

# IMPLEMENTING TRAINING SCORECARDS

## In Action

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Series Editor

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Editor

**SPECIAL EDITION**



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# Introduction to the *In Action* Series

Like most professionals, the people involved in HRD are eager to see practical applications of models, techniques, theories, strategies, and issues relevant to their field. In recent years, practitioners have developed an intense desire to learn about firsthand experiences of organizations implementing HRD programs. To fill this critical void, the Publishing Review Committee of ASTD established the *In Action* casebook series. Covering a variety of topics in HRD, the series significantly adds to the current literature in the field.

The *In Action* series objectives are as follows:

- *To provide real-world examples of HRD program application and implementation.* Each case describes significant issues, events, actions, and activities. When possible, actual names of organizations and individuals are used. Where names are disguised, the events are factual.
- *To focus on challenging and difficult issues confronting the HRD field.* These cases explore areas where it is difficult to find information or where processes or techniques are not standardized or fully developed. Emerging issues critical to success also are explored.
- *To recognize the work of professionals in the HRD field by presenting best practices.* Each casebook represents the most effective examples available. Issue editors are experienced professionals, and topics are carefully selected to ensure that they represent important and timely issues. Cases are written by highly respected HRD practitioners, authors, researchers, and consultants. The authors focus on many high-profile organizations—names you will quickly recognize.
- *To serve as a self-teaching tool for people learning about the HRD field.* As a stand-alone reference, each volume is a practical learning tool that fully explores numerous topics and issues.
- *To present a medium for teaching groups about the practical aspects of HRD.* Each book is a useful supplement to general and specialized HRD

textbooks and serves as a discussion guide to enhance learning in formal and informal settings.

These cases will challenge and motivate you. The new insights you gain will serve as an impetus for positive change in your organization.

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# Preface

There is increasing pressure from stakeholders on training and development departments to show a return-on-investment. Many training and development departments struggle to align training programs with business strategies, but it can be difficult to find the best approaches to establish, track, collect, compile, analyze, and communicate training results. Many training and development departments don't know the results of the training programs they deliver, so they can't demonstrate the value they add to the business.

Through this casebook I hope to contribute to the understanding of training measurement and evaluation. The case authors, who reflect viewpoints from varied backgrounds, are all using training scorecards as a framework as they pursue training measurement and evaluation.

## Target Audience

This book should interest anyone involved in HR, HRD, or any type of training delivery. The primary audience is practitioners who are struggling to report the results of their training initiatives. They are the ones who request more real-world examples. This same group also expresses concern that there are too many models, methods, strategies, and theories, and too few examples showing that any of them has really made a difference. This publication should satisfy practitioners' needs by providing examples of how training scorecards have been implemented successfully.

The second audience comprises instructors and professors. Whether this casebook is used in university classes with students who are pursuing careers in training and development, at internal workshops for professional training staff, or at public seminars on training measurement and evaluation, it will be a valuable reference. It can be used as a supplement to a standard HRD or learning textbook or as a complement to a textbook on training measurement and evaluation. As a supplemental text, this casebook will bring practical significance to the coursework, convincing students that there are systematic

processes, methods, and models that can help to measure and evaluate training initiatives.

A third audience is the managers who must work with these issues on a peripheral basis—those managers who are asked to spend their time and to offer the time of their employees to collect and analyze training data. These are managers who participate in training programs and ask other employees to participate, and who occasionally lead efforts in that area. In these roles, managers must understand the impact of training and appreciate the value of training solutions.

Each audience should find the casebook entertaining and engaging reading. Questions are placed at the end of each case to stimulate additional thought and discussion. One of the most effective ways to maximize the usefulness of this book is through group discussions using the questions to develop and dissect the issues, techniques, methodologies, and results.

## **The Cases**

The most difficult part of developing this book was to identify case authors who could contribute systems, processes, and models that provide a training scorecard approach to measuring and evaluating training initiatives. In the search, many people who had expressed interest in the topic of training scorecards were contacted—many of them outside the United States to tap the global market. I had more than 100 requests for guidelines to the casebook. Based on the response, I selected eight case studies to present here. These eight cases cover a variety of approaches and represent several industries, including health care, telecommunications, manufacturing, and high technology.

In my search for cases, I contacted the most respected and well-known organizations in the world, leading experts in the field, key executives, and well-known authors and researchers. I leave it to you to decide if best-practice cases were delivered. What I know is that if these are not best practices, no other publication can claim to have them either. Many of the experts producing these cases characterize them as the best examples of using training scorecards as a framework for measurement and evaluation.

Although some attempt was made to structure cases similarly, they are not identical in style and content. It is important for the reader to experience the solutions as they were developed and identify the issues pertinent to each particular setting and situation. The result is a variety of presentations with a number of styles. Some cases are brief



and to the point, outlining precisely what happened and what was achieved. Others provide more background information, including details on how the people involved determined the need for the process, descriptions of the personalities involved, and analyses of how the backgrounds and biases of the people involved created a unique situation.

There was no attempt to restrict cases to a particular methodology, technique, or process. It is helpful to show a wide range of approaches. I resisted the temptation to pass judgment on various approaches, preferring to let the reader evaluate the techniques and their appropriateness in particular settings. Some of the assumptions, methodologies, and strategies might not be as comprehensive and sound as others.

## **Case Authors**

It would be difficult to find a more impressive group of contributors to a publication of this nature than those included here. I would describe the case authors as experienced, professional, knowledgeable, and on the leading edge of training measurement and evaluation. Most are experts, and some are well known in their fields. A few are high-profile authors who have made a tremendous contribution to the field and have taken the opportunity to provide an example of their top-quality work. Others have made their mark quietly and have achieved success for their organizations.

## **Suggestions**

As with any new publication, I welcome your input. If you have ideas or recommendations regarding presentation, case selection, or case quality, please send them to Lynn Schmidt, [lynn.schmidt@nextel.com](mailto:lynn.schmidt@nextel.com). These comments will be appreciated and acknowledged.

## **Acknowledgments**

I want to thank the case authors for their dedication and professional contributions to this book. It has been a pleasure working with them over the last several months. Their patience with the editing process has been greatly appreciated. There would be no book if the case authors had not been willing to share their stories. I also want to acknowledge the organizations that have allowed their names and solutions to be used for publication. I believe that the final product has portrayed them as progressive organizations interested in results and willing to try new processes and techniques.

I would also like to thank Jack Phillips, the series editor; Joyce Alff, the internal editorial director; and the American Society for Training & Development. I have enjoyed the process of creating this casebook and greatly appreciate the opportunity. It has been an incredible journey and an exceptional learning experience.

Lynn Schmidt  
Ashburn, Virginia  
January 2003

# How to Use This Casebook

**T**he cases presented in this book illustrate various approaches to creating and implementing training scorecards. The cases focus on a number of methods that can be used to measure and evaluate training programs, including their return-on-investment. Collectively, the cases offer a range of settings, methods, techniques, strategies, and approaches. Moreover, they represent a wide spectrum of industries, including manufacturing, telecommunications, health care, and technology.

As a group, these cases are a rich source of information about the strategies of some of the best practitioners and consultants in the field. Yet, no case necessarily represents the ideal approach for the specific situation. In every case it is possible to identify areas that could benefit from refinement and improvement. That is part of the learning process—to build on the work of other people.

Table 1 presents basic descriptions of the cases in the order in which they appear in the book. It provides an overview of the cases by industry, focus areas, and training programs. It can serve as a quick reference for readers who want to examine the cases by particular audiences, industries, and case types.

## Using the Cases

There are several ways to use this book. Overall, it will be helpful to anyone interested in the topic of implementing training scorecards to compile and report training evaluation data, whether that person is a senior-level executive, an HRD/HR professional, or a measurement and evaluation consultant. Specifically, I recommend the following four uses:

1. Professionals can use this book as a basic reference of practical applications for training scorecards and their use in measuring and evaluating training programs. A reader can analyze and dissect each of the cases to develop an understanding of the issues, approaches, and, most of all, refinements or improvements that could be made.

**Figure 1. Overview of the case studies.**

<b>Case</b>	<b>Industry</b>	<b>Focus of Case</b>	<b>Training Program(s)</b>
Saint Elizabeth Health Care	Health care	Aligning a learning-and-development balanced scorecard with an HR balanced scorecard	Performance management and managing injured workers' training for managers of nursing staff
Nextel Communications	Telecommunications	Using a training scorecard to demonstrate the bottom-line impact of management development programs	Diversity awareness training for managers
Sprint	Telecommunications	Using value measurement summaries and project logs to report the bottom-line impact of performance improvement initiatives	New-hire training for call center accounts receivable representatives
Analog Devices, Inc.	High-technology manufacturing	Integrating a training scorecard with a production scorecard	Proficiency training focused on scrap reduction for inspectors and operators
Toyota Industries Corporation	Manufacturing	Using a training scorecard to report the impact of problem-solving skills on the bottom line	Statistical quality control training for engineers
Large-Tech Corporation	High technology hardware and software	Implementing a training scorecard to measure and report the bottom-line impact of sales training	Financial selling skills training for sales account executives and sales managers

The Mellear Corporation	Telecommunication services	Creating a training scorecard to demonstrate the value of learning services initiatives	Lead-generation training for sales account executives
	Construction equipment manufacturing	Using a training dashboard to report evaluation targets and the results of a variety of training programs	Leadership, manufacturing, technical, business, marketing, and Six Sigma training programs

2. This book will be useful in group discussions during which interested individuals can react to the material, offer different perspectives, and draw conclusions about approaches and techniques.
3. This book can serve as an excellent supplement to other training and development textbooks. It provides the extra dimension of real-life cases that show the outcomes of using training scorecards to compile and report the results of training programs.
4. This book will be extremely valuable for managers and executives who do not have responsibility for compiling and reporting training data. These managers provide support and assistance to the HRD/HR staff, and it is helpful for them to understand the methodologies professionals use and the results that their solutions can yield.

Remember that each organization and its program implementation are unique. What works well for one may not work for another, even if both are in similar settings. The book offers a variety of approaches and provides many tools to assist with implementing a training scorecard.

## **Follow-up**

Space limitations have required that some cases be shorter than the author and editor would have liked. Some information concerning background, assumptions, strategies, and results had to be omitted. If additional information on a case is desired, please contact the lead author of the case or the book's editor. In most instances, the contact information for the lead author is provided in the biographical information following each case; the address of the editor is provided in the biographical information at the end of the book.

# The Value of Training Scorecards

Lynn Schmidt

*Webster's Unabridged Dictionary* (1998) defines “score” as the record of points or strokes made by competitors in a game or match; the act of making or earning a point or points; a tally. The same source defines “scorecard” as a card for keeping score of a sports contest. Imagine watching “Monday Night Football,” attending a soccer game, playing tennis, or golfing without a scorecard for any of the games. No one knows the score or how the game is going. No one knows if the score is better or worse than the last game. The players, who have dedicated themselves to the sport and have invested a great deal of time and energy, don’t know if they are playing as expected or if any improvements are needed. Individuals who either watch or participate in sports rely on the scorecard to know who is winning the game, how the competitors compare, and if improvements are required.

Businesses and organizations need to keep score as well. Imagine a training department that invests a lot of time and money in offering many training programs and development interventions but keeps no scorecard. No one knows how individuals are being affected. No one knows how the training department is doing. There is no information on whether the company is winning the game, how it compares with its competitors, and if improvements are needed. No one is asking the following questions:

- Are training participants satisfied?
- Is learning taking place?
- Has behavior changed?
- Are business results being affected?
- Is the company receiving a return on the investment being made?

Is the scenario as applied to a training department difficult or easy to imagine? Does your training organization have a scorecard?

According to ASTD's *State of the Industry* report for 2002, the number-one factor affecting the future of training and the workplace learning and performance field is money (Van Buren and Erskine, 2002). The increasing pressure from shareholders for realizing short-term profits prompts greater pressure on employees to produce results and on training to show a return-on-investment (ROI). But the data collected for the report indicates that not many companies have a training scorecard. Of the 367 benchmarking services companies included there, 78 percent measure satisfaction, 32 percent measure learning, 9 percent measure behavior change, and 7 percent measure business results. One could conclude from those percentages that many companies don't know their training department's score.

Jack Phillips (1999) conducted a research study on the top training and development trends worldwide. Here are the top six trends he identified:

1. Training and development costs are being monitored more accurately to manage resources and demonstrate accountability.
2. Measuring the return-on-investment in training and development is growing in use.
3. Systematic evaluation processes measure the success of training and development.
4. Needs assessment and analysis are receiving increased emphasis.
5. Training and development staff and line management are forming partnerships to achieve common goals.
6. Training and development is being linked to the strategic direction of the organization.

Immediate action will need to be taken by training departments to keep up with those trends. It will be important to improve continuously the techniques for keeping score in order to demonstrate the training department's ability to be a business partner and to add value to the business. The training scorecard is a tool that can help training departments determine if they are winning the game, how they compare with competitors, and if improvements are required.

## **Business Scorecards**

In 1990 the Nolan Norton Institute sponsored a study titled "Measuring Performance in the Organization of the Future" (Kaplan and Norton, 1996). David Norton served as the study leader and Robert Kaplan as an academic consultant. What prompted the study was the



thought that current performance measurement approaches, primarily financial accounting, were becoming obsolete. Representatives from a dozen companies met for a year to develop a new performance measurement model. The outcome of this study was the “balanced scorecard.” The balanced scorecard translates an organization’s mission and strategy into a set of performance measures that provides a framework for a strategic measurement system. It emphasizes financial objectives but also includes the performance drivers of those objectives. The scorecard measures organizational performance from four perspectives: financial, customer, internal business processes, and learning and growth.

In the 11 years since the study was completed, it is reported that 50 percent of organizations in North America and western Europe have adopted the balanced scorecard approach (Creelman, 2001). The HR profession has not been as aggressive in implementing better measurement techniques. In 2001 an HR measurement survey was commissioned by the publishing firm Business Intelligence. Participants were senior HR leaders (Creelman, 2001). Just over one in three respondents indicated they were using a performance measurement (scorecard) framework. In turn, 86 percent of the respondents believed that the use of measurement would increase in HR over the next two years. During the last few years, business leaders have begun to ask HR to demonstrate the value it brings to the organization. HR is moving toward a more strategic role, and the use of HR balanced scorecards is increasing. That scorecard operationalizes the strategy of the HR function and includes financial, customer, internal, and learning and growth measures.

Developing measures of both HR efficiency and effectiveness for the balanced scorecard is critical. Efficiency measures relating to function cost are more solidly established HR measures and they are easier to track and report. HR effectiveness measures, such as measuring the impact of a recruiting initiative or the return-on-investment of a training course, are not as well established and are more difficult for HR departments to track and report. The conventional balanced scorecard often cascades from the corporate level through divisions, business units, and functions. It is important to note that HR can create a balanced scorecard even when an enterprise or corporate balanced scorecard does not exist (Creelman, 2001). This is possible when there are clear understandings of the corporate strategy and of the personnel capability requirements. Such understandings enable HR to be more proactive in creating balanced scorecards to measure and

evaluate impact, and HR will need to take a more proactive role in measuring the effectiveness of their organizations so as to meet the requests of the business leaders.

### **Training Scorecards**

A training department might have some of the following objectives:

- to facilitate learning
- to enable behavior change
- to improve on-the-job performance
- to affect business results
- to increase employee satisfaction
- to improve employee retention
- to create a positive ROI for the company.

How is a training department going to know if it has accomplished its objectives? The training scorecard is a tool to ensure that the training organization is focused on accomplishing training objectives linked to business strategy. The scorecard provides a structure for establishing, tracking, compiling, analyzing, and communicating training results. It should be customized on the basis of business needs and may contain a variety of measures for what the business views as critical. A scorecard can be created and implemented even when there is no HR or corporate scorecard. This is critical because it enables the training department to take a proactive stance in creating measurement and evaluation strategies and to become a valued business partner.

As the studies conducted by ASTD, Jack Phillips, and Business Intelligence indicate, business is placing greater pressure on HR and on training and development to show a return-on-investment. Measurement and evaluation tools for training organizations, such as the training scorecard, are evolving because of a shift in accountability. Training organizations today must be accountable, justify expenditures, demonstrate performance improvement, deliver results-based training, improve processes, and be proactive. Using measurement and evaluation tools in training organizations can no longer be a reactive decision. The leaders of training organizations realize that business leaders are expecting to see results for the dollars invested in training, and proactively they are measuring the results of training initiatives.

The training scorecard enables executives to understand the benefits of the training program to employees and to the organization's bottom line. It also provides useful measures for the training and development staff, which can determine how well a program is working and improve or halt the program as necessary. A focus on using

measurement and evaluation for the continuous improvement of training programs can build the credibility of the training department. The data from a training scorecard can be used to justify expenditures, build a business case for requesting additional budget dollars, and create management support.

### **Creating Training Scorecards**

When creating a training scorecard it is important to conduct a needs assessment and create a project plan to address the following questions: Why? Who? Where? When? What? and How? The answers to these questions will be important in deciding the scorecard's structure and components.

1. *Why is the training scorecard being created?* A training scorecard being created because there is a corporate or an HR scorecard should have direct linkages to those other scorecards. A training scorecard being created proactively with no other scorecards in place will need to have a linkage to the business strategy. Business strategy linkages can be made by reviewing a company's vision, mission, and goals for the year.

2. *Who is the target audience for the training scorecard?* The information that is tracked, collected, and compiled for the scorecard will vary, depending on who the target audience is or if there is more than one target audience. If the audience is the training department or a variety of company training organizations, the scorecard may contain data more relevant to continuous improvement training programs. If the target audience is senior executives, then business metrics such as ROI may be needed. Identify the target audience(s) for the training scorecard and perform a needs assessment to learn what measures are important to each audience.

3. *Where will the training scorecard be maintained?* The scorecard is often the compilation of data for multiple training departments. An owner should be assigned to the scorecard—someone who takes responsibility for creating the structure of the card and for ensuring that design input is received from all involved parties. Someone also needs to be accountable for collecting, compiling, and reporting the training scorecard data. Ensure that there are adequate numbers of trained employees to maintain the scorecard on an ongoing basis.

4. *When will training scorecard data be reported?* A reporting schedule is one component of the project plan for the scorecard. The data can be reported at a variety of times. The reporting could be program based, with the data calculated and reported on the bases of program completion and associated timeframes for behavior change and

business impact. Alternatively, the reporting could be calendar based, with the available data for all programs reported monthly or quarterly.

5. *What data will the training scorecard contain?* The answers to why? who? and when? will start to provide information concerning what data will be tracked, compiled, and reported on the training scorecard. It could contain data from a variety of training organizations within the same company, or from only one training organization. Participant satisfaction, learning, and behavior change data could be tracked, compiled, and reported for all programs or for only a designated percentage of programs. Data demonstrating the business impact of training programs might be collected and reported as cost-benefit ratios and ROI percentages.

6. *How will the data be tracked, collected, compiled, analyzed, and reported?* No two training scorecards will necessarily look identical, but they probably will use similar training measurement and evaluation methodologies. The scorecard measurement and evaluation methods are based on Donald L. Kirkpatrick's (1998) framework of four levels of evaluation and on the ROI process created by Jack J. Phillips (1997). The next section on training scorecard methodology provides an overview of Kirkpatrick's and Phillips's training measurement and evaluation strategies.

## **Training Scorecard Methodology**

When implementing a training scorecard it is important to track, collect, compile, analyze, and report six different types of training data collected over different time periods. These types of data are indicators, reaction, learning, application, business impact, and return-on-investment (Kirkpatrick, 1998; Phillips, 1997).

- *Indicators.* This is the traditional approach to reporting training data. Some examples of indicators are
  - number of employees trained
  - total training hours
  - training hours per employee
  - training investment as a percentage of payroll
  - cost per participant.

Although these measures are necessary, they do not reflect the results of the training program. There are many types of indicators, but it is most important to include in the scorecard the measures of interest to the organization's top managers.

- *Level 1: Reaction.* This tends to be the most popular level of measurement in traditional training organizations, often used to measure 100 per-

cent of an organization's training programs. Reaction represents an important area of measurement, primarily for the training and development staff. At this level, participants' reactions to and satisfaction with the training program are measured. Sometimes the planned actions of the participants attending the training program are also captured, and that assists with forecasting program outcomes. Some recommended data to capture on Level 1 instruments are

- relevance of training to job
- recommendation of training to others
- importance of information received
- intention to use skills/knowledge acquired.

Those four items have predictive validity for projecting actual applications (Phillips and Phillips, in press) and should be compared from one program to another.

- *Level 2: Learning.* Learning measurements typically are not tracked for 100 percent of an organization's training programs. The percentage often ranges from 40 percent to 80 percent, depending on the definition of learning (Phillips and Phillips, in press). Learning can be measured informally with self-assessments, team assessments, or facilitator assessments; or formally with objective tests, performance testing, or simulations. Learning self-assessments may ask participants to rate the following items:
  - understanding of the skills/knowledge acquired
  - ability to use the skills/knowledge acquired
  - confidence in the use of skills/knowledge acquired.
- *Level 3: Application.* This level measures changes in on-the-job behavior while the training is applied or implemented. The percentage of training programs for which this measure is tracked typically is 20 percent to 50 percent (Phillips and Phillips, in press). This information often is collected through a follow-up survey or questionnaire. Key questions asked concern
  - the importance of the skills/knowledge back on the job
  - the frequency of use of the new skills/knowledge
  - the effectiveness of the skills/knowledge when applied on the job.Information also is collected about the barriers and enablers to application of the new skills/knowledge. Barrier information provides insight into the reasons for unsuccessful application of the new skills/knowledge. Enabler information provides insight into reasons for successful implementation of a training program.
- *Level 4: Business Impact.* At this level the actual business results of the training program are identified. The percentage of training

programs for which this measure is tracked is typically 10 percent to 20 percent (Phillips and Phillips, in press). A paper-based or automated follow-up questionnaire can be used to gather this data. Depending on the training programs' performance and business objectives, data may be gathered on the following:

- productivity
- quality
- cost control
- customer satisfaction.

There also are several other possible measures of business impact. It is important to include the method used to isolate the effects of the training program, such as control groups, trend line analysis, or participants' estimates.

- *Level 5: Return-on-Investment.* At this level the monetary benefits of the program are compared with the cost of the program. Approximately 5 percent to 10 percent of training programs are evaluated at this level (Phillips and Phillips, in press). The costs of the program must be fully loaded. The methods used to convert data should be reported. The ROI calculation for a training program is identical to the ROI ratio for any other business investment:

$$\text{ROI (\%)} = ([\text{benefits} - \text{costs}]/\text{costs}) \times 100$$

A benefit-cost ratio may also be calculated by dividing costs into benefits.

- *Intangible Benefits.* Intangible benefits are measures that are intentionally not converted to monetary values because the conversion to monetary data would be too subjective. It is important to capture and report intangible benefits of the training program, such as
  - increased job satisfaction
  - reduced conflicts
  - reduced stress
  - improved teamwork.

There are a variety of other intangible measures. These types of measures are often very important to the organization.

Figure 1 provides an example of one training scorecard template. The structure and contents of an organization's scorecard will depend on the needs assessment conducted and the answers to the questions who? what? when? where? why? and how? The scorecard example in figure 1 will be discussed further in the Nextel case that begins on page 41.

**Figure 1. Template for a training scorecard.**

Training Scorecard				
Program Title:				
Target Audience: Indicators				
Duration: Indicators				
Business Objectives:				
Results				
Satisfaction	Learning	Application	Tangible Benefits	Intangible Benefits
Level 1	Level 2	Level 3	Levels 4 and 5	
Technique to Isolate Effects of Program:				
Technique to Convert Data to Monetary Value:				
Fully Loaded Program Costs:				
Barriers to Application of Skills:				
Recommendations:				

**Training Scorecard Challenges**

There are several challenges an organization may face when implementing a training scorecard, and the challenges must be addressed during the initial planning process to ensure a successful implementation. Some challenges that may be encountered are the following:

- *Getting the buy-in of line management and the training and development staff.* As the training department moves from reporting the more traditional measures of number of attendees and number of training hours, line management and the training staff must be educated about the training scorecard process to ensure their buy-in. Line management may be concerned about the follow-up surveys and how the data will be used. The training staff may fear that data showing no behavior change or a negative ROI could imperil their jobs. It is critical to emphasize that the data is being collected to enhance training programs and improve business results.
- *Making the time to do the required needs assessment.* It is important that the training scorecard tracks the right information, for the right departments, and for the right reason (to improve business results). An effective needs assessment is required to align the training scorecard with business strategy and to ensure the gathering of appropriate