THIS WEEK — MANAGEMENT STRATEGIES

High Attrition Rates in e-Learning: Challenges, Predictors, and Solutions

BY MARGARET MARTINEZ

You've probably heard that people drop out of e-Learning at very high rates and that nobody knows what to do about it. But the last part of that statement isn't really true. Some organizations and some researchers *do* know what to do about it, and we can all benefit from their experience. Let me give you an example.

The University of Phoenix has built its commercial success, in part, by understanding important learner considerations, especially social issues. Here's what William Symonds had to say recently about Phoenix Online, in a Business Week article published in June, 2003:

"... Phoenix Online realized that inter-action with humans — the professor and other learners in the class — was far more important to success than interaction with the digital content. Thus, Phoenix Online keeps its classes small, averaging just 11 learners. And to combat the Achilles heel of distance education — a high dropout rate — it offers its learners plenty of hand-holding, including round-the-clock tech support. The result:

65% of its learners go on to graduate."

Clearly, it is important to anticipate issues that cause learners to quit e-Learning without completing the objectives, and to deal with those issues effectively. Successfully reducing the dropout rate allows better allocation of delivery resources as well as providing improved return on investment.

Learner attrition and retention (the two halves of the drop-out problem) are not

We know that learners frequently do not complete online courses. Reasons offered range from "e-Learning is e-Boring" to "they got what they needed and quit." This article explores another possible reason, a mismatch between learning orientation and e-Learning design. Use these ideas to develop your own attrition management plan!

A publication of

The eLearning Developers' Journal™ is design-
ed to serve the industry as a catalyst for inno-
vation and as a vehicle for the dissemination of
new and practical strategies and techniques for
e-Learning designers, developers and man-
agers. The **Journal** is not intended to be the
definitive authority. Rather, it is intended
to be a medium through which e-Learning practi-
tioners can share their knowledge, expertise
and experience with others for the general
betterment of the industry.

As in any profession, there are many differ-
ent perspectives about the best strategies,
techniques and tools one can employ to accom-
plish a specific objective. This **Journal** will share
these different perspectives and does not posi-
tion any one as "the right way," but rather we
position each article as "one of the right ways"
for accomplishing a goal. We assume that
readers will evaluate the merits of each article
and use the ideas they contain in a manner
appropriate for their specific situation. We
encourage discussion and debate about articles
and provide an Online Discussion board for
each article.

The articles contained in the **Journal** are all
written by people who are actively engaged in
this profession at one level or another — not
by paid journalists or writers. Submissions are
always welcome at any time, as are sugges-
tions for articles and future topics. To learn
more about how to submit articles and/or
ideas, please refer to the directions in the side-
bar on page 6 or visit www.eLearningGuild.com.

MANAGEMENT *strategies*

new challenges. Most colleges and uni-
versities routinely face them, especially
with first-year students who are often
unprepared for self-directed learning. It
may be a surprise to learn that half of all
freshmen today drop out before complet-
ing their programs. Now, outside the
world of academia, trainers are finding
that requiring a higher degree of self-
motivation or self-direction in e-Learning
is also associated with higher attrition
and lower retention. People drop out,
and we wonder, "Why?"

We can learn much from the retention
research conducted for universities and
colleges. In these institutions, research-
ers have been able to identify common
predictors that correlate completion with
learner characteristics, experiences, and
settings. Many universities and colleges
have developed attrition management
plans in order to better understand and
address the dropout problem. Solutions
found in higher education have improved
retention through analysis and placement
of students, collaboration between
administrative departments, learner
advice and management, and curriculum
integration.

Any organization can create an attrition
management plan to incorporate such
solutions, tailored as necessary to gov-
ernment or private enterprise situations.
Such a plan will coordinate strategies for
implementation, delivery, and progress
measurement across entire learner popu-
lations. But plans adapted from higher
education can now be made better.

e-Learning designs that accommodate
individual learner profiles through "per-
sonalization" principles further reduce
online dropouts. Recent neuroscience
advances support the notion of these
profiles. Personalization complements
and extends more traditional approach-
es, including attrition management plans.
Cost-effective technologies exist to iden-
tify and support key success attributes
that are important to a learning audi-
ence, and to tap into self-motivation and
self-direction. Through these technolo-
gies, it is possible to identify at-risk
learners, improve the quality of the learn-
ing experience for every student, get the
right message and the right tools to each
person at the right time, and encourage
learner achievement and continuing per-
formance improvement.

This article provides the background

information needed to apply these per-
sonalization principles and to develop an
attrition management plan for e-Learning
in your organization.

Introduction

Keeping online learners engaged and
enrolled is a tough challenge. The reality
is that many learners who function well
in classrooms are not ready for online
learning. Typical learners have developed
a classroom learning ability over time.
They know how to interact with teachers
and with other students, and they know
how to take tests.

Online, learners require an expanded
set of skills to be successful. In the
same vein, trainers need a different kind
of design and teaching perspective for
the online world, in contrast to the class-
room. These are two sides of the same
coin.

Until the advent of online learning, it
was enough to design primarily cognitive-
based solutions, driven by the ways peo-
ple process information, and to rely on
the instructor to provide the personal
touch during delivery. Something similar
to that personal touch is even more
important online. Research suggests
that e-Learning outcomes, including com-
pletion rate, improve when the instruc-
tional presentation adapts to the learn-
er's aptitude, expectations, and person-
ality.

Good classroom trainers intuitively pay
attention to key human factors, and
adjust content, presentation, and other
factors as needed to promote learning.
Trainers receive important cues from
learner emotions, and from expressions
of learner intent. Learner persistence is
something that has to be inspired and
nurtured throughout the learning and
teaching experience. Online, of course,
the usual cues to learner emotions are
not available to an instructor or to an
e-Learning application.

Definitions

Definitions are important in this dis-
cussion, so here are three terms that
you will see throughout the next few
pages.

Attrition refers to a decrease in the
number of learners or students engaged
in some course of study. This course of
study might be a degree plan, or it might
simply be a standalone online course.

Attrition takes place when a learner leaves the course of study, for any reason. Institutions of higher learning often differentiate between the "dropout," who never returns and never completes the course of study, the "stopout," who leaves but comes back later to finish, and the "attainer," who leaves before completion but who has nonetheless achieved some personal goal — a specific skill, for example. In other settings (business or government), these distinctions may be made less often. Understanding the differences, and identifying examples of each kind of attrition, could be useful information in many organizations in guiding improvement efforts.

Retention refers to the number of learners or students who progress from one part of an educational program to the next. In higher education, this is normally measured as enrollment from academic year to academic year. In other settings, retention may simply be the inverse of the attrition rate. It may be defined as the number of learners who progress from one module to the next, or from one certification to the next.

Persistence relates to the act of continuing toward an educational goal. In higher education, a "persister" is simply one who achieves a degree or certificate and graduates "on time." In other institutions, persistence may not be the term of choice, and instead the issue is simply the number of individuals who complete the required course, modules, or criterion tests.

Learning design and attrition issues

Successful e-Learning designers, instructors, and trainers know that online instruction can encourage persistence and reduce attrition, to the extent that the design and implementation recognize and tap into how individuals may want to learn. Unfortunately, many of today's e-Learning designs lack appropriate personalized support that will help individuals manage their online experience, stay motivated to finish the course, and learn satisfactorily.

Personality issues must be considered from the very beginning of the e-Learning design process, during planning and analysis. An analysis is inadequate if it does not determine the key personality attributes and sources for learning differences in the learner population. The
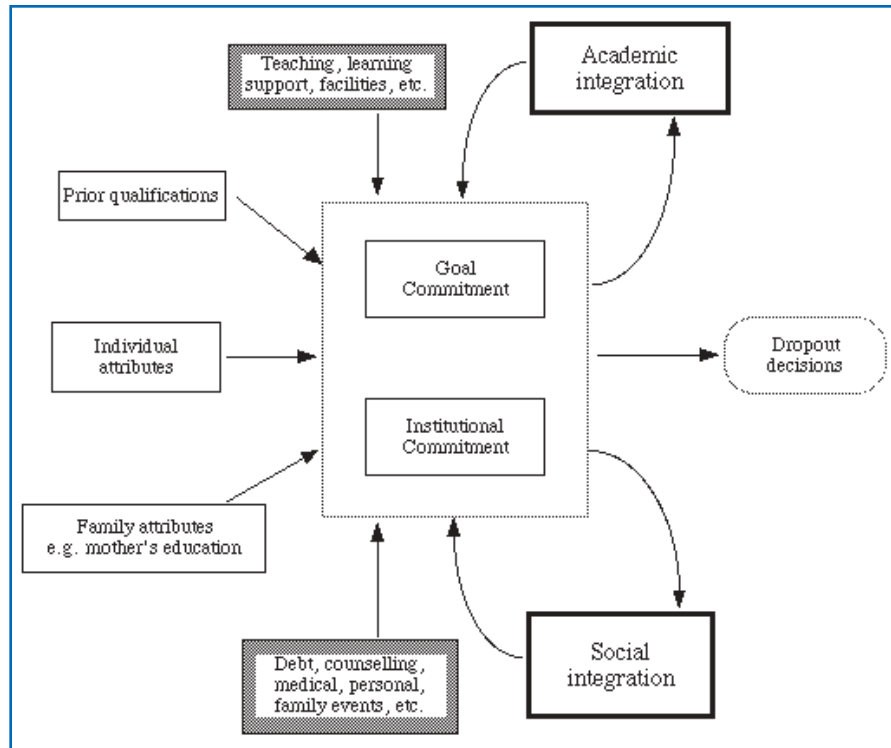

FIGURE 1 *Tinto's Retention Model (Adapted by Stephen W. Draper from Tinto, V. (1975)* Dropout from Higher Education: A Theoretical Synthesis of Recent Research, *Review of Educational Research vol.45, pp.89-125.)*

ongoing analysis of the audience must go so far as to determine why some of the learners are less persistent, successful, self-directed, or motivated than others.

Designers must also understand how to apply the specific strategies, derived from new research, that support and foster greater persistence and self-motivation. This approach will help to identify "at risk" learners and provide the solutions, interactions, and environments that will eliminate or minimize the demotivating elements. If the design is causing attrition because it frustrates or drains interest, analysis will make this obvious.

Attrition management in higher education

Traditional theories addressing learner attrition at institutions of higher learning consider various issues, characteristics and settings. These usually include demographics, ethnicity, family, economics, experiences, background, and related variables. Additionally, studies often cite personal reasons such as family problems, finances, child care, distractions, and job needs and demands as

the cause of withdrawal.

There is, as yet, no consistent view among educators of the key factors. However, over time, various attrition models have been proposed. One of these is more often used than the others, comes close to being a working standard, and forms the basis (or at least the point of departure) for many attrition management efforts.

Tinto's model

Vincent Tinto's model is commonly referenced in the learner retention/dropout literature. (See Figure 1, above.) The model's concept is that of "integration" of multiple influences on attrition. The model claims that whether a learner persists is strongly predicted by that learner's degree of academic and social integration.

Attrition management examples

There are a number of guidelines and examples of attrition management plans and strategies available on the Web. Several are included in the sidebar on page 8. These are:
• An Examination of the Retention Literature and Application in Learner

Success (Harvey-Smith, 2002)
- Community College Survey of Learner Engagement (CCSSE, 2003)
- Retention Revisited (Seidman, 1996).
- Strategic Plan (MSU-Bottineau Administrative Council, 2003)
- Strategic Retention Planning (University of Memphis, 2002)

Attrition management framework

An attrition management plan should deal with retention issues based on a coherent framework combined with a more effective method for measuring progress. An overview of the framework should provide a reliable definition of retention. The framework should link business or academic strategy and priority to a strategy for learning, development, and evaluation, and then to a learning blueprint. Aspects of the framework should include the following elements:
- Business or academic strategy and change vision
- Organization principles, needs, resources, and priorities
- Individual and team needs
- Stakeholders goals, priorities and needs
- Key processes, interactions, and activities
- Key programs, facilities, and resources
- Measures and accountability

Where do current attrition management plans fall short?

The literature to date does not provide strong proof or good tests of retention and attrition theory. Additional consideration and integration of important neurobiological characteristics, such as locus of control or goal orientation, is needed.

Note that most of the examples available on the Web do not consider individual learning differences; they assume that "one size fits all." This type of untargeted approach wastes resources. What is needed is an integration of conventional models offering a more evolved understanding of individual learning differences based on neurobiological foundations. Research is suggesting that locus of control, measured by Julian Rotter's Locus of Control scale (see the Readings in the sidebar), is a significant predictor of academic persistence. In my opinion, leaving the differing aspects of learner control out of the discussion is an important omission.

Learning orientations

Neuroscientists are helping us identify individual differences in learning, memo-ry, and brain development that govern specific aspects of learning success. Emotion and intention to learn are powerful forces — on these two depend how well individuals purposefully manage information, plan, and set and accomplish goals. These are consistent findings in the research. Ultimately, these are the factors that influence learner persistence, attrition, and retention.

Whole-brain perspectives

Recent research highlights the strong impact of three additional factors on persistence and performance, namely an individual's independence, goal orientation, and locus of control. These characteristics also impact factors commonly associated with learner retention and attrition, including engagement, expectations, motivation, self-direction, and attitude. Studies are beginning to show that these three factors can be used to distinguish learners who complete courses from those who do not.

The neurobiology of learning and memory is the source of learning differences, including differences in persistence. Emotions (e.g., fear, frustration, passion, motivation, and happiness) and intentions (e.g., will, striving, and commitment) greatly impact personality charac-

teristics — including locus of control as well as how learners persist to meet goals, learn and perform tasks, and succeed.

An important concept: Locus of control

Some researchers describe locus of control as a concept that considers how some people feel that they have high control of managing their lives (an internal locus of control) while other people feel that they must rely on forces outside of themselves (an external locus of control).

People with a strong internal locus of control tend to be highly motivated, and believe that they can make a difference in the outcome of a situation. Those with a strong external locus of control see their lives as being directed by luck and forces outside of their control. They may believe that change brings risk and fear of the unknown; they may blame others for the outcomes of their behavior. While most people fall in a range between the two, several researchers have found that drop-outs scored higher in external locus of control, that is, they felt they were more controlled by external events.

Learning orientation model

Learning orientation theory (summarized at http://www.trainingplace.com/source/research/overview.htm) represents human learning variability from a whole-brain perspective. Learning orientations represent a comprehensive set of psychological factors (conative, affective, cognitive, and social) that influence how individuals approach learning. (Editor's Note: See Dr. Martinez' article, "What is Personalized Learning?" in **The eLearning Developers' Journal**, May 7, 2002.) This perspective is more robust than the primarily cognitive explanations of learning differences (e.g., learning styles) because it highlights the dominant developing, guiding, and managing influences of emotions and intentions on cognitive and social processes. Personalization without including a whole-person neurological foundation is unsatisfactory and incomplete.

The Learning orientation model (summarized at http://www.trainingplace.com/source/research/lomatrix.htm) presents profiles for four dominant learning orientations: *Transforming*, *Performing*,

---

TABLE 1 *Learning orientations model*

Transforming learners

Transforming learners deliberately use personal strengths, deep desires, strong emotions, persistent and assertive effort, and sophisticated, abstract or holistic thinking ability and strategies to self-manage learning successfully.

http://www.trainingplace.com/loq/pop_trans1.htm

Performing learners

Performing learners are lower-risk, semi-skilled to skilled learners who rationally, systematically, and capably use psychological processes, strategies, preferences, and self-regulated learning skills to achieve learning objectives and tasks. In contrast to transforming learners, performing learners are more selective about how hard they work on learning goals. They prefer focusing on the process and steps towards attaining worthwhile, to them, goals.

http://www.trainingplace.com/loq/pop_perf1.htm

Conforming learners

Compared to transforming or performing learners, conforming learners are complying learners who prefer to more passively accept knowledge, store it, and reproduce it to conform, follow simple steps to complete assigned tasks, and please others.

http://www.trainingplace.com/loq/pop_conf1.htm

Resistant learners

In contrast to the other three learning orientations, resistant learners lack a fundamental belief that (1) achieving learning objectives set by others is of any value or worth the effort, (2) they can learn and enjoy achieving goals set by others, or (3) academic learning and achievement can help them achieve personal goals or initiate desired changes. A resistant learner's personal goals strongly conflict with learning goals set by others.

http://www.trainingplace.com/loq/pop_resist1.htm

Conforming, and *Resistant*. These orientations describe the range of learning approaches (e.g., differing locus of control) within any learner population. They are summarized in Table 1, above.

You can find more learning orientations research information at http://www.trainingplace.com/source/research/index.html

These profiles show the degree to which learners, following beliefs, values, emotions, and intentions to learn, generally commit effort and self-manage the learning process to attain goals, monitor or assess learning progress, and use reflection to improve future learning opportunities. Depending on the specific learning circumstances and the individual's ability, a learner may cover a range of tasks with a single learning orientation or they may move downwards or upwards on the table of orientations in response to negative or positive responses, conditions, resources, results, expectations, and experiences.

Extending the attrition management model

What additional considerations are there when implementing an attrition management plan? With the long-term goal to reduce attrition, such a plan should also improve learner motivation, independence, persistence, satisfaction and accomplishment. It is important to find the right balance between maximizing individualized learning opportunities and accomplishment of business, educational, and performance goals. It is not enough to simply talk about attrition and persistence problems! These problems should be managed with a formalized attrition management plan offering targeted strategies for implementation,

management, and measured progress.

When developing models for today's more personalized online learning, there are two steps to take. The first is to explore, understand, and use some of the new information about extraordinary whole-brain activity, learning processes, and social interactions. This is to be done in the context of instructional goals, learner purpose, motivation, independence, persistence, and self-directed learning.

The next step is to use the "brain research" foundations to develop an attrition management plan. In other words, consider those "personalization characteristics" that particularly impact attrition and persistence. This plan should provide a framework within which one can analyze and differentiate audiences, identify key success attributes, predictors, and retention issues, track attrition rates, and provide and evaluate solutions that support retention and minimize attrition.

What to cover in an attrition management plan for e-Learning

The plan should cover key points, including strategies to:
- Consider the impact of emotions and intentions on learning, persistence, and self-motivation to learn.
- Identify causes for non-completion.
- Determine predictors that correlate learner settings, situations, and characteristics (e.g., independence, self-direction, and self-motivation) with learner retention, accomplishment, and completion of courses and academic programs. For example, frequency and quality of contact with faculty, staff, and peers has repeatedly been shown to be a good predictor of learner persistence for learners with low locus of control or conforming learners.
- Implement and manage the transition from instructor-led to online learning.
- Predict and track potential and actual persistence with some accuracy.
- Apply results to improve policy making, budgets, and resource allocation.
- Improve and direct curriculum and learner support programs towards improved quality, increased enrollment, and learner retention (e.g., transition programs, counseling, and support for special populations).

A good attrition management plan needs to:
- Be flexible enough to change as the needs change.
- Ensure that the plan's substance and foundation is the learner.
- Ensure positive workplace, learning, and social settings — in which learners and learning is valued.
- Measure and report to management, learners, and stakeholders.
- Represent core values and expected outcomes.

Summary and recommendations

e-Learning requires a higher degree of self-motivation, self-directed learning, and greater persistence and commitment from the learner. These requirements can create the serious problem of high attrition rates and costs if not recognized and managed strategically. Too many learners lack adequate preparation for the rigors of e-Learning and are less likely to complete programs or courses. A better understanding of "at risk" learners is critical.

Over the years, many models of persistence have evolved to address attrition and retention issues, particularly focusing on learner's reasons for dropping out. These models, primarily university- and college-based, examine which factors relate to persistence. Identified as predictors, these factors are the typical reasons learners give for dropping out, including ability, academic and family matters, instructors, finances, full-time jobs, dissatisfaction, and lack of direction or reasons to complete.

Today, non-traditional attrition studies are considering the impact of psychological factors (such as locus of control and goal orientation) on persistence (i.e., goal-directed behavior). In the new models, the traditional factors associated with retention and attrition may become secondary or contributing factors (albeit still important factors).

The whole-person factors are being studied as a primary or dominant influence on persistence. For example, highly goal-oriented learners persist and seek education as a means to accomplish specific objectives and accomplishments. In contrast, "at risk" learners have lower levels of persistence towards completion. With the growing recognition about the need for targeted learner support or remedies for more personalized

> Personalization complements and extends more traditional approaches, including attrition management plans. Cost-effective technologies exist to identify and support key success attributes that are important to a learning audience, and to tap into self-motivation and self-direction.

The eLearning Guild's Advisory Board

A leading organization needs focused leadership. **The eLearning Guild** is proud to have the support and guidance of these industry leaders serving on its Advisory Board:

Ruth Clark
Author and Principal, Clark Training & Consulting

Conrad Gottfredson
Principal
Conduit Tecknowledgy

John Hartnett
President
BlueMissile, Inc.

Bill Horton
Author and Principal
William Horton Consulting

Kevin C. Moore
Co-Founder
Tier 1 Performance Solutions

Eric Parks
President
ASK International, Inc.

Marc J. Rosenberg
President
Marc Rosenberg and Associates

Allison Rossett
Professor and Author
San Diego State University

Brenda Pfaus
President
Spectra Interactive Learning

SIDEBAR *References and readings*

References

Martinez, M. (2002). What is Personalized Learning? *The eLearning Developer's Journal*, May 7, 2002, 1-7.

Tinto, V. (1993). *Taking Learner Retention Seriously: Rethinking the First Year of College*. San Francisco: Jossey-Bass. Retrieved June 20, 2003, from http://soeweb.syr.edu/Faculty/Vtinto/Files/AACRAOSpeech.pdf

Readings

Cahill, L. & McGaugh, J. (1998). Mechanisms of Emotional Arousal and Lasting Declarative Memory, *Trends in Neurosciences*, 21, 294-299.

Cronbach, L. & Snow, R. (1977). *Aptitudes and Instructional Methods: A Handbook for Research on Interactions*. New York: Irvington Publishers.

Community College Survey of Learner Engagement (CCSSE, 2003). Newsletters. Retrieved June 20, 2003, from http://www.ccsse.org/retention/highlights.html

Davidson, R. (2000). Cognitive Neuroscience Needs Affective Neuroscience (and Vice Versa). *Brain and Cognition*, 42, 89-92.

Dille, B. & Mezack, M. (1991). Identifying Predictors of High Risk Among Community College Telecourse Learners. *The American Journal of Distance Education*, 5(1), 24-35.

Draper, S. (2003). Tinto's Model of Student Retention [WWW document]. Retrieved June 20, 2003, from http://www.psy.gla.ac.uk/~steve/localed/tinto.html

Harvey-Smith, A. (2002). An Examination of the Retention Literature and Application in Learner Success (2). *CCSSE Publications (Promoting Inclusions)*, 11. Retrieved June 20, 2003, from http://216.239.37.100/search?q=cache:eN8bm21T7osC:www.ccsse.org/ssi/docs/Harvey-Smith_Alicia_Retention_Article.pdf+%22An+Examination+of+the+Retention+Literature+and+Application+in+Learner+Success%22&hl=en&ie=UTF-8

Kandel, E. (2002). *Columbia News Video Forum Symposium: Perception, Memory and Art*. Retrieved June 20, 2003, from http://www.columbia.edu/cu/news/vforum/02/perception_memory_art/

LeDoux, J. (1996). *Emotional Brain: The Mysterious Underpinnings of Emotional Life*. New York: Simon & Schuster.

LeDoux, J. (2002). *Synaptic Self: How Our Brains Become Who We Are*. New York: Viking.

Martinez, M. (1999). Research Design, Models, and Methodologies for Examining How Individuals Successfully Learn on the Web. *Special Research in Technical Communication*, 46(4), 470-487.

Martinez, M. (2000). Mass Customization: Designing for Successful Learning. *International Journal of Educational Technology*, 2(2). Retrieved June 20, 2003, from http://www.ao.uiuc.edu/ijet/v2n2/martinez/index.html

Martinez, M. & Bunderson, C. (2001). Foundations for Personalized Web Learning Environments. *Journal of Asychronous Learning Networks*, 4(2). Retrieved June 20, 2003, from http://www.aln.org/publications/magazine/v4n2/bunderson.asp

Martinez, M. (2003a). *Learning Orientations Research (Overview)*. Retrieved June 20, 2003, from http://www.trainingplace.com/source/research/overview.htm

Martinez, M. (2003b). *Learning Orientations Model: Descriptions for Four Learning Orientations*. Retrieved June 20, 2003, from http://www.trainingplace.com/source/research/lomatrix.htm

MSU-Bottineau Administrative Council (2003). *Strategic Plan*. Retrieved June 20, 2003, from http://www.misu-b.nodak.edu/Strategic_Plan-2003.doc

Parker, A. (1999). A Study of Variables that Predict Dropout from Distance Education. *International Journal of Educational Technology*, 1(2). Retrieved June 20, 2003, from http://www.ao.uiuc.edu/ijet/v1n2/parker/index.html

Parker, A. (2002). Identifying Predictors of Academic Persistence in Distance Education. *United States Distance Learning Journal*, 17(1). Retrieved June 20, 2003, from http://www.usdla.org/html/journal/JAN03_Issue/article06.html

Reeves, T. (1993). Pseudoscience in Computer-Based Instruction: The Case of Learner Control Research, *Journal of Computer-Based Instruction*, 20(2), 39-46.

Rotter, J. (1966). Generalized Expectations for Internal Versus External Control of Reinforcement. *Psychological Monographs*, 80, 1-28.

Seidman, A. (1996). Retention Revisited: College and University. *Collegeways*, 71(4), 18-20. Retrieved June 20, 2003, from http://www.collegeways.com/article_retention_revisited.htm

Symonds, W. (2003). University of Phoenix Online: Swift Rise. *BusinessWeek Online*, June 23, 2003. Retrieved June 20, 2003, from http://www.businessweek.com/magazine/content/03_25/b3838628.htm

University of Memphis (2002). *Strategic Retention Planning*. Retrieved June 20, 2003, from http://oir.memphis.edu/ir_group/retention/stu_dev/strat_retent_plan.pdf

Witte, J., Forbes, S., & Witte, M. (2002). Identity Theory and Persistence: A Tentative Synthesis of Tinto, Erikson, and Houle. *Journal of Integrative Psychology*, 2(2). Retrieved June 20, 2003, from http://www.integrativepsychology.org/articles/vol2_article2.htm

learning needs, many educational institutions have upgraded the level of student-support services and developed attrition management programs to identify and support "at risk" learners. As a result, they can encourage learners, as needed, to stay, be satisfied, and persist towards completion. An attrition management plan is the first thing that can be done to apply relevant interventions to im-prove attrition rates and support better learning, achievement, performance, and career development.

Finally, collecting data about persistence associated with e-Learning and course completion has the potential benefit of guiding management decision-making with respect to planning, policy making, and providing future services aimed at learner support and improved return on investment.

AUTHOR CONTACT

Dr. Margaret Martinez, CEO, The Training Place, has worked in the fields of learning, information, and technology for more than fifteen years. Previously, she was the Worldwide Training and Certification Director, WordPerfect Corporation. Dr. Martinez is a respected consultant on adult learning methodologies and strategies and is considered an expert in learning orientation research — the study of how people learn differently and most effectively. She often presents at major conferences and publishes in academic and trade publications. Contact Dr. Martinez at mmartinez@trainingplace.com.

ONLINE DISCUSSIONS

Extend your learning beyond the printed page! If you are looking for more information on this topic, if you have questions about an article, or if you disagree with a viewpoint stated in this article, then join the online discussions and extend your learning.

Follow these easy steps to participate:
1. Go to http://www.eLearningGuild.com and log in.
2. Click on the *Online Discussion* link on the left-hand navigation menu.
3. Select this article by title from the *e-Learning Discussions* list, or use the *Search Subjects/Post* box to find it.
4. Click on *Add A New Message.*
5. Enter your message. It will be posted as soon as you hit the *Add Message* button on the form.

Additional information on the topics covered in this article is also listed in the Guild Resource Directory.

The eLearning Guild™ is a Community of Practice for designers, developers, and managers of e-Learn-ing. Through this member-driven community, we provide high-quality learning opportunities, networking services, resources, and publications. Community members represent a diverse group of instructional designers, content developers, web developers, project managers, contractors, consultants, and managers and directors of training and learning services — all of whom share a common interest in e-Learning design, development, and management.

The eLearning Developers' Journal™

The Guild publishes the only online "e-Journal" in the e-Learning industry that is focused on delivering real world "how to make it happen in your organization" information. The Journal is published weekly and features articles written by both industry experts and members who work every day in environments just like yours. As an active member, you will have unlimited access to the Journal archive.

People Connecting With People

The Guild provides a variety of online member networking tools including online discussion boards, and the Needs & Leads™ bulletin board. These services enable members to discuss topics of importance, to ask others to help them find information they need, and to provide leads to other members.

Become a member today! Join online at www.eLearningGuild.com.

Resources, Resources, Resources

The Guild hosts the e-Learning industry's most comprehensive resource knowledge database. Currently there are over 2,300 resources available. Members have access to all of these resources and they can also post resources at any time!

Guild Research

The Guild has an ongoing industry research service that conducts surveys on 20 topics each year. These topics are identified by the Research Advisory Committee. The data collected is available for all members.

It's About Leadership

The Guild draws leadership from an amazing Advisory Board made up of individuals who provide insight and guidance to help ensure that the Guild serves its constituency well. We are honored to have their active engagement and participation. The Guild has also established three committees made up of active members who help steer its editorial, events program and research efforts.

Discounts, Discounts, Discounts

Guild members receive discounts on all Guild conferences and on other selected products and services. Your Guild membership will save you 20% off the list price of Guild events!

Join today at www.eLearningGuild.com!