EXPERIENTIAL LEARNING, GRADUATION, AND JOB PLACEMENT: PERSPECTIVES OF CULINARY ARTS EDUCATION PROGRAMS USING DINING ROOM SERVICE CURRICULUM IN THE UNITED STATES OF AMERICA

David S. Fowler

Ph.D., Louisiana State University Shreveport, Shreveport, Louisiana, United States. Email: david.fowler@lsus.edu

Abstract

The purpose of this study is to investigate the impact of dining room service as experiential learning in culinary arts programs across the United States. It is possible that programs that utilize this type of service-based learning as part of their advertised curriculums may experience augmented results in graduation rates and student employment opportunities. During the research, the author observed dining room service in numerous programs while patronizing these institutions of higher education. Public domain quantitative data was analyzed concerning graduation rates and post-graduation job placement statistics. It is evident that experiential learning is of significant benefit to budding students across multiple fields of endeavor, and culinary arts is no different. Students are gaining invaluable knowledge and experience through these forms of scholarship and are reaping the rewards in real-world employment. Because of these programs, the sustainability of a supply of well-educated culinary professionals is augmented.

Keywords: *Culinary Arts Education, Experiential Learning, Dining Room Service, Graduation Rates, Employment Rates*

Introduction

Culinary arts programs are alive and well within the United States of America. Currently, over 12,000 students across almost 300 institutions of higher education are graduating annually with their culinary arts diplomas and certifications (*Culinary Arts and Chef Training*, 2022). It is apparent that this is a viable field of educational endeavor as many students are finishing their degrees and entering the workforce as well-prepared budding potential chefs. As a hands-on field, culinary arts education deploys numerous forms of experiential learning. This type of education has proven successful in many types of programs, from vocational to professional, and culinary arts is no different.

Experiential learning has achieved a paramount appointment in higher education as an effective way for students to acquire and enhance beneficial skills and abilities while preparing for post-graduation employment. The hospitality industry is reliant upon potential personnel who are well-prepared for this competitive and demanding field of endeavor. Colleges, universities, technical institutions, and trade schools have embraced culinary arts as enticing offerings to a multitude of students who desire to enter the fascinating world of food preparation. An explosion of programs has been realized over the past few decades, as culinary students fill higher education classrooms, kitchens, bakeries, and dining rooms as they aspire to become the next generation of admirable chefs.

Many culinary arts programs offer experiential learning in the form of dining room service offered to the public as a component of the required curriculum. This study considers personal observations through active participation as a consumer of culinary school dining room service. As an expert in dining service, relevant observations were recorded for analysis of service quality and rigor. The qualified researcher exhibits extensive relevant practitioner and scholarly knowledge in culinary arts, hospitality management, and general business fields.

The study also associates the qualitative observations with quantitative data concerning graduation and employment rates of selected culinary schools that use live dining room service as part of the curriculum, and a comparison to those that do not advertise offering this experiential learning.

Experiential learning in the culinary arts field should demonstrate positive correlations with graduation and employment rates concerning these educational programs. These observed measurable aspects in participatory

Department of Hotel Management and Catering Technology, BIT-Mesra, Ranchi-835215

programs should surpass those that do not accentuate live dining service in their curriculums.

The inquiry provides a high-level overview of observed hospitality developmental skills and an analysis of public-domain quantitative information concerning graduation and job placement rates within selected culinary programs. A review of the current literature reveals there is a gap in the knowledge available concerning dining room service as experiential learning and its impact on graduation and employment recruitment in culinary arts programs. Because of the gap, this study proposes two research questions:

- What is the impact (graduation and job placement rates) of dining room experiential learning in these programs?

- What is the difference in impact between programs that advertise dining room service as part of the curriculum and those that do not?

Literature Review

A review of relevant literature commenced formulating a basis for the research inquiry. The study proposes research into dining room service experiential learning in culinary arts programs and its impact on student results. An exploration of literature concerning experiential learning in a general higher education context and culinary arts was facilitated by using a targeted lexical approach. Keywords included *culinary arts, experiential learning, higher education,* and *impact* and were utilized to search for pertinent academic literature concerning these subjects. Google Scholar was the primary search tool used during the study. Augmentation of the search results was supplemented through a query of electronic library databases from Lander University, New Mexico State University, Texas Woman's University, and the University of Texas at Tyler.

A significant sample of over forty articles was retrieved, submitted to a Mendeley repository, and reviewed for applicable information to develop an appropriate framework for the study.

Experiential Learning in Higher Education

Experiential learning in higher education demonstrates advantages to the student that are not necessarily achieved solely in the classroom. Experiential learning "helps students both to bridge classroom study and life in the world and to transform inert knowledge into knowledge-in-use. It rests on theories of experiential learning, a process whereby the learner interacts with the world and integrates new learning" (Eyler, 2009, p. 24).

This type of instruction is formally evident in higher education for over one hundred years. Empirical education through experiential learning can be traced back to an engineering program during the early 1900s at the University of Cincinnati in the United States of America. This would become a progressive trend as over 1,000 institutions of higher education would adopt such programs by the 1950s (Lee & Dickson, 2010).

Positive results are realized within the realm of experiential learning as student engagement is noticeably increased and assessment results are improved across multiple disciplines (McCarthy & McCarthy, 2006).

Students are more inclined to complete their programs within the proscribed time frames advertised by curriculum designers and retention rates are subject to more robust numbers as students find value in the practical application of knowledge (Jin et al., 2019; Lee & Dickson, 2010). As such, graduation rates have significantly benefited as numbers are driven positively through the realization of increased student retention that is enhanced by practical hands-on education (Young, 2008).

Across most majors, practical knowledge is important to possess as employers recruit graduates with a real-world understanding that might not be found within the confines of a traditional classroom. This type of learning applies practical knowledge related to the students' majors and relevant career goals (Lee & Dickson, 2010). This is a win-win for the graduate and the potential employer. Therefore, job placement and employment recruitment are improved for the budding graduate with practical experience, and a potential employee satisfaction boost could be realized (Jin et al., 2019; Lee, 2007).

Experiential learning, as an institution, is not used in just vocational and professional programs. It can apply to many majors in higher education. Evidence is found that practical knowledge is garnered through many types of experiential learning in programs of liberal arts education, pre-professional programs, service-based majors, as well as vocational hands-on curriculums (Kolb & Kolb, 2017). There are many different approaches to experiential learning and these are evident in their diverse offerings. Each type has its definitive purpose reliant on the environment it resides in.

One of the most common forms of work-related education is the internship (Eyler, 2009). An internship provides the opportunity for a student to gain practical on-the-job experience with an off-campus temporary employer, paid or unpaid, over a dictated period during the student's course of study. Internships afford a student to usually work part-time in an environment that will provide invaluable experience without conflicting with current

curriculum studies in their academic pursuit. The value realized with this type of experiential learning to the student is in accelerated job probabilities after graduation as potential employers utilize the internship to recruit and filter out possible full-time employees (D'Abate et al., 2009).

An apprenticeship also provides a hands-on approach to gaining valuable practical knowledge in a particular segment of occupation. However, an apprenticeship differs from an internship in the fact that the apprenticeship is a paid position, with usually full-time employment, and work is dictated to the apprentice in the same manner as a regular employee. However, the apprentice is under the watchful eye of a senior member of the team to mentor and guide them along their path to enlightenment in the field. A hands-on on-the-job training approach is deployed, and apprentices can take what they have learned and move to another place of employment, or they may become permanent employees over time. Apprenticeships or work-integrated learning programs offer great advantages. "The role of work-integrated learning in students' career development and its impact on graduate employability were perceived to be the most compelling advantages to student participation in work-integrated learning programs" (Sattler et al., 2011, p. 28).

The practicum is deployed within the students' institution of learning as a form of experiential learning to put knowledge into practice. This is usually facilitated under the supervision of a faculty member, administrator, or mentor. Practicums are used in all fields of study including medicine, psychology, social work, and vocational programs. The public might also be involved as voluntary "consumers" or "patrons" of the services provided during a practicum. However, many times practicums are private internal affairs. The positive impact of the practicum model is apparent. "Students reported that their practicum experiences enhanced their understanding of content knowledge" (Simons et al., 2012, p. 325). Dining room service in culinary arts programs could fall under the practicum definition umbrella.

Service learning can be construed as similar to the practicum approach to experiential learning. Service learning is putting garnered knowledge into practice to serve the community. For instance, students may be involved with community projects to assist underprivileged citizens with building homes or assisting with the financial analysis of a non-profit organization that serves the public. "Service-learning is an evolving pedagogy that incorporates student volunteering into the dynamics of experiential learning and the rigors and structure of an academic curriculum. In its simplest form, service-learning entails student volunteering in the community for academic credit" (Mooney & Edwards, 2001, p. 181). Service learning affords opportunities for students to help others while gaining valuable experience in the field. Culinary schools also deploy types of service-learning in conjunction with practicums to feed the public.

Limited Literature Concerning Culinary Arts Education

Historically speaking, literature concerning experiential learning in higher education has focused on studies outside of the culinary arts realm. Much of the current knowledge available concentrates on programs that may be considered more traditional higher education subjects and majors (Burch et al., 2014). However, some literature is found concerning culinary arts programs in a hands-on learning context (Askren & James, 2021). It is without question that a foray into culinary arts education would be an expectation that this type of educational training would deploy a hands-on approach. Experiential learning is prevalent within the field as it is deemed necessary to put into practice lessons learned to achieve relevant cognition within the culinary arts arena.
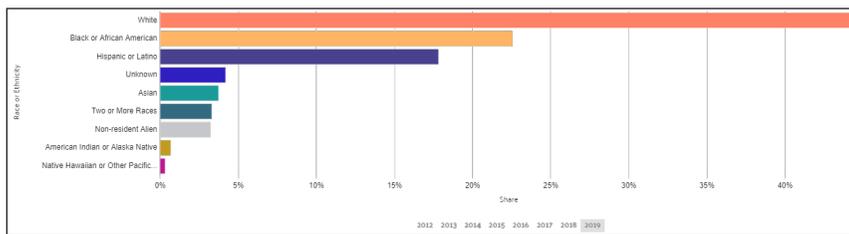
Culinary Arts Programs and Experiential Learning

Formal culinary arts education programs have been in existence in the United States since the Boston School for Cooking opened its doors and kitchens to promising students in 1879 (Mitchell, 2021). Since then, an explosion of hands-on training has commenced as many institutions as possible of higher education began offering vocational training and academic degrees in hospitality and culinary arts. Also, a burgeoning industry of private schools providing focused areas of cooking and baking study has emerged during the era of the proliferation of for-profit higher education. Currently, in the United States, there exists a multitude of institutions, approaching 300, providing multiple levels of degree designations including vocational certifications, associate's degrees, bachelor's degrees, and graduate credentials (Okumus, 2021). A distribution of culinary arts credentials granted in 2019 is illustrated in Fig. 1.
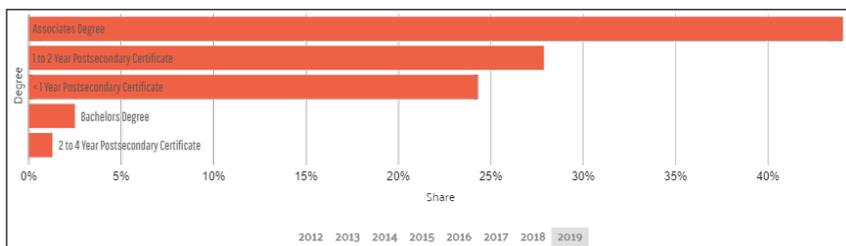
Note. This data was retrieved from Data USA. *Culinary Arts and Chef Training*. (2022). Data USA. https://datausa.io/profile/cip/culinary-arts-chef-training

Fig. 1: **Total Degrees Awarded in Culinary Arts Education Programs by Percentage and Type in 2019**

Department of Hotel Management and Catering Technology, BIT-Mesra, Ranchi-835215

The field is attractive to a diverse population as many demographics are represented in current graduation statistics. Fig. 2 illustrates the diverse population of recent graduates from culinary arts programs.

Note. This data was retrieved from Data USA. *Culinary Arts and Chef Training*. (2022). Data USA. https://datausa.io/profile/cip/culinary-arts-chef-training

Fig. 2: Percentage of Culinary Arts Degrees Awarded by Race in 2019

Most culinary arts education programs offer some sort of experiential learning inside and outside the walls of the institution to instill practical knowledge in its students.

Internships are an invaluable form of experiential learning in culinary arts programs. Many of the two-year community, junior, and technical colleges across the nation implement this type of experience into their programs (Kalyoncu, 2019). Not only that, but many also require an internship as part of the completed curriculum for graduation. A student may work temporarily for a food service employer in a restaurant, hotel, gaming industry, cruise, airport, institutional cafeteria, or catering service.

Opportunities are relatively unlimited to the different types of experience that might be gained in multiple segments of the culinary industry. Internships allow students to realize an additional level of engagement with real-world industry and hence an appropriate level of satisfaction in their studies (Abdulsalam, 2015).

It is possible that internships may also provide kitchen managers, chefs, and food-service owners to realize the value in the recruitment of quality students for possible future full-time employment. The opportunity to gauge performance during an internship concerning the student is a valuable commodity in recruitment processes (Jin et al., 2019).

Historically, an apprenticeship has been the standard method of education for centuries in Europe as knowledge is handed down from chef to apprentice

in an on-the-job training environment (Miles, 2007). Before the evolution of formal culinary arts programs, this was the type of learning that most burgeoning cooking professionals took in their pursuit of a lifelong career. This is still a method of gaining knowledge for many hopeful chefs as this practice is alive and well (Emms, 2005). However, this method of experiential learning is also deployed in the higher education arena as a valid form of learning, and it is a beneficial practice implemented for the graduate and the employer.

In culinary arts programs, apprenticeships are usually deployed near or after graduation as the student is possibly looking for full-time employment that will help him or her achieve professional growth and success within the field. However, the apprenticeship might be taken concurrently with a formal culinary arts education. Whatever the case may be, "the learner observes and assists a master at work gradually gaining competencies by taking responsibility for progressively more challenging aspects of the task in an apprenticeship" (Williams, 2005, p. 74). Once the student gains and demonstrates a reasonable understanding of the knowledge given by a mentor, the apprentice may stay in the current environment as a full-time employee under the chef he or she trained under. They also may be the apprentice that the training chef has been "looking for" as his or her replacement, or the student could move on to another kitchen to put into practice the experiences gained over the apprenticeship period.

Apprenticeships have launched many famous chefs' careers across the centuries, including many popular modern culinarians. Jamie Oliver, Gordon Ramsay, and Clare Smyth all began their culinary careers as apprentices in European kitchens (Lewis, 2015). It is possible that the apprenticeship, deployed by formal culinary arts programs, could launch the next celebrity chef, and this is a possible attractive enticement to potential culinary students.

The practicum, in its purest form, is deployed within the confines of the institution providing the educational service. This is meant to be a hands-on demonstration of the lessons learned within the classroom and laboratory.

Test kitchens are used for practical application assessment (Rinsky, 2012) of cooking, baking, charcuterie, Garde manger, and all other components of culinary arts. This environment provides a similar ambiance the student will face upon graduation in a working kitchen. Test kitchens are usually located on campus; however, some institutions may deploy a method of testing outside of the campus environment, based on the qualifiers of the assessment. For instance, if someone is being tested on institutional cooking, the test kitchen could be located at a location more suitable, such as a cafeteria.

Department of Hotel Management and Catering Technology, BIT-Mesra, Ranchi-835215

Furthermore, the practicum can be utilized in culinary arts education as an opportunity for students to gain practical experience, at their schools, as practicums are morphed into real-world dining. Patrons from the public are invited to participate as paying clientele to reap the rewards of students presenting their best wares of culinary delights and excellent customer service.

This is not necessarily a new idea; however, many schools are creating spaces within their institutions of secondary education to provide real-world experiences for the students, and to provide a service to society. Dining rooms are being created as public places to serve a hungry community. This is an invaluable tool as students take on all responsibilities in the dining room experience, under the careful supervision of instructors and administrators, to provide a distinguished culinary encounter. This is a win-win for the school and the student. The culinary pupil gains knowledge, and the school may receive financial gain. Also, this is an effective recruitment tool for culinary schools to deploy. A good dining experience that brings value to the customer will propel positive social feedback, and that can only be advantageous for future recruitment into the educational program and potential growth.

Dining room service is an integral part of culinary arts education. The programs that have progressed by adding this facet as part of the required curriculum are practicing the novel application of acquired knowledge. The student benefits, the institution benefits, and an adoring public certainly benefits. However, without the perceived high quality of the service, the institution could suffer. Institutions are cognizant that a paying, and possibly a non-paying, customer deserves a pleasant experience when patronizing an eating establishment. Being greeted at the door by a host or hostess, interacting with wait staff, receiving attractive food offerings that taste good, and finally receiving quality value are all part of the dining event. For the most part, quality management (Lyu et al., 2016) assurance checks are in place to ensure this is something the customer experiences.

Service learning is the practice of serving the community positively while implementing acquired skills (Lin et al., 2017). Culinary arts programs have an opportunity to serve the greater populace that might require community support. For instance, many schools provide reduced or free meals to disadvantaged members of society. Soup kitchens, rescue missions, and homeless shelters have accepted volunteer work from culinary programs. While this is practical experience that is good for the learner, society benefits from the skills and knowledge that these students can actively distribute. This is also an opportunity for schools to give back to communities that have supported their actions for years.

Methodology

This study implements a mixed-methods approach to analysis. The purpose is to document dining room service as experiential learning in culinary arts programs and analyze its impact on student outcomes. Observed qualitative facets of service were documented and used to validate the dining room experiences within the programs. The researcher has been frequenting dining rooms of culinary arts programs over the past few years and engaged with administrators, students, and faculty of the institutions. The qualitative information supplements public quantitative data concerning graduation and job placement rates. A comparison is formulated to assess the differences in the rates between programs that advertise and utilize dining room service as an experiential learning curriculum and those that do not. A sample of private vocational schools, two-year public institutions, and four-year colleges and universities is utilized for the study.

Observations

Six different dining room observations were performed over two years at five public education schools and one that is private. The researcher transcribed notes immediately after the sessions to effectively recall the qualitative data. Records regarding what types of services were offered, the quality of the service and products, the ambiance of the session, and the overall value of the experience were considered. The observations were utilized to validate the offerings of true dining experiences in an educational setting. A minimum overall average score of 3 was used to validate the experience as acceptable. The dining room experience rubric is found in Fig. 3.

Category	Poor	Needs Improvement	Acceptable	Accomplished	Exemplary
	1	2	3	4	5
Food Taste/Quality/Temperature					
Food Appearance					
Timeliness of Service					
Cordiality and Knowledge of Staff					
Ambiance/Cleanliness					
Overall Value					
Total					

Note: This rubric was created by the researcher based on substantial practitioner experience in the dining industry

Fig. 3: Dining Room Experience Grading Rubric

Department of Hotel Management and Catering Technology, BIT-Mesra, Ranchi-835215

Comparative Quantitative Data

Quantitative data has been realized through public domain sources regarding student graduation and job placement rates in culinary arts programs. However, more data is beneficial to draw viable conclusions regarding validity. It is essential to gather enough data to make an informed conclusion regarding the impact of advertised dining room services as experiential learning impact on student outcomes. Many schools advertise job placement rates of 100%, or close to it. However, in what context is a question that is relatively difficult to answer. Comparisons are made based on whether programs advertise or utilize public dining room service as a requirement of the curriculum. Also, a simple statistical analysis is performed for validity. A sample of applicable programs is found in Table 1.

Table 1: List of Comparable Programs

Institution (Private or Public Support)	Dining Room Experiential Learning	Degree Type (Vocational, Bachelor, Associate)	Graduation Rate Relative to Program Length (150%)	Job Placement for Graduates
Two Year Public	N	A	10%	94%
Four Year Private	N	B	11%	25%
Two Year Public	N	A	20%	N/A
Two Year Public	N	A	20%	65%
Two Year Public	N	A	28%	80%
Two Year Public	N	A	40%	90%
Two Year Public	N	A	46%	97%
Two Year Public	N	A	50%	79%
Two Year Public	Y	A	53%	N/A
Four Year Public	N	B,V	60%	95%
Four Year Private	Y	V	66%	94%
Two Year Public	N	A,V	70%	75%
Two Year Private	Y	V	70%	86%
Two Year Public	Y	A	72%	100%
Two Year Public	N	A	74%	88%
Two Year Public	N	A	75%	92%
Four Year Private	Y	B	75%	94%
Two Year Private	Y	V	81%	68%

Results

Results concerning the correlation between student outcomes compared to dining room service offerings are presented with mixed outcomes. Statistical analysis with current data shows a positive correlation between programs that include dining room service as part of the curriculum and graduation rates. Results are included in Table 2.

Table 2: Graduation Rates for Programs With and Without Advertised Dining Room Experiential Learning

Dining Room Service Y/N	M	SD	SEM	n
Yes	69.5	9.52	3.89	6
No	42	24.22	6.99	12

Note: M, SD, and SEM are used to represent the mean, standard deviation, and standard error of the mean respectively

The results are significant as the graduation rate for dining room usage in curriculum surpasses those that do not by an average, or mean, of 69.5% compared to 42%. The Value of r is 0.5519, and the P-value is 0.018, which is significant at $p<.05$.

Statistical analysis with current data shows a positive correlation, albeit insignificant, between programs that include dining room service as part of the curriculum and job placement rates.

Job placement rates are quite similar with an 88.4% average for inclusive programs and 80% without dining room service as experiential learning. The P-value is 0.42 which is not statistically significant at $p<.05$. An illustration of the results is found in Table 3.

Table 3: Job Placement Rates for Programs With and Without Advertised Dining Room Experiential Learning

Dining Room Service Y/N	M	SD	SEM	n
Yes	88.4	12.44	5.56	5
No	80	20.72	6.25	11

Note: M, SD, and SEM are used to represent the mean, standard deviation, and standard error of the mean respectively.

Discussion and Conclusion

The quantitative data provides a positive correlation concerning the different aspects of dining room service in culinary arts educational institutions. The impact of dining room experiential learning is positive on student outcomes concerning job placement and graduation. Students are reaping benefits from experiential learning in these programs, and the results are attractive to potential learners. Programs that deploy dining room service as part of their curriculums are outperforming those that do not. Because of this fact, it is assumed that administrators and educators could use this information to further their existing programs with the development and implementation of dining room service as part of experiential learning curriculums.

Implications could also include valuable knowledge to institutions considering starting culinary arts programs. It could provide a starting point for understanding the value of dining room service as an integral part of curriculum development and design.

Future research is possible to build on the results of the study. However, larger samples could be utilized for more in-depth investigation and analysis. Larger samples taken over longer periods could produce significantly different results.

In conclusion, this is a study that provides substantial evidence of the positive impacts of experiential learning in culinary arts education programs in the United States. Furthermore, the disparity in graduation rates between the sample of those that do not deploy this type of learning and those that do is substantial. It could facilitate further investigation, and also provide validity to programs advertising these learning modalities within their curriculums. It is without question a valuable part of effective learning and culinary arts programs are benefiting from its implementation.

References

- Abdulsalam, N. M. (2015). *Application of an andragogical approach and experiential learning for teaching culinary nutrition to culinary arts students* (ProQuest dissertations and theses. Clemson University).

- Andersson, T. D., & Mossberg, L. (2004). The dining experience: Do restaurants satisfy customer needs? *Food Service Technology*, *4*(4), 171-177. doi:10.1111/j.1471-5740.2004.00105.x

- Askren, J., & James, W. (2021). Experiential learning methods in culinary course can bridge the gap: Student perceptions on how hands-on curriculum prepares them for industry. *Journal of Hospitality and Tourism Education*, *33*(2), 111-125. doi:https://doi.org/10.1080/10963758.2020.1791134

- Bradberry, L. A., & De Maio, J. (2019). Learning by doing: The long-term impact of experiential learning programs on student success. *Journal of Political Science Education*, *15*(1), 94-111. doi:10.1080/15512169.2018.1485571

- Burch, G. F., Batchelor, J. H., Heller, N. A., Shaw, J., Kendall, W., & Turner, B. (2014). Experiential learning - What do we know? A meta-analysis of 40 years of research. *Developments in Business Simulation and Experiential Learning*, *41*, 279-283.

- Chaileuangleu, S., Chaiya, P., Batra, A., & Barnes, J. (2021). Factors affecting the culinary arts program development for preparing professional chefs in the food service industry in Thailand. *Social Science Asia*, *7*(1), 1-14. Retrieved from https://www.socialscienceasia.nrct.go.th/index.php/SSAsia/article/view/228

- Chandra, G. (2019). Is culinary school still worth it ? Four Chefs weigh in. *Food & Wine*, pp. 1-7. Retrieved from https://www.foodandwine.com/lifestyle/culinary-school-worth-it-four-chefs-weigh-in

- Culinary Arts and Chef Training. (2022). *Data USA*. Retrieved from https://datausa.io/profile/cip/culinary-arts-chef-training

- D'Abate, C., Youndt, M., & Wenzel, K. (2009). Making the most of an internship: An empirical study of internship satisfaction. *Academy of Management Learning and Education*, *8*(4), 527-539. doi:https://doi.org/10.5465/AMLE.2009.47785471

- Dalton, S. (2020). Disrupting culinary education: Making a case for a European curriculum framework for culinary higher education. *Dublin Gastronomy Symposium: 2020 Food and Disruption*.

- Deutsch, J. (2018). Can improvisation save culinary education? *Liminalities*, *14*(1), 169.

- Emms, S. M. (2005). *The modern journeyman: Influences and controls of apprentice style learning in culinary education*. Auckland University of Technology.

- Eyler, J. (2009). The power of experiential education. *Liberal Education*, *95*(4), 24-31. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=48666338&site=ehost-live

- Gilbert, B. L., Banks, J., Houser, J. H. W., Rhodes, S. J., & Douglas Lees, N. (2014). Student development in an experiential learning program. *Journal of College Student Development*, *55*(7), 707-713. doi:10.1353/csd.2014.0072

- Gillis, L., Whibbs, R., & Li, A. (2020). Future chefs' beliefs on the role of nutrition, diet, and healthy cooking techniques in culinary arts training for foodservice: A cross-cultural and gender perspective. *Journal of Culinary Science and Technology*. doi:10.1080/15428052.2020.1808138

- Henderson, S. (2014). Culinary arts integration: 12 PBL activities students can sink their teeth into. *Edutopia*. Retrieved from https://www.edutopia.org/blog/culinary-arts-integration-pbl-food-sarah-henderson-lori-holm

- Holik, M. (2019). The flipped classroom and its impact on student engagement and academic performance in a culinary arts, career and technical education program. *Journal of Research in Technical Careers*, *3*(2), 74. doi:10.9741/2578-2118.1072

- Jin, L., Doser, D., Lougheed, V., Walsh, E. J., Hamdan, L., Zarei, M., & Corral, G. (2019). Experiential learning and close mentoring improve recruitment and retention in the undergraduate environmental science program at an Hispanic-serving institution. *Journal of Geoscience Education*, *67*(4), 384-399. doi:https://doi.org/10.1080/10899995.2019.1646072

- Kalyoncu, M. (2019). Culinary arts associate degree program, faculty of open education, Anadolu University. *Journal of Tourism Leisure and Hospitality*, *1*(2), 95-97.

- Katula, R. A., & Threnhauser, E. (1999). Experiential education in the undergraduate curriculum. *Communication Education*, *48*(3), 238-255. doi:10.1080/03634529909379172

- Kolb, A. Y., & Kolb, D. A. (2017). Experiential learning theory as a guide for experiential educators in higher education. *Experiential Learning & Teaching in Higher Education, 1*(1), 7-45. Retrieved from https://nsuworks.nova.edu/elthe/vol1/iss1/7

- Lee, S. (2007). Increasing student learning: A comparison of students' perceptions of learning in the classroom environment and their industry-based experiential learning assignments. *Journal of Teaching in Travel and Tourism*, *7*(4), 37-54. doi:https://doi.org/10.1080/15313220802033310

- Lee, S., & Dickson, D. (2010). Increasing student learning in the classroom through experiential learning programs outside the classroom. *Journal of Hospitality and Tourism Education*, *22*(3), 27-34. doi:https://doi.org/10.1080/10963758.2010.10696982

- Lewis, M. (2015). *Celebrity chefs who started as apprentices*. Babington. Retrieved from https://babington.co.uk/blog/apprenticeship/celebrity-chefs/

- Li, L., Gray, D. E., John Lockwood, A., & Buhalis, D. (2013). Learning about managing the business in the hospitality industry. *Human Resource Development Quarterly*, *24*(4), 525-559. doi:10.1002/hrdq.21171

- Lin, P. M. C., Kim, Y. H., Qiu, H., & Ren, L. (2017). Experiential learning in hospitality education through a service-learning project. *Journal of Hospitality and Tourism Education*, *29*(2), 71-81. doi:https://doi.org/10.1080/10963758.2017.1297716

- Lyu, J., Li, M., & Wang, D. (2016). Experiential learning and its effectiveness from the perceptions of hospitality students. *Journal of Teaching in Travel and Tourism*, *16*(4), 296-315. doi:https://doi.org/10.1080/15313220.2016.1213149

- Maier, T. A., & Thomas, N. J. (2013). Hospitality leadership course design and delivery: A blended-experiential learning model. *Journal of Hospitality and Tourism Education*, *25*(1), 11-21. doi:10.1080/10963758.2013.777585

- McCarthy, P. R., & McCarthy, H. M. (2006). When case studies are not enough: Integrating experiential learning into business curricula. *Journal of Education for Business*, *81*(4), 201-204. doi:https://doi.org/10.3200/JOEB.81.4.201-204

- McKeever, A. (2013). *Culinary school the pros and cons of culinary education.* Eater. Retrieved from https://www.eater.com/2013/7/11/6408893/culinary-school-the-pros-and-cons-of-culinary-education

- Miles, R. (2007). Culinary education: Past, present practice and future direction. *International CHRIE Conference*, pp. 266-271. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.465.4628&rep=rep1&type=pdf#page=275

- Mitchell, M. (2021). *Why are internships and externships important for culinary school?* Auguste Escoffier School of Culinary Arts. Retrieved from https://www.escoffier.edu/blog/value-of-culinary-education/importance-of-internships-and-externships/

- Mooney, L. A., & Edwards, B. (2001). Experiential learning in sociology: Service learning and other community-based learning initiatives. *Teaching Sociology*, *29*(2), 181-194. doi:https://doi.org/10.2307/1318716

- Okumus, B. (2021). A meta-analysis of evolution of gastronomy and culinary education research published in top-tier culinary, hospitality, and tourism journals. *Journal of Foodservice Business Research*, *24*(1), 101-120. doi:https://doi.org/10.1080/15378020.2020.1865775

- Rahmawati, Y. (2018). The faculty management readiness and perception of students in implementing curriculum in culinary art education study program in Universitas Pendidikan Indonesia. *International Research Journal of Advanced Engineering and Science*, *3*(1), 40-44. Retrieved from http://irjaes.com/wp-content/uploads/2020/10/IRJAES-V3N1P481Y17.pdf

- Rinsky, G. (2012). *Test kitchen: An examination of a community college's assessment for graduating culinary arts students* (In ProQuest dissertations and theses, Capella University, issue October). Retrieved from https://search.proquest.com/docview/1282141675?accountid=10673%0Ahttp://openurl.ac.uk/

redirect/athens:edu/?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/v:
mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:ProQ
uest+Dissertations+%26+Theses+Global&a

- Sattler, P., Wiggers, R., & Arnold, C. (2011). Combining workplace training with postsecondary education: The spectrum of work-integrated learning (WIL) opportunities from apprenticeship to experiential. *Canadian Apprenticeship Journal*, *57*(5), 1-33. Retrieved from http://journals.sfu.ca/caj/index.php/caj-jca/article/viewArticle/74

- Simons, L., Fehr, L., Blank, N., Connell, H., Georganas, D., Fernandez, D., & Peterson, V. (2012). Lessons learned from experiential learning: What do students learn from a practicum/internship? *International Journal of Teaching and Learning in Higher Education*, *24*(3), 325-334. Retrieved from http://www.isetl.org/ijtlhe/

- Smith, G., & Cooper, C. (2000). Competitive approaches to tourism and hospitality curriculum design. *Journal of Travel Research*, *39*(1), 90-95. doi:10.1177/004728750003900112

- Stevens, P., Knutson, B., & Patton, M. (1995). Dineserv: A tool for measuring service quality in restaurants. *Cornell Hotel and Restaurant Administration Quarterly*, *36*(2), 56-60. doi:10.1177/001088049503600226

- Vazquez, J. (2018). *The relationship between student engagement and academic performance in culinary arts programs: A community college case study* (St. Thomas University). Retrieved from https://www.proquest.com/openview/e70f4950c427dc11ff8ac444ac0b2628/1?pq-origsite=gscholar&cbl=18750&diss=y

- Vogel, D., Sohn, A. P., & Gomes, K. (2021). Analysis of competencies models in culinary arts higher education. *Journal of Culinary Science and Technology*, *19*(2), 171-186. doi:10.1080/15428052.2020.1738299

- Williams, D. (2005). Contemporary approaches to hospitality curriculum design. *Consortium Journal of Hospitality and Tourism*, *9*(2), 69-83.

- Young, D. (2008). Improving Alabama's graduation rates. *Delta Kappa Gamma Bulletin*, *74*(4), 34-37.