

EXTERNSHIPS AND CONSTRUCTIVISM: A LONGITUDINAL JOURNEY TOWARD EXCELLENT EXPERIENTIAL OUTCOMES

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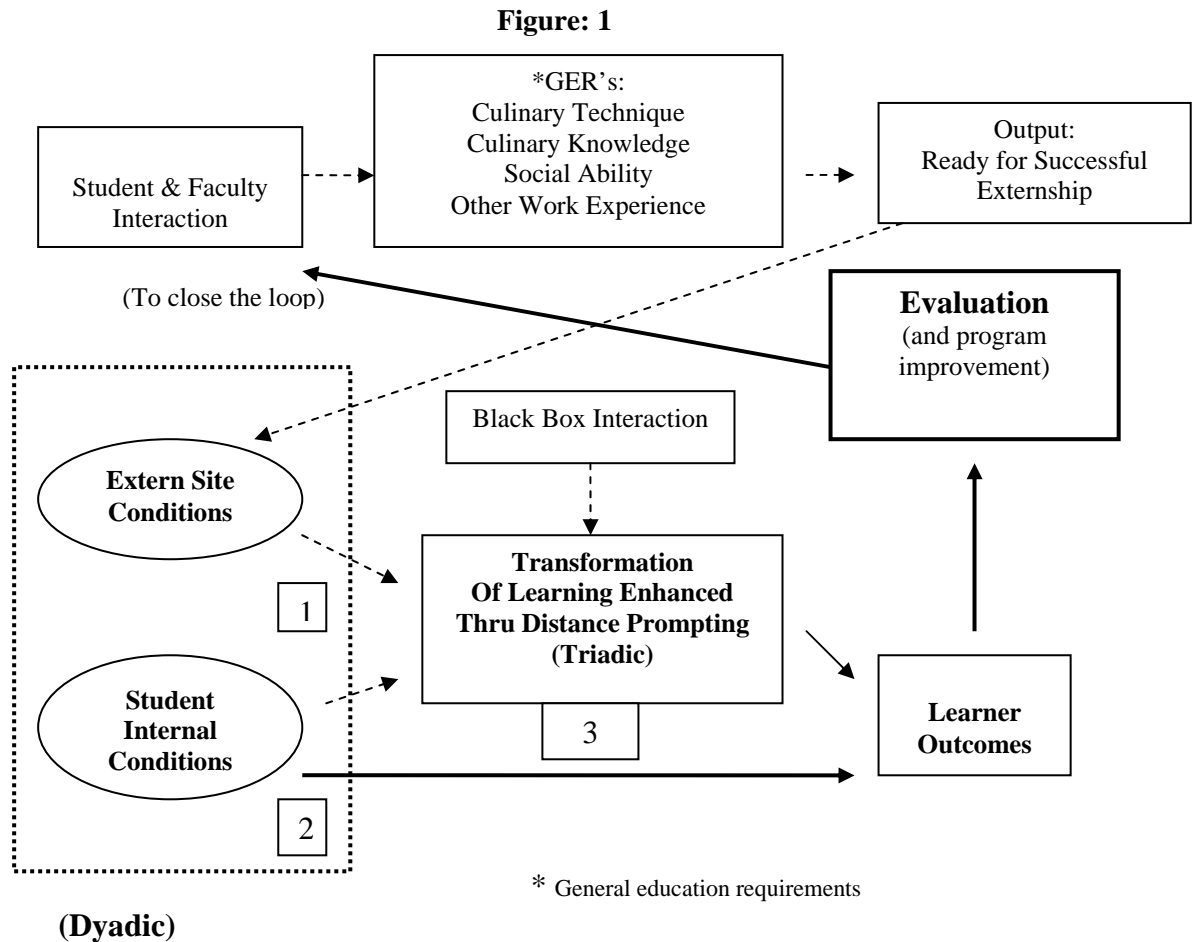
ABSTRACT

This research explores the results of a constructivist externship process (learner centered) to improve student cognitive learning processes. Many scholars believe liberal arts education and cooperative education should be treated as separate methodologies given the former involves critical thinking, and the latter is training oriented. The results presented in the study indicate that successfully bridging the gap between these two distinct learning schemes is possible through the use of distance prompts to help interpret environmental events for the students. Thus the student views the entire operation utilizing critical thinking embedded in applied theory to expand learning outcomes.

INTRODUCTION

In most educational circles, the externship, constitutively defined as a training program which is part of a course of study of an educational institution undertaken in private business, is associated with cooperative education historically viewed as training, and not of itself an actual educational discipline adhering to the traditional liberal arts mandate to increase the breadth of intellectual understanding. While educators follow this primary directive to educate students, externship sites are following their company mission to operate a successful business endeavor. Other factors that cloud the outcome objectives involve the learner's level of awareness and skill, and the volume level of the externship's site which may be prohibitive to achieving a multiple department experience because learner proficiency may not sufficiently match the operational pace of the externship site.

Triadic learning paradigm. In contrast to a dyadic educational scheme, where desired learning is assumed to be maximized through the student and externship interaction, inexperienced externs utilizing a triadic educational schema are not left to construct learning outcomes with a limited perspective. Thus we hypothesized that the preconceived questions, described as "distance prompts," could be useful as a way to lessen the variance which inherently exists between the static nature of the classroom, and the evolving atmosphere of the workplace. While the main inputs still combine the student and externship site, distance prompts, operationally defined as pertinent information-gathering questions that an experienced individual would almost instinctively seek to answer to assess operational methodologies leading to successful outcomes, when inserted into the transformation process could ensure desired learning direction. These insightful questions were designed for easy student compartmentalization by operational topic. As the student begins to gather parts of the operational puzzle, they begin to construct their own knowledge and generate additional questions on their own juxtaposed to the particularities of the extern site. Thus the inclusion of this additional learning component should provide more profound results because the extern, regardless of level of competency, could be learning about the whole operational framework as opposed to, for example, a single aspect due to competency limitations. Therefore any externship could theoretically result in more knowledgeable learning outcomes regardless of the student's experience level, or the extern site's respective teaching proficiencies or deficiencies as the prompts were constructed to provide logical, systematic inquiry to increase the student's awareness and thus his or her ability to assess, clarify, and acquire greater understanding of operational issues and methods.



As illustrated in figure 1, the (1) extern site conditions, in conjunction with the (2) student's internal conditions, is moderated by (3) the infusion of the distance prompts to significantly lessen the student-site knowledge variance and enhance the student's learning transformation by increasing the stocks and flows of knowledge taking place through more productive student-employer interaction. This process increases the overall effectiveness of the externship experience and stakeholder outcomes. The increased awareness of the forces affecting the marketplace, in conjunction with the operational methodology to address these forces, is a potential by-product of the distance mentoring prompt learning schema.

LITERATURE REVIEW

The initial challenge impacting all externship stakeholders is the fact that experiential educational programs are developed with academic purpose, but are designed for non-academic implementation (Petrillose & Montgomery, 1997/1998). There is a delicate balance to be struck between the theory of the classroom and the reality of operations. Constructing progressive learning experiences for students by building on the theory of the classroom and matching practice with preaching is a constant struggle (Titz & Wollin, 2002). Jonassen (1991) notes that many educators have applied constructivism to the development of learning environments and stressed the creation of real-world environments that employ the context in which learning is relevant. Thus, utilizing constructivist epistemology, the instructor functions as coach and analyzer of the strategies used to solve real-world problems, stress conceptual interrelatedness, and provide multiple representations or perspectives on the environmental content from which the student constructs knowledge (Prawat, 1996). Through the instructor's interpretive aid, and the student's collaborative input, instructional goals and objectives become negotiated and not simply imposed on the student thus learning should be internally controlled and mediated by the learner (Jonassen, 1994).

Wilson and Cole (1991) argued that the instructor should embed learning in a rich authentic problem-solving environment which provides for authentic versus academic contexts for learning, and learner control. Ernest (1995) posited several implications of constructivism derived from social perspectives such as sensitivity toward and attentiveness to the learner's previous constructions, and diagnostic teaching attempting to remedy learner errors and misconceptions. Honebein (1996) described seven goals for the design of constructivist learning environments: (1)

provide experience with the knowledge construction process; (2) provide experience in and appreciation for multiple perspectives; (3) embed learning in realistic and relevant contexts; (4) encourage ownership and voice in the learning process; (5) embed learning in social experience; (6) encourage the use of multiple modes of representation; and (7) encourage self-awareness in the knowledge construction process. Vygotsky (1978) argued that students' problem solving skills fall into categories such as skills which the student: (a) cannot perform, (b) may be able to perform, and (3) and can perform with help. Thus, with appropriate teacher assistance and guidance, students could perform tasks that would normally be slightly beyond their ability. Further, this knowledge construction takes place in individual contexts and through social negotiation, collaboration, and experience because the student plays a central role in mediating and controlling his or her learning through the use of primary sources of data (von Glasersfeld, 1996).

The static and reflective nature of the traditional liberal arts institutional philosophy and the evolution of the twenty-first century workplace atmosphere can resemble educational quicksand for students attempting to acclimate to the realities of the working world (Titz & Wollin, 2002; Eyler, 1993; Varty, 2000). Limited experience, in the majority of cases, does not allow the extern to anticipate and capitalize on all of the refined operational wisdom available from the externship site. This lack of experience is normally destined to become a disconnect between the extern and the employer as the student focuses on the tasks at hand with little perspective, or formulated logical inquiry methodology, in his or her knowledge gathering arsenal (Derry, 1996; Brown, Collins, & Duguid, 1989). In this regard, the student's efforts are scattered because they are unable to assimilate information quickly enough, therefore, never reaching a "threshold" (point of functional usability) level of understanding to apply their learned knowledge in a practical sense (Bestor, 1953).

Significance of the Study. This research was grounded in the proposition that externs are entering a successful working environment with extensive knowledge available in many operational areas which, potentially, could offer positive enhancement to the classroom material and its proper assimilation. The differences in these two environments can present formidable obstacles to students undertaking externships based on variances in knowledge, skill, and practical experience. We assume that most externship programs provide some prior advice or insight for the student, but away from the educational facility, the student is left with only his or her own mental acumen to derive useful knowledge and career enhancing experiences from the endeavor. Further, the instructor cannot prepare the student for all situational events possible during the externship. Hence, the purpose of this study was to test a constructivist methodology to improve the overall educational effectiveness of any student externship by blending theory with environmental interpretation aids to significantly narrow the gap between the classroom and the workplace.

METHODOLOGY

Profile of the respondents. The sample population of 72 culinary undergraduates participated in both first (sophomore) and second (senior) externships and consisted of 48 sophomores and 24 seniors. Of the total sample population, 40 externs were male and 32 externs were female. The responses from the study's participants were gathered over the past two years, and represent 100 percent of undergraduate externship participation.

Specifically, the students were given a formatted organizational chart addressing the following areas: (1) organization schema, (2) organizational policy, (3) internal politics, (4) management, (5) human resources, (6) marketing, and (7) internal controls. Insight-seeking questions will be included in each section to spur the curiosity of the student as he (she) delves into each of these areas during the externship. As each area is modular in design, no particular sequence was required in the information gathering process. Hence, the extern was free to randomly acquire information during the ebb and flow of the externship. The final research report represented a compilation of the sum of the information annexed during the experience, conjoined in the appropriate operational area, to create a synthesis of the extern site's whole strategic operational application from the critically-considered perspective of the extern. For explication purposes, table 1 provides a working model of specifics regarding applied theory underlying important distance prompts, specific organizational areas to be addressed, example prompts for each area, and desired outcomes for each area.

Applied Theory. In addition to specific functions associated with a typical externship experience (i.e. kitchen experience, purchasing and receiving procedures, etc.), organizational operations areas can be a source of a wealth of knowledge for the extern. The "Applied Theory" column provides some potential underlying theoretical concerns that student externs should be prompted to consider and, thus, link the theoretical with the practicality observed in a real world setting. Our intention was to shift students thinking from a "what are they going to teach me" mentality to a "what can I learn from this experience in addition to day-to-day task oriented experiences." Examples of applied theoretical areas of interest include organizational hierarchy, power assumptions, organizational culture or climate issues, and control systems

Organizational Areas. The basic externship process required information gathering from a variety of organizational areas related to theory application. For example, distance prompts required the extern to gather information in areas concerning: (1) the organization to inquire about the extern site mission statement, core values, and organizational goals; (2) the specific hierarchy of the organization, the background; and organizational structure; (3) the unwritten rules, employee value judgments and personnel who control operational decisions; (4) assessing the management structure and responsibilities; (5) the employees and their ability to perform and enhance operational goals; (6) the marketing scheme of the organization; (7) the inventory control process and scheme of the extern site; and (8) the extern’s assessment of the overall operation.

Portfolio. The portfolio, encompassing all aspects of the extern’s learning experience, begins with the executive summary, an abstract summarizing the student’s analysis of the extern experience, followed by a detailed, in-depth report following the format of the previously illustrated flowchart (table 1) of significant operational areas. Each discussion area demonstrates the student’s use of critical thinking to logically construct, and link, their description of the whole inter-related operational structure of the extern site utilizing information gained from the distance prompts, the additional questions and

Table 1
Operational Areas Addressed Through Distance Prompting

Assumptions	Area	Distance Mentor Prompts	Outcome
Purpose and functioning of the organization is necessary to become an effective organizational member.	Organization Schema	What is the organizational mission? What are the core values? Can personal and organizational goals be achieved simultaneously?	Improved understanding of corporate purpose
Every organization has a specific hierarchy, however, power may not lie where one might expect.	Policy	Who is the storyteller? Who is powerful and who is not? What is the organizational structure?	Effective organizational integration
It is important to determine who has control, respect, is considered to be valuable, and should be emulated.	Politics	Who has the most respect? Why? Who is considered valuable? Why? Who makes operational decisions?	Who should be emulated and why
Responsibilities duties, personalities may vary with different management philosophies.	Management	What are the chef’s duties? Are the trainers knowledgeable? What is the cultural personality?	Understanding management styles
Teammember competency, skills, talent, reliability, and motivation may vary individually or collectively.	Employees	What is important to the employees? What are their values? Are they motivated and consistent?	Individual and collective team assessment
Customer perception and intended audience can be approach utilizing various methodologies	Marketing	Is popularity governed by price? Who are the clientele? Is the marketed perception complimented?	Overall marketing approach and effectiveness
Menu pricing, purchasing, tracking, waste and inventory control may indicate similarities or differences from classroom instruction	Internal Controls	Who orders for the operation? Is product waste tracked and evaluated? What F & B costs are acceptable? How are purchase amounts determined?	Improving profitability through proper planning and operational control

observations of the student, and the detailed information recorded in the student’s journal entries. The discussion was formatted to highlight the types of experiences encountered, the externship aspects that were most beneficial or least beneficial and, most importantly, why the student feels that way.

Evaluation. The manipulation for this study was whether the students’ satisfaction with the new process was high or low relative to: (1) a Likert questionnaire evaluating the overall usefulness of the prompts process, (2) a Likert questionnaire of site supervisor evaluations, and (3) qualitative analysis of the student’s externship portfolio and externship report. The student respondents’ level of satisfaction was by questionnaire comprised of eleven items related to the externship material. The respondents were asked to indicate their

extent of agreement or disagreement with each of the 11 items by using a ten-point, Likert-type anchored scale (1 = disagree, 10 = agree). The study's analysis included descriptive statistics, and inferential measures including chi-square, bivariate analysis, and ANOVA to test the moderating effects utilizing SPSS (version 13) to perform the statistical calculations. Qualitative analysis was utilized to evaluate student externship reports and site supervisor comments.

RESULTS

Sophomore and seniors. The mean scores of both undergraduate extern groups indicate improvement with the new externship process. The top four overall responses from both sophomore and senior groups (table 2), from highest to lower score, were: (1) "I was able to see how management styles affect employee performance," (2) "I was able to achieve an understanding of the inner workings of the extern site organization as a whole", (3) "I was better able to understand different management styles," and (4) "I was better able to understand the power structure of the extern site's organization."

ANOVA was used to determine if differences to survey item responses varied by class level (sophomore and senior). Analysis of the data indicated moderately significant differences exist between these undergraduate levels. Responses to 3 survey questions were significant: (1) "I was better able to understand the differences between the duties of the Chef and Sous Chef," (2) "the information helped me to investigate the marketing scheme of my extern site," and (3) "From your experience, how would you rate the effectiveness of the externship information?". All differences were significant at $p < .05$. Although the sophomore and senior responses indicated no highly significant differences, the sophomores mean response

Table 2

Questionnaire Items	Sophomore Mean	Standard Error	Senior Mean	Standard Error
Understand inner workings of the organization as a whole	8.47	.21	8.75	1.25
Site power structure	8.29	.26	8.50	1.58
Duties of Chef and Sous (and differences)	7.95	.32	8.43	1.87
Different management styles	8.31	.25	8.54	1.71
Management style affecting employee performance	9.22	.16	9.42	.92
Marketing scheme	7.20	.37	7.96	1.33
Helped me investigate aspects I would not have investigated on my own	7.22	.36	7.17	2.33
Provided logical sequence to formulate my report	8.02	.30	7.50	1.86
Providing questions that were hard to formulate	7.29	.36	7.58	1.90
Helped me to explore more operational areas than I would have explored	7.37	.33	7.58	2.28
Rate the effectiveness of the programs approach	7.89	.31	8.38	1.43
N =	48		24	

showed consistently lower scoring than the senior mean for all questionnaire items. Further, the mean scores for both sophomores and seniors indicated overall satisfaction with the program's process improvements. Of note, although both groups indicate satisfaction, the sophomore overall mean was lower than the senior mean response to this item.

Gender. Chi square tests were performed to test for differences in response based on gender. Quantitative analysis indicated five significant differences (all significant at $p < .05$) existed in respondent means (table 3) based on gender: (1) "Overall, the information helped me to investigate aspects of the extern

site operation I would not have investigated on my own.” (2) “The information provided a logical sequence to formulate my externship report.” (3) “The information helped me by providing questions that were hard to formulate when learning and working with a new system, in an unfamiliar setting.” (4) “Overall, the information helped me to explore more

Table 3

Questionnaire Items	Female Mean	Male Mean
Understand inner workings of the organization as a whole	8.375	8.725
Site power structure	8.218	8.45
Duties of Chef and Sous (and differences)	7.935	8.250
Different management styles	8.125	8.600
Management style affecting employee performance	9.281	9.300
Marketing scheme	7.000	7.825
Helped me investigate aspects I would not have investigated on my own	6.656	7.650
Provided logical sequence to formulate my report	7.406	8.200
Providing questions that were hard to formulate	6.750	7.900
Helped me to explore more operational areas than I would have explored	6.968	7.825
Rate the effectiveness of the programs approach	7.562	8.450
N =	32	40

operational areas than I would have done on my own.” and (5) “From your experience, how would you rate the effectiveness of the externship information?”

As indicated in table 3, the overall female response mean scores were consistently lower than their male counterparts to all survey items. The lower female scores reflect a positive opinion of the information regarding management and employee relationships, management styles, power structures, and thus a respectably favorable overall effectiveness response. The area where the female response was lowest in relation to males involves the personal motivation to explore and logically formulate information. Females appeared to need less assistance in areas of natural curiosity, the formulation of questions to ask (i.e. communication skills), and the ability to organize.

Externship Reports and Portfolios. Qualitative assessment of the final externship reports and portfolios, as opposed to previous submissions that were randomly selected for comparison, exhibited improved thought organization of the students’ reflective analysis of their externship experiences. Additionally, the reports exhibited improvement in the students’ ability to link experiences across departmental boundaries. Thus, students were able to construct more in depth analogies of specific departmental requirements and actions as they related to the operation as a whole.

Site supervisor scores. Empirically, the overall mean supervisor response was 9.24 for both sophomore and senior externs. Qualitatively, the site supervisor’s comments indicated strong satisfaction regarding the questions asked by the externs. They were generally impressed with: (1) the depth and breadth of questions asked by externs, (2) the areas of interest to the extern unrelated to menu preparation, and (3) overall quality of student preparedness for the externship.

DISCUSSION

Our decision to revitalize our externship program was undertaken with thoughtful consideration for improving student outcomes, and also the culinary program itself. Constructivism proved to be a productive educational learning model for externships because the emphasis is placed on the learner rather than the teacher. The learner, therefore, constructs his/her own conceptualizations and solutions to problems, is encouraged to engage in dialogue, and places emphasis on performance and understanding when learning is assessed. An important consideration when using a constructivist, learner-centered, approach is the realization that the learner must understand that events unknown to them exist and, therefore, a certain importance is attached to that existence. Thus, the instructor must interpret environmental events for the student in the form of direction. The students, as indicated by the results of the study, are quite capable of constructing their own knowledge in meaningful ways. However, it is the responsibility of the instructor to point them in the right direction to acquire it.

We realize that the strength of our program, in terms of teaching subject matter on an equal and futuristic plane with industry, is juxtaposed to our primary concern for impacting student experiential learning. For example, curriculum adjustment can provide the appropriate just-in-time classroom-to-workplace connection as a direct result of gained knowledge pertaining to current changes in workplace needs and operational techniques. Finally, the increase and clarity of information can be utilized to more accurately evaluate the appropriateness of externship sites as viable learning environments.

The results of the study indicate that our program is steering in the right direction. However, it also gives rise to the need for further research with regard to some differences between sophomore and senior responses. It would seem logical that seniors, as a result of higher level course participation, would have greater perspective of the total operation. Further, it would seem equally logical that sophomores would acquire information that, at the moment, fails to completely equate with their current knowledge base.

Gender differences could be considered another area requiring further investigation. Women are seen to be more communicative than men so it is plausible that they encounter less difficulty formulating questions to acquire information. It would seem equally plausible that organizational strengths could naturally result as women more freely exchange stocks and flows of information.

Because externship experiences are by their definition outside of the educational facility, distance prompts could be implemented through a variety of mediums. The choice of medium will vary due to student access to the Internet, fax and telephone. The distance prompting can be implemented in the hard copy form issued to the student prior to beginning the externship. But, other possible methods of implementation include student-professor communication via Internet-based options such as Blackboard, Passport, and e-mail. Fax, telephone conversation, or possible combinations of various communication methods could be utilized. The latter methods would provide a benefit of continual inquiry by the student but require access by the student and continual prompting by the instructor-mentor from a distance over the course of the externship.

This exploratory constructivist methodological approach to externships, in our opinion, has universal application thus the approach can be expanded for use in many different areas and aspects of hospitality education. The instructor must simply determine what knowledge is important for the student to acquire, provide him/her with dialog assistance, point the direction towards the information, and finally, of the highest importance, give the student a venue to construct meaning to what has been learned.

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