

# Prologue: e-Learning from the perspective of an educational technologist

**Learning Objectives:** 

- Be able to explain, through concrete examples, what e-Learning is, by introducing three emphasized viewpoints.
- Be able to describe examples of misunderstandings and myths concerning e-Learning.
- Be able to explain, based on social background, the reason why Instructional Design is said to be important in quality e-Learning.

### Summary of this Chapter

- Although there are a variety of definitions of e-Learning, they are all different. A definition for this course is proposed after introducing three definitions which state that the essence of e-Learning is digitalization, being more than training, and interactivity, respectively.
- E-Learning in Japan is said to have begun in 2000. Although its history is short, it has already evolved to the third generation. E-Learning is promoted not only for corporate training/education, but in higher education as well. Since it keeps changing rapidly, there also are a lot of misunderstandings and myths in e-Learning. Schank summarizes the misunderstandings in e-Learning in 15 myths.
- Instructional Design (ID) is the focus of attention as a means of enhancing the effectiveness of e-Learning. ID is a collection of techniques and methods relating to the systems approach to enhance the effectiveness, efficiency, and appeal of learning.
- ID has also been required to change in accordance with the rapid change of society. The societal changes that influence ID include technological innovation, rapidity of changes, cost control, knowledge society/economy, the speed of market change, globalization, and diversification. The changes required of ID itself include response to the speed of change, focus on skills, response to the progress of learning theories, sophistication of demands, expanded interpretation of skills which are the object of ID, and enhanced accountability of ID.

### Section 1: What is e-Learning? The definition of e-Learning

Although there are a number of definitions concerning what e-Learning is, they are all different. It is interesting, because the differences in the definition of e-Learning reflect different understandings of and expectations for e-Learning. First of all, let us look at the three definitions which state that the essence of e-Learning is digitalization, is more than training, and interactivity, respectively.

### 0-1-1: The essence of e-Learning is digitalization. (Broadbent)

Broadbent, in 2002, proposed the following definition in his book "ABCs of e-Learning," arguing that the essence of e-Learning is to be digital.

The term e-Learning; i.e., electronic learning, means "training, education, coaching, or information which is delivered in a digital form," including synchronous/asynchronous, the Internet/CD-ROM/satellite/telephone, personal computers and wireless equipment such as PDA, and such forms of learning that are assisted by multimedia, CBT, and/or technologies. (Broadbent, 2002, p. 9)

Considering that digitalization has been the core technology that has supported the information revolution contributing to the accelerated pace of duplication and information sharing, the contention "e-Learning means digitalization" is quite understandable. For example, he summarizes how each type of learning has changed, from conventional learning to e-Learning, as shown in Figure 0-1 below.

(Broadbent, 20		
Туре	Examples of e-Learning	Examples of conventional learning
Informal learning*	Well-designed Web sites	Books, discussion, & coaching
Learning at one's own pace	CBT materials/WBT materials	Self-learning manuals
Leader-led learning**	Online discussion with support	Workshops and seminars
Implementation assistance tool	Software operational wizard (Online help)	Software operational notes

Figure 0-1: Four types of e-Learning compared with conventional methods of learning (Broadbent, 2002)

Note: Table 1-1 (p. 11) in Broadbent (2002)

CBT=Computer-based Training; WBT=Web-based Training

<sup>\*</sup> Informal learning: This type of learning particularly tries to take advantage of Web sites from a viewpoint of how we design day to day learning experience which falls outside the scope of planned and organized learning opportunities (i.e., formal education). Although, up to this point of time, much emphasis has been placed on how we design organized/planned learning experience, it has become more and more important to support Web-based learning accessibility 24/7 (an abbreviation for 24 hours a day, 7 days a week). In other words, whereas the nature of formal learning is "push" (i.e., we give the learner a learning opportunity to learn specific contents), the nature of informal learning can be described as "pull" (because the learner pulls out the information on his/her own initiative). Knowledge Management System (KMS) is also considered an improvement on the informal learning environment because it converts expert knowledge and experience into documents, making them accessible. Some good examples of Web sites for informal learning include Engines for Education (Institute for Learning Science, Northwestern University) by Roger Schank, and Teaching and Learning with Technology (Toronto's Seneca College, http://www.about.com) by Kimeiko Hotta. Discussion on Internet bulletin boards and FAQs can also be used for informal learning.

\*\* Although "leader-led learning" encompasses instructor-led training (ILT), it is a broader concept used for wider situations where not just instructors but other people such as coaches, mentors, and facilitators are involved. In many cases, this type of learning is carried out using e-mail, thread-type discussion boards, video conferencing, chat, etc. to supplement "learning at one's own pace." Provided that it is possible to secure one or more instructors per 20 learners, this type of learning can be prepared in a short time to teach such skills that require face-to-face communication with those learners who have difficulty in learning by themselves. (Although other types of learning do not require instructors that are suitable for a situation where knowledge and skills are taught to many learners, the time required for development is long and the learners have to study by themselves)

### **0-1-2:** The essence of e-Learning is more than training (Rosenberg)

Rosenberg (2002) proposes a limited definition of e-Learning in his book "E-Learning: Strategies for delivering knowledge in the digital age." He defines, "e-Learning is the offering of a variety of solutions for the purpose of enhancing knowledge and performance using Internet technology" (p. 25). In addition, he argues that, to distinguish itself from other, similar concepts, e-Learning requires the following three fundamental conditions (Figure 0-2).

Condition	Interpretation
<ol> <li>The content of education and information can be instantly updated, stored, searched, distributed, ar shared, because e-Learning utilizes a network. Th function is so important that it is becoming an "absolute must" for e-Learning.</li> </ol>	In other words, he takes the stand that instruction delivered by CD-ROM does not constitute a form of e-Learning.
<ol> <li>E-Learning is delivered to the end user via computers using standard Internet technologies.</li> </ol>	In other words, he takes the stand that, whereas an in-house TV broadcast is not e-Learning, the use of Web-TV (a product where personal computers and television are fused together) and mobile phones/mobile terminal devices is e-Learning.
3. E-Learning, as it has much broader perception of learning, is to offer solutions which go beyond the limits of the conventional view that puts a lot of emphasis on training.	In other words, he takes the stand that mere WBT cannot be called e-Learning, because it is just networked CBT.

Figure 0-2: Three conditions of e-Learning as purported by Rosenberg (2002)

Note: The table above is summary of Rosenberg (2002, p. 26)

The definition of Rosenberg (2002) is a definition in which he presents his own ideal view of e-Learning, contending that e-Learning should be like this or like that (Note: this type of definition is called "prescriptive definition": Numano, 1986, p. 35), and as such, is worth listening to because it suggests the future direction of e-Learning. In other words, I agree with his warning, "You just replaced the name. However, the content and the usage are still the same as before. What's new about in the name of e-Learning?" However, he also suggests, "On the one hand, WBT should not be called e-Learning, but on the other, if you add something to WBT, the whole thing can become e-Learning." In an extreme context, it is possible that, "The conventional WBT which cannot be called e-Learning will become something worth being called e-Learning, depending on how you use it." Therefore, in a way it is not simple to understand what he really wants to say.

Similar to the argument saying that any person, whether good or not, is still a human being, I think it would be pushing things too far to consider that e-Learning which does not agree with Rosenberg's contention, even though it might not be good e-Learning, is NOT e-Learning. It would be appropriate to think that his argument, "Mere WBT <u>cannot be called</u> e-Learning, because it is just networked CBT," actually means, "I <u>do not WANT to call</u> mere WBT e-Learning because it is just networked CBT" Rosenberg proposes a framework "training" and "information (KMS)" as two pillars of e-Learning components. Through this framework, he challenges our conventional way of thinking which does not go beyond the idea of training. You should see that his argument is consistent. It would be appropriate to think that his definition of e-Learning strongly reflects his thoughts as a pioneer who has been a leading figure in the research of e-Learning in the US.

### **0-1-3:** The essence of e-Learning is interactivity. (ALIC)

In contrast to the definition of Rosenberg, the definition provided by the Advanced Learning Infrastructure Consortium (ALIC) in 2002 tries (or seems to try) to encourage everybody's effort by being all-inclusive. According to ALIC, e-Learning is defined as follows:

E-Learning is proactive learning which uses such applications of information technology as communication networks. Therefore, it is necessary that the contents are prepared in accordance with the learning objectives and there is interaction between the learner and the provider of the contents. The interaction indicated above means that the learner is offered an opportunity to participate in the learning and given appropriate instructions in the process of learning by human or computer at an appropriate time. (ALIC, 2002, p. 23)

According to the definition by ALIC (2002), only such learning that has a high level of interactivity is considered e-Learning. ALIC argues that such one-way media as correspondence education, satellite broadcasting, and electronic books are not included in e-Learning. Meanwhile, although it maintains that the degree of freedom in terms of learning time is an important factor in defining e-Learning, it states that e-Learning includes everything, starting from WBT, which has a high degree of freedom, to the classroom setting (using IT), which has a low degree of freedom. In addition, as being far away is not a required factor either, e-Learning is defined as "application of information technology such as a communication network" (Note: Here other forms of application are implied by "such as"). ALIC considers e-Learning to be a broad spectrum of learning experiences which includes not just corporate training and higher education, but application to primary and secondary education as well. For the framework to categorize e-Learning in primary and secondary education, ALIC proposes to define it at two dimensional levels, self-learning versus collaborative learning, and group learning versus distributed learning. (ALIC, 2002, p. 64-65)

### 0-1-4: What is e-Learning? Katori's framework and the definition in this book

Katori (2001) proposes a framework which is to clarify what you are discussing by distinguishing between broadly-defined e-Learning and narrowly-defined e-Learning. Figure 0-3 below shows Katori's conceptual diagram. Including a wide variety of educational experiences such as distance education, technology-based training (TBT), e-Learning as group education, KMS, and performance support system (PSS), this is a well-organized

definition. Whereas the role of the conventional training sectors (or Instructional Designers) has been TBT (narrowly-defined e-Learning) and group education, it is expected that the role will be expanded from the central area of the diagram towards the area on the right-hand side, forming the broadly-defined e-Learning. Katori's diagram shows us this trend well.



Source: Katori, K. (2001), "e-Learning management: Human resource strategy in the knowledge economy", ELCO, p. 26 (In Japanese)

Glossary: TBT=Technology-based Training, PBT=Paper-based Training

Figure 0-3: A variety of concepts analogous to e-Learning (by Katori, 2001)

Based on Katori, the definition of e-Learning in this text for the time being is as follows:

"E-Learning is to offer a variety of solutions for the purpose of enhancing knowledge and performance using Internet technology." E-Learning system means the whole system used for human resource development (HRD) in an organization, including Knowledge Management System (KMS), Performance Support System (PSS), online training, and face-to-face training. An e-Learning course is a training module that is offered online, and is a sub-system under the e-Learning system in which it is used."

I am aware that some part of this definition is not well formulated. For example, although the e-Learning system above includes face-to-face training, the definition as a whole limits e-Learning to that using Internet technology. Although it is strange that e-Learning includes group teaching which does not use IT, it is quite possible that group teaching which does not use any IT is integrated, as a component, into e-Learning when it is designed as a system. Please be aware that this definition does not expressively reflect this kind of dilemma (this is the reason why I used the word "for the time being").

## Column: What does "e" means in e-Learning?

In the most general definition, "e" means "electronic." Being the same "e" as in "e-commerce," "e-Japan plan," and "e-business," this "e" is commonly used in a context of how you use IT technologies to navigate through the rapidly changing world. This may be a bit too boring. So, I tried to find other usages for you. Other conceivable interpretations include "e" for "experience" in such context as "change the quality of corporate learning experience," "e" for "expanded" in such context as "greatly expand the learning opportunities to make it consistent," or "expand the opportunity for employees working all over the world" (Rosenberg, 2002, p. 35-36). Can you think of anything else?

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### Section 2: The short history of e-Learning in Japan

It is understood that, since the year 2000, which is said to be the starting point of e-Learning in Japan, e-Learning in corporate education has already experienced two generation changes (Nemoto, 2002). Figure 0-4 shows that e-Learning, which started from digitalization of existing courses (in particular, IT related), expanded into language and business software in the second generation, making it a trend to blend e-Learning with group training; and in the third generation, the goal of e-Learning has become the integration of human resource development (HRD). The current situation in 2003 is that three generations of e-Learning exist and are all mixed together. You might be able to identify the characteristics and limitations of a certain implementation of e-Learning by trying to classify or find out characteristics of the generation(s) represented in that particular implementation.

"Report on the study of promotion of the use of distance learning system" was published in 2001 (KAIT, 2001), setting the future direction of e-Learning, by reporting the results of evaluation concerning the major contents of e-Learning. In addition, the "E-Learning white paper" was published for the first time the same year (ALIC, 2001). The year 2001 was also saw ASTD introduce an e-Learning certification program in the US, a country where e-Learning developed a step earlier than Japan.

	The first generation (The year 2000 is the first year)	The second generation (2001 onward)	The third generation (The end of 2001 onward)
Purpose of introduction	Digitalization of existing courses (cost reduction)	Plus, blending approach	Integration of human resource development (HRD) using IT [e-HRD and e-HRM]
Enterprise type	System vendors IT enterprises	Plus, enterprises operating over widespread geographical areas	General enterprises
Main content	IT related	Plus, software-related [languages, management, etc.]	Plus, enterprise portal [EIP]
Target of training	IT engineers and new employees	Plus, sales people, prospective employees, and managers	All employees and affiliated companies
Learning mode	Offering knowledge; exercise	Plus, collaborative learning (emphasis on synchronous type)	Knowledge management & competence management [career development]

Figure 0-4: The third generations of e-Learning (Nemoto, 2002)

Source: Nemoto, T. (2002), "E-human resource development: Learning architecture building", Chuokoron, p. 35 (In Japanese)

Note: The terms enclosed by square brackets are modified quotations from the source text. IT: Information Technology, e-HRD: e-Human Resource Development, e-HRM: e-Human Resource Management and EIP: Enterprise Information Portal In university education, the Japanese governmental regulation for universities (Daigaku-secchi Kijun) was revised in March 2001 to state, "even such teaching that has neither simultaneity nor interactivity is considered distance teaching, provided that its educational outcome is considered, beyond doubt, to be as good as face-to-face teaching." Appropriate conditions had been put in place for promotion of the use of information and communication technology including satellite communication and the Internet. Following this, a Graduate School of Shinshu University began a program in which students can study all the subjects via the Internet, except for master's thesis. Since then the use of e-Learning has been promoted at universities as well as in postgraduate education.



The keynote speech for ASTD: TechKnowledge2003 held in January 2003 in Orlando, Florida was "E-Learning by doing" by Professor Roger Schank. Wearing a leather jacket, Professor Schank, the guru of cognitive science and artificial intelligence, went to the podium surrounded by the audience's air of expectation that filled up the venue. In response to the introduction saying that he is famous for his sharp tongue, he presented his pet argument saying, "It's not just me. A whole lot of people have a sharp tongue, even from hundreds years ago" while citing quotations from Dewey, Plato, Aristotle, and Edison. It was 90 minutes of continuous demonstration of hot and sharp tongue, interposing some episodes he experienced when he implemented a new type of university education at CMU-West, which he started after he was told, "Computer science at Carnegie Melon University (CMU) is the best in the world. You go to the West campus because you make too much noise."

According to Professor Schank, people who are associated with e-Learning tend to have a lot of delusions. He stressed that e-Learning never fails if you could only disbelieve the fifteen myths (meaning stories which sound true, but actually are not) given in Figure 0-5. Well, how many "myths" are there spreading around you? Among all these opinions that Professor Schank declares "myths," isn't there anything you want to disagree with?

"Myths" you should NOT believe	Explanation
<ol> <li>Good corporate training simulates what is being done in schools</li> </ol>	You should not think that Harvard or Yale is the model for all education.
<ol> <li>The role of the school (and e-Learning as well) is to prepare you for work</li> </ol>	The role of the university is to prepare you for getting a good job; i.e. e-Learning does not necessarily let you do a better job.
3. People can learn by just listening to what the teacher says.	It is wrong to assume that the more you are made to listen to something, the more you learn, or the faster the teacher speaks, the more the students absorb. Thus, it is wrong to assume that lecture should also be used in e-Learning. It would be good if you could learn by just listening to what the teacher says, but in reality it's not that simple.
4. You can learn even if there is no goal.	Can you really learn just because you are told to learn? You must check to see if e-Learning is linked to the needs of the learners.

Figure 0-5: Fifteen myths surrounding e-Learning (by Schank, 2003)

"Myths" you should NOT believe	Explanation
5. All usable knowledge can be expressively written down.	Even if you cannot answer the question, "How much pressure do you have to put on the brake pedal to stop a car running at 60 KM per hour?", you can still stop the car, can't you? You should distinguish implicit knowledge from explicit knowledge.
6. E-Learning is a means to reduce educational costs.	You might think "By going online, we can afford such education that we have not been able to put into practice. This should make our CEO very happy." However, a lot of initial investment is required (for this reason, many attempts have failed). Nevertheless, e-Learning would still be an inexpensive option if you could take advantage of human resources and computers, looking at the benefits to be gained from operating costs and going for a large-scale operation or the possibility of using it over a long period of time.
<ol> <li>You have to spend a lot of money on LMS to ensure the success of e-Learning.</li> </ol>	Although everybody thinks that Learning Management System (LMS) is mandatory as a means of making all courses reusable is widespread, LMS might not be necessary in some cases, depending on the number of courses and the number of learners.
<ol> <li>Among other types of e-Learning, blended learning is the best.</li> </ol>	At the background of this argument lies the attitude not to throw anything away but to keep everything that has been used in the past. This is a solution in which you retain instructors and classrooms. Doesn't this only mean that e-Learning has yet to reach a stage where instructors and classrooms become redundant?
9. School is school. That never changes.	Although it has certainly been like that in the past, the situation is changing now. For example, CMU-West (Carnegie Melon University West Campus) is a new type of campus where there is no distinction between e-Learning students and students who study face to face. Every one of the subjects tells a "story." Students have a role to play in that "story." Students work together in a team. The mode of learning is project-driven. When necessary, students receive advice from experts.
10. The curriculum is the sort of thing which is handed down from Heaven (i.e. has always been the same and cannot be changed)	The questions you should start with include "What sorts of training do the employees need?" "What should be done after the training?" "What are the frequently made mistakes?" and "Where can you find experts?" Curriculum keeps changing.
11. Training and school education are different.	They are almost the same. The only difference is that training is done very ineffectively in school education.
12. It is possible to learn something in an hour.	People think "It's not too expensive to develop a short course. Let's do it" However, you cannot do that because people need time to practice.
13. High quality courseware is always expensive.	Expensive does not necessarily mean good quality. On the contrary, there are good quality products that are inexpensive.
14. You cannot develop e-Learning yourself.	You should develop the curriculum yourself. Rather than depending on tools, you should access and design it yourself.
15. Instructors are not needed for e-Learning.	Apart from learning through your own experience, you learn a lot of things from "conversation." There are humans at the other end of email or chat, aren't there?

Note: This is a summary table prepared by the author based on the keynote address for ASTD: TechKnowledge2003 titled "E-Learning by doing" by Roger Schank. Since the content of the table depends on my hearing ability, I am afraid that it might not be very precise.

### Section 3: E-Learning and Instructional Design

Instructional Design (ID) is a collection of techniques and methods regarding systems approach to enhance the effectiveness, efficacy, and attractiveness of the training to ensure that the training satisfies the requirements of the trainees as well as the organization to which the trainees belong. ID confirms the purpose of the training to clarify what should be achieved, so as for the training to be called "effective training." ID chooses the most effective and attractive training method, considering (1) profiles of the trainees, (2) given training environment, and (3) given resources, then implements it and evaluates it. ID analyzes the effect of the training, including the behavioral changes which take place after the trainee goes back to his/her workplace, to help improve the training method. The know-how concerning how to effectively implement such series of ID processes has been accumulated as ID techniques.

Katori (2001), in his book "E-Learning management: Human resource strategy for knowledge economy," explains the background why expectation for e-Learning is increasing. He analyzes the change in business environment by four keywords, (1) knowledge economy, (2) globalization, (3) IT revolution, and (4) speedy management. According to him, people's attitudes towards human resource development (HRD) have also changed. He observes such trends as "from training to learning" and "from just-in-case to just-in-time." He suggests to see e-Learning from such perspective that companies offer learning environments in response to the demand of employees who look for opportunities to educate themselves, rather than the idea that it is companies that offer training. Then, e-Learning can truly be characterized by five fundamental principles of learning; i.e., voluntary, continuous, interactive, applicable to reality, and choice/compilation by the learner.

When people see that the success or failure of e-Learning is directly linked to the success or failure of business, expectation for ID increases. The following are some of the claims that the flag carrier of e-Learning is the instructional designers (sometimes abbreviated as IDers in this text) who play a crucial role in determining the quality of the content.

"For you to seriously promote e-Learning, the role of instructional designers; i.e., people who have learned the basic knowledge and techniques of ID, is crucial, regardless of whether you are taking advantage of commercially available contents, making your own contents by outsourcing, or developing them on your own. It would be one of the important tasks for the people in charge of e-Learning to participate in an ID training course to enhance their knowledge of ID, as some general ID training courses are also being offered, although not very often." (Nemoto, 2002, p. 56)

"In relation to the process of material development, a method called 'Instructional Systems Design' has so far been developed and put into wide use. Although the number of ISD specialists unfortunately has been extremely low in Japan up until now, you can almost certainly find them designing lessons and materials in the training sections of American firms or those companies that develop teaching materials. (Snip) Although ISD methodologies still remain important for general WBT material development, in the case of those WBT materials that utilize the Internet, when you want to use them you should add those elements that are specific to the Web to what has been traditionally dealt with by ISD at the time of conventional CBT."(Katori, 2001, pp. 99-100)

Recently, ID has been the focus of attention as a means of enhancing the effectiveness of e-Learning. However, its history is much longer than that of e-Learning, as it was developed into a system keeping in tempo with the emergence of programmed learning and teaching machine in the 1960s. Although on the one hand people are saying that ID has already lost its effectiveness in the context of e-Learning, ID itself is also trying to change to remain effective, keeping pace with the changes of the times.

Based on the survey conducted by the American Society for Training and Development, Rothwell & Kazanas (1998) summarized the social changes (macro changes) surrounding ID as shown in Figure 0-6. They point out that the broad social changes such as technological innovation, rapidity of change, cost control, knowledge society/economy, speed of market change, globalization, and diversification have huge impact on the implementation of ID. In addition, they listed eight trends that are the changes ID itself is expected to make, as shown in Figure 0-7. Although ID started as know-how to design and implement training programs, it has expanded into a methodology to design not just training programs but other means of achievement as well, in terms of means to achieve the goals of human resource development (HRD) derived from the business strategy looking at how to liaison the training programs with the business strategy (Note: Sometimes the expanded part is distinguished from ID and called Performance Technology.). ID also analyzes peripheral factors (such as support by one's superior, corporate culture, and reward program) as a design object (or an affecter) to make the training program successful, growing into a tool aspiring to become capable of HRD total design which also looks at options other than e-Learning.

Social changes	Impact on ID
Technological innovation	There is a "productivity paradox," which means that a new technology does not necessarily mean quality improvement or customer satisfaction. IDers need to know, inside and out, how to use the new technology.
Rapidity of change	In a situation where the only thing that does not change is change, IDers are required to look for a place for work even outside ID.
Cost control	In this cost conscious world epitomized by down-sizing, IDers are, for the sake of securing one's own employment as well, required to produce a result commensurate with the costs.
Knowledge society/economy	In an environment where education/experience, corporate memory, and "learning organization" are considered important, IDers must meet the expectations for human resources development (HRD).
Speed of market change	Products which are "quicker, better, and cheaper" are required. ID is also required to respond to the consumer demand which tends to keep changing in a short span of time.
Globalization and diversification	ID is required to respond to internationalization and multicultural environment. Therefore, IDers also need to have a high level of ability to deal with the diversification.

Figure 0-6: Social changes surrounding ID (macro changes) (Rothwell & Kazanas, 1998)

Note: This table is extracted from Chapter 1 of Rothwell & Kazanas (1998).

Figure 0-7: C	hanges required	of ID itself	(micro	changes)
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Required changes	Changes of ID responding to the requirement	
Requirement for speed	Offer training just-in-time, balance between certainty and speed, and design while implementing (rapid prototyping)	
Focus on ability	How to evaluate ability in the workplace rather than ability in the classroom, contribution to the establishment of "learning organization," and design learning embedded in the workplace	
Development of learning-related theories	Diversification of methods to support learning and establishment of ID methodology based on the cognitive/constructivist approach	
Sophistication of ID requirement	Keeping up with the change of expectation, revision and expansion of competency standards for IDers is required from material development to improvement/facilitation/realization (achievement) of job performance	
Expanded interpretation of performance of IDers	Evaluation/learning environment building methodology in response to the change from nurturing mere knowledge/skills/attitude to nurturing competency (highly developed ability to execute)	
Reexamination of accountability	Reporting methods, etc. in response to the situation where the ID process is no longer the sole responsibility of the IDs, but is the responsibility of management and/or learners as well	
Recognition of ID specialists	Response to the situation where instructional designers grow out of the old image where people see them as doers of routine tasks, being recognized as specialists of high standards who can handle contingency situations	
Enhanced accountability of ID	Re-learning in response to the requirement for cost effectiveness forecast or additional cost management work	

### (By Rothwell & Kazanas, 1998)

Note: This table is extracted from Chapter 1 of Rothwell & Kazanas (1998).

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The term ID, the same as e-Learning, is a word which is used in multiple senses. Whereas in some cases the term is used in relation to system or organization, in other cases it is used in relation to design of material for one hour of training. Further, whereas in some cases the focus of attention is placed on the processes, in other cases people are discussing the blueprint of the product which has been drawn. Apart for the term ID, people use Instructional System Design (ISD) and sometimes, the same ISD could mean Instructional System Development. In addition, sometimes the term Educational Technology (Instructional Technology, these days) is used in the same context as ID, or there are cases where Performance Technology rather than ID is preferred, because in this way it is indicated that the term includes methodologies for other activities, not just for instruction. Moreover, the term used for the specialists who carry out ID varies widely depending on the situation.

In this text, considering the wide range of meanings that the term ID could indicate, for the time being, I would like to use the term ID in the sense that includes all these concepts. However, for the purpose of clarifying what is being talked about in each chapter, the term ID shall be used in such forms as "system level ID," "ID process model," or "ID model" as I added a few extra terms to the term ID. What these terms mean will be explained in the following chapters.

Figure 0-8 is a checklist to determine whether there is a need to have ID. You can think of ID as being the know-how to achieve each one of the items on this checklist.

### ■■■ eLF textbook (Prologue – e-Learning viewed by an educational technologist)

Figure 0-8: Checklist to decide whether you need ID (Piskurich, 2000, p.11)

Instruction: Answer the following items indicating either "Yes," "No," or "Don't know."

- $\Box$  When the trainees come to the course, I know who they are and their needs.
- $\Box$  I know very well the required contents of the course.
- $\Box$  The trainees of my course always understand what they have to learn in the course.
- $\hfill\square$  The material I prepare always match the content of the course and the needs of the trainees.
- $\Box$  The training method I use is always the most effective one.
- $\Box$  I know whether the trainees have learned what they are supposed to learn.
- $\Box$  I know whether the result of the training is utilized in the workplace.
- $\Box$  I always implement a training method which is the most cost effective.
- $\Box$  The course I implement is always the best method for both myself and the trainees in terms of time saving.
- $\Box$  The course I implement matches the needs of the workplace.
- Note: If you cannot answer "Yes" to any of the questions above, there is room for you to utilize some ID know-how. If your answers include many "No's" or "Don't know's", you need to go through all the ID processes from the beginning to the end.

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### ■■■ eLF textbook (Prologue – e-Learning viewed by an educational technologist)

End of chapter report	
assignment	
(Prologue)	

For further understanding of this chapter, please think about <u>one or more</u> of the following assignments:

- 1. Summarize your questions, comments, opinions, and impressions you had after reading through this chapter (Prologue). In addition, if you have any experience, additional information, or have done any research (do not forget to name the source) in relation to what is written in this chapter, you are encouraged to include them in your report so that you can extend your understanding even further.
- 2. With regard to the "Column: Fifteen myths surrounding e-Learning (by Schank)" introduced in this chapter, analyze to what extent people associated with e-Learning around you "believe in" these myths. In addition, it would be helpful for you to write down your personal reactions (such as questions and opinions), not necessarily limited to e-Learning, to Schank's view and think about the reason you react in such a manner.