Instructional Strategies for the Development of E-learning

White Paper

RESULTS UNLIMITED
Instructional Strategies for the Development of E-learning

Introduction

To support the development of large scale, custom E-learning, Results Unlimited, Inc. has developed appropriate instructional strategies and guidelines to ensure quality throughout the instructional design process. This paper discusses the use of instructional systems design (ISD) in Results Unlimited’s content development process as well as instructional strategies supporting Blooms taxonomy and adult learning motivational factors.

For the purpose of this paper, and instructional strategy is the action taken in support of a specific teaching goal. Guidelines provide the parameters and specifications for how these instructional strategies are implemented within the instructional content.

Goals for E-Learning

The world of E-learning is continuously evolving and presenting new challenges, so instructional tools must successfully meet current challenges and be appropriate for future changes. The following are goals Results Unlimited, Inc. has identified to create successful E-learning offerings.

✓ Insure that the client needs are correctly identified and that the final training is appropriate and effective.

✓ Insure that the content supports adult learner characteristics and motivation.

✓ Develop instructional strategies, based on instructionally sound models and methods that are appropriate for a virtual environment.

✓ Develops clear and effective guidelines for all instructional strategies that can be easily and consistently used among all instructional designers.

✓ Create granular, stand-alone pieces of content based on a learning object architecture.

✓ Create content that can be easily updated to support client needs.

✓ Create universal content that remains viable so the update process is timely and cost effective.

✓ Implement a course content structure that is easy to use and access. Content will need to be updated and clients might have in-house staff perform the updates.
Instructional Strategies for the Development of E-learning

- Insure that course design is flexible. Instructional strategies must be easy to modify according to client need.
- Develop instructional strategies that work within bandwidth sensitive requirements and still result in highly interactive and engaging courseware.

After reviewing our goals we concluded that an ISD model was best for the overall design and development of instructionally sound E-learning. We additionally determined that by developing instructional strategies that supported Gagne’s Nine Events of Instruction, Bloom’s Taxonomy and a learning object architecture our resulting content development process could achieve our goals.

One of our goals was to identify the primary learning characteristics and motivational factors affecting adult learners. In reviewing current adult learning theory, several key characteristics were indentified as being important to support by our instructional strategies.

Adult Learning Theory

A major challenge in designing instructional materials for adult learners is to not merely communicate effectively, but to also bridge the gap between adult learners of different educational backgrounds, attitudes, skill levels and learning styles. E-learning must provide enough guidance, reassurance, and reinforcement for all types of learners. Effective instructional design considers adult learners’ common characteristics, while providing enough flexibility to also support their differences.

Perhaps the most influential researcher on adult learning was Malcolm Knowles, who coined the term “andragogy” for the approach he recommended. Knowles contended that adult learners differ from child learners in several ways:

- Adults are more self-directed.
- Adults have a larger base of knowledge that can be used in learning new concepts and skills.
- Adults have specific goals for learning.
- Adults want to apply what they learn right away.

When designing instruction, it is important to the success of the training that general adult learner characteristics are taken into account. Dorothy MacKeracher describes most adult learners as believing themselves to be self-directed and capable of planning actions and making decisions for themselves. They expect to be provided with a sense of where they are going in the learning process, how they will get there and how they will know when they have succeeded.
In addition to recognizing the importance of general learner characteristics, content relevance should be considered, since it has a significant impact on a learner’s perception of E-learning. It is generally believed that without relevance, instruction may not engage the learner, risking the effectiveness of the instruction.

When developing instruction, not only should the instruction be clear and sound, it should also be motivating. Several methods of establishing motivation in an E-learning environment can be incorporated into the instructional content.

Dr. Raymond Wlodkowski lists several key motivational factors. Instruction should enhance meaning by providing engaging and challenging learning experiences that include learner perspectives and values. Training should enable learners to be confident in their ability to perform competently. Learners should believe that they have effectively learned something they value, and they should perceive their new knowledge as being useful and relevant in their world. Identifying these factors is the first step to ensuring that the chosen instructional strategies ultimately support these factors in the content presentation.

A primary goal of instruction is to allow students to acquire new skills and knowledge. Clear and accurate instruction is only part of achieving this goal. By designing training to encompass adult learner characteristics and provide motivation, the potential for learning to occur is greatly increased. Additionally, the use of sound instructional principles as a base for the development of E-learning is critical to the overall success of the educational materials.

**Instructional Systems Design**

In the last 20 years, researchers have tested and proven a set of principles for designing adult education materials. These principles constitute the field of instructional design. For instructor-led training or E-learning, to be most effective course materials should follow principles of instructional design.

One effective model that supports basic instructional design principles is the instructional system design (ISD) model. The ISD model is a procedural system. One definition of a system, presented by Walter Dick and Lou Carey (Dick & Carey) is,

“... a set of interrelated parts, all of which work together toward a defined goal. The parts of the system depend on each other for input and output, and the entire system uses feedback to determine if its desired goal has been reached ...the instructional process itself can be viewed as a system. The purpose of the system is to bring about learning.”
To insure that client needs are correctly identified, and that final training results in learning are met, we chose to utilize the ADDIE ISD model. The ADDIE model encompasses the major phases of ISD:

✓ **Analysis** - The purpose of the analysis phase is to identify the performance goal, context analysis and audience analysis. An assessment of available materials, subject matter expertise and technology requirements is also conducted.

✓ **Design** - During the design phase, objective maps identifying all course objectives and instructional strategies are created in preparation for content development. Design specifications include “look” and “feel” issues, corporate image considerations, technical specifications and a project schedule is determined.

✓ **Development** - In the development phase, content development experts create content that supports all performance objectives. Content authoring, media development and technology development are completed after a thorough editorial process. Content is carefully reviewed and tested to insure completeness and accuracy.

✓ **Implementation** - During the implementation phase, courses are integrated with the client’s learning management system or with Results Unlimited’s learning management system. Part of implementation is publicizing the availability of the training to the target audience helping insure utilization of training, another key factor in successful implementation.

✓ **Evaluation** - For the evaluation phase, Results Unlimited begins by performing data analytics to create benchmarking levels. This data will be used later to perform return-on-investment (ROI) analysis. In phase 2, we incorporate Kirkpatrick’s four levels of evaluation. These levels measure the students’ reaction, learning, behavior and results that occur upon completion of the training. we then perform final data analytics to evaluate program successes and additional learning opportunities.

The learner truly benefits from the systematic design of instruction. Through careful analysis and design, all performances required by the learner are identified and content is focused on the skills to be learned and presented under the best conditions for learning. The learner is evaluated with assessments that measure the performances described in the objectives. Following this process insures that the primary focus is on the individual learner and results in the creation of the best possible instruction.
**Bloom’s Taxonomy**

Bloom’s taxonomy has been instrumental in helping us to develop guidelines for the creation of appropriate objectives and their supporting instructional strategies. Not all objectives are the same. Different objectives focus on different performances and outcomes. Different types of objectives require different types of strategies. Instructional design is made easier by assigning learning objectives to different categories. Each category leads to a different classes of human performance and also requires a different set of instructional conditions for effective learning. By correctly identifying the learning level of an objective, strategies can then be developed to insure that the content is presented clearly and appropriately for E-learning, and that the instruction will be effective.

Results Unlimited has identified the following learning levels as those most often covered in E-learning content:

- **Knowledge** - Demonstrating knowledge typically involves the recall of a wide range of material ranging from specific facts to complete theories. Objectives at the knowledge level represent the lowest level of learning outcomes in the cognitive domain. Examples of the objectives at this level are recognize or identify common terms, specific facts, methods and procedures, basic concepts and principles.

- **Comprehension** - is defined as the ability to grasp the meaning of material. This might be shown by translating material from one form to another, by explaining or summarizing material and by predicting consequences of effects. These learning outcomes go one step beyond simply recalling material. Examples of objectives at this level are: understanding facts and principles, interpreting verbal material, charting and graphing, translating verbal material to mathematical formulae, estimating the future consequences implied in data and justifying methods and procedures.

- **Application** - refers to the ability to use learned material in new and concrete situations. This may include the application of such things as rules, methods, concepts, principles, laws and theories. Examples of objectives at this level are: applying concepts and principles to new situations, applying laws and theories to practical situations, solving mathematical problems, constructing graphs and charts and demonstrating the correct use of methods or procedures.
CONCLUSION

In developing large scale, custom E-learning solutions, Results Unlimited, Inc. has implemented a content development process based on proven instructional design strategies, to ensure the success of the instructional content. By supporting Bloom’s Taxonomy, adult learning characteristics and motivation in our instructional strategies, we have developed a highly effective process for custom courseware development.

A primary goal in our content development process is to insure that content developers create consistent, cohesive courses in terms of look and feel, as well as instructional soundness and quality. Our content development guidelines also help support flexible course design, allowing for modification based on client needs and requirements while continuing to ensue instructionally sound content. By adhering to these standards for consistency and flexibility in our instructional content, Results Unlimited is able to effectively address the changing needs of our clients for E-learning solutions.

Through the development of strategies and guidelines based on proven instructional design principles, along with and on-going commitment to stay abreast of the continuously evolving E-learning environment, course developers can successfully create and implement effective and engaging E-learning solutions.
ABOUT RESULTS UNLIMITED, INC.

Within the training and development industry, there are a spectrum of choices and approaches. Many training companies rely on the “standard” solution approach. The “one-size-fits-all” mentality. Unwilling to invest in understanding the client’s culture and uniqueness, these organizations rely on generic applications and hope the client gets something in return. On the other side of the training spectrum, custom training companies often takes months and millions to design applications.

Results Unlimited, Inc., headquartered in Denver, Colorado, is an internationally recognized leader in the design, development and delivery of turnkey training solutions. Results Unlimited has 20 years of proven experience, processes and curriculum that is delivered to your specific needs, industry and culture. Specializing in consultative and strategic sales training, customer retention applications and sales management development.

The organization is committed to driving measurable, sustainable results. As a partner, the organization has a solid track record of providing both competitive advantage and market place differentiation to clients. Companies who need to enhance profits, gain market share and create long term employee development have counted on Results Unlimited since 1990.
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### Summary

The following is an estimated investment summary:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program PRO-QuEST Consultative Training (15 participants and all training materials)</td>
<td>$23,925</td>
</tr>
<tr>
<td>May 2010 Deliverable (specific dates TBD)</td>
<td></td>
</tr>
<tr>
<td>Location - “TBD” (Las Vegas, NV)</td>
<td></td>
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</table>

**Estimated Expenses**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airfare, hotel, meals, car for 3 days</td>
<td>$1,000</td>
</tr>
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</table>

**Total Estimated Training Investment:** $24,925
Because of the size and scope of this training initiative, Results Unlimited would assign Jim Thornton as the lead training consultant for Shuffle Master, Inc. He would act as the main contact and is responsible for your overall satisfaction and delivering the expected outcomes. Depending on schedules and commitments, Results Unlimited, Inc. reserves the right to have another certified facilitator lead a program if necessary.

Jim is the President and founder of Results Unlimited, Inc. and has a wealth of experience working for sales leaders such as NCR Corporation, Johnson & Johnson and Norrell Corporation. Since 1990, Jim has conducted over 1,150 training engagements and touched the lives of more than 16,500 people.

Nationally recognized as an expert in the consultative sales process, he is a sought after speaker and consultant. Jim’s client base includes a dozen Fortune 500 organizations as well as a host of emerging, market leading organizations. A graduate of Western State College in Gunnison, Colorado with a major in both Business Administration and Marketing, Jim remains active in sports, community and church affairs.

Below is a sampling of what gaming employees have said after attending Jim’s training:

“I wanted to say thank you for an outstanding training. Your enthusiasm and motivation were truly inspiring to all of us. You’ve opened my eyes and my heart! You’ve helped me and my team be more successful, thank you so much.”

Sales Manager - Atronic Gaming

“I don’t have the words to describe to you the effect your training had on me. It has helped me in everyday life already. It was truly and honor to be part of your seminar.”

Joe - Sales Representative - Aristocrat Technologies, Inc.

“Jim, it’s been a pleasure working with you. I can’t believe the lift my division has had with your program. To think that an individual Account Executive could pay for the program in only a few days is a return on my investment I’ll take ever day. Thanks again for all you’ve done!”

Brian - VP of Sales - WMS Gaming

“Your ability to grab the attention of your audience was amazing to watch. You took a group of executives that had a million other things they could be doing, and captured their attention for every second of the seminar.”

Chris - Leadership & Development Manager - Bally Gaming

“My expectations were already high from what my friends said but are you kidding me? By far the best practical training I’ve ever received. I’ve already started my Kaizen and action mapping and have seen results immediately. Everyone on the sales team needs to attend this training, it’s awesome. Thanks again.”

Alicia - Account Executive - Konami Gaming
Our objective is simple: to help Shuffle Master Inc. and their sales reps gain and sustain a competitive advantage by providing world-class training solutions. As our name implies, we offer our clients an array of innovative training and consulting services that produce unlimited results.

Our belief is that people are a company’s most valuable resource. Our business is providing you with turnkey processes; services and learning exchanges that generate results. Our approach is unique, our offerings timely and our processes are dynamic.

We are committed to exceed your expectations by providing exceptional service and delivering solutions that have a bottom line impact. Our true measure of success is helping each client build and sustain competitive advantage.

Results Unlimited, Inc.

- Established in 1990 (20 years of proven track record)
- Headquartered in Denver, CO (Centrally located)
- 6 associates located throughout the U.S. (Extensive design and delivery capabilities)
- Nationally and internationally recognized as the leader in consultative selling
- Over 90,000 participants trained
- Extensive gaming experience (WMS, Bally, Aristocrat, IGT, Atronic, Konami, Paltronics)
- 12 Fortune 500 partners
- Full licensing and train-the-trainer certification
- E-learning platform & customized E-learning capabilities
- Robust training platform and product extensive product line (see below)

- PRO-QuEST Consultative Selling Skills
- STAR-QuEST Strategic Selling Skills
- TSS2 Trade Show Selling Skills
- ACCESS – Advance Customer Care Excellence Skills
- Sales Management For the 21st Century
- Sales Supervisory Skills for PRO-QuEST
Thank you for the opportunity to help Shuffle Master’s sales team make a realistic move to the next level of effectiveness. We know with our experience, commitment and knowledge, we can positively impact the results and productivity of your entire team. We look forward to discussing these ideas in greater detail and beginning this very timely and important training project.

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