

## ENGAGING WITH INDUSTRY: COLLABORATIVE ACTION RESEARCH AS A USEFUL TOOL IN FACILITY MANAGEMENT, KNOWLEDGE AND LEARNING

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### **Abstract:**

This paper reports on the collaborative action research process used to evaluate the patron experience and venue readiness at a sports, entertainment, convention and business meeting facilities setting in the United States. Research involved collaboration with facility management administration, on-site event analysis, website review, and communication with venue staff to determine the *patron experience* according to the provisions of the action research plan. Findings indicate that the collaborative action research program met the academic and facility management requirements inclusive of analysis and evaluation, and distinctive knowledge and learning transfer. The collaborative action research program not only connected academic research and students, facility management professionals and staff with methods to improve the *patron experience*, including website enhancements, serving persons with disabilities or mobility limitations, it demonstrates how other facility management professionals can engage knowledge and learning to enhance the patron experience and venue readiness so patrons, customers, clients, and other visitors can enjoy equitable experiences at sports, entertainment and other recreational, convention, and business meeting facilities.

*Keywords: facility management, knowledge and learning, action research*

## 1. INTRODUCTION

Professionals in the sports, entertainment, convention and business meeting facilities industry know that patron experience evaluation is imperative to demonstrate outcomes and ensure continuous quality improvement. In addition, professionals know that research is a necessary part of the facility management and events profession. Research and event-day evaluation can assist in ways such as improving service delivery, validating the importance and value of public assembly facilities to a community, growing the body of existing knowledge of facility management and support professional practice, and/or meet municipal/contractual obligations, just to name several. With increasing pressure to show outcomes to sustain facility operations and services, research can assist facility management to continue to demonstrate on-going improvement. Collaborative action research, in particular, can provide a systematic method for quality facility evaluation and a practitioner-friendly model for research. The article will review foundational aspects of collaborative action research, including an efficient process to conduct it within the facility management industry.

### 1.1. What is Action Research?

Action research focuses on research in action, rather than research about action. It is participative, concurrent with action, and is both a sequence of events and an approach to problem solving. The outcomes are both an action and research, which, unlike traditional positivist science, aims at creating knowledge only (Coughlan & Coughlan, 2002). It is a way of learning more from practice by questioning, listening, watching, acting, analyzing, and reflecting (Riel, 2013), and is a disciplined inquiry and process that supports the attainment of an organization's goals (Calhoun, 1994). Action research focuses on improving the quality of an organization, and provides reliable and valid information to support such improvements Hironaka-Juteau, Hergenrader, and Kraft (2006).

Action research has been conducted in agriculture, community development, health care, and educational settings, just to name a few. It is a powerful tool for improving recreation programs and services (Hironaka-Juteau, et al., 2006). Fundamentally, action research is instituting priorities and taking action based on the systematic collection of data. Mills (2014) describes his Dialectic Action Research Spiral to include four basic elements: (1) identifying an area of focus; (2) collecting data; (3) analyzing and interpreting data; and (4) developing an action plan.

As Huang (2010) postulates, action research is an orientation to knowledge creation that arises in a context of practice and requires researchers to work with practitioners. The idea of action research is that problems and issues are best identified and investigated where the action is, in this study, at the event and facility level. By integrating research into these settings and engaging those who work at this level in research activities, findings can be applied immediately and problems solved more quickly, (Guskey, 2000). In the case of this article, event-day and non-event-day problems and issues are researched where the action is: at the facility and hosted event.

### 1.2. What is Collaborative Action Research?

Collaborative action research is a specific type of action research that brings together a group of individuals to conduct systematic inquiry (Hironaka-Juteau et al., 2006). Collaborate implies that the individuals are working jointly (Oxford English Dictionary Online, 2014). The research group or team is comprised of individuals who have mutual interests and work together to study those interests. For example, group or team inclusion may include, but not be limited to, academic researchers, facility management administrators, and students studying facility management. Professionals in the sports, entertainment, convention and business meeting facilities industry are experienced in working together in groups or teams. As such, collaborative action research can be ideal in supporting program evaluation (da Gama & Hironaka-Juteau, 2002).

A distinctive feature of collaborative action research is that it imparts itself to including university students in the process. As such, incorporating activities that motivate students and generate student interest can involve the brain's affective network and that network, along with the intellectual network enhances learning (Hinton, Miyamoto, & Della-Chiesa, 2008). Furthermore, active learning is anything that involves students in doing things and thinking about the things they are doing Bonwell and Eison (1991). This includes several characteristics:

1. The learner does more than listening and is engaged in the activity

2. The learner practices and/or acquires skills
3. The learner is involved in analysis/higher order thinking skills
4. The learner explores his or her own attitudes and values (adapted from Bonwell & Eison, 1991).

With this comes the potential for future professionals to gain hands-on experience in conducting research while at the same time supporting the research team's quest to study a particular topic of interest (Hironaka-Juteau, et al., 2006).

According to Sagor (1992), *two guidelines must be followed when conducting collaborative action research: (1) the phenomena chosen for study must concern the teaching/learning process, and (2) those phenomena must also be within the practitioner's scope of influence* (p.9). Per se, dissimilar other forms of research, the members of the research group or team and the organization are the principal audience for the results of collaborative action research. Other facility professionals, academicians and programs can benefit when action researchers share or present the results from their studies outside of the research team via publications or presentations at professional conferences.

### **1.3. A Six-Step Process to Conduct Collaborative Action Research**

A six-step process of collaborative action research is offered by Brighton and Moon (2007), which is merely one beginning point for using action research as part of evaluation. Brighton and Moon's process provides structure to research development for the group or team conducting the investigation. Their steps include the following:

1. Identifying the area of focus
2. Writing the action plan to guide the inquiry process
3. Collect data to address the identified question
4. Organize the data
5. Analyze and interpret the data
6. Share the findings

### **1.4. The Process of Collaborative Action Research**

#### *Identifying the Area of Focus*

The aim of the collaborative action research process is to improve the situation for those affected by the issue being researched in the location it is being researched (Pavish & Pharris, 2012). The research team identifies needs or issues of the highest professional concern to the research team. Characteristics of the issues are identified, as well as additional information to aid with a more comprehensive understanding. For example patron complaints and timing, such as specific complaints (website, accessibility to name a few) and when they initially appear, may be a characteristic of an issue or need.

As a facility management professional conducting Action Research it must be determined what issue is significant to your professional practice, and to your respective venue and/ or municipality. Then move forward utilizing the process in seeking solutions and determining the plan of action.

#### *Writing the Action Plan*

Gay, Mills and Airasian (2012) describe that the research plan is a detailed depiction of the procedures that the researcher will use to investigate the topic, problem or issue to be studied. Brighton and Moon (2007) write that the action plan creates a structure and a process for guiding the researcher through the process. Furthermore, they state the plan *may have a specific timeline for gathering data, sharing findings, and enacting action; in other instances the plan may be an informal document to help outline the steps in the process* (2007, p. 5).

#### *Data Collection*

For each research question that surfaced during the problem formulation phase, action researchers are expected to collect three sets of data. Triangulation assists with improving the quality of the findings and allows for adequate data collection. Some examples of data sources are written surveys,

interviews, observations, attendance records, and program plans. A plan to collect the data is created to aid in the collection process. This plan would reflect the data to be collected and the respective timeline for the collection to occur (Hironaka-Juteau, et al., 2006).

### *Organization of Data*

It is at this phase of the process that organization is vital. Action researchers must adhere to strict guidelines for gathering and effectively managing data, as it has the potential to impact the quality of the findings and ultimately the actions that occur as a result. Organizing and managing data may require transcribing and sequencing field notes, photographs and screenshots, transferring notes into some workable format (e.g., Excel database, photograph and screenshot database), and/or identifying missing data that are essential for answering the project.

### *Data Analysis*

Hironaka-Juteau et al (2006) explain that it is imperative for the research team to examine the patterns that the data reveal, work to draw conclusions, and conduct this process systematically and impartially to assure accurate and useful information. Though the core audience of the research is the research team itself, it is crucial that the data are analyzed with neutrality.

### *Share Findings / Reporting Results*

As stated earlier, the primary audience for the results from collaborative action research is the research team (Calhoun, 1994); however, the results do not need to be limited to these stakeholders, or this audience. Reporting results via professional publications and, or conferences so that others may benefit should be deliberated, and if agreed upon, stipulated in contractual form prior to data collection. Additionally, results may be a key in securing venue accessibility funding, extending a facility management contract, enlightening municipal oversight and garnering community support.

A primary purpose of collaborative action research is the enhancement of professional practice. As such, reporting results and updating the action plan based on the reported results is essential. Together, the collaborative action research team members examine the results, determine the priorities, and update action steps for the attainment of the facility management organization's goals, in this study, for improvement of the patron experience and venue readiness.

## **2. COLLABORATIVE ACTION RESEARCH IN PRACTICE AS A USEFUL TOOL IN FACILITY MANAGEMENT**

The following is a Patron Experience Measurement (PEM) study that is intended to serve as an example of the six-step process of collaborative action research previously outlined. The project conducted by the researcher, employed by State U (one of 23 campuses in the State U, System), and students in the Sports and Entertainment Facility Management (SEFM) degree emphasis, and management of a convention and entertainment center (CEC) in the fifth largest city in California. The CEC is publicly owned, however, privately managed by a globally recognized management company of sports, entertainment, convention and business meeting facilities. This process would allow for the researcher, and six enrolled SEFM students to gain hands-on experience with patron experience and venuescape evaluation while at the same time providing a service to CEC. The involvement by students in the process is a distinctive feature of collaborative action research.

### **2.1. Identifying the Area of Focus**

The purpose of the study was to work collaboratively on an action-oriented research project to investigate professional service delivery in an existing sports, entertainment, convention and business meeting facilities setting. The focus of this project evolved from dialogue about a problem/need/concern identified by CEC that could benefit from the *patron experience measurement* that a researcher and college students could provide. This study focused on answering the following questions: Are patrons attending sports, entertainment, convention and business meeting events or programs receiving the level of customer/fan/visitor accommodation and service needed to maximize their experience? and Are the sports, entertainment, convention and business meeting facilities, and overall venuescape receiving the level of preparation and event-day support needed to maximize the

venues potential? The overarching goal of the study was to assess the effectiveness that CEC has in maximizing the patron experience of attendees. An orientation meeting for the Evaluation Team occurred at State U prior to the beginning of the data collection process.

## 2.2. Data Collection

Quantitative and qualitative methods were employed to study the research questions. The following data collection tools were developed by the researcher and approved for use by CEC: (1) PEM Form, (2) Telephone Inquiry Form, and (3) Website Evaluation Form. Target events were selected based on CEC input and availability of the Evaluation Team members. Target events and respective facilities were observed, website evaluations and staff/telephone inquiries were made. A five point Likert scale format was utilized, along with open-ended questions on each of the three data collection forms. Data was gathered on the following venues and events: Arena/Ice Hockey, Convention Center/Real Estate Summit, Exhibit Hall/Naturalization, and Theatre/Concert.

Data for this study was collected on four separate dates between December 2011 and November 2012, by direct observation, phone calls, and review of CEC website. The respective Evaluation Teams recorded field notes, took photographs, and utilized screen captures. Evaluation Teams observed multiple phases of the respective venue and event program: Website; Telephone; Parking, Parking Cleanliness, Wayfinding and Safety; Pre-Event Preparedness; Box Office/Ticket Sales/Will Call, Event Entry/Admissions, Event Security, Food and Concessions, Seating Areas, Restrooms; Signage, Ushers; Wayfinding, Housekeeping, Venuescape; and Post-Event.

## 2.3. Organization of Data

Collaboration amongst research team members was an important of the entire process and especially in this area of data organization. Organization and management of data included transcription and labeling of all field notes, screen captures, photographs, and followed the approved evaluation forms in structuring. Open discussion and agreement was reached across the evaluation team in all instances.

## 2.4. Data Analysis

Notes were independently recorded during event observation, phone call and website review and were recorded on the three data collection forms. Data analysis involved three strategies: direct interpretation of the individual instance, categorical aggregation of multiple instances, and PEM analysis. Categorical aggregation allowed the emergence of meaning from the repetition of themes. Direct interpretation allowed the emergence of meaning from a single instance of data, such as a researcher's specific expertise regarding parking for patrons with disabilities. Double coding of each observation, and field report (two researchers coding the same data) occurred to aid in definitional clarity as well as to serve as a reliability check (Miles & Huberman, 1984). Researchers worked inductively and iteratively to give meaning and structure to the data. Researchers independently read through the phone call and website notes, PEM charts, field notes, supplemental data, and observations. Researchers then collaborated and compared and contrasted their individual records for consistency, meaning, and interpretation. Full agreement was attained in all cases. Data were coded and categorized within the PEM focus areas (Website; Telephone; Parking, Parking Cleanliness, Wayfinding and Safety; Pre-Event Preparedness; Box Office/Ticket Sales/Will Call, Event Entry/Admissions, Event Security, Food and Concessions, Seating Areas, Restrooms; Signage, Ushers; Wayfinding, Housekeeping, Venuescape; and Post-Event).

Overall, results of the study indicated *patron satisfaction* with the events. Critical analysis of the CEC venuescape, webpage and staff interaction indicated improvements could assist CEC in maximizing the potential of the facilities, and improve future patron, client, and visitor experiences. Data was collected on four separate dates, twice in December 2011 and twice in November 2012, and areas of concern are presented as follows:

CEC website, parking lot surface and signage for persons with disabilities, exterior pathways, landscape maintenance, restroom flooring, sensor water and paper towel dispensers, trash, janitorial, interior and exterior lighting, drinking fountains, pre-event entry, security, concessions, storage, venuescape and venue readiness.



Field notes, photographs, screen captures, and suggestions were categorized and revealed that evaluation team members actively participated, demonstrated skill in PEM activities, and were comfortable with the collaborative process. Suggestions for enhancement of the patron experience and venue readiness were also revealed. Narrative comments highlighted a preference for enhancements to website appearance, user friendliness, ease of navigation, and descriptors indicating assistance for individuals with disabilities. These were the most consistent suggestions for website improvement.

## **2.5. Share Findings/Reporting Results**

Members of the Collaborative Action Research Team presented results and recommendations of the study to select audiences in three formats. Sixteen in-service presentations were conducted, two to the City Manager, two to the CEC General Manager and four each to four respective CEC department heads. The content of each presentation included five key pieces of information:

1. Introduction with the purpose of the study and objectives;
2. Methods;
3. Results;
4. Recommendations/ conclusions; and
5. Benefits to the collaborative action research team.

Each in-service included technical report details of the respective venue and event PEM. Care was taken in assuring study details included date, time, specific on-site location, notes, photographs and screen shots in each of the PEM focus areas.

## **3. ACTION PLANNING OUTCOMES**

Did the outcomes of this study lead to action? Based on the findings and recommendations by the Patron Experience Evaluation Team, preliminary action planning occurred. One area for potential enhancement included exploring the development of a patron and client friendly website to increase functionality, to assist potential clients with the booking of facilities, to providing map and parking information, and accessibility information for persons with disabilities and others with special needs. In addition, action planning included steps for improved staff and contracted vendor training and development of managerial competences of those involved in the scope of research. For example, providing small group professional development and learning sessions detailing industry bestpractices and benchmarking. Incentives may be incorporating the use of an employee of the month inclusive of preferred parking privileges, event tickets, or other incentives to engage employees to identify potential risk, or others areas the ensure venue readiness and ultimately the improvement of the patron experience. Research is, by its nature, is cyclical or, as Leedy and Ormrod (2014) write, helical (p. 2). As such, the next action planning step is for the evaluation team is to repeat the six-step process such that continuous cycling, and the quest for ongoing enhancement of professional practice within the facility management industry occurs.

## **4. CONCLUSIONS**

The CEC collaborative action research study outcomes connected to the study's data analysis and interpretation in multiple ways. Noted improvements include CEC website, venuescape, information for patrons with disabilities, just to name a few. This article presented a useful tool for patron experience evaluation that can have meaningful application for professionals in the sports, entertainment, convention and business meeting facilities industry. Collaborative action research is a multi-functional way for facility management professionals to systematically investigate: a programmatic area in need of improvement or enhancement (i.e., service delivery); or validate the importance and value of public assembly facilities to a community; to meet municipal/contractual obligations, and; in order to grow the body of existing knowledge of facility management and support professional practice. This case study example of academic engagement with the facility management industry outlined the process of collaborative action research.

This study describes the collaboration between academic researchers, facility management administrators, and students studying facility management and is anticipated to serve to motivate global facility management professionals to explore this as a viable tool for patron experience

evaluation. These collaborative action research team members (researcher, students, facility professional) concluded that collaborative action research is an applicable way to bring together professionals and future professionals, to engage in a multi-beneficial process designed to ultimately improve the patron experience and venue potential. By including various stakeholders (i.e., academic researchers and facility professionals) as well as incorporating college students pursuing formal education in the sports and entertainment facility management industry, the benefits are collective.

For the facility management organization, the advantages of being part of the research team can be multiple, for example to enhance professional practice (Sagor, 2000). When writing for the body of existing knowledge of facility management, and/or meet municipal/contractual obligations, the collaborative action research process can assist in identifying the evaluation factor. Collaborative action research allows for additional input, support and *external reviewers* perspectives which ultimately assist the facility to improve service delivery and support professional practice. When department heads interact directly with the research team, they begin to further comprehend and appreciate the event-to-event impact of venue readiness and service delivery upon clients, patrons and other users of the venue.

Students involved in the collaborative action research process also reap benefits. The understanding and importance of enhancing the patron experience and venue readiness becomes clearer to aspiring sports, entertainment, convention and/or business meeting facilities professionals during the process. Barkley, Cross, and Major (2005) wrote learning must be actively engaged in learning (p.11), as such, student involved in this study's research activities utilized the power of reflection and group discussion to maximize learning and knowledge. Current and aspiring facility professionals become open to the importance of evaluating the patron experience and venue readiness at sports, entertainment, convention and business meeting facilities as they realize the positive effects. With precise guidelines on what to evaluate, students begin to observe staff behavior and patron interaction and venue readiness and functionality that they would not have considered if merely attending an event. When students observe the improvements in a website, in the overall venue readiness, and/or the staff behavior as a result of changes directly implemented as a result of their effort, the importance of evaluation grows. Ultimately, when students are stakeholders in the collaborative action research process, they report improvement in their connectivity to the industry, in their knowledge of methods to improve staff training and learning, with the ultimate goal for the enhancement of the patron experience. Finally, they gain valuable knowledge in preparing for their forthcoming careers. In congruence with Rotenberg (2005), students working with others often increase involvement in learning. Sharing one's ideas and responding to other's actions sharpens thinking and deepens understanding (p. 27).

At a time when public assembly facilities (i.e., sports, entertainment, convention and/or business meeting venues) are faced with an increasing need to justify subsidies, and/or other forms of financial support, demonstrating outcomes inclusive of positive *customer, patron and visitor experiences*, and *venue readiness* make collaborative action research an ideal tool in program evaluation where benefits are abundant. It is the intention of the author that other facility management professionals will investigate prospects to use this tool as they work to educate oversight boards, and/or other governmental agencies in justifying facility existence and benefits to the community through regular program evaluation.

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