ESTABLISHING A TRAINING ACADEMY

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ABSTRACT

In the current economic climate, the demands put upon a utility require education to be delivered faster, cheaper and more effectively to a fluid workplace and a mobile workforce. Learning effects must be measurable with a clear line of attribution to business performance. In order to be sustained, learning must be strategic as well as impacting the bottom line. This paper presents how utilities can implement an educational process. It is the choice of the organization to decide whether that process will be strategic or merely tactical. It provides a case study example of how a capital improvements management office maximized its education investment dollars as well as explains how this process could be implemented in other organizations. The education spectrum available to most utilities ranges from the provision of generic off-the-shelf type of training to the development of an internal university / training academy model. Experience shows that internal universities tend to improve relevance, establish a shared vocabulary, emphasize applicable experience learning, and most importantly, increase knowledge retention. A case study of the City of Kansas City, Missouri Capital Improvement Management Office (CIMO) illustrates how a training academy focused on core skills can be implemented. Improving the skills of individual employees enhances the capabilities of the organization as a whole. As the organizational profile of public utilities change rapidly in the coming years, greater attention will need to be placed on education and training in order to maintain operations and plan for the future.

KEYWORDS

Organizational change, strategic education, internal universities, training academy.

INTRODUCTION AND BACKGROUND

In the current economic climate, the demands put upon a utility require education to be delivered faster, cheaper and more effectively to a fluid workplace and a mobile workforce. Learning effects must be measurable with a clear line of attribution to business performance.

In order to be sustained, learning must be strategic as well as impacting the bottom line. Some of the critical learning issues facing today's utilities include:

- Reorganization and restructuring of staff assignments and reengineering of business processes for greater work efficiency
- Increased skills shortages due to workers who are inadequately prepared for the high-tech work of the 21st century
- Doubling of knowledge every year by virtue of the rapidity of knowledge sharing over the internet
- Global competition from the world's most powerful companies for limited resources

- Escalating need for organizations and individuals to change to keep pace with the preceding issues
- Evolving workforce resulting from shifting demographics due in large part to the pending retirement of the Baby Boomers

According to a study by the American Society for Training and Development (Sugrue, 2003), costs for training at U.S. firms typically amounts to approximately two percent of payroll costs. This is a considerable investment, given the large size of many organization's payrolls. Although it is now a common understanding that the acquisition of knowledge is central to the success of any organization, the question of how to manage this to get the most value for the investment remains elusive.

This paper presents how utilities can implement an educational process. It is the choice of the organization to decide whether that process will be strategic or merely tactical. It provides a case study example of how a capital improvements management office maximized its education investment dollars and how this process could be implemented in other organizations.

THE EDUCATION SPECTRUM

To address critical learning, some organizations propose, and sometimes implement, an education and training plan. The plan plots the organization's commitment on a spectrum from "check-the-box attendance" training to strategic learning with a high value on individual and developmental education. This education spectrum, as shown in Figure 1 below, ranges from individuals receiving generic off-the-shelf type of training to the development of an internal university / training academy model.

Figure 1 – The Education Spectrum



Generic Off-the-Shelf

The educational option that typically carries the lowest cost to the utility involves the use of off-the-shelf training programs. Such programs are usually based on a software package or textbook purchase that is then made available to individual students. It is then incumbent upon the student to follow the program and understand the training. The value of this approach is that it can proceed at the pace set by the student and it is usually the lowest cost option, but the tradeoffs include the lack of direct applicability to the utility. Off-the-shelf options are sufficiently generic that they have mass applicability and therefore do not lend themselves to the specific nuances of a single purchaser. This type of education program is almost always tactical and skill based. It is appropriate for training on certain word processing, spreadsheet and scheduling programs. Its applicability to any single utility's higher level learning needs is low.

Local Universities/Executive Training Programs

Education programs offered by local community colleges and universities or executive training programs that are typically aimed at mid-management to executive level employees. Like off-the-shelf options, such offerings are convenient and typically lower cost. However, they are most often generic in design and therefore fail to address specific issues facing individual utilities. The applicability of course materials may or may not align with the utility's strategic plan or its unique vocabulary. A step above off-the-shelf options, these options do allow direct interaction between students and teacher/facilitator and therefore tend to better address the interactive learning style most effective with adult learners. In most cases, such education programs offer Continuing Education credit for those professionals seeking such to meet local professional licensing requirements.

Internal Programs Without Assistance

This fourth option for utilities has the greatest similarity to Internal Programs with Consultant Assistance. Strategic alignment can be gained through common messages delivered across multiple courses. Common vocabulary can be fostered among different employee groups and a customized curriculum will address utility-specific issues. This option is likely to be lower in cost than the consultant-assisted option, but is also likely to be unable to provide Continuing Education Units. In addition, pending the skills of the utility-provided teachers/facilitators, the course design and delivery may or may not include methods applicable to adult learners.

Internal Programs With Consultant Assistance

This educational option affords a specific utility the opportunity for courses tailored to its unique situation. To design such courses, consultants interview the leadership team of the utility to understand its strategic direction and the overarching objectives for the courses to be delivered. Course content is then tailored to meet the specific needs of the utility. While this is typically the highest priced option along the education spectrum, significant benefits are also associated with it. Benefits include the opportunity to gain strategic alignment across different departments/divisions of a utility by delivering consistent messages across multiple courses. Common vocabulary can be introduced through customized courses that can facilitate communication between different work groups within the organization. As with university-led courses, internal courses also offer direct interaction between students and teacher/facilitator to enhance adult learning. And, assuming the consultant is an accredited learning organization, this education option also offers Continuing Education Units to those professionals who require them

A utility's location on the education spectrum offers different advantages, as described above. While there is no right or wrong answer when it comes to a utility's education plan, experience has shown that positions toward the right side of the spectrum tend to bring significant benefits to any organization. They improve the relevance of the material to the specific utility, establish a shared vocabulary across different "silos" within the utility and emphasize applicable experience learning. Finally, pending the teaching methods employed to engage adult learners, courses delivered internally offer the greatest opportunity to increase knowledge retention.

KANSAS CITY CAPITAL IMPROVEMENTS MANAGEMENT OFFICE (CIMO) CASE STUDY

The City of Kansas City CIMO was established in 2004 with the goal of increasing the rate at which city projects were planned, designed and constructed to meet an aggressive schedule of urban redevelopment. One of the critical competencies required for this work is Project Management. CIMO has set a goal of becoming a leader among public agencies in the area of project management. Success and effective functioning of project teams is greatly influenced by the level of training and implementation of standardized project management fundamentals.

A series of steps were followed to develop the curriculum for CIMO that successfully met its needs. The series include a needs assessment, followed by a set of recommendations of topics to be covered, followed by preliminary course design and review. Review comments were then used to finalize the design. Delivery of the curriculum was followed by a feedback step to afford continuous improvement to the course materials and to identify additional educational needs.

The first step in achieving CIMO's goal was to conduct a needs assessment to evaluate the current level of project management skills across the organization. Interviews with key department leaders and focus groups with a cross-section of employees were conducted to identify the specific cultural and technical imperatives associated with managing projects within CIMO. Over 40 people were interviewed, typically in groups of four to six. Common questions were posed to each group and responses were collected, categorized and summarized. The needs assessment participants also completed a questionnaire tailored to CIMO to ascertain their perception of the relative importance of nine different project management skills and their personal level of expertise within each skill area.

All input received in the needs assessment was evaluated and summarized in a report to CIMO senior management. The data revealed strong and weak points in staff skills. It also allowed insight to the prevailing attitudes and readiness of the employees to change. The results of the needs assessment included a concise articulation of CIMO's training goals, a comparison of the prevailing views of project management held by leadership and project managers, and a prioritized ranking of the aspects of project management where training and education should be initially concentrated. The needs assessment also revealed that adjacent competencies, including team building, formal communications and resource management, were areas requiring focus in order to promote the success of CIMO projects.

Using input from the needs assessment, steps were then taken to design the curriculum for a series of project management educational courses for CIMO. An early decision that proved significant was to establish a formal Life Cycle of a Project for the city. Using the Life Cycle as the foundation of its approach to any project, CIMO was able to establish a standard vocabulary and use it in the design of all courses included in its training academy. With project management training as the foundation and consistent theme for the academy, the following set of courses comprised the 2005 CIMO training academy:

• Project Management Fundamentals - to enhance project manager skills while conveying the organization's expectations and performance objectives for the role.

- Project Management for Support Personnel to convey the roles and responsibilities of staff supporting project managers
- Communications and Presentations to provide practical strategies for improving the communication skills of the CIMO project managers in formal and informal settings
- Leadership Development to provide advanced learning in leading and inspiring project teams
- Negotiations Fundamentals to address a critical skill gap within CIMO while clearly defining the acceptable contracting parameters of the new organization

CIMO staff members were involved in the specific course content selection to ensure that CIMO core values, business processes and organizational culture were represented and reflected in the courses. The overall objective of the courses is to establish a base line level of consistent project management and related skills to CIMO project managers to enhance performance through standard work processes. An additional objective of the courses was to develop the leadership skills of those individuals selected to fill senior positions within this newly created city department.

In order to maximize the return on the training investment, a proven education philosophy was instituted for all courses. Education offerings must provide theoretical, practical and experiential learning activities blended into a comprehensive, dynamic curriculum uniquely tailored for each class. The curriculum is built upon a framework that ensures growth and development, which is sustainable and relevant. The curriculum framework is based on the following approach and is detailed in Figure 2:

- The first module provides theory on the topic under study
- The second module offers hands-on, engaging interaction with the material
- The third module offers practice to master the topics being studied

Figure 2 – IACET Course Development Standards



Other key aspects of course design included, among others, use of a modular classroom approach, usage of both technical specialists and education facilitators and engagement of CIMO senior executives in the course delivery. Additionally, the courses provide fully accredited Continuing Education Units (CEUs) through the International Association of Continuing Education and Training (IACET). IACET is an educational accrediting agency with rigorous demands for course content and delivery.

Delivery of the various courses to CIMO employees was based on the principles of effective adult learning. The number of students in each class was limited to 25 to allow effective interaction with not only the course facilitators but also between students. This peer group interaction was critical to the development of a project management network within the organization to enhance the learning that began in each classroom. Delivery was also done in a manner that accommodated the work demands of the participants. While each course was at least eight hours and as much as four days in duration, in no instance were participants away from their normal work responsibilities for more than two days in a row. Finally, to enhance the building of employee networks and ensure the student's focus on the course materials, all training academy courses were conducted in classrooms remote from the participants' regular office space.

The principal benefits provided by the transformative education approach used in the CIMO training academy include the following:

- A curriculum customized to CIMO's unique strategic and organizational needs
- Course content emphasizing the role each individual plays in serving Kansas City's customers
- Course content customized to complement CIMO's existing project management strengths and weaknesses
- Course content utilizing the established project management vocabulary and norms of Kansas City, thereby increasing material acceptance and retention
- Content delivery methods and materials designed specifically for adult education

- Courses designed specifically to promote the rapid development of CIMO's organizational culture
- The rapid creation of a project management peer support network
- Unambiguous definition of the project manager's comprehensive role within CIMO
- Focused communication of the project manager's critical responsibilities and performance objectives

THE IMPLEMENTATION PROCESS

The Kansas City CIMO example is an excellent illustration of how a training academy focused on core skills can be implemented. Improving the skills of individual employees enhances the capabilities of the organization as a whole. As the organizational profile of public utilities continues to change rapidly in the coming years, greater attention will need to be placed on education and training in order to maintain operations and plan for the future.

Public utilities can begin the process of developing a training academy by following a seven-step process:

- Step 1 Articulate the big-picture goals for the organization.
- Step 2 Determine where on the education spectrum you want your organization to be.
- Step 3 Conduct a training and education needs assessment around skills related to your organization's core competencies.
- Step 4 Communicate the results of the needs assessment to a wide leadership audience.
- Step 5 Establish a curriculum of education topics for the core areas of improvement identified in the needs assessment.
- Step 6 Design courses with content that is immediately usable in every day work practices of course participants. Best results are generally achieved when course content is designed in partnership with education specialists. Education materials between courses should build on each other to maximize the impact of the learning.
- Step 7 Frequently review course content and delivery, solicit feedback from participants at every opportunity, and modify content to continuously reflect the immediate and future needs of the organization.

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REFERENCES

Sugrue, Brenda (2003), American Society for Training & Development (ASTD) 2003 State of the Industry Report. *American Society for Training and Development;* Alexandria, Virginia.