The Look of the Learning Organization.

Judith G. Baker

St. John Fisher College

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Abstract
Gillespie Associates, a Rochester-based training and development consulting firm, is interested in developing an off-the-shelf package of instruction to address the current interest in transformation toward becoming a learning organization. Once the concept of the learning organization is explored, it is important to be able to transfer that into a product development opportunity for Gillespie Associates. Beyond the need to understand "the look of the learning organization in the 1990's," however, comes the need to understand how such a concept can be developed into a marketable product. In order to gain a better understanding about the steps companies take when they are in the early stages of product development, a brief literature review and a survey was conducted to examine this topic. The results of the survey, accompanied by several recent articles written about steps in product development, are contained in this report. Key findings of the literature review include several models Gillespie Associates can review to determine how adaptable they may be to their organization. The literature reveals that many companies do not pay enough attention to what Cooper (1997) refers to as "the fuzzy front end"—those activities which precede the actual product development process. Key findings of the survey reveal that companies similar in size and scope to Gillespie Associates generally do not have individual research divisions or formal team structures to support the product development process. Additionally, the survey revealed that surveys and interviews are the most commonly used methods for conducting market research. The overall purpose of this report is to support Gillespie Associates in their product development activities by providing them with background research consisting of a sampling of recent periodical literature about learning organizations in the '90s, and projections for future directions of the learning organization concept for the new millennium.

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Taylor Brown

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Marilynn Butler

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Jason Berman

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The Look of the Learning Organization
1995 to 1999

By

Judith G. Baker

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Submitted in Partial Fulfillment
Of the Requirements
For the Degree of

Master of Science

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We approve the paper of Judith G. Baker.

Mr. Taylor Brown, M.S.
Taylor Brown Partnership
Project Advisor

Marilynn M Butler
Marilynn N. Butler, Ph.D.
Assistant Professor of Human Resource Development
Advisor
Director, Chair
Graduate Human Resource Development Program

J. Jason Berman, Ph.D.
Associate Professor of Management &
Director, M.B.A. Program

Jane LeClair, Ph.D.

Joseph T. Carney

Date of Signature
8/24/99

Date
9/28/99

Date
9/24/99

Date
9/30/99

Date
27 Sept 99
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Judith G. Baker
Abstract

The Look of the Learning Organization: 1995 to 1999

Judith G. Baker

Master of Science, August, 1999

St. John Fisher College

Dr. Marilynn N. Butler, Advisor

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CHAPTER ONE

Introduction

Gillespie Associates of Rochester, New York is interested in developing an off-the-shelf package of instruction to address the their interest in transforming into a learning organization. Beyond the need to understand the look of the learning organization in the 1990s, however, comes the need to understand how such a concept can be developed into a marketable product.

The following chapters examine recent literature about how companies conduct product development research, and examine the current state of the concept of the learning organization. In addition, they contain a survey conducted to gather further insight about the product development process. The purpose of this information is to support the larger goal of providing Gillespie Associates with information relevant to their desire to create off-the-shelf products to assist companies in becoming learning organizations.

Chapter One is an introduction, providing the purpose and background of the study, a statement of the problem, and limitations of the study. This chapter offers a four-part discussion including the purpose, background, statement of the problem, and limitations of the study.

First, the purpose of the study clarifies how the information presented correlates with the information requested by Gillespie Associates to meet their defined product development goal.

Second, the background of the study will discuss the current state of product development at Gillespie Associates and will address their desire to have a more intentional thrust toward future product development.

Next, the statement of the problem describes the challenges faced by companies when trying to define, then become a learning organization. Finally, the limitations of the research on learning organizations are discussed.

Chapter Two reviews related literature discussing how companies conduct product development research. Chapter Three explains the methodology used for the product development survey, and the learning organization literature review. Chapter Four explores the results of each, and Chapter Five provides a conclusion, implications, and recommendations for future research.
Purpose of the Study

Product development within companies can take on many forms. One form is to conduct a literature review about the type of product an organization wishes to develop. When companies convert ideas into products, what they develop need not take the form of an actual, physical commodity; rather, a product that develops “soft skills” such as managerial expertise or the “how-tos” of a process may be the focus.

The purpose of this study is to provide Gillespie Associates with the background research about “the look of the learning organization” through recent journal articles. In order to make informed decisions about the direction of possible off-the-shelf programs, the company needs to know what is being said about learning organizations, how this new concept is evolving, and what products are already on the market for companies wishing to become learning organizations. Also, Gillespie Associates wants to know the steps they need to take to become a learning organization in this period of growth for them.

The purpose of the product development component of this report is to provide Gillespie Associates with guidelines about the process companies use to develop new products for soft-skill training. Specifically, research for this topic focuses on the activities that precede the product development phase—the upfront homework and the “fuzzy front end” activities (Cooper 1997). The use of literature reviews, the primary means by which this report supports Gillespie Associates in their product development process, is discussed in depth.

Background of the Study

Gillespie Associates is interested in developing an off-the-shelf package of instruction to address the current interest in transformation toward becoming a learning organization. According to Mr. Taylor Brown, former managing director at Gillespie Associates, the organization is seeking to update their knowledge regarding the concept of the learning organization. Brown, who is currently Executive Director of Taylor Brown Partnership, a training and development consultancy in Rochester, is also interested in the concept of the learning organization to develop his own organization.

Specifically, Gillespie Associates would like to develop off-the-shelf products for a niche where there is a need for managerial training and individual training. The
managerial training focus would address “how to manage in a new or changing environment,” while the individual focus would be on “how to succeed” in such a situation.

Further, the organization would like to develop products on sales training methods, instructional design, and training the trainer that help improve skills faster, cheaper, and using a unique or distinguishing approach.

Historically, Gillespie Associates has adjusted their product focus project-to-project; that is, they modify their product development activities to meet a specific customer need, functioning mostly as a service industry. According to Brown, there is currently no product development model in place, and the process is shared equally through continuous dialog by the marketing team (to define opportunity and position) and content experts (to define what goes into the product). The organization’s future directions will see a more intentional thrust towards custom design and creating pre-packaged programs on various subjects.

The results of this study will provide the organization with an overview of current trends in organizational learning that they will need as they develop future products, as well as to take the steps necessary to become a learning organization themselves.

Statement of the Problem

What is a Learning Organization? Is it a buzzword of the ‘90s or an organizational development process that is here to stay? Smart companies understand that to invest in their human resources and to continually learn and grow is the most positive way to affect “the bottom line.” Still, the proliferation of information, definitions and how-tos of learning organizations that have emerged over the last decade make it difficult for companies to understand the concept completely. Further, even if companies understand what it takes to become a learning organization the challenge to transform an organization through organizational learning remains.

What is a learning organization? This is a difficult questions to pinpoint because of the uncertain and ever-changing nature of the definition of a learning organization. Peter Senge, considered by most as a leading authority on the learning organization,
defines the learning organization as “an organization that is continually expanding its capability to create its future” in the article “Invest in Learning” by Kovach (1997).

Why would an organization want to become a learning organization? Kovach (1997) cites that among the various returns gained from an organization’s investing in learning is flexibility in roles, as employees become problem solvers. Employees are allowed to take measured risks, which free management to be learning guides and visionaries as well as to focus on strategies. Further, states Kovach (1997), the organization becomes market-driven by observing “what is happening now,” and becomes proactive rather than reactive, thus gaining a competitive edge through cost-effective responsiveness to customer problems and needs.

In the article “Learning for Organizational Effectiveness: Philosophy of Education and Human Resource Development” Barry and Pace (1998) offer Watkins’ definition of organizational learning as “an experience-based process through which knowledge about action-outcome relationships develops, is encoded in routines, is embedded in organizational memory, and changes collective behavior” (p. 5).

Once the theory of the learning organization is clearly understood, and the steps to, and goal of, becoming a learning organization is attainable, how could an organization present the concept and provide it to other companies to assist them in becoming a learning organization? In other words, if an organization, like Gillespie Associates, wished to develop a complete, pre-packaged program on becoming a learning organization, what are the steps they should take to develop the product, and what type(s) of product development process would they use? Finally, what would the end result look like?

**Limitations of the Study**

There are four limitations of this study. First, the vast amount of learning organization information available prohibited a comprehensive review of all resources and means (such as books and extensive Internet research). For this reason, the search for information consists of a review of journal articles between 1995 and 1999. Occasionally, an earlier publication is included.

Second, the concept of the learning organization is expanding and evolving quickly, and research conducted prior to 1995 is not necessarily the way the learning
organization is characterized today. Perhaps the changeable nature of this research suggests that the learning organization must include adaptability as one of its primary features.

Third, while it was the original intention to categorize learning organization information as it applies to small, medium, and large companies, much of the literature did not make a distinction on how the size of the organization affects the process or results in becoming a learning organization. Many of the larger companies such as Kodak, Xerox, and Motorola are identified with the processes they have to offer. The fact that the literature yielded a great deal about the larger company as a learning organization indicates a gap worth exploring. This find may mean that there are limited resources to assist small to medium-sized companies in their desire to become a learning organization. The needs of smaller companies are obviously different than those of larger companies and it may be that the learning organization products available may not be relevant for the smaller company’s special needs.

Finally, the information about product development in companies is meant to support the primary objective of reviewing the literature about learning organizations for Gillespie Associates. It is meant to provide an overview, a brief summary, of how companies deal with the pre-product development stages and the process of product development itself. It is not meant to be an empirical study, but merely a synopsis of questions relating to how several companies develop products and services.

In conclusion, this chapter presented an overview of the five chapters in this study, and a discussion on the statement of the problem, the purpose of the study, the background of the study, and the limitations of the study as described in Chapter One. Chapter Two reviews related literature about the product development process for soft-skills programs.
CHAPTER TWO

Literature Review
Product Development Research

Product development has become more important than ever to companies in the competitive global marketplace of the 1990s. The desire to produce newer products, faster drives organizations as they strive to develop new ideas and programs that fill ever more specialized niches. Perhaps most difficult of all, though, is the development of products that provide the “soft skills” employees need to ensure the success of the organization at large.

This chapter summarizes research from a brief literature review about how organizations approach product development, and provides information regarding current product development processes and models. Here, a review of product development literature reveals several articles that outline various product development models and steps. The literature consists of research and non-research-based articles dating from 1995 to 1999, with a focus on product development guidelines. The purpose of this chapter is to gain a general understanding about what recent literature has reported about the product development process.

Cooper (1997) presents a study focusing on those activities, which precede the actual product development phase — the up-front homework, building the business case, or what the author refers to as “the fuzzy front end.” These activities are often left undefined in organizations. These, Cooper states, are pivotal activities, and are strongly correlated with the eventual outcome of the project. Some success factors that occur in the front end of the process include:

- Successful businesses emphasize the up-front homework steps in the new product process before projects move into the development phase.
- Successful businesses emphasize the voice of the customer and a strong market orientation.
- Successful businesses build in tough go/kill decision points in the process where projects really do get killed (p. 22).
Table 1 illustrates Cooper’s (1997) descriptive model of the actions that successful businesses and project teams build into the early stages of a new product project. Cooper (1997) has adopted a StageGate™ approach to ensure that “homework” occurs for each step in the product development process. Following is an illustration of the process, which represents a summary of the information Cooper (1997) discusses.

Table 1: Cooper’s New Product Project Development Model - Summary of Level, Activity and Description

<table>
<thead>
<tr>
<th>Level</th>
<th>Activity</th>
<th>Description</th>
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<tr>
<td>Gate 1: Initial Screen</td>
<td>Project begins with an idea</td>
<td>a quick scope of the marketplace. This is largely detective work: desk research, accessing available public and commercial databases, reports, articles, etc.; utilizing in-house information and people, running some focus groups.</td>
</tr>
<tr>
<td>Stage 1: Preliminary</td>
<td>Market Assessment</td>
<td>a quick technical appraisal to propose a technical solution, map out a problem route, and roughly assess technical costs, times, and risks.</td>
</tr>
<tr>
<td>Investigation</td>
<td>Technical Assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business Assessment (Financial</td>
<td>estimate of the payback period based on very rough estimates of sales, costs, and investment required; a cursory legal assessment and a quick risk assessment.</td>
</tr>
<tr>
<td></td>
<td>Assessment)</td>
<td></td>
</tr>
<tr>
<td>Gate 2: Second Screen</td>
<td>A go/kill decision</td>
<td>to weed out obvious losers; has pre-specified deliverables - what the project leader and team must present to the “gate” to enable a timely, effective decision. Based on a list of rigorous go/kill criteria and has a set of outputs: decisions and approvals of resources.</td>
</tr>
<tr>
<td>Stage 2: Detailed Investigation</td>
<td>Detailed Market Studies</td>
<td>product definition, justification, action plan through to launch; detailed market studies such as market analysis, user needs-and-wants study, value-in-use study, competitive analysis, concept test.</td>
</tr>
<tr>
<td></td>
<td>Detailed Technical Assessment</td>
<td>a more thorough technical activity to identify the likely solution, prove technical feasibility and deal with technical risks.</td>
</tr>
<tr>
<td>Level</td>
<td>Activity</td>
<td>Description</td>
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<td>--------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Operations Assessment</td>
<td>Detailed Financial Analysis and Risk Assessment</td>
<td>a first look at how the product or service will be produced or delivered; the goal is to assess “manufacturability” (route, costs, and probable capital requirements), and deal with safety, health, legal, and regulatory issues.</td>
</tr>
<tr>
<td>Gate 3: Decision on Business Case</td>
<td>The “Money Gate”</td>
<td>provides the justification for the project—here the data from the market and technical studies are integrated into a thorough financial analysis; this is normally a discounted cash-flow analysis along with a sensitivity analysis to assess risk.</td>
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In summary, Cooper (1997) says, achieving a steady stream of successful new products remains an elusive goal. For results, look to the fuzzy front end of the process, where success and failure are decided, and where the critical go/kill decisions are made. Better yet, he suggests organizations should overhaul their entire new product process from idea through launch, and adopt a stage and gate template that builds in these best practice homework activities by design rather than by chance.

Khazanet (1997) features a model for product development planning in the article “Improving the Product Development Process.” He states that planning and balancing of product development phases are becoming more valuable as developers try to keep up with new technology, stay ahead of competition, retain customers, and attract new customers. Khazanet (1997) says the major steps in product development include:

1. Recognize the need and develop a product concept;
2. Prepare feasibility analysis, both technical and economical, for the product and its initial marketing;
3. Prepare detailed drawings, plans, specifications, and cost estimates and incorporate the results of research;
4. Approve the product;
5. Advertise the product;
6. Award prime manufacturing contracts/subcontracts;
7. Manufacture the product;
8. Implement quality control measures (p. 17).

Khazanet concludes that product development is often based on managerial intuition and experience, and that the approach outlined in the article can give developers of new products a competitive edge during the development process and provide great rewards through successful marketing.

Curtis (1998) lists several steps in the product development process in the article “Managing Successful Product Development:”

1. Identify all business issues, then evaluate and prioritize opportunities;
2. Define the product and its objectives;
3. Assemble a cross-functional steering committee;
4. Develop an action plan, and;
5. Execute (p. 184).

Further, Curtis (1998) states, “It’s no secret that new products stand a better chance of being marketplace winners if their developers work closely with suppliers early in the process,” and “the key to any successful project is to generate procedures everyone agrees to follow (p. 184).” Establishing a formal process for managing the business relationship lets each partner confirm expectations and align resources at every step. It also, Curtis (1998) concludes, facilitates measurement of success against concrete, pre-established milestones.

Jasinowski (1997) takes a slightly different focus in the article “The Paths to Growth” when he speaks of company growth in light of the new competitive success industrial firms have built on downsizing, which is the reverse of company growth. Jasinowski (1997) states there are six key steps that can maximize company growth:

1. Focus on your customer;
2. Improve productivity;
3. Emphasize new product development and improved service;
4. Seek out new markets and targeted niche markets, particularly those in the global arena;
5. Enter into acquisitions and strategic partnerships;
6. Invest in training the work force (p. 49).
With regard to step number three, "emphasize new product development and improved service," Jasinowski (1997) notes that successful growth firms must constantly be plotting the next move in product development and improved customer service. The author quotes Thermo Electron CEO George Hatsopoulos: "Every line of business you are currently in may be growing rapidly, but eventually that growth is bound to stop. If you are seriously committed to growth, the only way you can ensure that your organization will continue to grow is to develop new types of businesses to perpetuate that growth."

While most of these steps are not directly product development focused, they present an interesting outline to guide growth. In the long run, the author concludes, mainly knowledge, technological process, and investment in people and machines drive growth.

Kiermair and Butscher (1997), in "Develop Only What Customers Want, At Their Price," describe target engineering as an effective approach to product development, and list five steps involved in this process:

1. Selecting and defining the target segments;
2. Identifying competitive advantages and disadvantages in the target market;
3. Positioning of the new products within the target segments;
4. Determining the target segments’ preferences and willingness to pay, and;
5. Defining target costs and optimal product configuration (p. 10).

This process is offered to remedy the “old way” of design and pricing used by product developers in many industries: build what is technologically possible and set prices on a cost-plus basis. According to Kiermair and Butscher (1997), the result, without employing the target engineering approach, is overengineering and wrong pricing.

Most of the product development literature search yielded articles focusing on new product development with a manufacturing focus. Obviously, the process needs to be established to produce a specifically and uniformly engineered (tangible) item, but the process is not always as well defined for products that develop soft skills.

The article “Fixing the Fuzzy Front End” was the only article that focuses on pre-product development activities. Perhaps organizations that pay more attention to
these activities, rather than reacting to a perceived need for a product without sufficient market assessment or research, could put their resources to better use.

This chapter presented the results of a brief literature review about how organizations approach the product development. It provided information regarding current product development processes and models, which will serve to provide guidelines and ideas to Gillespie Associates as they develop a more systematic product development process. It helps the organization to learn from existing models, and to provide a starting point for developing their own. Chapter Three will describe the methodology used to conduct the product development survey and learning organization literature review.
CHAPTER THREE

Methodology

Chapter Three describes the methodology used to conduct research on two projects: a survey regarding product development processes in organizations and a literature review on the concept of the learning organization.

The approach to this study is to briefly analyze product development processes in organizations, and to examine recent learning organization literature for the purpose of product development and enhancement of a current organizational environment (Gillespie Associates). The purpose of this chapter is to provide an analysis of the methods used to attain information and results for product development and learning organization research.

Product Development Survey

The purpose of the product development survey was to discover what methods organizations use to conduct research for the development of new products and services. Using ideas from the product development articles, along with specific questions geared towards Gillespie Associates’ unique needs, a survey was developed (Appendix C). The main objective of the survey was to augment the literature research with additional real-world examples of the process organizations use when developing new products, and to offer additional ideas to Gillespie Associates to assist them in developing an off-the-shelf program on learning organizations.

The target population for the survey was training and development professionals who may be involved in soft-skills product development. The hypothesis to be tested is that organizations with 1-50 employees do not have a standard new product development process, but rather the steps taken occur on an as-needed basis.

The survey, which was randomly administered using non-probability and convenience sampling, was used because the population for the survey was ready and available and was representative of the type of information to be collected (Fink, 1995). The instrument had not previously been validated, but underwent one revision based on a low initial response rate. Because the purpose of the survey was not to be empirical, but
was to provide support to the larger project of assisting Gillespie Associates with their product development process, the level of reliability and validity is adequate for the survey's uses (Fink, 1995).

The survey consisted of five product development questions and three requests for respondent characteristics. An additional question asked if the respondent would like a copy of the survey. The five product development questions were:

1. What means of market research does your organization conduct when developing new product ideas?
2. Does your organization have a Research and Development Division? If not, who provides the information needed to make informed product development decisions?
3. In your organization, do you have a team structure? If so, what teams are directly involved in product development?
4. Please state the model of your product development process or the steps your organization follows.
5. On a scale of 1-10, how instrumental are you in influencing the new product development process (example of scale in Appendix C)?

The three respondent characteristics requested were:

1. Number of employees in the organization
2. Type of organization
3. Respondent position

A survey invitation was sent to several listserves, with the directions to contact the requestor directly if interested in participating in the survey. The survey was conducted from April 15 to May 15, 1999. The invitation (Appendix C), was e-mailed to the Training & Development Listserve (TRDEV-L@LISTS.PSU.EDU) on April 15, 1999, and yielded two requests for the survey and two completed surveys.

Due to a lower than expected survey request and return rate, the survey was revised, adding the words “soft-skills” to the product development title and adding “Training & Development” to the “Job Category” section. The survey invitation was resent on April 20 to the Training & Development Listserve (TRDEV-L@LISTS.PSU.EDU), the American Society for Training & Development (ASTD) Technical Training Listserve (TECHTRAIN@SIG.ASTD.ORG), the ASTD Knowledge
Management Forum (www.asid.org/virtual_community/
forums/know_man/know_man.cgi), and the Organizational Learning Forum
(www.learning-org.com). The survey invitation was sent to each location once, with the
exception of the Training & Development Listserve, to which the invitation was sent
twice.

Results from the survey were compiled on a spreadsheet and common responses
were analyzed using designation analysis, which determines the frequency with which
certain concepts were mentioned (Janis, 1965).

Learning Organization Literature Review

The concept of the learning organization is evolving. In order to gain a better
understanding of how the concept has changed since gaining popularity as a result of Peter
Senge’s book The Fifth Discipline in 1990, a literature review was conducted using ProQuest
Direct (http://proquest.umi.com). A search based on the keywords “learning organization,”
and “organizational learning,” together with the journal publication date between January 1995
and March 1999, yielded more than 100 articles. A content analysis was conducted using
thematic units, resulting in 60 out of 100 articles being chosen for this study.

The articles chosen were categorized into 14 specific topics or content areas. The
content areas are:

- Organizational Learning
- Teamwork/Groups
- Corporate Culture
- Executives/Management Styles
- Leadership
- Guidelines
- Management Development
- Employee Development
- Education & Training
- Organizational Change
- Employee Empowerment
- Strategic Planning
- Organizational Theory
- Management

Each article was summarized alphabetically by title, listing the author’s name(s),
content area(s), and a synopsis of article’s main points. Articles were then summarized in two
charts—one categorized by article title, and one categorized by author—with the title of the
article on the Y-axis and the content area on the X-axis. Check marks (✓) indicate when the
designated content area is present in an article.

This chapter described the methodology used to conduct research on two projects: a
survey regarding product development processes in organizations and a literature review on the
concept of the learning organization.
CHAPTER FOUR

Results

This chapter describes and reports the results of a survey regarding product development processes in organizations and a literature review on the concept of the learning organization. The purpose of this chapter is to demonstrate the results of the methods described in Chapter Three, and whether or not the desired results for product development and learning organization research were obtained.

New Product Development Survey

The purpose of the new product development survey is to provide an overview to Gillespie Associates about how organizations develop soft-skills products. Specifically, the results of the survey research highlights organizations with 1-50 employees, ensuring the information provided is more meaningful and useful for Gillespie Associates. The hypothesis to be tested is that organizations with 1-50 employees do not have a standard new product develop process, but rather the steps taken occur on an as-needed basis.

Among the information that will be given to Gillespie Associates are the types of research small organizations use (e.g. focus groups, literature reviews) when developing new products, and possible models or methodology to use for future new product/program development.

Background

A survey invitation was developed and distributed via e-mail. To those who accepted the invitation, a brief survey was sent (also via e-mail) to four listserve groups on the Internet: Training & Development Listserve (TRDEV-L@LISTS.PSU.EDU), the American Society for Training & Development (ASTD) Technical Training Listserve (TECHTRAIN@SIG.ASTD.ORG), ASTD Knowledge Management Forum (www.astd.org/virtual_community/forums/know_man/know_man.cgi), and the Organizational Learning Forum (www.learning-org.com). Each group was chosen with the assumption that the members of the listserve would be involved in soft-skills product development.
As explained in the methodology section and summarized here, the invitation and survey was distributed beginning April 15, 1999. A revised version of the survey was distributed on April 20, 1999. Completed surveys were collected from April 15 to May 15, 1999. Of those invited to participate, 47 people asked to complete the survey, and 27 returned a completed survey, for a response rate of 57%. The survey responses, the pace at which responses were received, and the results of the survey were entered into a spreadsheet and analyzed.

Survey Characteristics

Considering time limitations and with the intention of reaching the largest audience as quickly as possible, the survey was distributed via e-mail. The survey, which was randomly administered, had not previously been validated, but underwent one revision based on a low initial response rate. Because the purpose of the survey was not to be empirical but simply to provide support to the larger project of providing Gillespie Associates with information to assist them in the product development process, the level of reliability and validity is adequate for the survey's uses (Fink, 1995).

The survey consisted of five product development questions and three questions about the respondent. Of the product development questions, one question was nominal (question 1), one was ordinal (question 5), and three were content-based (questions 2, 3 & 4). On the scale for question 5, “1” represented no influence in the product development process, and “10” represented the respondent was a decision-maker in the process. The survey contents were influenced by a brief literature review on the product development process.

Three of the questions requested content-based responses. The approach served three purposes: to determine if the respondent’s organization has an established research and development function, to determine if there was a formal team structure in place, and to collect sample models to provide to Gillespie Associates as a starting point in establishing their process.

The three questions about the respondents were vital to establishing relationships between the responses and the type of respondent. For example, whether or not the respondent’s company had an established research division might be very different for an organization with 1-50 employees than for one with over 500. In other words,
identifying the type of respondent will ensure the data is being compared is relevant. The type of organization the respondent works for may also influence the product development question responses.

Survey Respondents

There were 47 requests to complete the product development survey, which yielded 27 completed surveys—a 57% response rate. Of the respondents, seven were from organizations with 1 to 50 employees (26%), two were from organizations with 151 to 500 employees (7%), 13 were from organizations with over 500 employees (48%), and six (4%) did not respond to the question. There were no respondents from organizations with 51 to 150 employees.

The job categories represented were Education (3 responses/11%), Training & Development (7 responses/26%), Manufacturing & Engineering (4 responses/15%), Finance (2 responses/7%), Information Technology (2 responses/7%), Government (2 responses/7%) and Entertainment, Telecommunications and Philanthropy (1 response each/4%). Five respondents did not identify their job category (19%). The position/title provided by the respondents are represented in four broad categories:

- Training & Development (10 respondents)
- Executive Level (5 responses)
- Product Development Management (6 responses)
- Other (6 responses)

The “Other” category consisted of such position/titles as Marketing Director, Staff, Adjunct Faculty, and Consultant. While the position titles were varied, the majority of the respondent's titles reflected a Human Resource Development — and specifically training — focus (16 responses or 59%).

Survey Results

The survey responses were collected between April 15 and May 15, 1999, and organized into a spreadsheet. The spreadsheet contained the respondent's name, the answers to questions 1-5, the three respondent characteristic question responses, the date the survey was requested by the respondent, the date the completed survey was returned,
the origin of the request (listserv group, if known), and any miscellaneous notes collected. The following information is a question by question analysis of the responses, followed by a summary of overall observations about the responses.

**Question 1.** "What means of market research does your organization conduct when developing new product ideas?"

Table 2: Market Research Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>% of Responses n=27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys</td>
<td>18</td>
<td>67%</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>13</td>
<td>48%</td>
</tr>
<tr>
<td>Interviews</td>
<td>16</td>
<td>59%</td>
</tr>
<tr>
<td>Literature Reviews</td>
<td>14</td>
<td>52%</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>7</td>
<td>26%</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>30%</td>
</tr>
</tbody>
</table>

Of the methods listed, nine respondents used at least two methods, six respondents used three, four respondents used four, two respondents used five, and two respondents used six methods. "Other" methods included competitive analysis, on-site observation ("walking" with the customer), Internet research, listening to clients, brainstorming, and pilot groups.

**Question 2.** "Does your organization have Research & Development Division?"

For this question, five (19%) respondents answered "yes" and the remaining 22 (81%) answered "no."

The respondents who answered "no," offered the following answers to the question "If not, who provides the information needed to make informed product development decisions."

- Sales & Marketing
- Individual Groups
- Sr. Managers
- Reliance on polls & client's needs
• An agency
• Department or project team
• Training Manager/Training & Development Division
• Partners & colleagues

As expected, the five organizations that have a Research & Development Division have over 500 employees. The information above illustrates other means by which organizations gather the information they need to make informed product development decisions.

Question 3. “In your organization, do you have a team structure?” For this question, nine (33%) respondents answered “yes” and the remaining 18 (67%) answered “no.”

The respondents who answered “yes,” offered the following answers to the question, “If so, what teams are directly involved in product development.”

• Capabilities Review Team, Product Development Team, Sales Education Team, Market Launch Team, Pricing Team
• Business Unit Team in partnership with Sr. Management
• Engineering Team, Marketing Team, etc.
• Engineering, Product Planning & Sales
• New Product Development Team
• Teams are set up on a “need to develop” basis

The majority of the respondents who answered “no” to this question stated that they form a product development team as needed. Such a team may involve just two people: the training manager and the subject matter expert, or it may represent a team from each discipline that is involved in various points in the product development cycle. The organizations that answered “yes” were characteristically larger (over 500 employees).
Question 4. “Please state the model of your product development process or the steps your organization follows (i.e. literature review then market research then focus groups, etc.).”

In general, the answer to this question began with either “a request by a client/customer” or an “organization-initiated needs assessment of the market.” The next step for many was product research, market research or internet research, followed by literature reviews, then by interviews or surveys. Compiling and design of a training module usually followed, which was followed by focus groups and a pilot test of the program.

The last steps involved implementation and evaluation of the product or program. The raw data provides great insight into new product development steps used by the respondents, and most stages are not part of a defined model, but rather “what works for them.” Only one respondent stated that his organization’s product development model was complex and proprietary, and that it involved “a seven stage process with decision points at the beginning of each stage that helps to determine the viability of moving forward.” In general, however, many new products come simply from “getting an idea” or “gut reaction.”

Question 5. “On a rating scale of 1-10, how instrumental are you in influencing the new product development process?” Results of this question are summarized in Table 3.

Table 3: Responses to Question 5
“How instrumental are you in influencing the new product development process?”

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>% of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = No Influence</td>
<td>3</td>
<td>11%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>5 = Some Influence</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>11%</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>11%</td>
</tr>
<tr>
<td>10 = Decision Maker</td>
<td>4</td>
<td>15%</td>
</tr>
<tr>
<td>No Answer</td>
<td>7</td>
<td>26%</td>
</tr>
</tbody>
</table>
The largest percentage (19%) of the respondents feel they have some to moderate influence in the new product development process. Seven respondents (26%) did not answer the question, which makes it difficult to predict if they don’t know what part they play in the process or if they simply chose not to answer the question.

Survey Conclusion and Implications

The survey research results reinforces the original hypothesis that organizations with 1-50 employees do not have a standard new product develop process, but occur on an as-needed basis. In fact, there are several characteristics that the responding organizations with 1-50 employees have in common:

- None have research divisions. They gain information for new product development from such sources as the sales and marketing department, clients/customers, prospects, marketing, and partners and colleagues.

- For most, there are no formal team structures in place. The organizations are small in nature so most employees are involved in some way with the product development process (each employee or member brings experience and expertise from their specialty area).

- Surveys and literature reviews are the methods most commonly employed research when developing new product ideas.

In addition to this, for the respondents from organizations with 1-50 employees, decision making ability is higher than the “7” rating cited earlier (on a scale of 1 to 10, with 1 being “no influence in the decision making process” and 10 being “Decision Maker”). Of the six organizations in this category, one is considered a “7,” two considered themselves a “10,” two considered themselves a “9,” and one was considered an “8.”

Generally, the combination of the survey research and the literature review showed that many larger organizations tend to have a more defined product development process, often supported by a product development division. Conversely, smaller organizations both develop products and define the product development processes on an as-needed basis, and pull teams time (such as subject matter experts and marketing representatives) together based on the product development need at that.
The literature review, together with the product development survey, provides an overview of product development processes in organizations to provide insight to Gillespie Associates as they more systematically formulate their product development process.

Learning Organization Literature Review

Because the literature addressing learning organizations is so vast, and the concept of the learning organization constantly evolving, the years 1995 to 1999 was chosen to present the most up-to-date research and ideas. The articles that were chosen presented ideas, theory, and models for creating learning organizations, and represented a cross-section of organization sizes and types, from large manufacturing organizations to colleges to the health care industry. Generally, the articles fell into three broad categories: the tips, tools and “how tos” of the learning organization, steps in creating the learning organization, and characteristics of learning organizations. For quick reference, the articles were summarized and presented in synopsis form alphabetically by title, and in chart form by title and by author name (Appendix B, Part II). An example of this type of chart is shown below.

| Article                                | Author(s)                  | Organizational Learning | Teamwork/Groups | Corporate Culture | Executive/Managerial Styles | Leadership | Guidelines | Management Development | Employee Development | Education & Training | Organizational Change | Employee Training | Strategic Planning | Organizational Theory | Management |
|----------------------------------------|----------------------------|-------------------------|-----------------|------------------|--------------------------|------------|------------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|-------------------|---------------------|
| Competence, Efficiency, And Organizational Learning | Barrie, J. & Pace, R.W.    | ✓                       |                 |                 |                          |            | ✓          |                        |                     |                     |                     |                    |                    |                  |                   |

Conclusion

Gillespie Associates could benefit most from the literature review and survey research by using it as benchmarking information, seeing how they compare to similar organizations with regards to their structure, how they conduct research and how they develop products. While there is no concrete model to offer Gillespie Associates to assist them in their product development efforts, they could look to an example such as ’s New
Product Development Model (1997), with its essential, and often overlooked, go/kill decision making process.

The learning organization research results here translate into the report prepared for Gillespie Associates in Appendix A. Each article chosen is presented in a table of contents and synopsis form, for ease of use and reference as the organization strives to develop new products to address this concept.

In conclusion, this chapter described and reported the results of a survey regarding product development processes in organizations, and a literature review on the concept of the learning organization and discusses how the information gained can benefit Gillespie Associates. Chapter Five provides a conclusion and summary of research regarding learning organizations as it relates to new product development, and suggestions for developing this knowledge into a marketable product.
CHAPTER FIVE

Conclusion

This chapter provides a summary for the research conducted regarding learning organizations as it relates to product development. This information is presented to Gillespie Associates with the knowledge that beyond the need to understand “the look of the learning organization in the 1990s” comes the need to understand how such a concept can be developed into a marketable product.

Through the use of a literature review about product development processes and a brief survey of how organizations develop programs for “soft-skill” development, comes a clearer picture about the tools and processes organizations use. In general, the organizations surveyed and represented in the literature review seem to have a broad sense of the product development activities they need to perform, but many of the smaller organizations have no specified model of product development. They pull the process and teams together on an as-needed basis.

For Gillespie Associates, the next steps in developing products, as supported by the learning organization research that aid organizations as they transform into learning organizations, would most likely consist of a managerial-level training package that consists of an “awareness” component and a training component. The awareness component would provide the organization with the characteristics of a successful learning organization, and provide them with the tools to measure or assess “where they are” versus “where they need to be.” Such a tool exists with DiBella’s Organizational Learning Inventory. After a needs assessment, Gillespie Associates’ training component would consist of modules designed to “fill-in-the-gaps” on such topics as leadership skills, performance appraisal systems, and coaching.

Implications

The next step in the research and development process for Gillespie Associates would be to conduct benchmarking against organizations of similar size and focus to determine what types of products are being developed and what markets are being reached. Because there are so many products now available providing training on such
topics as leadership skills development, performance appraisal systems, successfully working in teams, and coaching, Gillespie Associates must find their niche.

This niche could be a focus on presenting the steps to becoming a learning organization in a unique way or marketing their product to an underdeveloped segment of the population. The benefits of identifying this niche would be to help Gillespie Associates streamline their product development process and more clearly focus the product itself. This, in turn, could make Gillespie Associates more competitive. Identifying this niche, however, could be difficult entering the new millennium as my research revealed there is already much being said in journals and books about the steps to “becoming a learning organization.” There is a vast amount of information on the Internet about learning organizations, some even as specific as “Organizational Learning for Dentists!” Smaller organizations would benefit from a learning organization program/product to support their efforts that would condense all that is being said and written about the learning organizations and incorporate it into a comprehensive “how-to” package.

Reviewing the report in Appendix A can assist Gillespie Associates in expanding their knowledge of learning organizations to help them focus on developing new products to suit small- to medium-sized organizations.

The five chapters in this report examined recent literature about how organizations conduct product development research, as well as the current state of the concept of the learning organization, and contained the results of a survey conducted to gather further information about the product development process.

Chapter One served as an introduction, providing the purpose of the study, background, a statement of the problem, and limitations of the study. Chapter Two provided the results of a literature review about how organizations conduct product development research. Chapter Three explained the methodology used for the product development survey, and the learning organization literature review. Chapter Four explored the results of each activity in Chapter Three. Chapter Five provides conclusions to the study. The purpose of this information is to support the larger goal of providing Gillespie Associates with information relevant to their desire to create off-the-shelf products to assist organizations in becoming a learning organization.
References


Appendix A
The Look of the Learning Organization
1995 to 1999

A Report Presented to
Gillespie Associates

By

Judith G. Baker
Submitted in Partial Fulfillment
Of the Requirements
For the Degree of

Master of Science

August, 1999
Executive Summary

"Learning Organization...a term in search of a meaning."

-Dr. William Rothwell
October 23, 1998

The concept of the Learning Organization is perhaps the most widely explored notion since Total Quality Management (TQM) burst onto the business scene in the 1980s. It is also one of the most broadly defined terms, as organizations seek to "become a learning organization," changing organizational behavior as a way to succeed in business in the 1990s.

What is a learning organization? What are the payoffs of becoming a learning organization? What should I do to encourage organizational learning? How do I know if my company is a learning organization? What are the characteristics of a learning organization and how do I sustain one? Is there an implementation strategy (Goh, 1998)?

David Garvin (1993) says, "a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights." Goh cites Garvin when arguing that learning organizations have five core strategic building blocks: mission and vision, leadership, experimentation, transfer of knowledge, and teamwork and cooperation.

The information in this report will assist Gillespie Associates, a Rochester-based training and development consulting firm, in gaining a better understanding of the concept of learning organizations without conducting time-consuming, in-depth research on their own.

Specifically, Gillespie Associates is interested in developing an off-the-shelf package of instruction to address the current interest in transformation toward becoming a learning organization. More broadly, the organization is seeking to update their knowledge regarding the discussions around the concepts of the learning organization.

To support the organization to this end and to assist them in understanding the current climate of research, this report will provide background to support the development of off-the-shelf products. The organization will also use the discussions provided as a background to their consulting practices.
Having identified the need for research in the area of learning organizations, Mr. Taylor Brown, former Managing Director at Gillespie Associates, asked that a literature review be conducted to determine what "the experts are saying." The result of this research will give the reader an idea of how learning organizations are defined and characterized, and how to create a learning organization (tools and steps).

Gaining knowledge about learning organizations is important if an organization wants to maintain or gain a competitive edge in the regional, national or global marketplace. If organizations remain stagnant, using out-of-date management techniques that distinctly define the "boss/worker" roles, and if they do not constantly invest in the newest technology, they will fall behind their competitors and most likely fail.

Many organizations are beginning to learn what the most successful businesses have known for years: knowledge management affects the bottom line. This idea is at the core of learning organizations. Organizational management, from the CEO to the line workers, will reap the benefits of being part of an organization that places value in their knowledge capital.

For this project 60 journal articles and several internet-based articles were reviewed. The information researched spans several years, with much as current as January 1999. Because the definition of "the learning organization" is constantly evolving, even research published prior to 1995 may be out of date today.

Dr. Peter Senge, chairman of the Society of Organizational Learning and Senior Lecturer at MIT’s Sloan School of Management, the most widely quoted authority on the subject, has provided the most guidance in the development of the learning organization concept. He is the most frequently referenced and quoted on the definition, creation of, and "how tos" of learning organizations.

In the article "Creating Learning Communities," when Senge (1997) speaks of a learning organization, he's articulating a view that involves "us" as the observers as much as "us" the observed in the common system. This means taking a stand for a vision, for creating an organization people would like to work within and that can thrive in a world of increasing interdependency and change. It is not what the vision is, says Senge, but what the vision does (p. 17).

The information about learning organizations seems to divide into three broad categories: tools, tips, and the "how tos" of learning organizations, steps in creation of learning organizations, and definitions and characteristics of learning organizations. In
the following report, within these broad characterizations, the articles’ content is
categorized according to the following 14 topics:

- Organizational Learning
- Teamwork/Groups
- Corporate Culture
- Executives/Management Styles
- Leadership
- Guidelines
- Management Development
- Employee Development
- Education & Training
- Organizational Change
- Employee Empowerment
- Strategic Planning
- Organizational Theory
- Management

Each article has a title, followed by the author’s name, with content areas listed
last. The synopsis of the article focuses on a broad summary, presenting important
points and steps in the discussion. Finally, for ease of identification, the articles are
presented in a table format, sorted first by title and then by author.

The results of this study will provide Gillespie Associates with the appropriate
background information in order to move their product development process forward,
and will assist the organization in taking the necessary internal steps to transform into a
learning organization.
Appendix B
Letter to Gillespie Associates

August 10, 1999

Ms. Sue Leo-Fitzgerald
Gillespie Associates
25 Park Avenue
Rochester, NY 14607

Dear Sue,

I am pleased to present the report, “The Look of the Learning Organization: 1995 to 1999” to Gillespie Associates. This report is a culmination of months of journal and Internet research, and represents the most current thinking focusing on the concept of the learning organization. The information in this report will assist Gillespie Associates in gaining a better understanding of the concept of learning organizations without conducting time-consuming, in-depth research.

Specifically, this information will assist Gillespie Associates in developing an off-the-shelf package of instruction to address the current interest in transformation toward becoming a learning organization. More broadly, this report will assist the organization in updating their knowledge regarding the discussions around these concepts.

Beyond the need to understand “the look of the learning organization in the 1990’s,” comes the need to understand how such a concept can be developed into a marketable product. In order to gain a better understanding about the steps that organizations take when they are in the early stages of product development, a brief literature review and a survey was conducted to examine this topic.

I will be contacting you within the next few weeks to schedule an appointment to officially present my report findings. At that time I would also welcome the opportunity to discuss ideas and directions for the development of learning organization products at Gillespie Associates.

It has been a pleasure assisting your organization in this way, and I look forward to speaking with you soon. If you have any questions, please contact me at 385-8134 or "baker@sjfe.edu”.

Sincerely,

Judith G. Baker
The Look of the Learning Organization

1995 to 1999

A Project

In Partnership with

St. John Fisher College

Graduate Human Resource Development Program

and

Gillespie Associates

August, 1999
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Content Areas: Organizational Learning

INVEST IN LEARNING

Author: Kovach, J.W.

Content Areas: Organizational Learning, Corporate Culture, Employee Empowerment

LEARNING ACROSS A LIVING COMPANY: THE SHELL COMPANIES’ EXPERIENCES

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LEARNING FOR ORGANIZATIONAL EFFECTIVENESS: PHILOSOPHY OF EDUCATION AND HUMAN RESOURCE DEVELOPMENT

Authors: Barrie, J. & Pace, R. W.

Content Areas: Employee Development, Organizational Change

LEARNING ‘NEXT PRACTICES’ GENERATES REVENUE

Author: Berry, M.

Content Areas: Organizational Learning, Employee Development

LEARNING ORGANIZATION

Author: Belasco, J.A.

Content Areas: Organizational Learning, Leadership, Guidelines

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Content Areas: Organizational Learning, Employee Development, Education & Training

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Authors: Snell, R., & Chak, A.M.

Content Areas: Organizational Learning, Teamwork/Groups, Employee Development

LEARNING ORGANIZATIONS: DEVELOPING CULTURES FOR TOMORROW’S WORKPLACE

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Content Areas: Organizational Learning, Organizational Theory

PATHWAYS FOR KNOWLEDGE: HOW COMPANIES LEARN THROUGH PEOPLE

Author: Truran, W.R.

Content Areas: Organizational Learning

PEAK-TO-PEAK PERFORMANCE

Author: Tompkins, J.A.

Content Areas: Teamwork, Groups, Corporate Culture, Management

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PART I

Synopsis of Articles

When reviewing the numerous articles selected regarding the evolution of learning organizations in recent years, three broad themes emerged. Articles were selected for their relevance to the subject and applicability to the overall project of providing Gillespie Associates an overview and definition of learning organizations.

Many described the characteristics of successful learning organizations; others provided the tips, tools, and "how-tos" of learning organizations; while still others of identified steps in creating a learning organization. Within these broad themes emerged 14 content areas:

1. Organizational Learning
2. Teamwork/Groups
3. Corporate Culture
4. Executives/Management Styles
5. Leadership
6. Guidelines
7. Management Development
8. Employee Development
9. Education & Training
10. Organizational Change
11. Employee Empowerment
12. Strategic Planning
13. Organizational Theory
14. Management

The content areas above were identified as the search as the subject for the search criteria when using ProQuest Direct, which searches the University of Michigan (UMI) databases, and consists of articles originally published in magazines, newspapers, and journals.
A Guide to Reading this Section

Each article in this section is headed by an underlined title, accompanied by the author(s) name(s) on the second line, followed by the content areas identified on the third line. The synopsis of the article that follows focuses on a broad summary, presenting important points and steps in the discussion.

Competence, Efficiency, and Organizational Learning
Authors: Barrie, J. & Pace, R. W.
Content Areas: Organizational Learning, Management Development

Barrie and Pace (1997), in the article, "Competence, Efficiency, and Organizational Learning" pose the statement "The question of whether the field of human resource development is in the business of improving performance or of enhancing learning in organizations has not been sufficiently explored" (p. 335).

This article explores the measure of organizational effectiveness as the outcome of either performance, or learning, or both. It concludes that an organizational learning approach to human resource development that is grounded in meaning, valued contributions, and cognitive orientation is a stronger foundation than is a behavioral, performance approach.

A Conversation with Peter Senge: New Developments in Organizational Learning
Authors: Fulmer, R.M., & Keys, J.B.
Content Areas: Organizational Learning, Leadership

Peter Senge, with Fulmer and Keys (1998), discusses his efforts to build a sustainable movement and community around the concepts of organizational learning since the publication of his best selling book The Fifth Discipline (1990). He describes his new learning initiative, the Society of Organizational Learning (SoL), as "a marriage between organization learning theories of organizing and distributing control" (a concept created by Dee Hock founder of Visa International). According to Senge, SoL is a consortium of member companies, and its purpose is to build critical mass of learning about how organizational learning can be successfully implemented. Further, he states,
the key issues addressed by SoL are simple and central—it answers the questions brought to learning organization experts for years (page 41):

- How do you organize for learning?
- What are the kinds of structural arrangements?
- What is the necessary distribution of power?

The organization is looking to answer these and other questions of practitioners about profound change and leadership. Senge notes the reasons for success and failure to transform into a learning organization are complex and hard to isolate, but the two major themes that separate success and failure are commitment and community.

Finally, Senge states that probably the most important lessons learned about the learning organization “revolve around the incredible complexity of the challenges of creating learning organizations. This involves attempting to influence the tension between an incredibly important interest in this type of organizational transformation and temptations for ‘fadism,’ where organizations seek simple solutions to extremely complex challenges (P. 42).”

Creation of Learning Organization Laboratory in the Classroom: Expected and Unexpected Lessons
Author: Doherty, E.M.
Content Area: Organizational Learning, Management

In “Creation of a Learning Organization Laboratory in the Classroom: Expected and Unexpected Lessons,” Doherty (1998) described an experiential classroom design that adapted the learning organization laboratory concept to the classroom and introduced the concepts of organizational development and change. In the article, Doherty stated that developing a classroom environment instrumental to learning enabled the group to focus on five building blocks that define a skilled learning organization (Garvin, 1993):

- systematic problem solving
- experimentation with new approaches
- learning from their own experience and past history
- learning from experiences and best practices of others, and
- transfer of knowledge quickly and efficiently.
The themes of creating vision, mission, and values emerged as critical to the success of the class study. Additionally, the students recognized that working together and commitment by the group was critical to their success. According to the students most important outcome of the course, was that it was very pertinent to real-world experiences in organizations.

Creating Learning Communities
Author: Senge, P.M
Content Areas: Organizational Learning, Corporate Culture, Leadership

Senge (1997) states in “Creating Learning Communities” that there are five operating principles in a learning organization (p. 17):

1. The learning organization embodies new capabilities
2. Learning organizations are built by communities of servant leaders
3. Learning arises through performance and practice
4. Process and content are inseparable
5. “Learning is dangerous”

Perhaps worth of a further look is the provocative 5th principal: learning is dangerous. Senge states that learning occurs between a fear and a need. On one hand, we feel the need to change if we are to accomplish our goals. On the other hand, we feel the anxiety of facing the unknown and unfamiliar. To learn significant things, we must suspend some basic notions about our worlds and ourselves. This, cautions Senge, is a frightening proposition for the ego (p. 18).

Each principle is defined and described in the article. Overall, Senge continues, the learning required in becoming a learning organization is transformational learning, where there are not problems “out there” to be solved independent of how workers think and act in articulating these problems. “Such learning is ultimately about tools and technique—it is about who people are (p. 18).”

This is the first article to mention another 90s buzzword: servant leader. The term, which Senge defines as “leaders who lead because they choose to serve,” is not discussed at length here, but is worth mentioning and is used often in association with learning organizations.
Creating A Learning Organization
Author: Anonymous
Content Areas: Organizational Learning, Leadership, Management

The article "Creating a Learning Organization" offers an executive's view of the CEO's role in movement from individual concern to group responsibility. Leaders serve a number of vital functions during discussion (p. 82):

- Rather than avoiding discontent or treating it as an occasion for blame throwing or fault finding, leaders can redirect questions into group responsibilities
- Leaders can model the behavior of respectful feedback
- Leaders can grasp the opportunity to improve performance quality, and invite others to join in similar efforts

Finally, effective leaders expect and allow some anxiety over questioning old assumptions and giving up the familiar for the unknown, and they recognize and celebrate incremental steps toward goals of improved performance.

Creative Tension
Author: Senge, P.M.
Content Areas: Organizational Learning, Corporate Culture

The article “Creative Tension” by Senge (1999) focused on the characteristics of successful leaders. Senge introduces the principle of creative tension, “which comes from seeing clearly where we want to be—"our vision"—and telling the truth about where we are (p. 13).” He notes it is simply no longer possible for anyone to “figure it all out at the top.” The old model, “the top thinks and the local acts,” must now give way to integrating thinking and acting at all levels.

Senge cites three conditions that successful leaders must possess. First, “The Integration Principle,” consists of using creative tension to bring current reality “up to” the organization vision, and learning how to use the energy it generates to move reality more reliably toward their visions.

Second, a successful leader must possess reflection and inquiry skills. Specifically, the leader must see leaps of abstraction, balance inquiry and advocacy,
distinguish espoused theory from theory in use, and recognize and defuse defensive routines.

Third, leaders should help people see the big picture by using systems thinking skills. To do this, leaders must be able to see interrelationships, not things; process (scenarios), not snapshots. They must also be able to move beyond blame, distinguish detail complexity from dynamic complexity, focus on areas of high leverage, and avoid symptomatic solutions.

Senge concludes, in a learning organization, leaders are designers, teachers, and stewards—roles that require the ability to build a shared vision, to challenge prevailing mental models, and to foster more systematic patterns of thinking.

The Design, Development, and Validation of a Knowledge-Based Organizational Learning Support System
Authors: Hines, M.J., & Goul, M.
Content Areas: Organizational Learning

Hines and Goul (1998) offer supplemental theory and models to support organizational learning are in the article, “The Design, Development, and Validation of a Knowledge-based Organizational Learning Support System.” They state that it is generally agreed that organizational learning involves the processes of developing and exchanging organizational members’ underlying opinions, assumptions, and interpretations of the environment. This statement precedes the introduction to the Organizational Learning Support System (OLSS) toolkit. This toolkit uses three knowledge-based systems to elicit initial interpretations of the environment from organizational members and automatically detects where organizational members’ interpretations conflict and where they are in consensus.

The authors note that two themes of organizational learning have emerged: the systems-structural perspective, and the interpretive perspective. The systems-structural perspective emphasizes acquisition and distribution of information required for an organization to learn about its environment. Alternately, the interpretive perspective emphasizes the underlying purpose and meaning of environmental events. The focus of the article, as presented in a case study, is on the interpretive perspective and the article
details a methodology for the design and development of an interpretive organizational learning support system.

**Developing Learning Organizations and Communities**
Author: Ramirez, M.R.
Content Areas: Organizational Learning

Ramirez (1999), in his article "Developing Learning Organizations and Communities," notes that many of the shifts in becoming a learning organization have been cosmetic rather than structural, meaningful shifts. For people to develop shared vision, the organization must make decisions based on core values and beliefs, hire people who share them, and nurture programs and structures that promote them.

**Does the Bell Toll for the Living Company?**
Author: Chambers, N.
Content Area: Organizational Learning, Corporate Culture, Executives/Management Types, Strategic Planning

"Does the Bell Toll for the Living Company?" by Chambers (1997) refers to the book *The Living Company: Habits for Survival in a Turbulent Business Environment* by Arie de Geus (1997), author and originator of the concept of the learning organization. de Geus concludes that to extend an organization's life span, management must focus on developing brain-rich companies that can adapt to a changing environment, form relationships with employees, and use conservative financing to govern their growth.

The article chronicles an interview with de Geus by Chambers, describing the living entity of an organization, and discerning that the "company as person" philosophy must be interpreted as "the organization as personnel" (p. 1). Other points considered by de Geus when characterizing the "living company" include (p.4):

- An organization needs to organize its personnel in a way that allows fast learning and the conditions of "flocking" [learning in groups], and needs to do, intensively, things like career development.
• An organization needs the right underlying contract with its people that means "I'm interested in the development of your potential, rather than your immediate output over the next three years."

• Management view of finances needs to be long-term, not "I want it all and I want it now. I want to grow tomorrow and be big next year."

de Geus concludes the interview by stating that managers, now more than ever before, are listening to the "language" of the learning organization, that is viewing the business as a living entity, not simply speaking of it in financial terms.

**Editor's Desk**

Author: Roth, J.
Content Areas: Organizational Learning

In the short commentary from "Editor’s Desk" in the magazine *American Printer*, Roth (1998) states that many of the attributes of long-term industry profit leaders are exemplified by the winners of the 1998 “Top 50 Fastest Growing Printer” awards. What sets these printing businesses apart? Regardless of size or scope, each of the long-term profit leaders has developed a learning organization.

Specifically, these businesses use an exceptionally broad range of information sources, and management and its associates talk to and learn from clients, vendors, peer groups, trade associations, the press, and attend trade shows and conferences. In addition, they have learned to take the “best practices” from other industries and apply those principles to their operations. Above all, the profit leaders learn from experience—they track trends, develop strategic plans, and monitor the results.

**Everyone Can Be a Coach**

Authors: Cunningham, I. & Honold, L.
Content Area: Guidelines, Management

In “Everyone Can Be a Coach,” Honold and Cunningham (1998) relate that "fashionable ideas such as the learning organization will have little value unless organizations focus on the development of coaching capability across the spectrum of the workforce." Honold states that to focus on the role and value of coaching, it is
necessary to examine and expose, several fallacies associated with the concept, such as (p. 63):

- Coaching is all one thing (i.e., carried out only by special people called coaches).
- Coaching is about providing new knowledge and skills.
- Coaches need to be expert in something to coach.
- Excellent coaches are born, not made.
- Coaching has to be done face to face.

The authors proceed to expose the central fallacy that coaching is a specialized skill, when in fact existing employees can be effective coaches if given proper training. They expose this fallacy to clear up confusion of the definition of coaching and to improve the practice overall.

The Evolution of Learning Strategies in Organizations: From Employee Development to Business Redefinition
 Authors: Baldwin, T.T., Danielson, C. & Wiggenhorn, W.
 Content Area: Organizational Learning, Corporate Culture, Employee Development, Organizational Theory

Baldwin, Danielson and Wiggenhorn state that the dynamics of rapid change, heightened global competition, and advancing technology mean that organizational success will be increasingly dependent on learning.

Using the example of Motorola University (worth noting as an often cited example of a successful organizational learning model), a model depicts three phases of evolution of learning strategies in large industrial organizations, the authors strive to illustrate the underlying logic of recent learning initiatives. In the case of Motorola, the premise of the model is that as environment turbulence increases, the strategic role of learning evolves from a focus on imminent business needs to new business employee development to development/redefinition.

It is noted that these phases should not be viewed as independent or exclusive states—firms may have initiatives underway that would fall into each of these three categories. The goal of the study was to make a preliminary attempt to categorize the
confusing variety of learning initiatives underway in organizations today, and to understand them in the context of varying business environments.

**Faster Learning**
Author: Guns, B.
Content Areas: Organizational Learning, Teamwork/Groups, Organizational Change

Want to become a learning organization, fast? The article, “Faster Learning” by Guns (1998) argues that the ability to learn faster becomes even more significant as organizations become more knowledge-based. The first step is to develop a strategy that creates a stimulating climate for a faster learning organization, as openness to learning is necessary for faster learning. The author introduces three complementary strategies that provide the stimulus to create the openness that is necessary for faster learning.

First, The Surge Strategy is the most focused short-term strategy in which, through analysis, key leverage points are identified where, if learning is accelerated, the organization will surge ahead of the competition.

Second, The Cultivate Strategy, entails creating a profile of a faster learner, and then hiring and developing people according to that profile. Finally, The Transformation Strategy focuses on methods to accelerate everyone in the organizations’ learning. When properly implemented, the Transformation Strategy creates the greatest impact on organizational learning.

**Gearing Up to Become a Learning Organization**
Author: DiBella, A.J.
Content Area: Organizational Learning, Teamwork/Groups, Organizational Change

DiBella (1997) builds on the notion of continuous improvement, an essential ingredient to TQM, in the article “Gearing Up to Become a Learning Organization” by noting that quality practitioners must involve staff directly in learning interventions. DiBella states that assessment of organizational learning should not be based on some external, expert-generated model, but rather the assessment must help a workgroup profile the learning capabilities they currently possess. To accomplish this, DiBella recommends using the Organizational Learning Inventory, a tool designed as a participatory group exercise, completed by members of an organization working together with the assistance of a trained facilitator.
Features of this tool include enabling the group to come up with its own problem definition (as reflected in the gap between the current and desired profiles) and its own solution (action plans). In this way, the outcome will be a set of interventions that has group ownership and builds upon the group’s own knowledge.

Get Smart
Author: Patterson, L.
Content Areas: Organizational Learning, Education & Training, Strategic Planning

One basic feature is at the heart of the learning organization: knowledge. In the article "Get Smart," Patterson (1997) introduces "tools to raise your organization's IQ (p. 62)." This article summarizes off-the-shelf resources designed to help companies, and a sample of computer-based training is represented in the following (p. 62):

- "Project Challenge" - used to improve decision-making skills and to train employees’ how to manage projects
- PointCast’s "I-Server" - used to broadcast company news through an intranet directly to employees screens
- "WiseWire" - uses neutral networking to learn an individual’s content interest in order to deliver highly personalized information

Data warehousing, data marts, and data mining let companies create knowledge out of data by combining various databases, and then using “mining tools” to spot trends and extract hard-to-get data.

The Importance of Collaborative Know-How: An Empirical Test for the Learning Organization
Author: Simonin, B. L.
Content Areas: Organizational Learning

In “The Importance of Collaborative Know-How: An Empirical test of the Learning Organization,” Simonin (1997) provides a systematic research study on the proposal and testing of a model of how firms learn from strategic alliances. Based on a survey of 151 firms, the results suggest that experience alone is insufficient for the achievement of the greatest benefits from collaboration. Simonin (1997) also states that
experience must be internalized first, and collaborative know-how must be developed for this experience to continue to future collaborative benefits.

As the title of this article suggests, the study focuses on the benefits and drawbacks to collaboration between companies. It recognizes the importance of examining whether firms learn from the success and failure of collaborations in order to apply these lessons to new collaborations. The central theme of this research is that a firm’s experience must be transformed into know-how before it can improve performance, and extend existing work by (p. 1151):

- introducing a construct of collaborative know-how that measures the extent to which firms have skill in identifying, negotiating, managing, monitoring, and terminating collaborations;
- relating this collaborative know-how to the achievement of both tangible and intangible benefits from collaboration;
- relating this collaborative know-how to past collaborative experience;
- showing that experience with collaborations, without the development of collaborative know-how, will not contribute to the achievement benefits;
- examining the impact of firm size on the process, and
- looking at a large sample of firms in a single study.

As with any empirically-based study, the article concluded with the analytical results of the study, discussion of the results, description of the limitations, and future research directions.

Invest in Learning
Author: Kovach, J.W.
Content Areas: Organizational Learning, Corporate Culture, Employee Empowerment

In “Invest in Learning,” Kovach (1997) says that learning organizations “share ideas, learn from each other and from any source in or out of the organization, and by using cumulative knowledge of the corporate network, including vendors and customers, they solve problems, create value, and gain competitive advantage.” The author states that learning organizations share three characteristics (p. 11):
1. they are open to new ideas,

2. the culture encourages and provides opportunities for learning and innovations, and

3. employees understand how their work contributes to overall goals and objectives.

This article observes that “the new roles for the 21st century will be in terms of brain workers rather than hand workers (p. 11).” Once again, Senge is quoted as defining the learning organization as “an organization that is continually expanding its capability to create its future.”

There are various returns gained from an organization’s investment in learning. The first is flexibility as employees become problem solvers, taking measured risks which, in turn, frees management to be learning guides and visionaries, to focus on strategies, and to look for and manage opportunities. Second, the organization becomes market-driven by observing “what is happening now,” the organization becomes proactive rather than reactive. Finally, learning organizations gain a competitive edge through cost-effective responsiveness to customer problems and needs.

Learning Across a Living Company: The Shell Companies’ Experiences
Authors: Brenneman, W.B., Keys, J.B. & Fulmer, R.M.
Content Areas: Organizational Learning, Leadership, Organizational Change

In “Learning Across a Living Company: The Shell Companies’ Experiences” Brennenman, Keys, and Fulmer (1998) describe how The Shell Group exemplifies the concepts introduced in Arie de Geus’ “The Living Company,” a state achieved through a servant-leader philosophy. By using scenario forecasting, Royal Dutch/Shell has become a premier learning organization in its pursuit of understanding trends in the global business/economic environment. Through scenario forecasting, used as a tool to look into the future, anticipatory planners write imaginary stories about the future, concluding with multiple scenarios. Guided by such scenarios and aided by other organizational strengths, the authors explain, Royal Dutch/Shell comfortably survived the petroleum crisis of the 1970s.
With regard to the concept of servant leadership, The Shell Group, through the LEAP (Leadership and Performance) program, defines the servant leader as one who (p. 65):

- recognizes that, as an individual, one does not have all the answers
- is able to demonstrate a sense of humility and vulnerability
- advances his or her own transformation, and the personal transformation of others, and the transformation of the organization
- builds the capability of the organization and the people in it.

The article also cites Senge in *The Fifth Discipline* (1990) when he states, commitment to current reality is “commitment to the truth,” and lists three reasons why authority figures, through servant leadership, come to a more humble view of the power of top management. First, cynicism exists in most organizations following years of management fads. Second, it is difficult to obtain genuine commitment, even when strong authority and compliance is present. Finally, top-management initiatives often backfire and end up moving organizations backward, not forward.

According to the authors, the key to Shell’s success as a learning organization is attributed to a strong emphasis on action learning. Action learning is a systematic process that requires that project teams and other units not only solve problems and complete projects, but reflect on learning from each episode, and bank this learning in an institutional memory. This, they conclude, will provide increased adaptability and the ability to learn and adjust, as required of the living company.

**Learning for Organizational Effectiveness: Philosophy of Education and Human Resource Development**

Authors: Barrie, J. & Pace, R. W.

Content Areas: Employee Development, Organizational Change

Barrie and Chase (1998) explore some of the relationships between two fields of discourse: philosophy of education and human resource development in the article “Learning for Organizational Effectiveness: Philosophy of Education and Human Resource Development.” Much of this research-based article focuses on the parallels that are drawn with the performance and learning paradigms in human resource development, with the argument that the learning paradigm is conceptually richer and more
comprehensive than the performance paradigm. Specifically, they cite Watkins’ statement that “engineering human performance is quite different from facilitating adult education” (p. 254).

Technical terms aside, the article says that organizational learning is “an experienced-based process through which knowledge about action-outcome relationships develops, is encoded in routines, is embedded in organizational memory, and challenges collective behavior.” The article concludes that the traditional time-honored university value of promoting intellectual curiosity for its own sake has become the exception rather than the rule in learning environments, where pursuits of short-term technique is promoted at the expense of gaining wisdom.

Learning 'Next Practices' Generates Revenue
Author: Berry, M.
Content Areas: Organizational Learning, Employee Development

Berry (1998) presents a case study about Stentor Resource Centre, Inc. which attributes a $72 million boost in revenue in 1997 to the learning organization program its human resources department launched last year in the article, “Learning ‘Next Practices’ Generates Revenue.” After conducting an assessment of the organization’s current condition, Stentor created the “Stentor Learning Forum,” a program designed around Peter Senge’s Five Disciplines of Learning Organizations (1990): systems thinking, shared vision, team learning, personal mastery, and mental models. As a result of the program, the article states, the organization is now dedicated to growing leaders and enhancing people’s capabilities.

Learning Organization.
Author: Belasco, J.A
Content Areas: Organizational Learning, Leadership, Guidelines

Belasco (1998) makes an interesting point in his article “Learning Organization” when he states, “The truth is that the learning organization does not exist. Organizations do not learn—people do” (p. 7). He also has three ideas about the creation of the learning organization (p. 7):

1. Get serious about earning top financial returns by investing in learning,
2. build on-the-job learning experiences, and
3. become a coach/vehicle for other people's learning.

Belasco concludes that “if you want to become a learning organization (or rather an organization of learning people), invest those dollars and yourself in on-the-job learning activities and becoming a better coach (p. 7).”

**Learning Organization Update**
Authors: Birkner, L.R., & Birkener, R.K.
Content Areas: Organizational Learning, Employee Development, Education & Training

In “Learning Organization Update,” the Birkners (1997) focus on the concept of the “knowledge worker,” as first coined by Peter Drucker in 1959. Recently Drucker was quoted by the authors as saying, “the only comparative advantage of the developed countries is the supply of knowledge workers. The basic economic resource—the means of ‘production’—is no longer capital, land nor labor. It is, and will be, knowledge. The industrial age is over. Make way for the knowledge era.”

**The Learning Organization: Learning and Empowerment for Whom?**
Authors: Snell, R., & Chak, A.M.
Content Areas: Organizational Learning, Teamwork/Groups, Employee Development


Using case studies of two blue-chip companies to compare the perspectives of top management, the authors explore the argument that a learning organization will enhance only the power of the ruling court unless democratic arrangements are explicitly laid down against ideas of developmental leadership.

The authors cite the work of Pedler, Burgoyne and Boydell (1991) to identify 11 “learning company” characteristics (p. 337):

1. The learning approach to strategy
2. Participative policy-making
3. Informating
4. Formative accounting and control
5. Internal exchange
6. Reward flexibility
7. Enabling structures
8. Boundary workers as environmental scanners
9. Inter-company learning
10. Learning climate
11. Self-development opportunities for all.

The notions of single-, double-, and triple-loop learning as it relates to individual learning are featured in the article. Single-loop learning occurs when individuals make simple, adaptive responses to organization-wide learning. Double-loop occurs when members of the organization begin to see things in new ways, such as changing their views of their roles, of the business or of the environment. Triple-loop individual learning entails members of the organization developing new processes or methodologies for arriving at such re-framings as moving from brainstorming to rigorous self-critique; from serious discussion to playful banter; and from paradigm-shift to paradigm-invention. In summary, organizational learning entails meaningful change in the processes, structures, assumptions, or concerns connecting individual members.

Learning Organizations: Developing Cultures for Tomorrow’s Workplace
Author: Standke, L.
Content Areas: Organizational Learning, Corporate Culture

Standke reviews the book Learning Organizations: Developing Cultures for Tomorrow’s Workplace (edited by Chawla & Renesch, 1995) a collection of essays focusing on learning organizations the article, “Learning Organizations: Developing Cultures for Tomorrow’s Workplace.” Several guiding ideas, theories, methods and processes are organized to parallel the structural model described as based on Senge’s book, The Fifth Discipline Fieldbook (1994). The reviewing authors note that trainers with an organizational development background will welcome the book’s emphasis on holistic thinking, global discovery and behavioral change.

The Nonprofit Executive as Chief Learning Officer
Author: Nathan, M.L.
Content Areas: Organizational Learning, Leadership, Management Development, Management

Nathan (1998) offers a different slant to the concept of the learning organization: a view of learning organizations “from the top.” In the article “The Non-Profit Executive
as Chief Learning Officer" Nathan states that as chief learning officer (CLO), the non-profit executive should be transformational. That is, transformation leaders are described as visionaries and change agents who are courageous, value-driven, lifelong learners who are able to deal with complexity, ambiguity, and uncertainty. According to the author, the CLO has five functions that make learning come alive in the organization (p. 40):

1. Exemplify the learning organization.
2. Shape a vision of the organization as learner.
3. Design the organization for learning.
4. Empower people to learn.
5. Assess learning.

Additionally, this article offers the following definition of the learning organization: it’s an organization that’s skilled at creating, acquiring, and transforming knowledge and modifying behavior to reflect new information.

**Now We Are Learning about Learning**

Author: Tompkins, J.A.

Content Areas: Guidelines, Education & Training, Organizational Change

One learning organization tool, as described in the article "Now We Are Learning About Learning," by Tompkins (1997) is the Tompkins Associates, Inc. Team-Based Continuous Improvement Process. Based on the belief that training should be pursued to enhance an organization's intellectual capacity to become a learning organization, the Tompkins system includes the following guidelines (p. 27):

- Training must be done Just-in-Time.
- Training must be a part of the process of creating peak-to-peak performance.
- Training must be flexible.
- Training must have full leadership support at all levels.
- Training must be presented in bite-sized chunks.
- Training must be built into the schedule.
- Training must be accountable.
• Teams should be the focus of training.
• Training must be clearly viewed as an organizational priority.
• Training objectives must be focused.

In response to these guidelines, Tompkins has developed a series of in-house training tools with such titles ranging from "Supervisors/Managers Changing Role" and "Problem Solving Presentation Skills" to "Adaptability to Change" and "Developing Company Vision/Mission Set," citing 21 tools in all.

Organizational Learning: Diverging Communities of Practice?
Authors: Easterby-Smith, M., Snell, R., & Gherardi, S.
Content Areas: Organizational Learning, Organizational Theory

Is the concept of organizational learning the same as the concept of the learning organization? In “Organizational Learning: Diverging Communities of Practice” Esterby-Smith, Snell, and Gherardi (1998) argue that there are key divergences in current debates about these terms or processes noted in two areas. The first area of divergence is between the practitioner literature that is primarily engaged in creating learning organizations and the academic literature engaged in the study of learning processes in organizations.

The second area of divergence is in the views of both academics and practitioners about the nature and essence of organizational learning. In addition, the authors note, divergences are noted in the preferred ways of investigating and researching into organizational learning, and ways of improving the ability of organizations to learn.

This article focuses primarily on the different approaches to researching the learning organization and organizational learning. The authors conclude by stating, “the distinction between organizational learning and the learning organization is clearly marked by the establishment of distinct communities of practitioners and academics, each with their own infrastructures and conferences, both real and virtual, and this can be linked to the establishment of different ways of seeing and understanding the process of organizational learning (p. 227).”
Pathways for Knowledge: How Companies Learn through People

Author: Truran, W.R.
Content Areas: Organizational Learning

Truran (1998) explores the issue of communication as it relates to organizational learning is explored in the article, "Pathways for Knowledge: How Companies Learn through People." In the article, the author offers the following description of organizational learning according to Argyis (1991): “First, learning occurs when an organization achieves what was intended; that is, there is a match between its design for action, and the actuality or outcome. Second, learning occurs when a mismatch between intentions and outcomes is identified and corrected; that is, a mismatch is turned into a match.” The article further explores how learning and knowledge management are two key aspects of judging a successful company, and noted that in a learning environment, people’s roles change—from controlled to empowered.

The issue of how an organization learns through investigation of the means by which people convey information is explored through a structured interview process to determine how R & D personnel in top American companies find and transmit knowledge. The article presented several interesting opinions.

On average, when people look for knowledge, they consider that about 64% of the knowledge base reside outside of the organization boundaries. More than half of all company knowledge transmission flows verbally and informally through ad hoc channels, giving evidence that the communication means has changed greatly over the past decade.

Finally, the author notes, as most of us have experienced, a growing amount of company information sharing is taking place via fax and e-mail, which is impacting the way people acquire and interpret information, as well as affecting knowledge transfer in companies.

Peak-To-Peak Performance

Author: Tompkins, J.A.
Content Areas: Teamwork, Groups, Corporate Culture, Management

Tompkins (1997), states that to sustain peak performance, managers must undertake four major shifts (p. 17):

- from management to leadership
• from individuals to teams
• from customer service to partnerships
• from traditional compensation to performance based rewards and recognition

Again, Tompkins notes that a peak-to-peak enterprise will follow a team-based, evolutionary process by having successful teams and becoming a learning organization. Tompkins stresses the importance for organizations to evolve from customer service to being customer driven to giving invincible customer service to a cooperative relationship to a true partnership.

In addition to this, he identifies three "boomerang" principles. To become a true peak-to-performance enterprise, an organization must consider (p. 18):
1. What comes back is exactly what is put forth
2. What comes back is always more than what was put forth
3. Benefits will be positive only if the peak-to-peak leader knows the path

The key, notes Tompkins, is starting quickly and continuing to accelerate to create a sense of momentum that will pull other people into the process. This involvement, while following the four shifts and continually learning, will result in the synergy needed to create peak-to-peak performance.

The Process of the Learning Organization: Making Sense of Change
Author: Bierema, L.L.
Content Areas: Organizational Learning

Bierema (1999) states that the learning organization is defined as “a strategic commitment to capturing and sharing learning in the organization for the benefit of individuals, teams, the organization, and society” (p. 604) in the article “The Process of the Learning Organization: Making sense of Change.” The author offers several excerpts from learning organization experts such as Peter Senge, Karen Watkins, Victoria Marsick, Nancy Dixon, and Michael Marquardt, and summarizes each pioneer’s learning organization philosophy. In particular, Dixon (1994) points out that “we have entered the Knowledge Age and the new currency is learning. Knowledge is ‘sense making’: it is the process that leads to knowledge.”
The author cites Marsick (1993), who writes about “sculpting the learning organization” suggesting that a “learning organization is one that learns continuously and can transform itself” (p. 8). He emphasizes that there is no single formula for creating a learning organization, and outlines the following characteristics as being present in learning organizations (p. 604):

- Leaders who model calculated risk taking and experimentation
- Decentralized decision making and employee empowerment
- Skill inventories and audits of learning capacity
- Systems for sharing learning and using it in the business
- Rewards and structures for employee initiative
- Consideration of long-term consequences and impact on the work of others
- Frequent use of cross-functional work teams
- Opportunities to learn from experience on a daily basis
- A culture of feedback and disclosure.

Watkins and Marsick also identify the “seven C’s” of a learning organization as continuous, collaborative, collective, connected, creative, captured, and codified.

Dixon defines the organizational learning cycle as, “The intentional use of learning processes at the individual, group, and system level to continuously transform the organization that is increasingly satisfying its stakeholders.” Grounded in action learning, Dixon identifies a model that respects the relationship between learning and change, and in her research focuses on individual learning. Dixon suggests that there are three ways individuals “come to know” (p. 606):

- Direct experience (the receipt of sensory data such as color, sound, and pain)
- Verbal transmission of information (ideas voiced by others, reports, books, formulas, etc.)
- The reorganization of what we already know into a new configuration.
She also identifies four steps to the organizational learning cycle (p. 606):

1. widespread generation of information,
2. integration of new/local information into the organizational context,
3. collective interpretation of information,
4. having authority to take responsible action based on the interpreted meaning.

Finally, the author outlines the work of Marquardt (1996), who states that, “a learning organization, systematically defined, is an organization which learns powerfully and collectively and is continually transforming itself to better collect, manage, and use knowledge for corporate success. It empowers people within and outside the organization to learn as they work. Technology is utilized to optimize both learning and productivity” (p. 19).

Marquardt also observes that, “Learning must take place almost as a by-product of people doing their work in contrast to acquiring knowledge before performing a particular task or job” (p. xvii). Marquardt suggests that learning organizations (p. 608):

- Anticipate and adapt more readily to environmental change
- Accelerate the development of new products, processes and services
- Become more proficient at learning from competitors and collaborators
- Expedite the transfer of knowledge from one part of the organization to another
- Learn more effectively from its mistakes
- Make greater organizational use of employees at all levels of the organization
- Shorten the time required to implement strategic changes
- Stimulate continuous improvement in all areas of the organization.

This article offers an excellent “snapshot” of learning organization theory and models, concluding by stating the learning organization “is not a program, but rather a new process for understanding and learning together.”
The Role of Communication in Creating and Maintaining a Learning Organization: Preconditions, Indicators, and Disciplines

Authors: Barker, R.T., & Camarata, M.R.
Content Areas: Organizational Learning,

Baker and Camarata (1998) expand on the theme of communication in learning organizations in their article, “The Role of Communication in Creating and Maintaining a Learning Organization: Preconditions, Indicators, and Disciplines.” The article presents research on the continuum ranging from the relationship-based rational choice theory to social exchange theories. It describes these two concepts as being as effective for organizations exposed to conditions of instability and complexity.

As defined in the article, The Rational Choice Theory assumes that each transaction between parties is based on “I will do this for that” where effort is exchanged for a known, specific outcome of equal value. Social Exchange Theory suggests that relationships based upon this principle will involve future reciprocity of an unlimited and unspecified positive nature.

According to the article, in effective communication attention is given to the interaction embedded in the preconditions necessary for developing learning organizations (trust, commitment, perceived organizational support), in the indicators needed for preparing for this state (organization-employee relationship, valuing the employee, employee empowerment, and employee ownership and acceptance of responsibility).

Interestingly, most of the article is comprised of a case study of Eastman Kodak and the successful communication strategy used by the organization’s Team Zebra Black and White Film Division (BWFD). It states, however, that while the BWFD had a successful strategy that enabled it to be successful in it’s “learning” endeavors, the organization found itself in financial straits in the fall of 1997. Perhaps, note the authors, the organization as a whole could learn a great deal from one of its own divisions.

Modes of Organizational Learning: Indications from an Empirical Study
Authors: Klimecki, R., & Lassleben, H.
Content Areas: Organizational Learning, Organizational Theory

Introducing theme that conceptualizes organization learning as a communication-based process is the information presented by Klimecki and Lassleben
(1998) in the article, "Modes of Organizational Learning: Indications from an Empirical Study." In the article, a model is developed which characterizes organizations as learning systems, and serves as a framework for collecting and structuring data on reality constructions and communication relations. Analysis of the results of the study leads to propositions about the nature of the organizational learning process.

Specifically, the results of the study indicate that two primary learning modes emerged: structural learning and strategic learning. While structural learning develops cures for problems in the organization, strategic learning seeks to realize visions. With regard to the way these two groups communicate, the authors note that members of the structural learning organization impress by using detailed knowledge, often punctuating arguments with numerical specifications.

In contrast, employees of the strategic learning organization use more general terms in presenting information. The authors offer that specialized expert knowledge of organization members favor structural learning, while general strategic knowledge fosters strategic organizational learning.

Authors: Fulmer, R.M., Gibbs, P., & Keys, J.B.
Content Areas: Organizational Learning, Organizational Theory

Fulmer, Gibbs, and Keys offer tools or "how-tos" in building a learning in "The Second Generation Learning Organization: New Tools for Sustaining Competitive Advantage" (1998). The article states that since the phrase "organizational learning" was first used 25 years ago, the thinking behind it has evolved—companies have realized the competitive benefits and learning tools and techniques. But, it continues, as the evolution of organizational learning continues, companies will see existing tools used more often for new purposes and the development other learning tools to increase corporate competitive advantage.

As a result, organizational learning can be said to be in its second generation, moving beyond "maintenance tools," "anticipatory tools," "crossover tools," and "utility tools." All are described in the following paragraphs.

Maintenance tools are predominately used for "creating agreement" strategies, and feature such activities as employee suggestion systems, self-directed work teams,
statistical process control, benchmarking, and workout programs. Although these tools can produce incremental improvements in the current organization, they are rather ineffective at either anticipating or dealing with major changes.

Anticipatory tools, defined as predominately used for “creating the future” strategies, feature decentralized strategic planning, scenario analysis, joint ventures/strategic alliances, external management development, the Delphi method, and impact analysis.

Crossover tools, used equally for “creating agreement” and for “creating the future” feature transferring innovations, effective interventions, business process re-engineering, task forces or ad hoc groups, and internal management development. Further, total quality programs, popular in the 1980s, are another form of crossover tool that appears to be declining in importance.

Finally, utility tools, which are applied across all strategies, feature customer surveys, external advisory groups, and content analysis.

Six new tools can be added to these existing tools that seem to be associated with leading companies. The first second-generation tool discussed is the use of dialogue, defined as a process of collective thinking and inquiry, to enable a group to reach a higher level of consciousness and creativity through the creation of shared meanings and common thinking processes.

Second, the tool of scenario planning is cited. As already touched upon in a previous article with its regard to The Shell Group’s success in creating a learning organization, scenario planning involves thinking though strategic alternatives—not just one alternative—for the future. In the process, the brain attempts to anticipate what will happen or what it should schedule for the next moment, the next few minutes, next week, or next month. These plans are sequentially organized into “what if” analyses, through which we visit the futures and remember our visits.

Third, the companies should engage in “The Merlin Exercise,” a process which proceeds by asking participants to project themselves into some future period, such as ten years from now. At this specified period, participants imagine that their organization has become the leading organization in the nation (or world) competing in its market.

The fourth tool, action learning, involves asking participants to organize or work in teams and attack real problems. In the process of resolving a real challenge, they
acquire and use new skills, tools or concepts. As listed in the article, action learning has the following major steps (p. 11):

- Organize into a team with ownership of problems,
- Use diversity in team formation when possible,
- Allow few planned inputs, but require much questioning,
- Use a team advisor if needed, but no lecturer,
- Meet regularly to discuss solutions to the problem(s),
- Once problems are solved, continue to meet to focus on learning, and reflection, and
- Conclude action learning only when all relevant learning is gleaned from the projects.

Further, in August 1998, a global benchmarking study of leadership development (sponsored by the American Productivity and Quality Center and American Society for Training and Development) concluded that strategically oriented action learning was one of the major emphases of firms designated as “best practice partners.”

The next tool discussed is the establishment of “practice fields,” characterized by complex behavioral simulations to generate learning in organizations. The authors say, when used appropriately, practice fields can assist in providing “big picture” learning, encourage experimentation without the high risk incurred in real organizations, promote understanding of systems theory and dynamic interdependencies, and promote futuristic planning.

Finally, the last tool discussed is knowledge management and mapping. Knowledge management is defined by the authors as a process for identifying what knowledge is needed within an organization, what gaps exist, and what skills are required to solve a problem or complete a project. Further, an effective knowledge map concludes with a collective view of the knowledge and skills required to successfully perform each step in delivering a solution.

The article concludes by acknowledging that no organization can afford to be—or admit to be—an organization that isn’t interested in learning, and offers the following
mission statement for the learning organization, as developed by the Center for Managerial Learning and Business Simulation (p. 20):

“The world changes and we cannot stop it. Our products will change, our markets will change, our customers will change, and some of our employees will move—we hope—to greater things. But these things will not change:

“We will learn faster than our competitors,
We will learn across our organization from each other, and from teams,
We will learn externally from our suppliers and our customers,
We will learn vertically from top to bottom of our organization,
We will ask the right questions, and use action learning,
We will anticipate the future and create scenarios to learn from it,
We will practice what we learn, and learn from practice,
We will learn faster than our environment changes,
We will learn where no man or woman has learned before,
Therefore we will survive and prosper.”

Sharing Knowledge.
Author: Senge, P.M.
Content Areas: Organizational Learning, Teamwork/Groups, Corporate Culture, Executives, Management Styles

In the article “Sharing Knowledge” learning organization authority Senge (1998) states that sharing knowledge occurs when people are genuinely interested in helping one another to develop new capacities for action, and that building a learning organization involves the willingness to change mental models. To be a real learner, he notes, is to be ignorant and incompetent, and real learning requires patience, reflectiveness, and a willingness to find a new balance between focusing on results and focusing on how we are operating while we are trying to achieve these results. “Our” mental model is that knowledge is something that individuals acquire and possess. Further, he discusses interrelationships and the leader’s role in relation to building learning organizations.

Shedding Light on Knowledge Work Learning.
Authors: Fisher, K., & Fisher, M.D.
Content Areas: Organizational Learning, Teamwork/Groups, Employee Development

Fisher and Fisher (1998) acknowledge that corporations everywhere have discovered the importance of creating a learning organization, because, they state,
learning is critical to success in the post-industrial information age, where knowledge is power. With a focus on enhancing and utilizing knowledge resources with the organization, the article identifies such impediments to learning as lack of confidence in skills, fear of embarrassment, and a learner’s unwillingness to “ask stupid questions.” To overcome many of the impediments to learning by companies the authors cite four commonly used practices by effective knowledge teams (p. 11):

1. Organizing for socialization
2. Creating cross-disciplinary learning experiences
3. Promoting active experimentation, and
4. Developing learning structures.

According to the authors, competitive operations are those that are "innovative, collaborative, customer focused, quick to market with high quality products and services, and effective in resolving and learning from problems. All of these characteristics require a good learning process."

An interesting feature of this article is the characterization of "the learning lattice organization," a matrix-like model that signifies that this type of organization has knowledge workers reporting to only one organization—normally a cross-functional team—for consistency of work direction. Under traditional structures the knowledge worker reported to multiple organizations, such as one functional organization with a dotted-line responsibility to a division operation as well.

The article ends with the summary that "whatever the process, organizations attempting to create a distributed mind must help people overcome blocks to learning if they expect to take full advantage of their knowledge resources.

Toward A Learning Organization: The Strategic Building Blocks
Author: Goh, S.C.
Content Areas: Organizational Learning

Goh (1998) defines "what it takes" to be an effective learning organization when he states that clear and practical guidelines are needed to build a culture and strategic architecture that supports the dissemination of knowledge, teamwork, and the total commitment of managers and staff members to achieve the organization’s mission.
The author provides in-depth characteristics and how-tos of learning organizations by exploring such fundamental questions as “what is a learning organization” and “what are the characteristics of a learning organization?” The answer to the question “what is a learning organization,” as attributed to Garvin (1993), is “a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.” Goh cites Garvin when arguing that learning organizations have five core strategic building blocks: mission and vision, leadership, experimentation, transfer of knowledge, and teamwork and cooperation.

Goh also discusses supporting foundations, organizational design, employee skills and competencies, and measurement and intervention as they relate to learning organizations.

The author summarizes the ideas of the article by stating that building a strong learning capability is crucial for knowledge-intensive organizations and for companies operating in a highly competitive environment.

Understanding Learning Organizations as Systems
Authors: DiBella, A.J., Gould, J.M. & Nevins, E.C
Content Areas: Organizational Learning, Corporate Culture, Guidelines, Education & Training, Management

Nevis, DiBella, and Gould (1998) use Senge’s theories as a basis for their learning organization research in this comprehensive guide to learning organizations. This article, in which the authors state that their research is dedicated to helping organizations become better learning systems, seeks to answer the questions “how can you tell if your organization is, indeed, a learning organization?,” “what is a learning organization?”, and “how can you improve the learning systems in your organization?” The contents of the article include the core themes of learning organizations, a model for organizations as learning systems, and the general direction for enhanced learning.

Focusing on the two-part model that describes organizations as learning systems, the authors offer the following illustration (Table 4) depicts a model of organizations as learning systems (p. 5). First, learning orientations are the values and practices that reflect where learning takes place and the nature of what is learned. These lead to the
organizations "learning style," and are descriptive factors that help us to understand without making value judgments. Second, ten facilitating factors are the structure and processes that affect how easy or hard it is for learning to occur and the amount of effective learning that takes place.

Table 4: Organizations as Learning Systems
Definitions of the Orientations and Factors

<table>
<thead>
<tr>
<th>Seven Learning Orientations</th>
<th>Ten Facilitating Factors</th>
</tr>
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<tbody>
<tr>
<td>Learning Style</td>
<td>Standards based on &quot;best practices&quot; in dealing with generic issues</td>
</tr>
<tr>
<td>&quot;the values and practices that reflect where learning takes place and the nature of what is learned&quot;</td>
<td>&quot;the structures and processes that affect how easy or hard it is for learning to occur and the amount of effective learning that takes place&quot;</td>
</tr>
<tr>
<td>Knowledge Source: Internal/External</td>
<td>Scanning Imperative</td>
</tr>
<tr>
<td>Documentation Mode: Personal/Public</td>
<td>Concern for Measurement</td>
</tr>
<tr>
<td>Dissemination Mode: Formal/Informal</td>
<td>Experimental Mind-set</td>
</tr>
<tr>
<td>Learning Focus: Incremental/Transformative</td>
<td>Climate of Openness</td>
</tr>
<tr>
<td>Value-Chain Focus: Design/Deliver</td>
<td>Continuous Education</td>
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<tr>
<td>Skill Development Focus: Individual/Group</td>
<td>Operational Variety</td>
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<tr>
<td></td>
<td>Multiple Advocates</td>
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<td></td>
<td>Involved Leadership</td>
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<td></td>
<td>Systems Perspective</td>
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</tbody>
</table>

Finally, the article offers strategies for improving organizational learning capability by focusing on any stage in the learning cycle—knowledge acquisition, dissemination, or utilization—simultaneously or focusing on a single area. Based on the learning area chosen, the authors say, the next task is to select an option for focus (improve on learning orientations vs. change both learning orientations and facilitating factors), and they offer the following guidelines for developing and implementing a chosen strategy (p. 14):

- Before deciding to become something new, study and evaluate what you are now.
- Though the systematic issues and relationships in organizational life require that change be approached from multiple directions and several
points, organizations change in major ways if people experience success with more modest, focused, and specific changes.

- Organizations must consider cultural factors in choosing and implementing any strategy, particularly when considering how it does specific things.

In conclusion, to help managers better understand the learning capabilities of their own organizations, the authors are developing an “organizational learning inventory.” This diagnostic tool will enable an organization’s members to produce a learning profile based on the model of organizations as learning systems.

**The Unlearning Curve**
Author: Solovy, A.
Content Areas: Organizational Learning, Guidelines, Employee Development

Solovy (1999) introduces the concept of the unlearning curve by explaining that while many industries have focused their energy on organizational learning, climbing the learning curve is only half the process. The other half, he states, is the unlearning curve, which suggests that when a promising new idea occurs, the dominant logic is getting in the way.

The goal is to uncover those corporate biases and unlearn them—otherwise, new competitors will always have the advantage. The concept of dominant logic states that managers make decisions based on their preconceptions of the business and environment. Dominant logic, which is the sum of current corporate assumptions and institutional history, acts as a filter, focusing corporate learning only on data that conform to it. As a result, says the author, firms miss opportunities and struggle to change.

**What's HR's Benchmark for the Learning Organization?**
Author: Anonymous
Content Areas: Management

The article "What's HR's Benchmark for the Learning Organization" offers several pointers to make sure that an organization's employee development program is
successful, relating it to the question, "What do you intend to get from your learning that shows up somewhere on a balance sheet?" To answer that question, these points should be considered (p. 148):

- Begin the employee development program with mid-level employees.
- Do not force employees to participate.
- Require past participation in some kind of training.
- Tackle real-life problems.

The article considers and defines each of the above points as a means to ensure the program achieves bottom-line results.

**Where Does HS & E Fit In?**

Author: Birkner, L.R.

Content Areas: Management

Birkner (1997) asks, “Where does HS & E Fit In?” in this article with a health, safety and environment focus the corporate structure. Five different organizational structures are reviewed in the article, the last of which is the learning organization (the other four are functional structure, self-contained groups, matrix forms, and networked forms). In relation to the learning organization, Birkner says that this “structure is a shift of mind: identifying strategic interrelationships rather than linear cause and effect chains and seeing process for change rather than snapshots.” Further, moving towards a learning organization structure starts with understanding of organizational relationships and how actions can drive, change, or balance or neutralize forward movement.

**Conclusion**

An overarching theme emerges from the review of these articles: the concept, characteristics and how-tos of the learning organization is open to many interpretations and is a fluid, constantly evolving term. This much is clear: an organizations willingness and ability to invest in its people—to see the organization as a collection of people rather than just from a financial point of view—and manage their knowledge resources is vital to the living company. Many have ideas and even empirical studies to support their
theories of the learning organization, and there seems to be an openness in the field to build on colleagues’ ideas and increase the expanding body of literature through collaboration.

This section, Part I, provided a synopsis or summary of the many articles reviewed for this report. They were listed alphabetically by the name of the article, and each section contained the article title, the author(s) name(s), and the content areas represented in the article.
PART II

Summary

The information presented in Part I of this report provides an overview of what experts and others interested in the impact of knowledge capital have said about learning organizations over the last several years. Some of the information consistently carries from article to article, while other ideas, such as those expressed by Solovy ("The Unlearning Curve") or Fulmer, Gibbs, & Keys ("The Second Generation Learning Organizations: New Tools for Sustaining Competitive Advantage") present themselves as almost prophetic, describing how an organization needs to "act" if it is to survive in the 21st century.

The following two charts categorize the subject matter contained in the literature reviews by content areas, identified as keywords when using ProQuest Direct, a database consisting of articles originally published in magazines, newspapers, and journals.

Table 5 presents the information alphabetized by article title, and Table 6 is by author. The content areas identified are Organizational Learning, Teamwork/Groups, Corporate Culture, Executives/Management Styles, Leadership, Guidelines, Management Development, Employee Development, Education & Training, Organizational Change, Employee Empowerment, Strategic Planning, Organizational Theory, and Management.

These tables are intended to be a cross-referencing tool for those interested in reading the synopsis of an article with a particular emphasis on a specific content area such as teamwork/groups or management.
<p>| Article                                                                 | Author(s)                  | Organizational Learning | Teamwork/Groups | Corporate Culture | Executives/Managerial Styles | Leadership | Guidelines | Management Development | Employee Development | Education &amp; Training | Organizational Change | Employee Empowerment | Strategic Planning | Organizational Theory | Management |
|------------------------------------------------------------------------|----------------------------|-------------------------|-----------------|-------------------|-------------------------------|------------|------------|-------------------------|---------------------|---------------------|---------------------|----------------------|---------------------|----------------------|-----------------|-----------------|
| Competence, Efficiency, And Organizational Learning                   | Barrie, J. &amp; Pace, R.W.    | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| A Conversation With Peter Senge: New Developments In Organizational Learning | Fulmer, R.M. &amp; Keys, J.B.  | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Creating A Learning Organization                                       | Anonymous                  | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Creating Learning Communities                                          | Senge, P.M.                | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Creation Of A Learning Organization Laboratory In The Classroom: Expected And Unexpected Lessons | Doherty, E.M.             | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Creative Tension                                                       | Senge, P.M.                | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| The Design, Development, And Validation Of A Knowledge-Based Organizational Learning Support System | Hines, A.M. &amp; Goul, M.     | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Developing Learning Organizations And Communities                      | Ramirez, M.R.              | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Does The Bell Toll For The Living Company?                            | Chambers, N.               | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Editor's Desk                                                          | Roth, J.                   | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Everyone Can Be A Coach                                                | Cunningham, I. &amp; Honold, L.| ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| The Evolution Of Learning Strategies In Organizations: From Employee Development To Business Redefinition. | Baldwin, T.T., Danielson, C. &amp; Wiggenshorn, W. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Faster Learning                                                        | Guns, B.                   | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Gearing Up To Become A Learning Organization.                         | DiBella, A.J.              | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Get Smart                                                              | Patterson, L.              | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| The Importance Of Collaborative Know-How: An Empirical Test For The Learning Organization | Simonin, B.I.             | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Invest In Learning                                                     | Kovach, J.W.               | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Learning Across A Living Company: The Shell Companies Experience       | Brennen, W.B., Keys, J.B. &amp; Fulmer, R.M. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Learning For Organizational Effectiveness: Philosophy Of Education And Human Resource Development | Barrie, J. &amp; Pace, R.W.    | ✓                       |                 |                   |                               |            |            |                          |                     |                     |                     |                     |                    |                    |                 |
| Article                                                                 | Author(s)                          | Organizational Learning | Teamwork/Groups | Corporate Culture | Executive/Management Styles | Leadership | Guidelines | Management Development | Employee Development | Education &amp; Training | Organizational Change | Employee Empowerment | Strategic Management | Organizational Theory | Management |
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| Learning 'Next Practices' Generates Revenue.                          | Berry, M.                          | ✓                       |                 |                  |                        |            |            |                          |                       |                     |                     |                      |                    |                    |                    |                  |
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| The Nonprofit Executive As Chief Learning Officer                      | Nathan, M.L.                      | ✓                       |                 |                  | ✓                      | ✓          | ✓          |                          |                       |                     |                     |                      |                    |                    |                    |                  |
| Now We Are Learning About Learning.                                   | Tompkins, J.A.                    | ✓                       |                 |                  |                        |            |            |                          |                       |                     |                     |                      |                    |                    |                    |                  |
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| Pathways For Knowledge: How Companies Learn Through People             | Truran, W.R.                      | ✓                       |                 |                  |                        |            |            |                          |                       |                     |                     |                      |                    |                    |                    |                  |
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PART III

Conclusions and Implications for Future Research

Where will the concept of the learning organization go from this point? The concept is beginning to penetrate smaller businesses after having been a prominent management practice in larger organizations for years. Perhaps the trend will focus on developing tangible products for small- to medium-sized companies to assist them in the transformation process.

The future may also bring a segment of learning organizations transformations based on company size, a shift from the current literature focus on large or multi-national companies. Without the resources to support the deliberate creation of a learning organization though by creating a division or department to undertake the transformation, interested companies may turn to “off-the-shelf” programs to guide them through the process.

The biggest challenge will be trying to identify the continuously evolving meaning of what a learning organization is, lest the concept go the way of recent management trends such as TQM (Total Quality Management) and TQL (Total Quality Leadership).

For Gillespie Associates, the next steps in developing products that aid companies as they transform into learning organizations would most likely consist of a managerial-level training package that has an “awareness” component and a training component. The awareness component would provide the organization with the characteristics of a successful learning organization, and provide them with the tools to measure or assess “where they are” versus “where they need to be.” Such a tool exists with DiBella’s Organizational Learning Inventory. After a needs assessment, the Gillespie Associate’s training component would consist of modules designed to “fill-in-the-gaps” on such topics as leadership skills, performance appraisal systems, and coaching.

The next step in the research and development process for Gillespie Associates is to conduct benchmarking against companies of similar size and focus to determine what types of products are being developed and what markets are being reached. Because there are so many products now available providing training on such topics as leadership skills development, performance appraisal systems, successfully working in teams, and coaching, Gillespie Associates must find their niche. Their niche could be to present this information in a unique way or marketing their product to an underdeveloped segment of the population.

In order for companies to survive they will have to invest in the processes of following the steps to becoming a learning organization, and will need to support the continuous learning
and knowledge management of their most precious resource: their workforce. In the words of Arie De Geus “An organization’s ability to learn faster than its competitors may be its only sustainable advantage” (1997). It is a great opportunity for Gillespie Associates to support such an effort and the organization will profit from what it has learned about the learning organization in the process.
References


New Product Development Survey Invitation
Version I

My name is Judy Baker and I am a graduate student in Human Resource Development who is conducting a research project on product development processes. This research supports the larger project of developing products to help companies become learning organizations. The data received will be analyzed to provide examples of processes or models to assist in the development of these products.

If you are interested in completing a survey for the study please e-mail me at baker@sjfc.edu and please be sure to include your e-mail address. The questionnaire will be forwarded to you. Results of the study will be shared with participants who request them. I look forward to hearing from you.

New Product Development Survey
Version I

I am a student in the Graduate Human Resource Development Program at St. John Fisher College in Rochester, New York. I am conducting a survey on how companies develop new products, with a pre-product development focus. The survey, below, may be completed on-line and e-mailed to "baker@sjfc.edu", or printed, completed, and faxed back to me at (716) 385-8107. I will be happy to provide the results of my survey to participants.

1. What means of market research does your organization conduct when developing new product ideas?
   
   [ ] Surveys
   [ ] Focus Groups
   [ ] Interviews
   [ ] Literature Reviews
   [ ] Benchmarking
   Other __________________________

2. Does your company have a Research and Development Division? Yes or No
   If not, who provides the information needed to make informed product development decisions?

3. In your organization do you have a team structure? If so, what teams are directly involved in product development?

4. Please state the model of your product development process or the steps your organization follows (i.e. literature review then market research then focus groups, etc.)
5. On a scale of 1-10, how instrumental are you in influencing the new product development process

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Tell me about your organization

Number of Employees: 1-50 51-150 151-500 Over 500

Category: Information Technology Education Finance Health Care/Medicine Legal Manufacturing Philanthropy Retail Training & Development Other

Your Position: ____________________________________________

Would you like the results of this survey? Yes or No

Thank you for participating in this survey.
New Product Development Survey Invitation
Version II

My name is Judy Baker and I am a graduate student in Human Resource Development who is conducting a research project on the product development process for soft-skills programs such (i.e. coaching skills, supervisory skills). This research supports the larger project of developing products to help companies become learning organizations. The data received will be analyzed to provide examples of processes or models to assist in the development of these products.

If you are interested in completing a survey for the study, please e-mail me at baker@sjfc.edu and be sure to include your e-mail address. The survey will be forwarded to you. Results of the study will be shared with participants who request them. I look forward to hearing from you.

New Product Development Survey
Version II

I am a student in the Graduate Human Resource Development Program at St. John Fisher College in Rochester, New York. I am conducting a survey on how companies develop new products to address "soft skill" needs, such as coaching skills or how to manage people. The survey will support the larger project of developing programs to help companies transform into learning organizations.

The survey, below, may be completed on-line and e-mailed to "baker@sjfc.edu", or printed, completed, and faxed back to me at (716) 385-8107. I will be happy to provide the results of my survey to participants.

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   ___ Focus Groups
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   ___ Benchmarking
   ___ Other

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3. In your organization do you have a team structure? If so, what teams are directly involved in product development?

4. Please state the model of your product development process or the steps your organization follows (i.e. literature review then market research then focus groups, etc.)
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