work environments and styles of work.

The third section of the survey sought information on respondents’ perceptions of alternate career paths.

The survey was administered, (in November, 2006); to forty-four freshman enrolled in either the 46 or 46B option majors at SUNY Delhi. These two options were: AAS in Culinary Arts (46), and a BBA in Hospitality Management, (46B) (SUNY Delhi Catalog, 2006). The survey was conducted in the lecture section of CULN 100, the introductory culinary class at SUNY Delhi. The questionnaire was administered by the course instructor and the respondents were told by said administrator what the nature of the survey was, how the findings would be used, and also explained the anonymous nature of the study. All forty- four respondents answered the survey, and all responses were complete and usable.
Findings

Twenty-nine respondents were enrolled in the AAS program, and fifteen were registered in the BBA program. Typically, more students will decide to pursue a BBA at the conclusion of their AAS studies, but the scope of this study was to identify what the perceptions of the first semester students were. Many are also first time college students, with 38 being first time students and just 6 being transfers. Most were traditional college age students as well; 93% of the respondents indicated that they are in the 17-24 year old age group, while the remaining 7% are 25-35 years old. Fifty-seven percent of the sample was female, 43% was male. The respondents indicated that 96% percent of the sample speak English as their primary language, with exceptions indicated as Spanish (1 of 44), and French (1 of 44). The respondents showed the strongest preference for pursuing a position in a restaurant operation, with 54.5% responding with a choice of 5 (strongly agree). Respondents had a much smaller interest in a hotel position (2.3% responded with a score of 5), and interest in baking was moderate by comparison with 25% of the sample returning a score of 5.

Another interesting fact was that 36.4% went through a BOCES or some similar vocational training, and just one respondent went through military training. The other 61.4% of the respondents had gone through traditional high school programs and any training and exposure that they had was on the job training. The last two questions in this section had to do with what led students to this career choice as well as what role they expect the college to play in career exploration and eventual job placement. Of forty-four students, 13 indicated that their primary reason for studying culinary arts was due to the influence of a family member or close friend currently working in the industry, 10 indicated that they became interested due to work experience that they had prior
to attending college, and 7 indicated that they were most interested because the field looked interesting and exciting when portrayed by the media. The largest number, 14 out of 44, (31.82%); indicated that they simply love the craft of cooking and that interest sparked them to want to pursue a career in culinary arts. The final question, asked the student to identify what level of support they expect the college to provide in the area of job/career exploration and eventual job placement. Only 1 of the 44 respondents indicated that they expected the college to play a very minor role in this area. 43% indicated that they expected the college to play a supporting role in these areas, while the majority, 55%, expected the college to play a strong role in career exploration and placement.

The answers to these questions in the second section were quite diverse and several questions indicate that the respondents were fairly deeply divided, especially in terms of working environments and issues of self employment versus working for a corporate entity or managing a business that someone else owns. Responses to other questions seemed to cluster around a neutral answer, which could indicate the potential for positive exposure in these areas, but they could also indicate a simple lack of opinion in these areas.

These results indicate that the hypothesis forwarded at the beginning of this work is true. First semester freshmen need a more diverse exposure to career planning at the beginning of their curriculum. 55%, expected the college to play a strong role in career exploration and placement. The students, as well as retention figures, would be helped by the addition of a tool such as the book So You Want to Be a Chef? at the beginning of the curriculum at Delhi, in conjunction with a degree guide listing courses offered on campus. This would allow these students to “customize” their education to some degree by indicating
which electives might give the student the best tools to be successful, as well as keeping their interest level in their studies higher.

The second set of questions measured what skills respondents prioritized as being important to their careers and what they had come to college to build. Questions 4 and 5 ascertain whether the students feel that they will become managers or technicians. The students responded with mostly neutral results, although the fourth statement (indicating that the respondent thinks of themselves as being a manager) received more positive response than did the fifth statement which indicated that the respondent thought of themselves as being a strict technician. This part of the survey also illustrated what skill sets the students had come here to build. The skill sets were broken down into four statements as follows: 

6 says that the student has come to college to build technical skills, 7 business skills, 8 managerial skills, and 9 skills to match a planned career. Interestingly enough, the results indicate that these students place a high value on the business skills necessary to be successful; higher than both technical skills and managerial skills. In the last statement, about building skills to match a planned career, 52.37% of the respondents strongly agreed, indicating that most students have a fairly strong image of what their career path is. There were also several neutral responses (20.45%), which could indicate that these students are not as sure of what their career choice may be. The strong responses to building business skills also corresponds to a reasonably high level of positive response, (53%); to a question in a later segment involving plans to own businesses.

The third section of the survey tried to ascertain the respondents’ desire to explore alternative career paths to those offered in the first section, the restaurant model, the hotel model, or the bakery model. The tenth statement on the survey directly states that the student came to
college to explore different career opportunities. The response was positive, with only 20.4% indicating that they do not want to explore those possibilities. Statements 11 through 13 ask whether the respondents are most interested in business ownership (53% strongly agree), managing an existing business (41% strongly agree), or being involved at a line level operations position (52% responded neutrally). As stated above, the results clearly show that most students in this sample are interested in owning a business in the future, with most being opposed to the idea of remaining at a line level position. In between these two poles was managing an existing business, which finished with a positive as well, slightly behind business ownership.

![Figure 1](image-url)
The last section of questions involved typical environmental and behavioral aspects of working in a typical restaurant kitchen. The statements involved ascertaining environmental preferences in a workplace involving attitudes toward working as a team versus as an individual (statements numbered 17 vs. 18), innovation versus execution of the status quo (statements 20 vs. 21), working with the public (statement 19), and working within a structured environment (statement 15) and under pressure (statement 14). These results make sense when compared to the first overall section of the survey, which gives the perspective that these are reasonably inexperienced, young people coming into the classroom. The slight skew of the data to the positive pole probably indicate that the students have been “coached” to understand that these attributes are important to be successful, but that the respondents may lack enough experience to know where they stand on the continuum. As an example, the reply to statement #14 concerning working under pressure elicited the following response, with 11.4% of respondents strongly agreeing that they work well under pressure, 27.3% agreed, 40.9% responded neutrally, 4.5% disagreeing and 15.9% strongly disagreeing. 72.7% of the sample did not have a strong opinion. This indicates that the respondents possibly may not have sufficient experience to accurately predict how well they will perform as a rule.
Potential Error/Bias in the Results of the Survey

Although this survey as written provided insight into the wants and needs of the student respondents, future studies might be designed to solicit additional details and to build upon the findings realized by this project. The group of subjects studied has also been the object of considerable previous observation, which could cause potential error in that the survey was designed with too much previous information about the subject pool ahead of time. The optimal time to administer this type of instrument would have been at the very beginning of the respondents’ first semester. This survey was conducted at the conclusion of the fall 2006 semester. There were, at that point, several students who had already dropped from the program or knew they were failing and had stopped attending classes. This could lead to more positive responses than the first semester population as a whole. Also, by the time the survey was conducted in late November, remaining students had already been exposed to enough of the curriculum that their responses to many statements could be skewed. The sample of respondents is also quite small. Adding more respondents from other programs might provide a more reliable data pool. Lastly, many statements in the second section were written in a leading way; more objective, neutral language and points of reference that are more in line with the respondents’ level of experience would be more appropriate.
Recommendations for the Future

This survey has been very insightful as a tool to get to know the students at SUNY Delhi better. A more detailed study could provide volumes of information that could allow Delhi (and the industry) to retain greater numbers of culinarians in their formative years. The survey data could enable the administration to at least partially forecast course availability needs for future semesters. For example, the survey for this fall’s class indicated a high level of interest in potential ownership of businesses in the future. This could indicate a need for seats and/or sections available for classes like BUSI 205 (small business management) or BUSI 240 (business law), or even classes in computer applications for small business. The capability for these classes is already available on the Delhi campus. Students could then use these classes to fulfill graduation requirements as electives instead of less specialized, more broadly scoped classes currently used to fulfill these elective requirements. It is well established through decades of research that students who have a strong interest and sense of purpose in their coursework achieve better results academically. Research published in 1996 by Silberman says the following, “to learn something well, it helps to hear it, see it, ask questions about it, and discuss it with others. Above all, students need to do it, figure things out by themselves, come up with examples, try out skills, and do assignments that depend on the knowledge that they already have or must acquire” (Silberman, 1996, pg.2)

The study would also nicely complement tools already in use in the curriculum at SUNY Delhi. The results of the survey could be used in conjunction with the book So You Want to be a Chef? This book has been described earlier in this work as a great guide for students to be able to compare potential career paths with the skill sets and experience that
would be required to attain various positions in various enterprises. The book is currently used as part of the capstone restaurant course at Delhi. While it is a valuable and useful tool in this context, it could be much better utilized at the beginning of our curriculum. The book, used in conjunction with a survey, would put students in a better position to explore possibilities through summer work experiences. Many students return after their first summer’s experience with a much different perspective on their careers. While many have an experience that reaffirms their goals and objectives; other realize that their interests lie in entirely different areas.

Freshman studies are a great tool, and a redesigned study would be a powerful insight, however, the study could also be conducted at the beginning of the students’ third semester. This would allow the students who fall in the category described above, (as those who wish to change their career path), an opportunity to pursue other options as a result of their experience.

The information derived from the survey is also a great tool for the individual instructors within the program. Students, particularly “traditional” students in many cases have difficulty expressing themselves and their goals through explicit dialogue with the faculty, in many cases simply following the perceived wishes of the instructors. As an example, Delhi is putting together a pastry laboratory at a considerable cost, operating on the belief that around half of our students have a strong interest in the baking or pastry fields. According to the survey data, this is reasonably accurate. Of the 44 respondents surveyed, 25% indicated that they have a strong interest in a pastry or baking career while 9.1% indicated that they have no interest. This leaves a middle area, composed of some 65.9% of the sample that could potentially be interested in the field. These students could become
interested in the field through further exposure. Quantifying and capturing this potential helps to justify the expense of such a project.

The recommendations of the study are threefold. First, the college could adopt a tool to assess what path(s) a student is most interested in. This tool could be administered both early in the first as well as early in the second year. The results could help to focus career paths by matching student career constructs with industry segment(s) to provide the student with career choices that match up well with the attributes that they desire. The objective would be to engage them more thoroughly in their education from the onset, which numerous studies indicate will create a greater educational experience. The book, Cornerstone–Building Your Best illustrates this well. The entire book is a guide to student success and active learning strategies through engagement are discussed throughout, but central themes are presented in a list about how to persist in college (Sherfield, Montgomery, and Moody, 2005, p.88-89). To the end of more completely engaging students, the survey tool could also be used in the second year to further refine the focus for the student. Students at Delhi do a professional work experience described above, so many students change their plans based on the outcome of this work experience. The results of the survey could help the students to identify which course options would give them the most tools for their individual kits.

The second recommendation would be to incorporate more of the customer and the dining experience into the curriculum. This would give the student a more strategic outlook on their careers and assist them in devising their own careers to reflect a commitment to the customer rather than a strong focus on the products produced and controlling costs through those offerings. While building technical skill sets is a critical part of the students’ educational experience, a more customer
and experience centered view might allow the student to better fit into the organizations of tomorrow by illustrating for them how to incorporate these specific skills into the desires of the customer. Adjusting curriculum may also help the student to gain knowledge of alternative career paths, allowing for a more satisfying career in the culinary world, and hopefully retaining more skilled professionals within the industry. Curriculum would have to be expanded to include coursework in newer disciplines, such as food styling, retailing, or personal chef. If these objectives could be met, perhaps more students will complete their degree programs and even pursue further degrees down the road. The student would graduate with a more futuristic and customer centered view of the industry, thus driving the students' value perception of their educational experience. The student could then view the college as more of a vehicle to allow them to build their own "toolboxes" and fill them with a more customized array of tools to help them in their careers. This can only help to build the kind of strong relationships that create a lifetime customer that will drive future enrollment for the college.

The future is bright for those young men and women walking into MacDonald Hall on this cool fall morning. They are embarking on a path that is exciting and can be extremely fulfilling. It is true that the journey is theirs to take, and certainly not all will complete this journey. Developing the skills necessary to be successful in the culinary field can be a very daunting task indeed. The truth remains that all journeys, however difficult or arduous, can be made much more enjoyable by relieving anxiety and strengthening sense of purpose. The instructor is the primary guide on that journey and can provide the information as well as the strategy for getting the student to their destination. Most current service management theories focus on getting to know customers in an intimate and individual way (Pine and Gilmore, 1998). The only way that this can be achieved is through dialogue and intelligence on the
part of the service provider (Prahalad and Ramaswamy, 2004). The students at SUNY Delhi are customers and the faculty, service providers. While the model may not be as pure and simple as purchasing a customized personal computer through Dell, the relationship's health must be nurtured by honest and open dialogue, and the organization must have sufficient agility to maintain the relationship. It is in this environment that learning takes place.

Other studies and books illustrate these facts in other ways. The book *Millennials Rising* illustrates many trends in young people today in terms of values and motivations. Many young people today report that they are seeking careers in organizations that value flexibility, room for advancement, and sensitivity to quality of life issues (Howe and Strauss, 2000). Many of these attributes can be attained through the pursuit of alternative career paths and choices. These venues will almost certainly include self-employment and entrepreneurial operations. The culinary educators of today must address these trends and if that can be accomplished, the chef of tomorrow will be a well balanced, agile professional capable of creating truly customized experiences for the guest for many years to come.

As more and more students come into the industry embracing these new ideals, there will be many rewards. The industry will begin to change as the outlook on the world from its leadership begins to change. It is in this environment that the modern chef will be able to be a complete part of the team, not as the product centered tyrant, but rather as a vital and contributing member of management teams. Pine and Gilmore point out in their landmark work, *The Experience Economy*, that the "offering of experiences occurs whenever a company intentionally uses services as the stage and goods as props to engage an individual" (Pine and Gilmore, 1998, p. 11). In other words, chefs working in the
industry as well as the culinary educators of tomorrow have to embrace a new world order that other industries have already begun to explore. It is only through this approach that we can continue enjoy success. The book *The Future of Competition*, also brings this point home. There are more dining and food choices available than ever before, but as the authors point out, "Product variety has not resulted in better consumer experiences" (Prahalad and Ramaswamy, 2004, p. 1). Perhaps it is this product centric view of the world that causes the high rates of mortality in the restaurant business as well as an exodus to the less stressful, more "co- creative" alternative career choices that students are interested in today. Educators and the industry must change as well and as they begin the evolution of co creation, a new evolution of the professional chef can begin.

This evolution is already beginning to take place. In a recent address to ACF members in the monthly ACF publication, National Culinary Review, ACF President John Kinsella described an encounter with a chef in a local restaurant. He describes the encounter with some disdain as he recalls the chef’s lack of uniform and the lack of professionalism that he felt the lack of a proper uniform construed. (Kinsella, 2007, 7) Kinsella makes the statement, "As a professional chef, I take pride in my uniform. But it seems that the sloppier or more colorfully we dress, the more we feel we are in vogue or are making a statement" (Kinsella, 2007, p.7). Interestingly, an article run by the Los Angeles Times was picked up by the CIA and linked as a ProChef SmartBrief story. While the context of the article directly relates to home kitchen design, the ramifications to the industry are clearly, in contrast with Chef Kinsella’s embrace of the traditional model. The article states “Kitchens across America are shunning their white and antiseptic past for more dramatic moody color patterns and materials" (Easton, 2007, www.latimes.com). As the kitchens of America go, so do the kitchens of
the industry, which will have to accept their place in the new, experience event landscape. Acceptance of this inevitability rather than stubborn resistance will allow us to create successful leaders for tomorrow.
Appendix A

Student Questionnaire

Respondent Profile

1. What is your gender? M or F
2. Is English your primary language? Y or N
   - If no, please identify _______
3. Are you enrolled in the AAS or BBA program? _______
4. Are you a first time college student or a transfer? _______
5. Which age group best defines you? Select one from below.
   a. 17-24 years of age
   b. 25-35 years of age
   c. 36 or older
   d. younger than 17
6. My pre-college career educational background includes: select the strongest choice.
   a. I had a high school job in the field.
   b. I attended a BOCES or similar programs.
   c. I attended military training programs.
7. Please identify your primary influencer in choosing culinary arts as a career?
   (select the most appropriate choice)
   a. close friend or family member in the business
   b. previous work experience
   c. interest sparked by media exposure of the industry
   d. other (please identify below)
8. What role do you expect the college to play in career placement and exploration?
   a. strong role   b. supporting role   c. minor role
Please indicate which of the following numbers matches your response to each statement given by circling the number.

5- strongly agree, 4- agree, 3- neutral, 2- disagree, 1- strongly disagree

1. I want to pursue a position in a restaurant operation.  5
2. I want to pursue a position in a hotel operation.  4
3. I want to pursue a position in a bakery.  3
4. I think of myself as a manager.  2
5. I think of myself as a technician.  1
6. I came to college to build technical skills.  5
7. I came to college to build business skills.  4
8. I came to college to build management skills.  3
9. I came to college to build skills to match a planned career.  2
10. I came to college to explore career possibilities.  1
11. My future career plan involves business ownership.  5
12. My future career plan involves business management.  4
13. My future career plan involves line level operations.  3
14. I work best under pressure.  2
15. I work best in a structured environment.  1
16. I prefer giving orders to taking orders.  5
17. I enjoy working as part of a team.  4
18. I enjoy working as an individual.  3
19. I enjoy working with the public.  2
20. I enjoy innovation over execution of existing standards.  1
21. I enjoy perfectly executing a recipe.  5
22. I expect to be in top management within 2 years of graduation.  4
23. I expect to work in a corporate environment after college.  3
24. I expect to work in a family business after college.  2
25. I plan to be self employed within 2 years after college.  1
# Appendix B - Results of Student Survey

## Section 1 - Demographic Information

1. What is your gender?

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>19</td>
</tr>
<tr>
<td>F</td>
<td>25</td>
</tr>
</tbody>
</table>

2. Is English your first language?

<table>
<thead>
<tr>
<th>Language</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

3. Are you enrolled in the AAS or BBA degree option?

<table>
<thead>
<tr>
<th>Degree</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS</td>
<td>29</td>
</tr>
<tr>
<td>BBA</td>
<td>15</td>
</tr>
</tbody>
</table>

4. Are you a first time student or a transfer student?

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>38</td>
</tr>
<tr>
<td>Transfer</td>
<td>6</td>
</tr>
</tbody>
</table>

5. Which age group best defines you?

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 17</td>
<td>0</td>
</tr>
<tr>
<td>17-24</td>
<td>41</td>
</tr>
<tr>
<td>25-35</td>
<td>3</td>
</tr>
<tr>
<td>36 or older</td>
<td>0</td>
</tr>
</tbody>
</table>

6. My pre-college career educational background includes: (select the strongest choice)

<table>
<thead>
<tr>
<th>Background</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>27</td>
</tr>
<tr>
<td>Boces program</td>
<td>16</td>
</tr>
<tr>
<td>Military training</td>
<td>1</td>
</tr>
</tbody>
</table>

7. Please identify your primary motivator for entering the field. (select the best choice)

<table>
<thead>
<tr>
<th>Motivator</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friend or family member in the business</td>
<td></td>
</tr>
<tr>
<td>Previous experience</td>
<td></td>
</tr>
<tr>
<td>Media exposure</td>
<td></td>
</tr>
<tr>
<td>Other (please identify)</td>
<td></td>
</tr>
</tbody>
</table>

8. What role do you expect the college to play in career placement or exploration?

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>19</td>
</tr>
<tr>
<td>Supporting</td>
<td>24</td>
</tr>
<tr>
<td>Minor</td>
<td>1</td>
</tr>
</tbody>
</table>
Section 2- Likert Scale Statements

1. I want to pursue a position in a restaurant operation.

Mean 3.73

1 strongly disagree 3 2.30%
2 disagree 3 2.30%
3 neutral 4 9.10%
4 agree 10 22.70%
5 strongly agree 24 54.50%

2. I want to pursue a position in a hotel operation.

Mean 2.75

1 strongly disagree 8 18.20%
2 disagree 8 18.20%
3 neutral 18 40.90%
4 agree 7 15.90%
5 strongly agree 3 2.30%

3. I want to pursue a position in a bakery.

Mean 3.36

1 strongly disagree 4 9.10%
2 disagree 6 13.64%
3 neutral 15 34.09%
4 agree 8 18.18%
5 strongly agree 11 25.00%

4. I think of myself as a manager.

Mean 3.56

1 strongly disagree 0 0.00%
2 disagree 3 2.30%
3 neutral 17 38.64%
4 agree 20 45.50%
5 strongly agree 4 9.09%
5. I think of myself as a technician.

Mean 2.43

1 strongly disagree 11 25.00%
2 disagree 13 29.55%
3 neutral 13 29.55%
4 agree 3 2.30%
5 strongly agree 4 9.09%

6. I came to college to build technical skills.

Mean 3.84

1 strongly disagree 3 6.82%
2 disagree 2 4.55%
3 neutral 10 22.73%
4 agree 13 29.55%
5 strongly agree 16 36.36%

7. I came to college to build business skills.

Mean 3.84

1 strongly disagree 0 0.00%
2 disagree 1 2.27%
3 neutral 6 13.64%
4 agree 17 38.64%
5 strongly agree 20 45.45%

8. I came to college to build management skills.

Mean 4.11

1 strongly disagree 0 0.00%
2 disagree 1 2.27%
3 neutral 10 22.73%
4 agree 16 36.36%
5 strongly agree 17 38.64%

9. I came to college to build skills to match a planned career.

Mean 4.2

1 strongly disagree 1 2.27%
2 disagree 1 2.27%
3 neutral 9 20.45%
4 agree 10 22.73%
5 strongly agree 23 52.27%
10. I came to college to explore career possibilities.

Mean 3.65

1. strongly disagree 2 4.55%
2. disagree 7 15.91%
3. neutral 8 18.18%
4. agree 11 25.00%
5. strongly agree 16 36.36%

11. My future career plan involves business ownership.

Mean 4.06

1. strongly disagree 1 2.27%
2. disagree 6 13.64%
3. neutral 7 15.91%
4. agree 7 15.91%
5. strongly agree 23 52.27%

12. My future career plan involves business management.

Mean 4

1. strongly disagree 0 0.00%
2. disagree 4 9.09%
3. neutral 10 22.73%
4. agree 12 27.27%
5. strongly agree 18 40.91%

13. My future career plan involves line level operations.

Mean 2.95

1. strongly disagree 3 6.82%
2. disagree 7 15.91%
3. neutral 23 52.27%
4. agree 9 20.45%
5. strongly agree 2 4.55%

14. I work best under pressure.

Mean 3.13

1. strongly disagree 7 15.91%
2. disagree 2 4.55%
3. neutral 18 40.91%
4. agree 12 27.27%
5. strongly agree 5 11.36%
15. I work best in a structured environment.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>4.55%</td>
</tr>
<tr>
<td>Neutral</td>
<td>8</td>
<td>18.18%</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>47.73%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>13</td>
<td>29.55%</td>
</tr>
</tbody>
</table>

Mean: 4

16. I prefer giving orders to taking orders.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>4.55%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>2.27%</td>
</tr>
<tr>
<td>Neutral</td>
<td>18</td>
<td>40.91%</td>
</tr>
<tr>
<td>Agree</td>
<td>12</td>
<td>27.27%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11</td>
<td>25.00%</td>
</tr>
</tbody>
</table>

Mean: 3.68

17. I enjoy working as part of a team.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>2.27%</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>6.82%</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>47.73%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>19</td>
<td>43.18%</td>
</tr>
</tbody>
</table>

Mean: 4.31

18. I enjoy working as an individual.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>2.27%</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>9.09%</td>
</tr>
<tr>
<td>Neutral</td>
<td>13</td>
<td>29.55%</td>
</tr>
<tr>
<td>Agree</td>
<td>12</td>
<td>27.27%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>14</td>
<td>31.82%</td>
</tr>
</tbody>
</table>

Mean: 3.77

19. I enjoy working with the public.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>2.27%</td>
</tr>
<tr>
<td>Neutral</td>
<td>11</td>
<td>25.00%</td>
</tr>
<tr>
<td>Agree</td>
<td>18</td>
<td>40.91%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>14</td>
<td>31.62%</td>
</tr>
</tbody>
</table>

Mean: 4.02
20. I enjoy innovation over execution of existing standards.

<table>
<thead>
<tr>
<th>Mean</th>
<th>3.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 strongly disagree</td>
<td>0</td>
</tr>
<tr>
<td>2 disagree</td>
<td>5</td>
</tr>
<tr>
<td>3 neutral</td>
<td>14</td>
</tr>
<tr>
<td>4 agree</td>
<td>14</td>
</tr>
<tr>
<td>5 strongly agree</td>
<td>11</td>
</tr>
</tbody>
</table>

21. I enjoy perfectly executing a recipe.

<table>
<thead>
<tr>
<th>Mean</th>
<th>3.97</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 strongly disagree</td>
<td>18</td>
</tr>
<tr>
<td>2 disagree</td>
<td>12</td>
</tr>
<tr>
<td>3 neutral</td>
<td>10</td>
</tr>
<tr>
<td>4 agree</td>
<td>3</td>
</tr>
<tr>
<td>5 strongly agree</td>
<td>1</td>
</tr>
</tbody>
</table>

22. I expect to be in top management within two years of graduation.

<table>
<thead>
<tr>
<th>Mean</th>
<th>3.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 strongly disagree</td>
<td>3</td>
</tr>
<tr>
<td>2 disagree</td>
<td>10</td>
</tr>
<tr>
<td>3 neutral</td>
<td>19</td>
</tr>
<tr>
<td>4 agree</td>
<td>10</td>
</tr>
<tr>
<td>5 strongly agree</td>
<td>2</td>
</tr>
</tbody>
</table>

23. I expect to work in a corporate environment after college.

<table>
<thead>
<tr>
<th>Mean</th>
<th>3.09</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>2 disagree</td>
<td>13</td>
</tr>
<tr>
<td>3 neutral</td>
<td>19</td>
</tr>
<tr>
<td>4 agree</td>
<td>9</td>
</tr>
<tr>
<td>5 strongly agree</td>
<td>2</td>
</tr>
</tbody>
</table>

24. I expect to work in a family business after college.

<table>
<thead>
<tr>
<th>Mean</th>
<th>2.77</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 strongly disagree</td>
<td>3</td>
</tr>
<tr>
<td>2 disagree</td>
<td>6</td>
</tr>
<tr>
<td>3 neutral</td>
<td>19</td>
</tr>
<tr>
<td>4 agree</td>
<td>10</td>
</tr>
<tr>
<td>5 strongly agree</td>
<td>6</td>
</tr>
</tbody>
</table>
25. I plan to be self employed within 2 years after college

Mean

2.72

1 strongly disagree 6 14%
2 disagree 3 7%
3 neutral 15 34%
4 agree 13 30%
5 strongly agree 7 16%
Appendix C. IRB Approval

November 27, 2006

Jamie Rotter
133 MacDonald Hall
SUNY College of Technology at Delhi
Delhi, New York 13753

RE: The Future of Culinary Arts Education
Protocol #: 0002-01.
Review: Exempt.

Dear Jamie,

Your proposal was approved by the SUNY Delhi Institutional Review Board on November 27, 2006. The proposal will be due for continuing review on November 27, 2007.

There are five conditions attached to this approval letter:

• No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date. All unanticipated or serious adverse events must be reported to the IRB within 5 days.
• All protocol modifications must be IRB approved prior to implementation.
• Store research records containing the subject’s personal identifiers in locked storage with restricted access.
• Protocols must be re-approved yearly by the IRB, who will notify you prior to the expiration date. You must submit 5 weeks in advance of the expiration.
• Notify IRB of study completion: submit a 1–2 paragraph summary of study results to the IRB when the study is terminated or completed and after data analysis is complete.

Please feel free to contact me with any questions or concerns.

Sincerely,

Mary Pat Lewis, PhD, RN
Interim Chair, SUNY Delhi IRB
Appendix D-
Graphic Illustrations of Likert Survey Responses

1. I want to pursue a position in a restaurant.
   - strongly agree, 5, 54%
   - agree, 4, 23%
   - neutral, 3, 9%
   - disagree, 2, 7%
   - strongly disagree, 1, 7%

2. I want to pursue a position in a hotel.
   - strongly agree, 2, 2%
   - agree, 17%
   - neutral, 43%
   - disagree, 20%
   - strongly disagree, 19%
3. I want to pursue a position in a bakery.

- strongly agree, 5, 25%
- strongly disagree, 1, 9%
- disagree, 2, 14%
- agree, 4, 18%
- neutral, 3, 34%

4. I think of myself as a manager.

- strongly agree, 5, 10%
- strongly disagree, 1, 0%
- disagree, 2, 2%
- agree, 4, 48%
- neutral, 3, 40%
5. I think of myself as a technician.

- strongly agree, 5, 10%
- agree, 4, 2%
- neutral, 3, 31%
- disagree, 2, 31%

6. I came to college to build technical skills.

- strongly agree, 5, 35%
- agree, 4, 30%
- neutral, 3, 23%
- disagree, 1, 7%
7. I came to college to build business skills.

- Strongly disagree, 1, 0%
- Strongly agree, 5, 45%
- Disagree, 2, 2%
- Neutral, 3, 14%
- Agree, 4, 39%

8. I came to college to build management skills.

- Strongly disagree, 1, 0%
- Strongly agree, 5, 39%
- Disagree, 2, 2%
- Neutral, 3, 23%
- Agree, 4, 36%
9. I came to college to build skills to match a planned career.

- **Strongly agree**, 5, 53%
- **Neutral**, 3, 20%
- **Agree**, 4, 23%
- **Disagree**, 2, 2%
- **Strongly disagree**, 1, 2%

10. I came to college to explore career possibilities.

- **Strongly agree**, 5, 36%
- **Neutral**, 3, 18%
- **Agree**, 4, 25%
- **Disagree**, 2, 16%
- **Strongly disagree**, 1, 5%
11. My future career plan involves business ownership.

- strongly agree, 5, 52%
- neutral, 3, 16%
- agree, 4, 16%
- disagree, 2, 14%
- strongly disagree, 1, 2%

12. My future career plan involves business management.

- strongly agree, 5, 41%
- neutral, 3, 23%
- agree, 4, 27%
- disagree, 2, 9%
- strongly disagree, 1, 0%
13. My future career plans involve line level operations.

- strongly agree, 5, 5%
- agree, 4, 20%
- neutral, 3, 52%
- disagree, 2, 16%
- strongly disagree, 1, 7%

14. I work best under pressure.

- strongly agree, 5, 11%
- agree, 4, 27%
- neutral, 3, 41%
- disagree, 2, 5%
- strongly disagree, 1, 16%
15. I work best in a structured environment.

- strongly agree, 5, 30%
- neutral, 3, 18%
- agree, 4, 47%
- disagree, 1, 0%
- strongly disagree, 2, 5%

16. I prefer giving orders to taking orders.

- strongly agree, 5, 25%
- neutral, 3, 41%
- agree, 4, 27%
- disagree, 2, 2%
17. I enjoy working as part of a team.

- strongly agree, 5, 43%
- agree, 4, 48%
- neutral, 3, 7%
- disagree, 2, 2%
- strongly disagree, 1, 0%

18. I enjoy working as an individual.

- strongly agree, 5, 32%
- neutral, 3, 30%
- disagree, 2, 9%
- strongly disagree, 1, 2%
- agree, 4, 27%
19. I enjoy working with the public.

- Strongly disagree, 1, 0%
- Disagree, 2, 2%
- Strongly agree, 5, 32%
- Agree, 4, 41%
- Neutral, 3, 25%

20. I enjoy innovation over execution of existing standards.

- Strongly agree, 5, 25%
- Agree, 4, 32%
- Disagree, 2, 11%
- Neutral, 3, 32%
21. I enjoy perfectly executing a recipe.

- Agree, 4, 7%
- Neutral, 3, 23%
- Disagree, 2, 27%
- Strongly agree, 5, 3%
- Strongly disagree, 1, 40%

22. I expect to be in top management within two years of graduation.

- Agree, 4, 23%
- Neutral, 3, 42%
- Disagree, 2, 23%
- Strongly agree, 5, 5%
- Strongly disagree, 1, 7%
23. I expect to work in corporate environment after graduation.

- strongly agree, 5, 21%
- agree, 21%
- strongly agree, 5, 5%
- neutral, 4, 42%
- disagree, 2, 29%
- strongly disagree, 1, 3%
- disagree, 2, 29%

24. I expect to work in a family business after college.

- strongly agree, 5, 14%
- disagree, 2, 14%
- strongly disagree, 1, 7%
- neutral, 3, 42%
- agree, 4, 23%
25. I plan to be self employed within two years after college.

- strongly agree, 5, 16%
- agree, 4, 30%
- neutral, 3, 33%
- disagree, 2, 7%
- strongly disagree, 1, 14%
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