Planning of a Formal Training Program on a Menu Management System Designed for Food

Service Employees

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Abstract

This study is focused on the planning process involved with developing a training program on a particular menu management program utilized in food service environments. The study aims to incorporate individual user's direct experience and feedback utilizing the menu management system, FoodPro®, to help guide decision making on what to include in future training efforts. Through the framework of Cervero and Wilson's program planning theory, employees within Virginia Tech Dining Services were asked to participate in focus groups using a qualitative research method. Final participants for this study included 13 Virginia Tech Dining Services employees who have access to and use the department's menu management system, FoodPro. After focus groups were conducted, transcripts were reviewed and analyzed for themes. From the data, four themes emerged. The themes were user experience and interface, training and knowledge sharing, communication and responsibilities and importance and culture. Cervero and Wilson's program planning theory helped understand the social, ethical and political aspects of designing a training focused on FoodPro within Virginia Tech Dining Services employees. This study can help guide future research focused directly on developing training on other menu management systems.

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Chapter 1: Introduction

Background and Setting

Menus can be treated as a communication tool between guests and the operation. A well-defined menu can provide effective cost control, customer demand and increased profitability (Nebbiolo, 2020). Bernstein et. al (2008) argues that menu management should be of primary importance for the success of foodservice operations. Menu management systems are centralized technology tools that can assist food service operations throughout the entire flow of food beginning with purchasing all the way through menu planning, production, service and everything in between. They are designed to assist operators to price, control and monitor the entire menu (DeMicco, 2015).

Food service employees utilize menu management systems in a variety of different job duties. For example, chefs and culinary staff rely on menu management systems to write accurate recipes and design appealing menus. Food production managers utilize menu management systems to purchase food supplies appropriately and ensure tighter control on inventory. Administration and leadership rely on the reporting structures of menu management systems for sound financial reporting in support of budget control. When used appropriately, menu management systems can streamline staff responsibilities through efficient use of time and materials (DeMicco, 2015).

FoodPro® is a specific menu management system that functions as a cohesive solution by binding together multiple aspects of food service operations leading to proactive and informed decision-making through every step of management. While FoodPro®'s website (2021) does not specifically state it is designed only for college and university dining, the client

listing includes only 37 colleges and/or universities. The menu management system, FoodPro®, is the program that is used by Virginia Polytechnic Institute and State University Dining Services.

According to the Computing Technology Industry Organization, one in two of United States companies do not have formal training strategies in place to address workplace learning gaps (Computing Technology Industry Association, 2020). The purpose of workplace training is to continually improve the effectiveness of staff within the organization with the goal of ultimately meeting and exceeding expectations of customers/service users (Mythen & Janice, 2011). Oftentimes employers view training through the lens of the work requirements only and how best to satisfy the needs through the lens of the employer (Mythen & Janice, 2011). It is important to think of the employees using FoodPro® as active participants in the training process and allow for their involvement in the learning process (Geertshius, et. al, 2002). Currently, Virginia Tech Dining Services does not employ any type of formal training for employees who use FoodPro®. As an integral part of the food service operation, it is important for the department to realize the impact training on utilization of the software can bring to both the department overall and the individual users of the system.

Deficiencies in the studies

The impact of training on food service as it relates to food safety is well documented (Arendt et. al, 2002; McFarland et. al, 2019; Young et. al, 2019). Very few, if any, studies exist on how training impacts use of menu management systems in college and university dining programs and FoodPro®, in particular. According to FoodPro®'s website (2021), FoodPro® has been an established menu management system since 1995, but it remains specific to college and university dining programs and has not been explored explicitly. What remains to be examined

is the impact that formal training on menu management systems, specifically FoodPro®, has on

food service employees in college and university dining programs. Therefore, the purpose of this

qualitative study attempts to contribute to the deficiency in research of food service menu

management systems by exploring how the role of power and who is involved in planning a

formal training on FoodPro® has on employees in Dining Services at Virginia Tech. The study

will also seek to uncover additional support for the implementation of formal training programs

targeting adults as active participants in the design.

The guiding research questions for this study are:

      1). How do employees relate their interactions with FoodPro® to their job duties?

      2). Whose interest(s) will be negotiated within the design of a training program on

      FoodPro®?

Significance of study

      This study will directly include food service professionals that utilize FoodPro® in their

daily job duties. The data in the study can then be used to guide and develop training on other

menu management systems. This study can also provide feedback to departments on the impact

of formal training strategies within organizations, even those that do not relate to menu

management systems.

Reflexivity Statement

      My perceptions of Dining Services have been impacted by my personal experiences.

Since March 2019, I have been (and continue to be) employed as a full-time employee with

Dining Services at Virginia Tech. For almost seven years prior (from 2013-2019) I was

employed in an almost identical position with a dining program at another large state-run

university in a different state. In both roles, I served as a registered dietitian that works very closely with FoodPro® in multiple capacities. These ten-plus years of experience working with the targeted system provides me with a deep understanding of the intricacies of the system, the knowledge required to be a successful user, and a personal relationship with some of the struggles and gaps that might currently exist.

Power dynamics may also play a role with myself as the moderator of the focus groups/conductor of the research. Agreed upon for over fifty years, there have been six types of power identified: legitimate, reward, coercive, referent, expert, and informational (Henning & Roberts, 2016). Due to the role I hold within Dining Services as it relates to FoodPro®, there might be challenges when considering specific types of power held. Legitimate power is based on the position a person holds (Henning & Roberts, 2016). As the individual filling a position that works directly with all aspects of FoodPro®, I might be seen as having legitimate power when discussing the topic at hand. Expert power is derived from expertise (Henning & Roberts, 2016). While I would not classify myself as an expert in FoodPro®, I do hold a position that communicates with program designers and leadership in the software's parent company. These power plays could impact the willingness of participants to freely share their thoughts and perceptions on FoodPro® and will need to be focal points of the design to ensure they do not compromise any data.

My personal involvement with FoodPro® and with Dining Services has the potential to shape my role as the researcher in this study. Due to the close relationship I hold with this study, extra care will be taken to ensure there are no conflicts of interest - ethically, strategically or personally. Studying my own work setting, or conducting "backyard research" can lead to compromised ability to disclose information and might raise issues about power imbalances

between myself (the researcher) and the participants (Creswell & Creswell, 2018). Every effort will be made to ensure data is collected, analyzed and interpreted in an objective manner that excludes any potential biases I may bring to the research through my close relationships with the subjects and topic at hand. I view this research as only beneficial to the users of FoodPro® and the department of Dining Services as a whole but will ensure, to the best of my ability, all aspects of the research are properly validated.

Chapter 2: Literature Review

The concept of workplace training has come to be recognized as a common human resource strategy and a solution for improving an employee's knowledge, skills, and attitudes in the workplace (Awoniyi, Griego, & Morgan, 2002). Workplace training is a common part of operations and plays an important role in many industries including food service. Specific to hospitality and food service industries, a notable method for improving employee's knowledge is organization-provided training (Waqanimaravu & Arasanmi, 2020). Organization provided training is designed to not only upgrade an employee's performance on the job, but can also impact employee's job satisfaction and commitment (Waqnimaravu & Arasanmi, 2020). There are many factors to consider when developing training programs in the hospitality and/or food service workplace. Even though training is designed to affect overall job performance, lack of training opportunities, accessibility and benefits from training participation may affect the value of training to service quality in the hospitality environment (Waqanimaravu & Arasanmi, 2020). It is essential then to consider those factors when designing workplace training opportunities.

Characteristics of Learners

Characteristics of adult learners must be considered when designing learning activities in the workplace and can be impacted also by generational differences. Cafferella and Barnett (1994) summarize the three most discussed aspects of adult learners in research as adults' need for acknowledgement and use of their experiences and prior knowledge, the differing ways they learn, and the desire to be actively involved in the learning process. Research stresses how important the interaction adult learners have with the learning process is and how learning needs to take into consideration the characteristics of the adult learner, the context in which learning is

occurring and the process through which learning is delivered in order for any workplace training to be effective (Lawler, 2003).

Acknowledgment and use of adult learners' experiences and prior knowledge

The fact that adults have lived longer than children or youth means adults also bring more robust life experiences to the proverbial learning table. The varied experience levels of adults in learning situations includes background, learning style, motivation, needs, interests and goals and is a major reason why a larger emphasis is placed on individualization of teaching and learner strategies (Knowles et. al, 2005). Taking into consideration the diverse group of learners and tapping into the participants subsequent experiences will be crucial when designing the training program.

Differing ways adults learn

Learning style can be defined as "a person's preferred way of processing information within specific learning situations" (Caffarella & Barnett, 1994). Each individual brings a different learning style to the table that needs to be considered with designing workplace training. As suggested by Caffarella and Barnett (1994), a good strategy to account for differences in adult learning styles is to use a variety of learning techniques on a regular basis to ensure all learners feel their preferences are being addressed.

Adult learners desire to be actively involved in the learning process

Adults see themselves as self-directed, independent learners, having more control over the direction of their learning (Malone, 2014). At the stage of adult learning, instructors or teachers must take a step back from "lecturer"/information giver and move towards a more

facilitator approach. This means that instructors are more assisting learners with the process of

learning, potentially through the learners own learning objectives and learning strategies

(Caffarella & Barnett, 1994). As suggested by Malone (2014), this is one of the reasons why it is

so critical to include the learner as an active participant in the development of training, which

will be discussed more in the Methodology section of this study.

 Theoretical Framework

In this study, the use of program planning theory will drive the design of the formal

training on FoodPro®. Cervero and Wilson's program planning model includes four main

concepts: power, interests, negotiation and responsibility. The central claim in Cervero and

Wilson's theory design is that there is a theory-practice gap, which has resulted in poor guidance

for educators surrounding understanding and negotiating different levels of stakeholder power

and interests and subsequently making thoughtful political and ethical decisions in their daily

practice (Sandmann, Kiely and Grenier, 2009). While other planning models focused solely on

educational outcomes, Cervero and Wilson (2006) postulate planning practice has two types of

outcomes - producing educational outcomes and also social/political outcomes by navigating and

changing the social and political relationships that make planning possible. Their program

planning theory in turn provides planners more concrete suggestions and support on how to

navigate stakeholder power and interests.

The data will focus on the direct involvement of the participants as stakeholders and their

lived experiences driving the development of the training program. Cervero and Wilson (2006)

define program planning theory as "a social activity of negotiating interests in relationships of

power." This definition of theory focuses on the work that happens in messy situations where

people gather around the metaphorical planning table to make decisions about educational, social and political objectives of programs (Cervero & Wilson, 2006).

The term "planning table" is coined within Cervero and Wilson's theory of program planning as a means for planners to negotiate power and interest to determine whose interests get to the planning table and how those interests are then used to shape the program (Cervero & Wilson, 2006). The image of the planning table helps planners visualize who sits at or is missing from the planning table. That inclusion or exclusion reveals a lot about the dynamics of power in those planning situations.

Cervero and Wilson approach program planning as a social activity where an educational program is never determined by one single person. Instead it is a back and forth process involving multiple people with different interests working together to influence the program content and design (Boone et. al, 2002). The focus of Cervero and Wilson's program planning theory being on the stakeholders and those who sit around the planning table can elevate the quality of training on FoodPro® by welcoming and ensuring the actual users of the system sit at the planning table. People who use the system day in and day out have valuable insights to the system that might otherwise be left out of the planning process as they do not hold the same level of power as other stakeholders. Cervero and Wilson identified adult education as a struggle for power and knowledge (Cervero & Wilson, 2006). Therefore, when developing programs, planners need to address the following questions: "Who benefits from taking these programs? Who has been excluded or overlooked?" (Caffarella & Daffron, 2013).

The fact that adults have lived longer than children or youth means adults also bring more robust life experiences to the proverbial learning table. The varied experience levels of adults in

learning situations includes background, learning style, motivation, needs, interests and goals and is a major reason why a larger emphasis is placed on individualization of teaching and learner strategies (Knowles et. al, 2005). The development of a formal training on FoodPro® involves a wide range of stakeholders that come to the planning table with different lived experiences. Taking into consideration that diverse group of individuals and tapping into the participants' subsequent experiences will be crucial when designing the training program and can help address principal tenets of Cervero and Wilson's planning theory.

 Training Methods

On the job training is the most commonly used training method in the foodservice industry, followed by classroom instruction, use of books or manuals, case studies and simulations (Ravichandran et. al, 2015). Harris and Bohn (2000) define linear training as one that does not allow participants to easily delve into the chosen topic as the instruction is trainer-controlled and limits the involvement and interaction with participants. Unfortunately, then, common examples of linear training are the classroom style instruction that utilize more basic tools such as videos and manuals as aids and are commonly used in the foodservice industry. User-controlled training provides instruction on a variety of different levels and provides a more robust, motivating, and cost-efficient way of training (Harris & Bohn, 2000). Reliance on the linear training methods is common and research shows that training programs in the food service industry can use a refresh in their design, implementation and execution (Harris & Bohn, 2000).

Chapter 3: Methodology

Research Method and Design

Information from focus groups can be helpful when considering different stages in product or program development (Krueger & Casey, 2009). The goal of this study is to gather data necessary to identify deficiencies in current training practices and plan for future development of a training program, so focus groups align nicely through the lens of program development. A strategy for product/program development that Krueger & Casey (2009) advocate articulates three stages where focus groups play an important role: to gain understanding, to pilot-test the prototypes and finally for evaluation of a program that is currently functioning. Focus groups play an important role in qualitative research, allowing the researcher to assemble a group of individuals with specific characteristics and asking open-ended questions that allow for a deep understanding of the research question(s) at hand (Arendt, Roberts, Stohnben, et al., 2012). The goal is to have participants expand and build upon other's responses to provide information that could not be obtained in individual interviews (Henning & Roberts, 2016). FoodPro® is a shared software system that allows for interaction between a variety of levels of employees and building on responses of other employees will help provide a richer description of the department's view on the software system, not just one individual alone. For that reason, using focus groups in this study to gain a deeper understanding of user's experiences makes sense. Seeing as part of Cervero and Wilson's theory rests of the belief that adult educators should have interest in nurturing a democratic planning process aligns well with utilizing focus groups as the driving force for data collection (Cervero & Wilson, 1994). This project as designed, utilizing focus groups, was submitted to the Virginia Tech IRB Office for

review (IRB# 23-020) and was determined that it is not research involving human subjects (see Appendix A).

Choosing Participants

The population of this study will consist of Dining Services employees at Virginia Tech. Dining Services employs over 300 full time employees, including management and front-line workers, who will be the target audience. This study will not consider the hundreds of other part-time student employees. Within that larger group of 300 employees around fifty full time employees have access to the menu management system, FoodPro®. These employees include Food Production Managers, Executive Chefs, and Shift Leaders to name a few. That narrower list of employees who have access to FoodPro® will be the initial target population for the study.

Recruitment of Participants

A departmental list is maintained for all users of FoodPro® and will serve as the springboard for participant selection. Seeing as the list is maintained internally the selection of easy to recruit employees can occur, so efforts will be made to avoid the convenience bias through randomized selection from a pool of candidates that meet the initial screening requirements (Krueger & Casey, 2009). In order to create an environment where participants feel comfortable freely speaking and if there is any type of power differential, participants might feel uncomfortable (Krueger & Casey, 2009). For that reason, supervisors and their direct employees were not included in the same group.

Design of Focus Groups

A signature piece of focus groups is to better understand the group dynamics that affect individual's perceptions, information processing, and decision making (Stewart et. al, 2007). As suggested by Stewart et. al (2007), people behave differently in groups compared to when they are alone. This, in turn, emphasizes the importance of making the group dynamics work towards the service and goals of the research. There are many factors that can impact the group dynamics of focus groups, including age, gender, socioeconomic status, outward appearance, etc. While efforts will be made to not downplay the importance of those factors, attention will also be directed towards the social power of the group and how that might impact participant's status within the group. The moderator must legitimize the opinions and thoughts of both low-status and high-status individuals to not only encourage participation by all individuals but to model behavior that demonstrates an inclusive and welcoming environment (Stewart et. al, 2007).

Continuing with the discussion of social power, it is important to create an environment where participants feel their opinions and thoughts are not only necessary, but valued (Stewart et. al, 2007). It is reasonable to expect there will be participants who are less likely to speak up that can be overshadowed by other dominant participants so additional efforts and strategies will need to be employed to ensure the entire group is encouraged to speak. Such strategies could be direct questions posed to individual participants sporadically throughout the focus group and close attention to nonverbal cues, such as facial expressions and body language.

Conducting the Focus Groups

Due to the typical flow of work in a college and university dining program throughout a calendar year, effort was put into the times selected for the focus groups. One focus group was

held during a time when dining centers were closed, but most staff members were still in the office. Spring break week presented an ideal opportunity to allow for maximum participation by not having to be pulled away from daily duties while the operation is open. A second focus group was scheduled when dining facilities were in operation. The option of two separate times provided ample opportunity for participants to navigate participating around work schedules and individuals were able to select which time worked best for them. The focus groups were both held in a neutral location on Virginia Tech's campus, not specifically in any of the Dining Services offices. This helped reduce territoriality of physical spaces. The space selected allowed for adequate spacing between employees with rearranging seating to be in a circle, allowing for enhanced discussion facilitation and reduction in subgroups from forming that could dominate or sidetrack the conversation at hand (Stewart et. al, 2007). Participants were informed at the beginning of each focus group the session will be recorded using audio and transcription services. The recording(s) facilitated note taking and report writing. Participants who felt uncomfortable with being recorded will be allowed to leave the session without any embarrassment.

From the recruitment email that went out to 84 employees, the following two tables represent the final number of participants, job title and years of service within each focus group.

Focus Group 1:

	Job Title	Years of Service
Participant A	Chef de Cuisine	19 years
Participant B	Food Production Manager	21 years
Participant C	Administrative Support Specialist	5 months

Participant D	Food Production Manager	8 years
Participant E	Executive Chef	4 years
Participant F	Food Production Manager	25 years
Participant G	Chef de Cuisine	1 year

Focus Group 2:

	Job Title	Years of Service
Participant A	Operations Manager	3 years
Participant B	Associate Director	29 years
Participant C	Assistant Director - Training & Development	7 years
Participant D	Food Production Manager	19 years
Participant E	Contract Administrator	23 years
Participant F	Operations Manager	5 years

Each focus group was represented by a diverse group of employee's titles, years within the department and responsibilities, which contributed to the robust data on their individual lived experiences and perspectives essential to the purpose of this study.

Analyzing the Data

The two focus groups were held in person. Zoom was used as a medium to record the audio only of each session. Audio recordings from the Zoom sessions were then downloaded for ability to replay. Each focus group session also had the conversation documented via voice typing within Google docs. The combination of the voice typing and the audio recordings

provided very lengthy transcripts that were then reviewed by the researcher and organized by question for each focus group session. The researcher then looked to index the data and investigate common themes from both focus group sessions by identifying all the places where answers were provided relevant to each question, otherwise known as code-and-retrieve, or indexing (Elliot, 2018). After detecting themes from each individual focus group session, the identified categories were then combined together to develop the subsequent themes explained later in this paper.

Chapter 4: Findings

The purpose of this was to identify deficiencies in the training offered for Virginia Tech Dining Services food service employees that use FoodPro®, a specific menu management software system. The study intended to help explore where future training efforts could make the greatest impact on employees' utilization of the system. To dig deeper into this topic, focus groups were held with current Virginia Tech Dining Services employees that utilize FoodPro®. The participants in the study currently have access to and use FoodPro® on a regular basis as part of their job duties. Both focus groups were asked the same set of questions to get a wide variety of personal experiences and opinions on their experiences with FoodPro®. While each focus group had a different set of attendees, there were overlapping themes between the two groups. The four collective themes that emerged from both of the focus groups were:

1. User Experience & Interface

2. Training & Knowledge Sharing

3. Communication & Responsibilities

4. Importance & Culture

Theme 1: User Experience & Interface

The participants were asked for their opinion on their impressions working within FoodPro® and what they liked best and least about the system. This allowed the interviewer to gather an initial perception of participant's interactions within the system over an extended period of time. There was a consistent theme between sessions indicating that many users found the system clunky, outdated, and difficult to navigate. In fact, multiple participants shared they felt it looked old, resembled an old disk operating system (DOS) like system, which started its

decline in the mid-nineties, and was not intuitive. One participant bluntly said it "looks like junk".

Many participants also shared they did not know how everything in the system interacts together. A common term that repeated itself throughout the focus groups was the "FoodPro® wheel". This refers to how all of the pieces of the system fit together synergistically and how many users of the system, both seasoned and new, perform certain tasks without having a good understanding of why or how it integrates into the bigger picture. One participant summarized this nicely by saying:

> "We need to come up with training so that everyone understands the flow, understands the circle of FoodPro®, and they understand where and how they fit into that down to the student employee level."

Theme 2: Training & Knowledge Sharing

Within the focus group(s), participants were then asked a variety of questions regarding general training preferences with an emphasis on current departmental limitations and barriers to look more closely at the gaps specific to FoodPro. Questions were pointed towards what made training successful or disappointing, instructor roles, and preferred methods of training. Responses overwhelmingly indicated there is an overall need for comprehensive training that covers all aspects of the system.

There were multiple questions that had responses pertaining to this overarching theme. Responses to these questions varied and there was not as much overlap between different individual's responses. Preferences on training methods ranged from classroom-type settings to small group sessions, training opportunities should be hands-on and include time spent in front of the computer actually utilizing the system, whereas other participants stated they would not

learn in a computer lab environment and needs to take time, go through it and investigate by failure. Another participant agreed stating that they are working in food service for a reason and they do not want to sit in a classroom or in front of a computer having someone talk at them. There were quite a few responses that did agree having a variety of reference material, such as pre-recorded videos or copies of slide decks would help significantly.

One of the biggest challenges presented by participants is the lack of time due to busy schedules. To provide more detail, multiple participants echoed this sentiment with the following quotes:

"Everyone is so busy, that's why a lot of things don't get fixed."

"I just need to survive today."

"Finding the time, the real time, to fix it is always the hardest part."

"You know what you need to learn? Time. You know what we don't have? Time."

Theme 3: Communication & Responsibilities

Even though there was not a specific set of questions that pertained to communication or responsibilities, a clear theme in responses had to deal with a lack of clarity in individual responsibilities pertaining to their use of FoodPro®. Individuals who work with the system feel they do not have clear delineation of their own responsibilities within the system. Participants had the following comments about lack of communication:

"No one ever told me what I was responsible for in FoodPro®."

"I never had any training, was just told this is your responsibility."

"I was told - you're responsible for this building, you've got to make sure the menu is accurate. I had to learn on my own."

"I had to learn by being put on the spot."

"You're given FoodPro® and told "have fun"."

Outside of an individual's responsibilities in the system, there was a lot of discussion around the communication within the training(s). Qualifications and types of trainers for how information is delivered came up quite often. Having an engaging trainer that is well-knowledgeable and can empower people to do whatever they need to do was a response that surfaced often when asked about what makes any type of training a success. On a similar note, responses about what might make a training a failure surrounded the trainer as well, including lack of engagement, lack of passion, just delivering information without paying attention to the audience or group and relating the importance of the information.

Theme 4: Importance & Culture

Throughout the questions in both focus groups there was an apparent theme of the culture not prioritizing use of FoodPro® by upper level management:

"If management has the mindset that FoodPro® is a pain, FoodPro® doesn't work, that's what you're portraying to your staff. Therefore, they don't care, they're just filling out something."

"You need managers to say that it is important and staff need to be trained."

Building a culture where employees understand the significance of using FoodPro® and have management buy-in is seen as crucial throughout the responses of participants. Some participants even discussed the potential role disciplinary action could play in the utilization of the system, but again attributed it back to management buy-in, oversight, and accountability.

Chapter 5: Conclusion

The purpose of this study was to examine the perceptions of current employees that use a menu management system, FoodPro®, and explore how to plan a more formal training program. The evaluator wanted to gain insights directly from the users of the system (who were food service employees with Virginia Tech Dining Services) and incorporate those insights into the planning and development of a formal training program utilizing key aspects of Cervero and Wilson's program planning theory. Many organizations and workplaces struggle with retention of employees due to lack of training or inability to train employees. By understanding direct experiences from the employee's themselves and focusing on who is involved in the planning process (i.e. "the planning table"), organizations may have more success with training efforts designed to improve the overall work completed.

Cervero and Wilson changed the narrative of how to view program planning by acknowledging power, personal interests, ethical commitment and negotiation are central to planner's every day work (Caffarella and Daffron, 2013). Meaning that planners do influence the planning process, but other players in the process and the context of where the process is taking place play a significant role and influence the actual planner's decisions and actions. This further proves that program planning is an interactive, complex and messy process that does not follow the conventional approach to planning. Following the notion that the organizations responsible for planning have individualized traditions, relationships, politics, needs and interests it's critical that the process of planning is an overall negotiation between educators, learners, organizations and other stakeholders (Caffarella and Daffron, 2013). Throughout this research study, conducting focus groups open to any employee who utilizes FoodPro allowed for ample

opportunity for the program planner (researcher) to gather feedback direct from a variety of necessary stakeholders - learners, educators, leaders.

Research from this study indicates how any training provided on utilizing FoodPro needs to be conducted by passionate and well-versed educators, be supported by management and leadership, and meet the variety of learning needs that accompany adult learners. Cervero and Wilson (1994) state that any theory about planning in adult education must remain essentially a human creation that can lend planners to what is important and how their actions can make a difference in the world. Training on menu management systems might not change the world, but it is obvious that as shared by participants in the study involving the right stakeholders at the table, navigating and negotiating the power dynamic can assist in the design of a truly effective training change within the department of Dining Services at Virginia Tech.

Recommendations for Practice

Recommendation 1: Usability and Interface Enhancement

A consistent theme throughout the data from the focus groups was to improve the system's user interface to make it more modern and user-friendly. This includes addressing the clunkiness of the system and outdated elements to enhance the user's experience. Unfortunately, seeing as FoodPro is a third-party system managed by a vendor, Aurora Information Systems, this recommendation is not something within control of the researcher. This recommendation does bring up the importance of streamlining individual's use of the system to reduce the learning curve and user frustration though, which would most likely be accomplished through additional training efforts discussed later.

Recommendation 2: Training and Knowledge Sharing

Establishing consistent and comprehensive training methods for all users is an overarching recommendation that further solidifies the need for additional training efforts. This could be done in a myriad of ways including incorporating hands-on sessions, videos and interactive modules. This attributes back to appreciating different learner's perspectives and learning styles by providing a variety of training formats. Responses from the participants also focused on providing role-specific training to ensure users understand the system's relevance to their respective tasks. One way to capitalize on knowledge sharing would be to pair experienced users with newer users, as one example.

Recommendation 3: Engagement and Support

Discussion led to ensuring that trainers are engaging, knowledgeable, and passionate about teaching when developing training programs in general, but also specific to using FoodPro®. Many participants felt the current culture was lacking in support, therefore it's critical to foster a culture where learning and system usage are seen as integral to success. This can be done through encouragement of management to actively support and motivate employees to attend training.

Recommendation 4: Importance and Accountability

Similar to the engagement and support recommendation, another recommendation from participants was to promote a culture of accountability and standardization across departments. The significance of the systems needs to be emphasized in daily tasks, particularly in areas like recipes, catering and waste management. There also should be a collective agreement throughout the department that clearly articulates individual responsibilities within the system to avoid confusion and enhance efficiency.

Future Research Considerations

      This study includes one small sample size of individuals who use FoodPro® within their daily job duties within Virginia Tech Dining Services. Future researchers could expand on a larger population of individuals within the same institution who utilize the system to better understand more interactions with the system. Each individual user brings about different experiences and relationships with the system, so more data will amplify results from this study specific to Virginia Tech Dining Services.

      According to FoodPro®'s website (2021), there are 35 other colleges/universities, besides Virginia Tech, that utilize FoodPro®. Future researchers could expand and examine users of the system at different schools. This could more fully describe the impact of the social activity of planning a training program for users of FoodPro applied in different settings. Each school presents a unique, yet complex organization that includes different social, ethical and political dimensions. As stated by Cervero and Wilson (1994), there is no generic set of procedures that can be applied in all situations, so future research could amplify the support for applying Cervero and Wilson's planning theory by addressing the messy and complex situations that exist in different institutional dynamics.

      Moving forward, Virginia Tech Dining Services should utilize the data from this study, specifically the four themes that arose, to develop lasting and meaningful training programs for staff to utilize FoodPro®. Those four themes were user experience and interface, training and knowledge sharing, communication and responsibilities and importance and culture. By utilizing Cervero and Wilson's program planning theory and focusing on who is sitting at the planning table will ensure higher success rates when developing any programming.

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Appendices

Appendix A: IRB Approval Letter

VT VIRGINIA TECH.

Division of Scholarly Integrity and
Research Compliance
Institutional Review Board
North End Center, Suite 4120 (MC 0497)
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-3732
irb@vt.edu
http://www.research.vt.edu/sirc/hrpp

MEMORANDUM

DATE:	January 11, 2023
TO:	Donna Marie Westfall-Rudd, Melissa Hendricks
FROM:	Virginia Tech Institutional Review Board (FWA00000572)
PROTOCOL TITLE:	Evaluation of a Formal Training Program on a Menu Management System Designed for Food Service Employees
IRB NUMBER:	23-020

Based on the submitted project description and items listed in the Special Instructions section found on Page 2, the Virginia Tech Human Research Protection Program (HRPP) has determined that the proposed activity is not research involving human subjects as defined by HHS and FDA regulations.

Further review and approval by the Virginia Tech Human Research Protection Program (HRPP) is not required because this is not human research. This determination applies only to the activities described in the submitted project description and does not apply should any changes be made. If changes are made you must immediately submit an Amendment to the HRPP for a new determination. Your amendment must include a description of the changes and you must upload all revised documents. At that time, the HRPP will review the submission activities to confirm the original "Not Research" decision or to advise if a new application must be made.

If there are additional undisclosed components that you feel merit a change in this initial determination, please contact our office for a consultation.

Please be aware that receiving a "Not Research" Determination is not the same as IRB review and approval of the activity. You are NOT to use IRB consent forms or templates for these activities. If you have any questions, please contact the Virginia Tech HRPP office at 540-231-3732 or irb@vt.edu.

PROTOCOL INFORMATION:

Determined As:	**Not Research**
Protocol Determination Date:	**January 11, 2023**

ASSOCIATED FUNDING:

The table on the following page indicates whether grant proposals are related to this protocol, and which of the listed proposals, if any, have been compared to this protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

Appendix B: Focus Group Questions

Focus Group Questions:

1). Think back to when you first started working with FoodPro®. What were your impressions?

2). What best do you like about working with/in FoodPro®?

3). What do you like least about working with/in FoodPro®?

4). In your current role, to what extent is there a gap between what training is needed and what is offered?

5). What are the barriers to training or learning in your current role?

6). Training can occur in many ways through various media, such as lectures, workshops, but other methods such as one on one contact or videos can be used as well. How would you prefer to receive training on FoodPro®?

7). Let's talk about educational settings where you've learned a lot. Think about those times. What needs to happen to learn a lot?

       FOLLOW UP: To you, what ONE thing would make the training a success?

8). Now let's think back to a training course that was disappointing to you. What made it disappointing?

       FOLLOW UP: To you, what ONE thing would make the training a failure?

9). What is the most important thing an instructor can do to help students learn?

10). Suppose you are going to train someone or teach someone about FoodPro®. You want to be as successful as possible. What would you do?

11). Let's talk a bit about the topics of continuing education. As it relates to FoodPro® and your current role, what topics would be most beneficial to you?

       FOLLOW UP: What topics would be most beneficial to those you work with?

12). Suppose you are in charge of providing continued educational opportunities for staff members that use FoodPro® in a way that encourages folks to attend and that will be beneficial for all staff. What would you do?

13). The purpose of this session was to learn more about your interactions with FoodPro® and thoughts on what makes a good training to get some ideas for future action. Have I missed anything?

Appendix C: Participant Written Consent Form

<u>Purpose</u>

You have been invited to participate in a focus group as a part of the Online Masters of Agriculture & Life Sciences final product conducted by Melissa Hendricks. The purpose of this focus group is to learn more about how employees who utilize FoodPro® relate their interactions to their job duties and to evaluate how a formal training program could impact those interactions. The information learned in this focus group will be used to help start and grow a formal training program for FoodPro® for current and future Virginia Tech Dining Service employees.

<u>Participants' Rights</u>

I understand that my responses will be kept in the strictest of confidence and will be available only to the researcher. No one will be able to identify me when the results are reported and my name will not appear anywhere in the written report. Please do not share other people's identities or responses from the focus group with others to maintain the anonymity of the participants outside of the focus group. I also understand that I <u>may skip any questions or tasks that I do not wish to answer or complete</u>. I understand that the consent form will be kept separate from the data records to ensure confidentiality. I may choose not to participate or withdraw at any time during the study without penalty. I agree to have my verbal responses tape-recorded and transcribed for further analysis with the understanding that my responses will not be linked to me personally in any way. After the transcription is completed, the tape recordings will be destroyed.

<u>Contact</u>

If you have any questions or concerns regarding this study, please contact the Virginia Tech Institutional Review Board (IRB) at irb@vt.edu or the program advisor (Dr. Donna Westfall-Rudd; dmoore@vt.edu).

Consent to Participate

I acknowledge that I am at least eighteen years old, and that I understand my rights as a research participant as outlined above. I acknowledge that my participation is fully voluntary.

Print Name: _____

Signature: _____ Date: _____