

DEVELOPMENT AND POST ANALYSIS OF
MICROSOFT OUTLOOK 98® FORMS
TRAINING AT COMPANY XYZ

By

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ABSTRACT

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Company XYZ implemented Outlook 98® for their new email software. It provided extra functionality that their current Windows-based email software did not support—creating custom forms. They had been able to do this with mainframe email and individuals had been requesting this ability within Windows.

The form's development environment is unique, with some common features of other software. Company XYZ decided to have a course created that would teach individuals from departments how to create their own forms. This would help them obtain forms that met their business needs and reduce the cost of hiring consultants to develop forms.

The researcher worked with Company XYZ's email department to create a course that met their needs. All of the standard materials that Company XYZ uses were created (handbook, instructor guide, handouts, exercises, and course evaluation). The course was piloted in Wisconsin and adjustments were made. The course is now taught at three locations within the United States.

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Chapter 1

MICROSOFT OUTLOOK 98® FORMS TRAINING

INTRODUCTION

What are Forms

Email software use forms to send messages from one user to another. Common email message forms include four fields: To, Cc (carbon copy), Subject, and Message. Depending on the software there may be other fields on the message form. Outlook 98® allows users to develop their own forms. These forms then contain the fields that the developer included in the form. The user can also add drop-down lists, option buttons, check boxes, text boxes, and many other items. Outlook 98® forms can also contain Microsoft Office documents, such as an Excel® spreadsheet or Word® documents. Forms may be as simple as a standard email form, or they may contain multiple pages (tabs) of fields to be filled out.

There are benefits for end users and administration. End users have a form that is easy to follow and assist them to understand what information is being requested. Administration always receives information in a preset format with consistent information. Forms provide an efficient and effective means of communication.

Why Create Outlook 98 ® Forms Training

Company XYZ has been using two forms of email for the last two years. They have been using mainframe email and also Microsoft Exchange®. In 1998, they decided to change their Microsoft Windows® email from Microsoft Exchange® to Microsoft

Outlook 98®. There are multiple reasons for changing their email client to Outlook 98®; one of those reasons is the availability to develop custom forms.

With their mainframe email system, individuals had the ability to develop custom forms. However, Microsoft Exchange® does not contain this function. Individuals in Company XYZ have been requesting the functionality to create custom forms within their Microsoft Windows® environment ever since the company installed Microsoft Exchange®. Due to the lack of custom forms in Exchange®, some users have maintained two email accounts for the past two years: one mainframe and one Exchange®. Now that the company is upgraded to Outlook 98®, custom forms are available once again.

Outlook 98® beta users at Company XYZ started using Outlook 98® November 1998. It was released to production users beginning in June 1999. Most individuals at Company XYZ are not familiar with the end user functions of Outlook 98®, and have no experience at developing custom forms in Outlook 98®. The teams involved searched for five months within the company and externally, including computer-consulting firms, for individuals that specifically had Outlook 98® forms development experience – none were found.

Through meetings and discussions with employees, Company XYZ evaluated the need to develop custom forms. There are numerous mainframe forms that individuals want converted to Outlook 98® forms. On occasion, new forms are desired. Some forms become needed during policy and operational changes. These forms tend to become used long term. Other forms are desired during a temporary project. These allow individuals

to easily gather information for a short period of time. Multiple departments and locations throughout the world desire custom forms. Often, forms work best when created by somebody within the same department, or that works closely with that department. They understand the purpose and objectives of having a form in place. Hiring outside consultants to develop all of the desired forms would create an initial high number of consultants. The number of consultants would fluctuate as projects began and ended in the long term. To meet quantity and overcome their long-term fluctuation needs, Company XYZ decided internal people should learn how to develop custom forms.

Some people could learn on their own how to develop custom forms. This could cause a couple of problems. Departments would be on their own to get forms developed since no formal structure existed. A second problem would occur when somebody that had acquired form development responsibility left a department or the company. The department would lose this experience and knowledge with no backup. The third problem that would exist is the lack of standards. If various people took it upon themselves to learn through trial and error, there would be no consistency in how a form is developed. This could cause confusion for end users that use forms developed by various people. It would also make it more difficult to edit a form that someone else created. Having standards make it easier for another person to open an existing form and make any necessary changes. Standard processes and consistencies can be communicated through the use of an Outlook 98® forms class.

There were multiple reasons to create a class for Outlook 98® forms. Company XYZ had, and still has, the need for custom forms to be created. The need to have forms created does not appear to have an end date. Also, they want to make sure forms are created with consistency and standards. For these reasons, an Outlook 98® forms class was developed.

Statement of the Problem

The purpose of this study is to create a course that will provide Company XYZ individuals throughout the United States with the knowledge and skills to develop basic Outlook 98® Forms.

Scope of the Study

Company XYZ employs individuals throughout the world. The majority of their employees are employed in the United States. Their main administration sites are located in four states, one of which is Wisconsin. It was determined that the majority of the individuals that would be developing Outlook 98® forms work at one of these sites. The pilot courses were taught in Wisconsin, with the regular courses to be taught at the other sites after it was in its final format.

Definition of Terms

Beta test: “The formal test of under-development courseware and draft documentation by selected users before external testing or distribution users test the functionality and determine whether operational or utilization error still exist” (Trainers Dictionary p. 21-22).

Course Development: To create a complete set of materials that “result in the attainment of the desired learning objectives” (Goad 1982, p. 13).

Email: Electronic form of communication. Messages are sent and received to individual computers.

Formative Evaluation: Conducted before instructional materials are delivered to a majority of the targeted learners (Rothwell and Kazanas 1992, p. 228).

Forms Development: The process of developing forms. In Microsoft Outlook 98® this involves the use of electronic tools to create custom email templates.

Likert Scale: “A type of instrument commonly constructed and used to measure opinion. It is characterized by requiring the participant to answer questions by selecting from among choices that range from strongly agree to strongly disagree” (Trainers Dictionary p. 134).

Mainframe: Type of computer central processing unit. Individuals access by monitors and keyboards located at their work cite. All data is transferred and stored as text only.

Microsoft Outlook 98®: A personal information manager software. Provides one location for individuals to store appointments, tasks, email, and contacts.

MIS: Management Information Systems, the department in an organization that deals with computer aspects of the business.

On-line Help System: “A job aid built into the user’s computer software. Provides just in time help. On-line help systems may be the most often used technological job aid” (Trainers Dictionary p.170).

Outlook Forms: Electronic means to provide functionality to create custom mail templates for frequently used items.

Pilot Tests: “. . . [focuses] on participants’ reaction to instructional materials in a setting comparable to that in which the instruction is to be delivered” (Rothwell, 1992).

Researcher: “The HRD role of identifying, developing, or testing new information (theory, research, concepts, technology, models, hardware, etc.) and translating the information into implications for improved individual or organizational performance” (Trainers Dictionary p. 208).

Summative Evaluation: “The assessment of the merit or worth of a program” (Hawthorne 1987, p. 54).

Limitations of Study

Limitations that affect the findings and conclusions drawn from the study are:

1. Outlook 98® is new to Company XYZ, it’s full potential has not been discovered.
2. There are still questions concerning how Outlook 98® interacts and integrates with other software.
3. Every person that participates in the study will have a different use for the material. The researcher cannot focus on how to use the software for a specific business purpose.
4. The material and course must maintain and coincide with Company XYZ standards.

5. Participants will voluntarily sign up for the course. Number of participants per session is dependent on the amount that signs up and size of the training room.

Overview

The remaining portions of this paper will discuss the development and analysis of the Outlook 98® forms course. Each chapter looks into the specifics of a portion of the development. Everything from theories to recommendations for the training will be discussed.

Chapter 2 looks at the history of computer training, then looking into various adult learning theories, and it will finish by discussing various analysis tools. Chapter 3 will go into the details of the methods and procedures used for the class and its analysis. Chapter 4 actually looks at the results of the analysis. In Chapter 5, the researcher will provide a summary of the paper and have recommendations for the Outlook 98® forms training.

Chapter 2

OUTLOOK 98® FORMS LITERATURE REVIEW

Chapter Overview

This chapter looks at multiple references pertaining to the research project. Information is used from resources concerning multiple topics including: history of training, adult learning theory, course development, and course evaluation. Each resource provides insight into why and how this project was developed.

History

Training

Training has existed for thousands of years. Many of the changes, goals, and theories behind it changed in the 1900s. Hawthorne (1997) describes a brief history of worker training from the Egyptians' slaves into the 1980s. She states that it began with purely "direct, task oriented, and on-the job" (p. 2). The Industrial Revolution still focused on tasks instead of production or business learning. Prior to World War I turnover for unskilled and semiskilled labor was as high as 125 percent. Training and retraining was necessary due to the high turnover and the fact that workers moved from one industry to another. In the 1950s, corporations started to focus more on management education. Most of this education was oriented toward liberal arts; especially for managers with a technical background. Some corporations even began internal programs for executives. The 1970s started showing more training as formalized courses. This period also displayed the building of corporate colleges. Many of the courses offered even earned the students college credits by being approved by the American Council of

Education. The 1980s changed education to more of a systems approach to education. Hawthorne states that technological changes impacted the need for “continuing education for both technical and non-technical employees at all levels...” (p. 4). Training is constantly changing to meet the needs of the social and organizational goals. Corporations change their objectives, goals, and culture. Training programs change to meet the needs of the current organization.

Adult Learning

Marriam (1993) looks at a different type of history. Marriam describes the changes that have taken place in adult learning, the psychology behind the training. The first investigations took place in the 1920s. Researchers (Thorndike, Bregman, Tilton, and Woodyard) found that the learning curve declined about one percent for each year between the ages of twenty-five and fifty. Marriam states that Lorge disputed this research by stating the test scores correlated more to previous education than to age. It is Marriam’s opinion that much of the early research conducted is inconclusive due to it taking place in laboratories or other unrealistic settings. The more recent research holds the most promising results due to “consideration of experience, personal history, and social and cultural contexts” (p. 7).

Klevins describes three periods of adult education beginning in 1919. The first period ran from 1919 to 1929. Adult education was the road to “reform, reconstruction, and progress” (p. 22). 1930 to 1946 was the span for the second period. This period concentrated on the lessening of ideals and the raise of realism. Specific definitions and subject matter were expected in training. The third period has lasted from 1947 to today.

This movement sees various things becoming more formalized. Higher focus on professionalism and expansion of graduate programs are seen during this period (1982).

Evaluation

American Society for Training and Development [ASTD] (1992) states that Donald Kirkpatrick introduced his four-step approach of evaluation between 1959 and 1960. He developed four articles, one article per step. Goad (1982) lists these four steps:

1. “Measuring the reactions of participants – how well they liked the training.”
2. “Measuring the learning of knowledge, skills, and attitudes.”
3. “Measuring on-the-job behavioral changes that results from the training.”
4. “Measuring desired results. Were they achieved?” (p. 161).

ASTD (1992) says that the framework of Kirkpatrick survived, or even prospered, during all of the changes that took place between 1959 and today. Hawthorne states that World War II training and evaluation is the starting point for evaluation research. Evaluation research is the “provision of information” collected systematically (1987).

Adult Learning

In order to effectively design or teach a course to adults, one must understand how they learn. Goad tells us that a lot of research has been done and data is available on how, why, and when learning takes place. There are three categories for learning groups: cognitive, psychomotor, and affective. Cognitive learning is the learning of knowledge.

Psychomotor deals with physical skills that require the student to do something.

Affective skills are associated with attitudes, values, and interests (1982).

Margolis & Bell (1986) provide five basic assumptions that Malcolm Knowles identified:

1. “Adults are motivated to learn as they develop needs and interests that learning will satisfy.”
2. “Adult orientation to learning is centered around life or work.”
3. “Experience is the richest resource for adult learning.”
4. “Adults have a deep need to be self-directing.”
5. “Individual differences among adult learner increase with age and experience” (p. 7-8).

Goald believes that at the heart of adult learning is the assumption that they want to learn. This can be for a variety of reasons. They may personally want to learn something or they are responsible for learning something. Even if they were told to go to training, it is because their professional role requires it and they chose that profession. Adults learn differently than children. They learn by doing, requiring realistic examples and problems, they relate their learning to what they already know, prefer an informal environment, need a variety of stimulates, learning objectives should be met – not graded, and the teacher is more of a facilitator to assist in the learning procedures (1982). In “Is There a Learning Curve in This Business,” Thiagarajan adds another variable to how the environment must adapt to the learners desire for information. Thiagarajan divides the adult learner into the committed learner (job-relevant skill) and the casual learner (self-goal). Due to the lack of necessity, the teacher must be able to entertain the casual

learner (1999, p. 34). Galbraith states that the learning process is similar in all human beings. However, there are some important differences between children and adults. Adults have more prior knowledge and their traits are not as “plastic” as in children (1998). The adult learner’s background takes a large role in the education process. Merriam states that learners should be involved in setting their directions, the means of learning, and even the evaluation. “...the needs and experience of the learner take precedence over the expertise of the instructor” (p. 19). Tice agrees by suggesting that learning becomes more meaningful and “profound” when the background and skills are acknowledged during the course (1997). All of these experts believe adult learners are unique and come to a course with skills. Those skills must be acknowledged to help motivate the adult learner.

Klevins gives conditions that effect the behavior of the adult learner. The first condition is making the learner the central figure. Stereotypically, the teacher is in charge and controls the classroom. Making the learner the central point provides a more realistic environment for the objectives to be met. The second condition is that the learning is in the hands of the learner. The teacher is there to facilitate the process and relate it to the learner’s background. The final condition is that the teacher believes in the appropriate learning concepts. These concepts include:

1. “Adults must want to learn.”
2. “Adults benefit most from active participation in the teaching-learning process.”
3. “Adults respond better in an informal atmosphere.”

4. “Adults progress more rapidly in learning situations that involve dealing with realistic problems.”
5. “Adults maintain interest better when a variety of methods are used.”
6. “Adults require reinforcement at each step.”
7. “Ambiguity has no place in adult education.”
8. “Adults should be permitted to practice new skills without threat” (p. 217).

Wlodkowski lists six factors that impact learner motivation: attitude, need, stimulation, affect, competence, and reinforcement. Attitudes make a large impact on the learning process. Often, the adult is attending a course for their job, a promotion, or a personal goal. This makes the course itself seem high risk to the adult. The adult learner automatically creates an opinion of the instructor, the subject, the learning situation, and their personal expectations. Their attitude directly affects their opinion. Needs push individuals toward a specific goal. The person’s current need depends on their specific history of learning, the situation, and the last need that was met. Teachers become more effective when they show how individuals can meet their needs through participation in the course. “Stimulation is any change in our perception or experience with our environment that makes us active” (p. 51). Stimulation assists adult learning, it helps learners pay attention and create a positive attitude. Affect is the emotion that the adult learner experiences. A person’s feeling can dramatically alter the reaction to learning. Teachers must remember that emotions affect behavior and thinking. Competence means

that the adult learner's objective is to maintain "effective interactions with their world" (p. 54). Adults that feel competence and progress in a course are compelled to continue and strive to learn more. Reinforcement is one of the most basic fundamentals in adult learning. Reinforcement is any stimulus that increases the potential for a given response. Positive reinforcers can vary from physical goods to approval from peers. Teachers must provide positive reinforcers throughout the course to help make students feel like they are doing well (1984). Attitude, need, stimulation, affect, competence, and reinforcement all effect the adult learner. The teacher cannot automatically provide these to a learner. The teacher must realize that these variables all exist and provide an environment and course that nurtures them.

Spitzer believes that the design, presentation, and learner's motivation impact the success of training. Motivation can even make a poorly designed course succeed. The motivational side of training has lacked the attention it needs over the years. Action, variety, choice, stake sharing, and encouragement are only a few of the items that can motivate learners (1995). Apps (1991) adds that New York based College Board research shows adults participate in learning usually after a major life-changing event (e.g., new job, lost job, divorce, new baby, etc.). Apps refers to this event as a "teachable moment." He also agrees that adults usually want to improve their current job, keep up to date for their current job, or are simply interested in a topic (p. 41).

Adult learners are different from children. They attend courses to solve a specific problem, for their jobs, or to learn more about a topic they are interested in. They attend with a current purpose and need to apply what they learn.

Course Design

Course design plays a large role in the success of the course. The design of the course includes many aspects that impact setting up for class, types of instruction to be used, what the students learn, and how they learn it. The design of the course plays a large role to meet the organizational goals.

Bader and Bloom describe course design as “highly creative as well as systematic, and the approaches to adopt are unlimited” (p. 26). They also state that scheduling must take place so the learners can practice what they learn as soon as possible. If the training is too far in advanced, the learners can forget what they learned (1995). The project must correspond with the organization’s time frame.

Once the time frame has been set, the design takes place. Rothwell and Kazanas list six steps to follow when designing instructional material (p. 196):

1. Preparing a working outline
2. Conducting research
3. Examining existing instructional materials
4. Arranging or modifying existing materials
5. Preparing tailor-made instructional materials
6. Selecting or preparing leaning activities

The working outline shows the content and flow of information. It helps the designer remember what they are doing and how to meet the objectives. Conducting the research identifies materials that are available. If materials already exist that help meet the goal of the course, the cost and time of the project can be greatly reduced. The third step,

examining existing instructional materials, decides if the materials found during step two actually meet the objectives for the organization. Materials may have been located that are related to the same topic, but not in the fashion that meets the corporation's objective or matches their culture. Arranging or modifying existing materials is the fourth step. If the materials located do meet the needs of the organization, they may still need to be modified to meet specific goals and time frames for the organization. One of the main issues with this can be copyright permissions. If copyright permission can be obtained, this can create a course that meets the needs – at a reduced cost. The fifth step is to prepare tailor-made instructional materials. The organization needs to create its own materials if other resources could not be found. The final step is to select or prepare learning activities. Learning activities give the learners a chance to demonstrate what they have learned and apply it in a business example (1992). Each of these steps helps design a course that will meet the business needs.

Goad says the course outline contains a combination of selected information. The outline can include a variety of things including objectives, audience, descriptions, length, prerequisites, and events (1982). Apps tells us that organizing the content can help the students learn the material and help the designer choose the appropriate tools (1991). An outline helps the designer construct the appropriate flow and helps choose the correct materials. This reduces the amount of rework that must be done after the training has been developed.

Finding existing courseware to use can save time and money. Clothier says you may have many choices to pick from. The key things to look for are “clarity, simplicity,

consistency, and organization.” Some of the best training material Clothier has found was “about half as thick and detailed as some of the most popular courseware available. It was simple, graphical, to the point, and easy to teach from...” (p. 147). Sink states that there is a variety of things to think of when selecting material. Try to involve verbal and visual information to increase the learner’s interest. Also, do not forget to make sure the materials and their availability align with the course’s cost, timing, and company policy (1986). There are many factors to analyze when selecting pre-constructed courseware.

If the organization needs to create its own materials, there is a lot of work and time that must go into them. Schedlbauer states that off-the-shelf training may not apply to the specific needs or the situation of the organization (1998). According to Rothwell and Kazanas (1992), there are four types of materials that can be produced: learner directions, instructional materials, tests, and instructor directions. The learner directions are not always necessary. They are used more for self-paced courses, not instructor led courses. The instructional materials include the actual content. This includes text, visual aids, and handouts; some of these materials become job aids. Tests are the evaluations for students. Instructor directions provide the procedures to help deliver instruction (p. 205-206). Birnbrauer provides some standards for material that is used as a job aid. The steps should be specific, step-by-step. The stimulus and response should be included in the material (e.g., “push button when light goes on”). Critical words should be highlighted to draw attention. Graphics can also make the material easier to understand and follow (1985). Clothier says to make certain the materials remain consistent. Readability is important and spending a little time on making sure of consistent details,

such as fonts, are important. Make sure every heading, subheading, caption, etc. is always the same. He also says to state the objective at the beginning of each chapter. This provides a quick overview so learners know what to expect (1996). Referring specifically to computer training, Boyd says learners need reference materials for their jobs, instead of manuals. This can be cheaper and quicker to develop. The learner can also find it answers to specific tasks while on the job (1997). Newman, Pallesen, and Visk state that during system rollouts, the designer does not have all of the answers until after the initial training (1999). Each type of material has its own purpose and content. Which ones to develop depend upon the format and condition of the training course.

There are a lot of steps and functions involved in creating a course. To save time and money, it is usually best to find materials that meets the organization's needs. However, if the courseware found does not meet those needs, they need to be modified or new courseware must be developed. Developing courses includes lots of time and factors. The course must meet time frames, cost, company culture, and the needs of the learners.

Evaluation

A course can be developed and delivered on any topic to any person. However, evaluating the course is the only way to know if it truly made a difference. Goad informs us that training is dynamic. If it is left alone, it becomes “stagnant, outdated, or inaccurate—perhaps even harmful to the learning effort” (p. 159). There are various stages and levels of evaluation.

Stages

There are two stages of evaluation: formative and summative. The evaluation of the course begins with the pilot course. The pilot course must be evaluated to help the course meet the needs of the learners. Rothwell and Kazanas provide three reasons to perform formative evaluation. First, the materials and methods used should be evaluated so revisions can be made. This increases their effectiveness and minimizes learner's confusion. The second reason is to place a value on the course. The evaluation shows how the learners judged the course and its purpose. The final reason is because evaluation is expected. The pilot course is taught for the designer to learn what needs to be changed and make useful edits to materials (1992). After the edits have been made from a pilot course, the course is better prepared to be widespread throughout the organization.

Hawthorne describes summative evaluation as focusing on the final outcomes of a course. There are many types of summative evaluations including benefit-cost (1997). Rothwell and Kazanas describe it as measuring results after delivering the course to the targeted learners (1992). The corporation benefits from summative evaluation as the course continues to be taught.

Levels of Evaluation

ASTD states that Donald Kirkpatrick has provided a sound framework for summative evaluation. There are four levels: reaction, learning, behavior, and results. Reaction is the learner's opinion to the course. Learning tests the knowledge and skills the course was designed to teach. This test often takes the form of a written evaluation.

Behavior deals with how well the knowledge and skills transferred to the job. Learners may enjoy the training, comprehend it well, but not utilize the new knowledge or skills once they return to the job. This is often measured by sending a survey to the learner's manager sixty to ninety days after the training. The final level of evaluation is results. This tells the organization how the training effected the bottom line. It may look at production, scrap, or quality. This is the level that is looked at least often. Each level of evaluation looks at a different dimension. Each level requires more work to prepare and collect data for. There is a direct ratio to how often each level is used; the higher the level—the least often it is used (1991).

Apps adds that evaluation should not take place only at the end of a course. During the course the teacher should pay attention to body language, questions being asked, the discussion (or lack of), etc (1991). Clothier agrees by saying that learners constantly communicate how they are handling the course and the material. Most of the communication, ninety percent, is made up by nonverbal gestures including facial expressions, eye movements, body movements, etc (1996). Bader and Bloom also state that the teacher can evaluate during the course by how the learners are completing practices and assignments (1995). The teacher can adapt for the current students to help the course be successful.

The first level of evaluation is the learners reaction. Klevins provides multiple reasons for feedback from learners. The first reason is that immediate feedback also serves the learner. The learner cannot accept the new knowledge or skills until they have been validated. Providing feedback to the teacher can mentally help the learner accept

these skills. Feedback also shows learners that they are achieving their goals. It helps eliminate the feeling that they have not learned anything and lose their focus. The final purpose is to help the adult learners redirect themselves. Adult learners are self-directed in nature. The feedback makes it easier for learners to redirect themselves, and saves the teacher from needing to interfere and block the learner's path (1992). Bader and Bloom state that the timing of the data is essential. The data should be collected immediately after the course is complete (1995). Apps takes feedback one level further. Instead of taking it upon himself to analyze the results, Apps hands the feedback to a committee. The committee summarizes the results of the feedback. Then, they hold an open discussion with the teacher. This provides information beyond what the participants wrote in their evaluations. Apps learns what to change, what not to change, what to add, what to eliminate, the alterations to the pace, and what materials were useful (1991). The learner's reaction is useful to the teacher. The data can be easy to gather and show what modifications should be made to the course.

The second level of evaluation is learning—knowledge and skills. ASTD states that multiple choice tests are the most popular type of written tests. It “can assess a variety of cognitive processes from straight forward factual knowledge to complex thinking processes.” Writing the test is very important. How it is written affects its validity and accuracy. Writing tests is not a science—it is an art. In order to write a good test, the designer must know the subject, understand the psychology of the people taking the test, and also know how to effectively communicate information (1991, p. 171). Goad describes performance tests as measuring the ability to do something (1982). This

shows that the person can actually perform the tasks taught during the course. ASTD describes Kirkpatrick's suggested guidelines. He says that the learners should be measured before and after the course. This creates a stronger bond to the course. Only taking a test after the course is completed shows the learners total knowledge—what they came to the course with and what they learned. Conducting a pre-test narrows the data to what the learner gained from attending the course (1991). The second level of evaluations shows what the students learned from the course. Depending on the circumstances and environment, the teacher may evaluate the knowledge gained or possibly the actual skills that were taught.

The third level is behavior. ASTD (1992) describes this as "...whether or not trainees are displaying in the workplace those skills, methods, or techniques taught and learned in training" (p. 111). Hawthorne talks about the importance of this transfer. The mere gain of learning is beneficial to the learner. However, the organization does not benefit from the learning until it is applied to the job. Another good point Hawthorne brings up is measuring the effectiveness of blue-collar workers versus white-collar workers. Blue-collar workers usually have production numbers that can be tracked. These can be measured and compared to numbers before training was conducted. Work performed by white-collar workers, such as management, is more difficult to measure. Most of their objectives correlate to people and organizational skills. The performance measures used may be very subjective in some cases, but should somehow relate to the job (1987). Although this level of training is only analyzed by some trainers, it is the

level that begins to show how the organization profits from the training provided to learners.

The fourth level of evaluation is results. ASTD states that is the level that looks at “changes in organizational functions.” It looks at multiple variables, which include such items as lowered costs, turnover, absenteeism, and grievances. This is often the cost-benefit analysis for an organization. However, this is very difficult to relate to the training due to the number of factors involved (1991, p. 177). ASTD also says that when this is analyzed, it is often little more than an inquiry referring to what has changed since training (1992). Geber says level four evaluation is not for every course. It should only be done when the results are top priority for the company and the number can clearly be tied in with the bottom line (1995). This level of training is rarely looked at, even though it is the level that shows exactly how the organization benefited from the training. The measurements that can be looked at are effected by a number of items and correlating them back to the training is difficult to do.

Chapter Summary

Training has transformed throughout history. In the 1900s many things have been learned about training, adult education, and the evaluation of training. Adults learn differently from children. They attend training with past experiences and developed skills. Their current knowledge and skills must be acknowledged for the learner to take stake in the training. Developing courses can take time and be costly. Designers should first search for a course that is already developed that can meet the needs of the organization, even if it needs to be modified. When developing a course the designer

must make sure that it meets the needs of the organization and the learners. The evaluation can look at a variety of things. Kirkpatrick described four levels of evaluation: reaction, learning, behavior, and results. Each of these levels provides an insight to the success of the course. Each step to implement a course affects its success.

Chapter 3

OUTLOOK 98® FORMS PROCEDURES

Overview of Outlook 98® Forms Training

The training for Outlook 98® forms at Company XYZ had multiple steps to its creation. First, the researcher met with the project leader for Outlook 98® forms. Items discussed were the purpose of the training, the type of audience, and the materials to be developed. The project leader was in charge of aligning forms with the goals of the company. The researcher was in charge of creating the course and communicating the goals to employees.

The researcher suggested that various materials be developed for the students. The materials suggested were consistent with Company XYZ standard training courses. Suggested was a handbook for the students, a student guide with exercises, and an instructor's guide. The guides would be used during class and the handbook could be used during class as well as a reference when developing forms.

The course was expected to run numerous times when it was first released. It would be offered as much as demand required it to be. After the initial sessions, the class would be offered as needed for an unlimited amount of time.

Audience

Before any material was developed, the audience had to be determined. Knowing the general background of individuals interested in forms development made it possible to determine the topics and detail to be covered in the class and the handbook. Two project individuals provided the researcher with a description of the typical Outlook 98®

forms developer at Company XYZ. They determined this by knowing the people that developed forms for the mainframe system, people that had requested the forms functionality, and the forms project leader knew the skills required for forms development.

The project leader and researcher took the description of the typical forms developer and created the preferred prerequisites for the course. It was advertised that an individual should meet one or more of recommended prerequisites:

- Mainframe forms development
- Microsoft Access® forms development
- Other forms development
- Visual Basic/Visual Basic Script programming

Outlook 98® Forms Training Development

Getting Started

There were various materials created for the forms training. To verify everyone would know what topics were to be covered, the first thing developed was an outline of the topics. Then, the researcher developed the handbook. This allowed for detailed research and processes before the actual course was developed. After the handbook, the researcher created the instructor's guide, the student's guide, and a survey to evaluate the course. The last items developed were the class files to use during exercises. Drafts of the materials were developed for the first pilot course.

The development began with the project leader providing the researcher with an outline containing important items to include. The researcher went through the outline

and made necessary changes. The project leader and the researcher then sat down to discuss items to be and not to be included. Everyone's purposes and viewpoints were discussed until a consensus was made. The project leader's viewpoints came from a more technical and email administration side; the researcher's viewpoints concentrated on how adult learners apply information and how to motivate them. The project leader and the researcher were pleased with the final outline for the training.

The next step for the researcher was to learn the Outlook 98®'s forms environment. The researcher had experience developing forms in Microsoft Word, Microsoft Access, and Visual Basic programming, but had never developed forms in Microsoft Outlook 98®. The researcher found various resources of information. These materials included a guide from a software training company, online help, web sites, and individuals with experience developing forms.

The researcher learned forms develop using trial-and-error testing and using the references. The researcher created various levels of forms, experimenting with features in the same order as the handbook being developed. The handbook was started once the researcher established a comfort level.

The Handbook

Company XYZ had a standard format that all software handbooks had to follow. Their standards included how chapter titles appeared, fonts used, an editing process, and how it would be printed and bound. The researcher was familiar with the standards, since the researcher had developed a handbook for the company the previous year. The

researcher contacted the editor to get a reference sheet on all standards and find out about any changes that had taken place over the past year.

The book was designed to follow the flow of the outline that had been developed. The researcher added an introduction and an additional reference area to the beginning of the handbook. At the end of the handbook, tips and company standards were repeated for quick reference while individuals developed forms.

The researcher wrote one chapter at a time. After each chapter, the researcher did editing. This editing included looking for grammar errors, content, content flow, and determining if the objectives for the chapter were met. After making necessary changes, the chapter was then given to the project leader for another perspective on the chapter. The project leader was informed that the chapter was a second draft and was not grammatically perfect yet. The project leader went through the chapter mainly for content and flow. The researcher began writing the next chapter while the project leader was proofing the previous chapter. This process continued during the entire creation of the handbook.

The chapters went from basic to advanced features. The first chapter was an introduction to the purpose and storage of forms. The next section showed how to use the basic editing features and menus. The third chapter started with advanced editing features. The next section provided users with how to add advanced controls to Forms. The final section was an overview of using Visual Basic Scripting to automate forms.

Each of these sections included various materials. The sections contained text that explained purposes and procedures for creating forms. Click-by-click instructions

provided steps to follow for specific functions. This helped users when they used the handbook as a reference. They were able to check at certain points to make sure they were performing the actions correctly.

The researcher went through the entire handbook once it was finished and edited by both the researcher and again by the project leader. There were still two steps left after the researcher and the project leader were satisfied with the product. The Training Manager went through the handbook to determine if anything was missed or to give suggestions on improvements. The Training Manager was pleased with the content and style. The final step before production was for the company's editor to go through it for grammar and spelling errors. The editor found some grammar errors and gave comments on how a couple areas could use wording improvement. The researcher made these changes, and then the handbook was printed, eighty-four pages in length.

Only enough copies were printed for the first class size and a few key people that had been practicing the development of Outlook 98® forms. The first students to take the course would also be asked to evaluate the handbook. This was done to make sure the handbook would meet the needs of the individuals that would actually use it.

Instructor Materials

Company XYZ also had a standard format for instructor materials. The researcher was familiar with these standards. The editor verified what the standards were for any changes that had occurred during the past year.

The instructor materials followed the same order as the handbook. The researcher wrote a section to cover each chapter. They reflected the handbook, but do not go into

the detail the handbook covered. The instructor materials also did not contain many screen captures. Certain paragraphs were taken straight out of the handbook, others were written specifically for the instructor. Notes were also added to suggest examples and class set up for the instructor. This helped other trainers to easily teach the course.

The process for creating the instructor materials was very similar to the steps for the handbook. The researcher developed one section at a time. Then, went through the section for the first editing. The project leader also went through each section to provide any suggestions. Changes were made, the researcher went through all of the materials to make sure the content and flow was consistent for the entire course. Finally, the company's editor went through the materials for grammar and spelling errors. The instructor materials were printed on normal computer paper and were not bound. A "master" copy is kept in a filing cabinet, with the computer file existing on a share drive for the training team.

Student Materials

Student materials were created with a different process. Their materials, besides the handbook, only contained the agenda and class exercises. The agenda listed the various topics to be covered. The project leader and the researcher created the exercises.

It was discussed and agreed that the project leader knew Company XYZ's culture and information flow better than the researcher. The project leader was in charge of developing the examples to be used during class, and the researcher made sure the examples were presented in the best manner possible. This resulted in exercises that

were driven by business purpose, while meeting the needs of the students as adult learners.

The project leader developed examples for the demonstration and exercises to be used. Two forms were created for the demonstration; two more forms were developed for the class exercises. An exercise would be conducted after each section of the training. The first form, for the demonstration and exercises, was intended for the basics portion of class. This would give the students something easy to start with and begin to get ideas on how they could use forms. The second demonstration and exercise form was for the advanced portions of the class. These forms would be created from scratch and almost every aspect customized during the class.

The project leader also developed step-by-step instructions for creating the example forms. These consisted of bulleted steps and images of what the form would look like after certain steps. They would be left printed on normal computer paper, just like the instructor materials.

The researcher evaluated the exercises and made necessary changes to the instructions. The examples had been well developed, and showed genuine business purposes and benefits of Outlook 98® forms. The instructions did not provide very much detail, and were inconsistent with the detail that was given. The researcher modified the instructions to tell the students the general step to be conducted. Then, underneath the step gave very specific click-by-click steps on how to perform the step. This would provide students with the option of trying the steps on their own after reading the general description, or reading click-by-click how to do something if they could not remember.

The researcher also decided to make sure the students were able to keep their copy of the exercises to practice while at work.

Survey Instrument

The final item to develop was the survey instrument. The instrument was designed to gather information after the students completed the course. There were four main categories the instrument looked at: reaction to the class, ability to perform skills covered in class, background of the student, and comments. All of these would be measured, except for comments, on a Likert scale of one to five. The combination of these measurements would be used to improve the class for the individuals attending.

The reaction to the class contained three standard questions for Company XYZ's software training. The information that was gathered from this section included the pace of instruction, applying at least half of the knowledge they learned to their job, and appropriateness of the course's length. These questions determine if people are getting the correct information, in the right amount of time, and at the right pace (see the Appendix).

The section pertaining to the abilities of the student determine if the student feels he/she can perform the major objectives of the student. The researcher picked out the major skills of each section, at least one to two skills per section. The students rated if they felt they could perform these skills after completing the course. Assuming the student took the course due to the lack of these skills, this determines if the students understood how to perform the actions taught during class.

The third section, the student's background, is not standard for Company XYZ. This was added to evaluate the type of person taking the course. Recommended prerequisites were determined, but they were not enforced. This section helped determine if a more elementary section would need to be added for true beginners or if the introduction could be shorter. It could also help determine if there were two different audiences and a beginning and an advance course should be broken out of the single course. The Training Manager had never done this type of section, but was pleased that it was added.

The final section was for comments. This is a standard section for all software training at Company XYZ. It is used for any comments on the instructor, course, materials, or the environment.

Selection of Students

The selection of students was voluntarily. It was determined that the best results could only be developed if individuals from various departments participated. This provided an idea of how people would use forms and their frame of reference. There were two limitations determining students: location and room size. The first two classes would be conducted onsite in Wisconsin. Each room had a different capacity: six, eight, and fourteen.

A few individuals from the training and email departments were asked to attend the pilot class. However, they were not forced. Having input from these two teams was necessary for the success of the pilot. Only a few select people had any experience

developing Outlook 98® forms from either department. Individuals from the training department would be able to provide feedback on how to make the class more effective, help analyze the pace of the course, and the materials. Participants from the email team would be able to think of more business examples and foresee any issues with the administration side of forms. Three people from the email department and one person from the training department attended.

The remaining participants would be made up from whomever signed up. The email team advertised the course to a few departments that had been requesting the course and individuals that they knew needed it. The standard process for sign up was on the company's Intranet—first come, first serve. The first pilot course had fourteen people, the maximum capacity of the room. It took two days from when it was posted on the Intranet to fill the room. Nine people attended the second pilot class. Having this high of a number for pilot courses was a very good sign.

Classroom Procedures

The class was designed to show the students how to design forms and give them hands-on experience. The course included an introduction followed by demonstration and hands-on exercises for each section. At the end, the students filled out the course evaluation.

The class began with participant introductions and an overview of the course. Students introduced themselves and informed everyone what department they worked in and why they attended the course. The overview of the course included the objectives and what would be covered in each section. During the pilot classes, it was also

announced that all feedback would be appreciated and adjustments would be made to the class.

Each section was taught using lecture, demonstration, and discussion. The instructor and the students had hardcopies of the forms being developed. This helped the students visualize the end result and understanding the goals of the section. The students watched and copied the instructor's actions during the demonstration. After the section was complete, the students did the exercise to repeat what they had just learned. Questions were encouraged, specifically asking for assistance or the purpose of why something was done.

Pilot Classes

There were two pilot courses held in Wisconsin. Fourteen individuals attended the first one; nine people attended the second course. Both of these courses were advertised on the company's Intranet as beta courses. It stated in the description that the course was new and required feedback before it would be in its final format.

The first course took place May 1999. It began with the participant's introduction. The researcher requested the participants included their name, department, reason for attending the class, and objectives for the course. Next came the actual course. The first section was an introduction of forms, their purpose, and some of the standards for Company XYZ. This section was mostly lecture with a little discussion. The remaining sections included demonstration, lecture, and hands-on exercises. At the end of the course, each participant was requested to fill out an evaluation.

Adjustments to the course were made from the feedback received. The first section lecture was lacking visual stimulation. A PowerPoint presentation was created to balance the first section better. The demonstration and exercises went well. However, the more advanced demonstration and exercises took too much time. Many of the steps were included to reinforce the beginning of the course and ended up feeling like wasted time. To reduce the time, but keep some reinforcement, the forms used were partially created. Handouts included what they were beginning with and what the end product should look like. One chapter that varied on the feedback was VBScripting. Individuals with some Visual Basic programming were very intrigued, some were interested and experimented with it, others were confused and did not understand any of the VBScript material. Rather than making this section mandatory, it was handled as an optional section for all future courses. After this course, the researcher announced at the beginning of the section that it was optional to follow along. Individuals were told what would be covered and given a handout with the coding answers. Individuals were encouraged to either: follow along and do the exercise, give it their best try, or watch and see the automation possibilities so they could request help at a later date. The first pilot course brought out some issues and displayed a variety of user skills. The suggestions provided were implemented in the course to improve it.

The second pilot course took place three weeks later. All of the changes from the first course were already completed and ready for this course. This course went well. The only suggestions for improvement related to VBScripting. There was one request for VBScripting tips and one request for an advanced course that dealt purely with

VBScripting. Already included at the beginning of the handbook was a section for references. This contained resources for additional Visual Basic learning. The second pilot was very smooth and required no changes to the course or the materials.

Summary of Chapter

Outlook 98® forms training at Company XYZ involved a series of steps. These steps included creating the initial outline, the handbook, instructor materials, and student materials. The Outlook 98® forms project leader and the researcher worked together to develop a course and the materials that would meet the needs of a wide diversity of users. The pilot courses helped refine the course to a smooth and informational session.

Chapter 4

MICROSOFT OUTLOOK 98® FORMS FINDINGS

Overview

People from various departments learned how to develop Outlook 98® forms. The first two classes were taught in Wisconsin. Since then, it has been taught in two other states besides more courses in Wisconsin.

The survey that individuals filled out at the end of the course provided feedback about three aspects of the course: reaction, knowledge, and background of the students. The mean and standard deviation analyzes the results from these surveys. The mean shows the average response fell on the scale. The standard deviation shows the variety in answers for each question. First is a table with the results. Then, it is broken down to each section for analysis.

Table 1

Course Evaluation Summary

How would you rate the course?

	Mean	SD
1. The pace of instruction was appropriate for the class.	3.9630	0.85402
2. I will apply at least half of what I learned to my job.	4.0714	0.89974
3. The length of the course was appropriate.	3.7500	1.2360
4. I can do the following:		
Access forms from various locations.	4.3333	0.78446
Switch the view to Design View.	4.7407	0.52569

Set form standards.	4.4815	0.84900
Use the Field Chooser.	4.6296	0.56488
Change the form layout.	4.6667	0.55470
Create custom controls.	4.5556	0.50637
Create new fields.	4.6296	0.56488
Add VBScript code to a form.	3.1481	1.6102
Use the Forms Manager.	3.9231	0.93480
5. I have the following:		
Level of VB Script experience.	2.1071	1.3427
Level of previous form development experience (Toss, Word, Access, VB, Delphi).	2.7857	1.3705
Level of knowledge of Public Folders.	3.1071	1.1001
_____ years computer experience.	4.1111	1.1875

Note. response scale 1 = poor 2 = low 3 = average 4 = high 5 = outstanding

Reaction

The first three questions requested response information about the course itself. They focused on the length, pace, and relevance. These questions are standard for Company XYZ. They are used to determine if the content or instruction needs modifications.

Table 2

Reaction Summary

 How was the environment during the course?

	Mean	SD
1. The pace of instruction was appropriate for the class.	3.9630	0.85402
2. I will apply at least half of what I learned to my job.	4.0714	0.89974
3. The length of the course was appropriate.	3.7500	1.2360

Note. response scale 1 = poor 2 = below expectations 3 = average 4 = above expectations

5 = outstanding

The mean for each of these was between 3.75 and 4.07. This shows that people were satisfied with the pace. Most of the comments that were negative about this question occurred during the first pilot course. This was expected due to the discussions and variety of skills individuals came with.

Knowledge

Question four had nine measurements included. All of these asked what the person felt they could do after the course. There was no evaluation to verify what people could do. This are provides a place for them to say what they think they could do on their own.

Table 3

Skills Evaluation

 How well are you able to perform the following tasks?

	Mean	SD
Access forms from various locations.	4.3333	0.78446
Switch the view to Design View.	4.7407	0.52569
Set form standards.	4.4815	0.84900
Use the Field Chooser.	4.6296	0.56488
Change the form layout.	4.6667	0.55470
Create custom controls.	4.5556	0.50637
Create new fields.	4.6296	0.56488
Add VBScript code to a form.	3.1481	1.6102
Use the Forms Manager.	3.9231	0.93480

Note. response scale 1 = low ability 2 = can do with assistance 3 = can do with references

4 = can do with little help 5 = can do without any help

Most of these had a high mean, with a low standard deviation. Individuals felt they could do most of the items they learned during class. Some of the items scored closer to a four. People felt they could these tasks with some trial and error and/or looking at a reference. Adding VBScript code to a form only scored 3.1481. People did not feel as comfortable adding programming code to forms. The standard deviation is 1.6102 for this question. This large of a standard deviation is justified by the high level

of skill and experience required for this. Some of the participants had a background that supported this skill, while others did not. It was recommended that individuals had some experience, but it was not required. The coding section was an introduction that people with some programming background enjoyed. However, some individuals had never done computer programming before. They did not follow during this section and most of them did not even attempt it. This was modified in all of the courses following the first course to make it optional. People were more at ease with this method, but they still scored this section on the evaluation. In general, this section proved that people learned the skills needed to develop Outlook 98® forms during this course. They did not master the functions needed, but that was not the goal.

Participant's Background

The final five questions got information about the participants' background. This is not a standard section for Company XYZ. The researcher added this verify if people met the recommended prerequisites:

- Mainframe forms development
- Microsoft Access® forms development
- Other forms development
- Visual Basic/Visual Basic Script programming

Table 4

Participant's Background

 How would you rate your background in the various areas?

	Mean	SD
Level of VB Script experience.	2.1071	1.3427
Level of previous form development experience (Toss, Word, Access, VB, Delphi).	2.7857	1.3705
Level of knowledge of Public Folders.	3.1071	1.1001
_____ years computer experience.	4.1111	1.1875

Note. response scale 1 = none 2 = little 3 = some 4 = worked with 5 = worked with often

___ years computer experience 1 = 0-1 2 = 2-4 3 = 5-7 4 = 8-10 5 = 11+

This section provided information that helped target the users skills. These numbers showed that the people attending the course had a high level of computer experience, but little coding and forms development experience. This brought out discussion if there should be a beginning course and an advanced course. Having a high amount of computer experience allowed the course to move quicker during the “point-and-click” areas and had more focus on forms development. The low amount of coding assisted in the decision to make that section optional.

Chapter 5

CONCLUSIONS OF RESEARCH PROJECT

Summary

Company XYZ implemented Outlook 98® for their email software. This provided extra functionality that their current Windows-based email software did not support—creating custom forms. They had been able to do this with mainframe email and individuals had been requesting this ability within Windows.

The form's development environment is unique, with some common features of other software. Company XYZ decided to have a course created that would teach individuals from departments how to create their own forms. This would enable departments to obtain forms that met their business needs and reduce the cost of hiring consultants to develop forms.

The researcher worked with Company XYZ's email department to create a course that met their needs. All of the standard materials that Company XYZ uses were created (handbook, instructor guide, handouts, exercises, and course evaluation). The course was piloted in Wisconsin and adjustments were made. The course is now taught at three locations within the United States.

Purpose of the Study

The purpose of this study is to create a course that will provide Company XYZ individuals throughout the United States with the knowledge and skills to develop basic Outlook 98® Forms.

Methods and Procedures

The researcher began the project by meeting with the project leader from the company's email team. The purpose of the training, the type of audience, and the materials to be developed were discussed. The researcher then began to develop the materials for the course. The material flowed from an introduction to the development environment, to basic creation, advanced functions, and finally how to add programming code. Throughout the entire process the project leader kept in contact and assisted in verifying the technical aspects of the documentation. When a complete draft of the materials was finished, the company had its editor review the material and make suggestions.

Two pilot courses were taught. The first pilot course unveiled areas that needed improvement and areas that individuals were interested in, but was not covered in the course. The participants filled out course evaluations that provided information on how the environment was, what skills they had learned, and their background. The first two areas helped the researcher make adjustments to the material and presentation. The final area of the evaluation helped the researcher adjust the course to meet the range of people attending the course. The second pilot course showed that the adjustments worked and people were pleased with what, and how, they had learned. The course was then ready to be provided at multiple locations.

The course evaluations averaged high scores in all areas. The environment was considered comfortable and conducive to learning. The participants felt they had the skills needed to develop custom forms for their departments. Even though their

background varied, the course had built in variables to adjust. The course evaluation helped create an effective course.

Conclusions

The course met Company XYZ's objectives. Individuals that work in the various departments, and know the business needs of that department, are able to develop their own forms. The company's email department decided to keep one person on staff to assist individuals for high-level development. This person also helps departments that do not have anyone with the proper technical background. This is a secondary function for the individual. Company XYZ's training and email departments have pronounced the course a success.

Individuals use the handbook for a reference. It should not require any updating for at least a couple of years. Outlook 2000® uses the exact environment for form's development. The current course should not need any updating when the company upgrades. Company XYZ plans on implementing this system in the near future.

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APPENDIX

Course Evaluation

	“No”			“Yes”		
	Disagree			Agree		
1. The pace of instruction was appropriate for the class.	1	2	3	4	5	
2. I will apply at least half of what I learned to my job.	1	2	3	4	5	
3. The length of the course was appropriate.	1	2	3	4	5	
4. I can do the following:						
Access forms from various locations.	1	2	3	4	5	
Switch the view to Design View.	1	2	3	4	5	
Set form standards.	1	2	3	4	5	
Use the Field Chooser.	1	2	3	4	5	
Change the form layout.	1	2	3	4	5	
Create custom controls.	1	2	3	4	5	
Create new fields.	1	2	3	4	5	
Add VBScript code to a form.	1	2	3	4	5	
Use the Forms Manager.	1	2	3	4	5	
5. I have the following:	“Low”			“High”		
Level of VB Script experience.	1	2	3	4	5	
Level of previous form development experience (Toss, Word, Access, VB, Delphi).	1	2	3	4	5	
Level of knowledge of Public Folders.	1	2	3	4	5	
_____ years computer experience.	0-1	2-4	5-7	8-10	11+	
6. Comments:						