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Learning and Development Arena Training

Topic LD-1-2

Introduction to Learning and Development

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Version: 1-1

Date: 2014-03-04



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1 Introduction

1.1 Summary

This training document details some of the primary and identifying features of the area of Learning and Development in industry and how BE is applied to operations of that area.

1.2 Key Project Variables

Status Summary: Training

Project Manager: PL

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1.4 Acronyms and Abbreviations

1.4.1 All n One

BE	Business Express
BER	Business Express Release
SER	Service Enhancement Release

1.4.2 Training Document

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1.5 Key Stakeholders

1.5.1 All n One

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1.6 Version History

Version	1-1
Date	2014-03-04
Author	Philip Lacey
Modifications	Body added

Version	1-0
Date	2014-03-03
Author	Philip Lacey
Modifications	Initial draft

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1.7 Learning Objectives

At the conclusion of this activity, participants should be able to:

- Describe the key terms in the area of Learning and Development
- Describe the objectives and application of the laws of talent development
- Describe the training cycle in terms of educate, examine and evaluate
- Describe what eLearning is and how it applies to learning
- Describe the elements of eLearning
- Understand the principles of Instructional Design
- Describe the primary phases of ADDIE
- Know of the certification and standards of learning
- Describe the primary challenges of eLearning
- Operate Business Express to navigate eLearning delivery tools

NOTE: Business Express has developed its own lexicon and we use it throughout this document, and we therefore include a section (2.3) to aid your understanding. There are also exercises and multiple choice support tests where appropriate.

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2 Theory

2.1 Recommended prerequisite training

CC-1-1 Introduction to Business Express



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2.2 Standard training approach

This document is broken into four sections:

- Section 1 provides some document management
- Section 2 provides theory on the training area including a Lexicon
- Section 3 provides scenarios and worked examples to highlight what is to be accomplished
- Section 4 provides instructional procedures associated with the scenarios

This training is appropriate to the level stated at the start of the document and it forms part of the All n One Learning Departments curriculum for BE. This curriculum is available in the document *BE Learning Department vX-x* where X is the major version and x is the minor revision.

In this document a procedure is identified as [Procedure X] where X is the number of that procedure. The procedures can be found in Section 4 of the document or in the indicated document.

2.3 Lexicon

2.3.1 Previously explained terms

From CC-1-1 Introduction to Business Express

All n One is the name of the company that developed and delivers Business Express.

The **Internet** is a global network connecting millions of computers.

An **Internet Browser** is a computer program that allows the user to view documents from the Internet.

Cloud Computing is a large collection of computers connected together. Since it is not practical to draw all these connections a cloud image is used to represent them.

Software as a Service (SaaS) is a cloud based service that is rented, not purchased like traditional software.

Business Express (BE) is the flagship product of All n One and is a pure SaaS solution.

BE Client. An organisation that has purchased an instance of BE.

User. An individual who uses BE.

Module. A set of related functionality grouped together for convenience. BE has a number of modules available to BE clients, some of which are mandatory. For example, System Access Management which contains all the system security functions.

Section. A subsection within a module where the grouping of functionality is further grouped, for convenience.



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Function. An individual function within a section or module

System Champion. A person within the BE Client organisation who has primary responsibility for the management of BE and its content. Users within the BE client requiring will be directed to the System Champion.

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2.3.2 What is Learning and Development

Wikipedia define Learning and Development as:

http://en.wikipedia.org/wiki/Learning_and_development

Human Resource Management (HRM) training and development is the field which is concerned with organizational activity aimed at *bettering the performance* of individuals and groups in organizational settings. It has been known by several names, including "**human resource development**", and "**learning and development**".

Harrison observes that the name was endlessly debated by the Chartered Institute of Personnel and Development during its review of professional standards in 1999/2000. "Employee Development" was seen as too evocative of the master-slave relationship between employer and employee for those who refer to their employees as "partners" or "associates" to feel comfortable with. "Human Resource Development" was rejected by academics, who objected to the idea that people were "resources" - an idea that they felt to be demeaning to the individual. Eventually, the CIPD settled upon "Learning and Development", although that was itself not free from problems, "learning" being an over-general and ambiguous name. Moreover, the field is still widely known by the other names.

Training and development (T&D) encompasses three main activities: **training, education, and development**. Garavan, Costine, and Heraty, of the International Institute of Market Research and Analytics, note that these ideas are often considered to be synonymous. However, to practitioners, they encompass three separate, although interrelated, activities:



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Training: This activity is both focused upon, and evaluated against, the job that an individual currently holds.

Education: This activity focuses upon the jobs that an individual may potentially hold in the future, and is evaluated against those jobs.

Development: This activity focuses upon the activities that the organization employing the individual, or that the individual is part of, may partake in the future, and is almost impossible to evaluate.

The "stakeholders" in training and development are categorized into several classes.

- The **sponsors** of training and development are senior managers.
- The **clients** of training and development are business planners.
- **Line managers** are responsible for coaching, resources, and performance.
- The **participants** are those who actually undergo the processes.
- The **facilitators** are Human Resource Management staff.
- The **providers** are specialists in the field.

Each of these groups has its own agenda and motivations, which sometimes conflict with the agendas and motivations of the others.

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2.3.3 What is Talent development

"Show me the army with better trained soldiers and I will show you the victor of the battle."

Sun Tzu

Talent development, part of human resource development, is the process of changing an organization, its employees, its stakeholders, and groups of people within it, using planned and unplanned learning, in order to achieve and maintain a **competitive advantage** for the organization. Rothwell notes that the name may well be a term in search of a meaning, like so much in management, and suggests that it be thought of as selective attention paid to the top 10% of employees, either by potential or performance.

While talent development is often reserved for the top management it is becoming increasingly clear that career development is necessary for the retention of any employee, no matter what their level in the company. Research has shown that some type of **career path** is necessary for **job satisfaction** and hence **job retention**.

The term talent development is becoming increasingly popular in several organizations, as companies are now moving from the traditional term training and development. Talent development encompasses a variety of components such as training, **career development**, **career management**, and **organizational development**, and training and development. It is expected that during the 21st century more companies will begin to use more integrated terms such as talent development.



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Washington Group International, in their paper "The Nuclear Renaissance, A Life Cycle Perspective" defined two logical laws of talent development:

First law of talent development: *"The beginnings of any technology-rich business are all characterized by a shortage of large numbers of technically trained people needed to support ultimate growth"*

Second law of talent development: *"The resources will come when the business becomes attractive to the best-and brightest who adapt skills to become part of an exciting opportunity"*

Talent development refers to an organization's ability to align strategic training and career opportunities for employees.

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2.3.4 Career Path

A career is defined by dictionary.com as "a person's progress or general course of action through life or through a phase of life, as in some profession or undertaking." A career path is a map outlining how that progression can be implemented. The path will contain stages or checkpoints to be achieved in order to progress. Job roles / Titles / Positions can also denote stages on a career path.

The MBA Skool defines career path as:

<http://www.mbaskool.com/business-concepts/human-resources-hr-terms/1782-career-path.html>

Career path refers to the growth of the employee in an organization. It refers to the various positions an employee moves to as he grows in an organization. The employee may move vertically most of the time but also move laterally or cross functionally to move to a different type of job role.

*Career path is used interchangeably with **career ladder**.*

*Most successful companies chalk out a career path/career ladder for the employees in order to provide them with a realistic picture of their position in the coming years in order to retain them. Having a clear idea about future positions and job responsibilities, the employee and the company can work to identify areas where relevant training is required for the employee to build their **competencies** to fulfil future job requirements.*

2.3.5 Competencies

Each competency requires a number of supporting development programs. These programs can be **delivered internally** (by the HR / training department) or **externally** (by a college or university).

Scope is unique to every company's career path.

There is a cycle in the development of material. This is called **Instructional Systems Design (ISD)**.

Instructional Systems Design (ISD) is defined as:

http://en.wikipedia.org/wiki/Instructional_design

Instructional Design (also called Instructional Systems Design (ISD)) is the practice of creating "instructional experiences which make the acquisition of knowledge and skill more efficient, effective, and appealing." The process consists broadly of determining the current state and needs of the learner, defining the end goal of instruction, and creating some "intervention" to assist in the transition. Ideally the process is informed by pedagogically (process of teaching) and andragogically (adult learning) tested theories of learning and may take place in student-only, teacher-led or community-based settings. The outcome of this instruction may be directly observable and scientifically measured or completely hidden and assumed. There are many instructional design models but many are based on the ADDIE model with the five phases: analysis, design, development, implementation, and evaluation. As a field, instructional design is historically and traditionally rooted in cognitive and behavioural psychology, though recently Constructivism (learning theory) has influenced thinking in the field.

There is a cycle for each employee to training and development. This is called a **Training Cycle**.

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A key measurement of the success of training is to review the Return on Investment (ROI) of all aspects of training and development. ROI is defined as:

http://en.wikipedia.org/wiki/Return_on_investment

Return on investment (ROI) is the concept of an investment of some resource yielding a benefit to the investor. A high ROI means the investment gains compare favorably to investment cost. As a performance measure, ROI is used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments.



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2.3.6 Learning Objectives

Learning Objectives are vital to any educational delivery. The University Of New Mexico School Of Medicine define learning objectives as:

<http://ccoe.rbhs.rutgers.edu/forms/EffectiveUseofLearningObjectives.pdf>

"A learning objective is an outcome statement that captures specifically what knowledge, skills, attitudes learners should be able to exhibit following instruction."

A common misapplication of objectives is for the teacher/presenter to state what he/she is going to do (e.g., "My plan this morning is to talk about..."), rather than what the student is expected to be able to do (e.g., "After this session, you should be able to...").

Creating clear learning objectives during the planning process of a unit/week/individual session serves the following purposes:

- Helps unit planners integrate across a day/week/unit of learning
- Serves to connect content and assessment around learning
- Guides selection of teaching/learning activities that will best achieve objectives
- Gives learners a clear picture of what to expect and what's expected of them
- Forms the basis for evaluating teacher, learner, and curriculum effectiveness

Learning objectives should have key components which must be "**SMART**"

- Specific
- Measurable/Observable
- Attainable for target audience within scheduled time and specified conditions
- Relevant and results-oriented
- Targeted to the learner and to the desired level of learning

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2.3.7 The Training Cycle

2.3.7.1 *Overview*

The training cycle has three steps which are constantly applied to all employees.

Educate

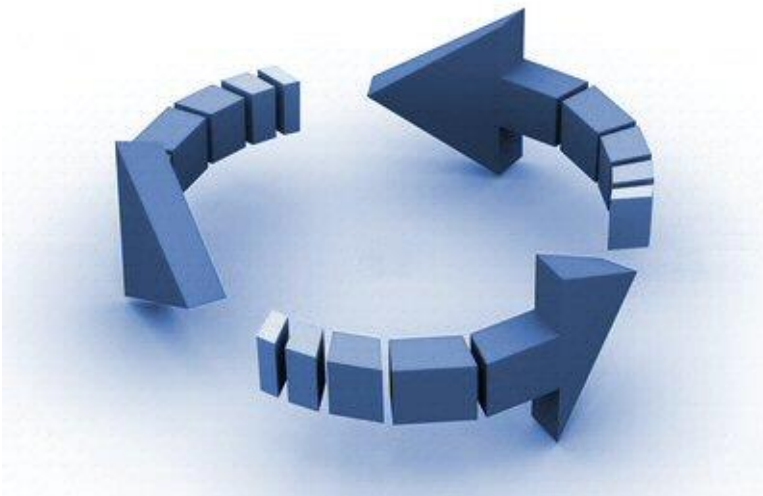
This is the delivery of the learning objectives.

Examine

This is the validation of the acquisition of knowledge.

Evaluate

This is the review of the education delivery and methods as well as the testing approach to improve delivery.



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2.3.7.2 *Educate*

Adult Learning: **Andragogy**, (Knowles, 1970)

Adults need to know why they have to learn, they want control and responsibility. Research also has shown that adults need to learn **experientially**, incorporating earlier experiences. Adults approach learning as **problem solving**, *practical rather than theoretical*. They learn best when content is needed immediately.

Delivery of knowledge is through **Stimulated**, **Asynchronous** or **Synchronous** delivery.

Stimulated Events

- **Interactive exercises**
- **Simulations**
- **Discussion**
- **Real-world context**
- **eLearning**

Synchronous Events

- **Classroom**
- **Live eLearning**
- **Real time interactions**
- **Telephone**
- **Video Conferencing**
- **Virtual Classroom (eLearning)**
- **Web conference**
- **Instant Messaging**
- **VoIP**

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Asynchronous Events

- **Book (written, used later)**
- **Email**
- **Podcasts**
- **Blogs & wikis**
- **Self-paced e-learning course, including interactivity**



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2.3.7.3

Examine

Examination or testing is key to ensure that the results of education have been successfully achieved.

Wikipedia define **testing method** as:

http://en.wikipedia.org/wiki/Test_method

A test method is a definitive procedure that produces a test result.

A test can be considered a technical operation or procedure that consists of determination of one or more characteristics of a given product, process or service according to a specified procedure.

*The test result can be **qualitative** (yes/no), **categorical**, or **quantitative** (a measured value). It can be a **personal observation** or the **output of a precision measuring instrument**.*

In software development, engineering, science, manufacturing, and business, it is vital for all interested people to understand and agree upon methods of obtaining data and making measurements. It is vital to fully document experiments and measurements and to provide needed definitions to specifications and contracts.

*Using a **standard test method**, perhaps published by a respected standards organization, is a good place to start. Sometimes it is more useful to modify an existing test method or to develop a new one. Again, documentation and full disclosure are very necessary.*

A well-written test method is important. However, even more important is choosing a method of measuring the correct property or characteristic. Not all tests and measurements are equally useful: usually a test result is used to predict or imply suitability for a certain purpose.

2.3.7.4 Evaluate

It is important to continually review and improve all aspects of training and approach. For this reason evaluation is important.

OPM define **Training and Development evaluation** as:

<http://www.opm.gov/wiki/training/Training-Evaluation.ashx>

***Training evaluation** is a continual and systematic process of assessing the value or potential value of a training program, course, activity or event. Results of the evaluation are used to guide decision-making around various components of the training (e.g. instructional design, delivery, results) and its overall continuation, modification, or elimination.*

To assist agencies in evaluating their training programs, OPM published the 2011 OPM Training Evaluation Field Guide. The Training Evaluation Field Guide is designed to assist agency training representatives (i.e., training managers and supervisors, training liaisons/coordinators, agency evaluators, instructional designers, training facilitators and others who have a significant role in training effectiveness) in evaluating training effectiveness and in demonstrating training value to stakeholders and decision makers. Data and information were gathered from fifteen federal agency representatives who volunteered their time to attend a one-day working meeting, participate in individual interviews and submit samples of their tools and case studies. This Field Guide reflects the input from the working group.

2.3.8 eLearning

2.3.8.1 *What is eLearning*

"eLearning is to training what e-business is to business."

"Everyone has learning needs, no one has e-learning needs"

Morrison, D. 2004

The definition of **eLearning** has evolved as the use and understanding of technology has evolved. In 2001, Allison Rossett defined eLearning as: "**Web-based training (WBT)**, also known as **eLearning** and **on-line learning**, is training that resides on a server or host computer that is connected to the World Wide Web." In 2003, Derek Stockley expanded on that definition with: "The delivery of a learning, training or education program by electronic means. E-learning involves the use of a computer or electronic device (e.g. a mobile phone) in some way to provide training, educational or learning material." In 2004, Victor Jeurissen, global practice leader for IBM Management Development Solutions, explained that "E-learning is the use of innovative technologies and learning models to transform the way individuals and businesses acquire new skills and access knowledge; 70% of employees' learning is learning by doing,".

Delivering material through a computer is known as **Computer Based Training (CBT)**.

Taking eLearning as a definition which "enables the use of technology to deliver learning requirements" is how eLearning is interpreted in this document.

The material in this training has been collated from a number of literary, online and college lecture based sources. Through discussion with numerous industry professionals, many synonyms have been identified for elements e.g. test, exam, review, assessment, smile sheet. Depending on how the business operates, the influence and background of their trainers and the context of environment in which the eLearning is being delivered, sets the collection of synonyms appropriate to their business. The material collated here is made with reference to Irish industry.

2.3.8.2 *Elements of Learning*

There are a number of basic components that make up the area of learning, teaching, testing and tutoring. In order to contextualise the elements, figure 2 and following provide a brief overview of eLearning.

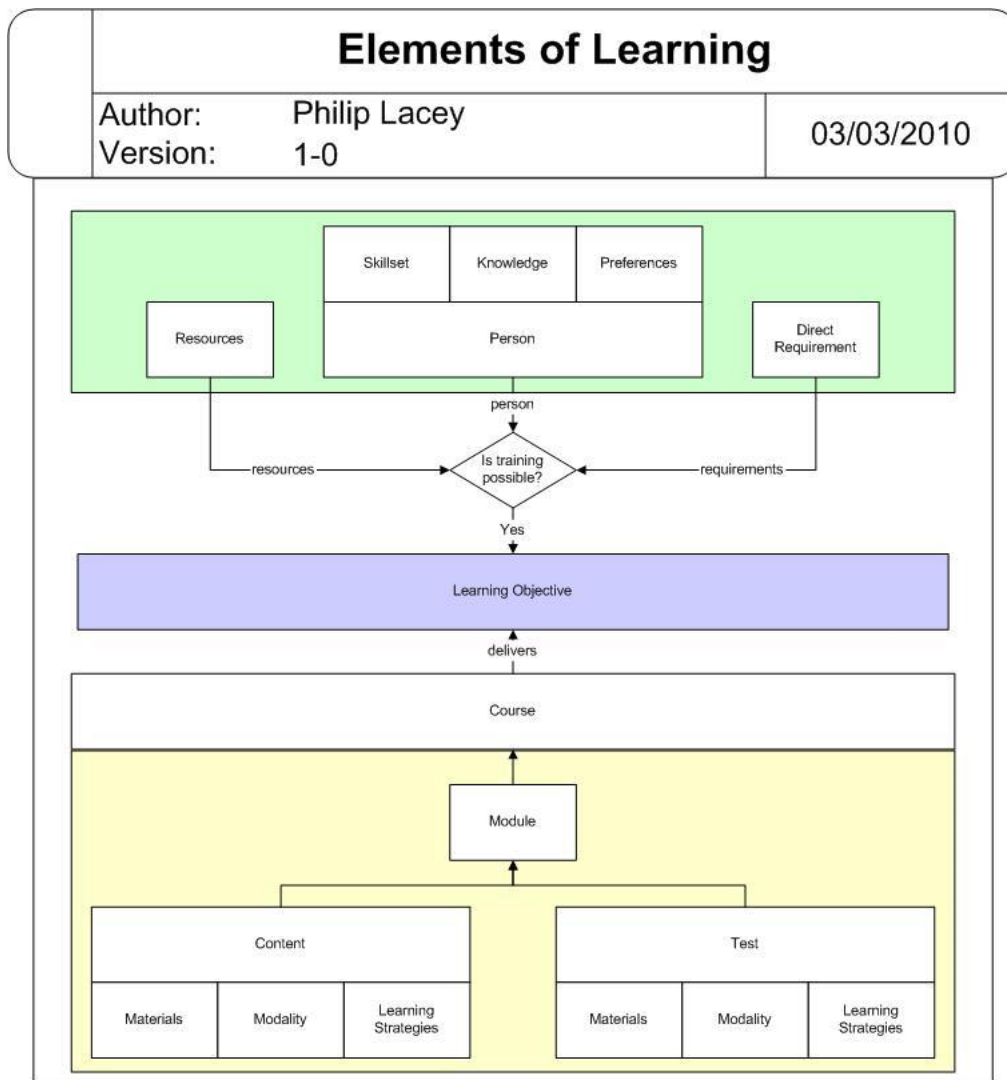


Figure 2: Author's interpretation of Elements of the Learning Process

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- Resources:** Money, time and availability to do training.
- Direct requirement:** Without a need or needs, training will not be started.
- Person:** The subject who requires the knowledge and skills

Each person comes to any training with a number of elements.

- Skill set:** Physical skills, such as guitar playing, how to use a chisel, etc.
- Knowledge:** Information, facts and figures and procedures.
- Preferences:** People have preferred learning styles (out of a book, video, audio, etc), language requirements, disabilities and also availability times.

If there are resources, a need and a student, then training can be entered into

If training is required, then there will be a specific set of goals, or Learning Objectives that need to be attained:

- Material** the primary information (fact, concept, process, procedure, strategic principle)
- Medium** is the way that this information is delivered (image, audio, text, video, interactive multimedia content, teacher led class)
- Methodology** is the psychological approach used to deliver the material, through the best option medium. This is also known as Instructional Design.

A simple example of this is learning: Basic Mathematics, Addition, $1 + 1 = 2$

Material a fact i.e. $1+1 = 2$, this is maths.

Medium written text for many students the best approach to this

Methodology a behaviouristic approach of "Drill and practice" is probably most effective

This collection is collectively called **Content**. Content is the delivery of Educate.



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A **Test** has exactly the same elements but has a different focus. Instead of teaching, this is performing the role of Examine. Due to tests being closely based linked to similar materials, a test and a course are very closely linked.

Content and tests are referred to here as a **Module**. The term module is commonly used in educational circles and does not relate to a Business Express module.

Worked example

Again using our example: We have a basic module called "Simple Addition"

This teaches how to add 1+1 (content) and then examines the student's knowledge (test)

These modules can be grouped together collectively to provide a Course.

A Course provides a single, or multiple, Learning Objectives.

Continuing our example, we have a person who wants to learn basic maths. Their job requires them to learn maths. The company is willing to afford the person time, pay for the course and flexibility to learn this information. There is a course available that teaches maths. So the person, will attend the course, with the view that at the end of it, they will be able to do simple maths.

The reason each item is broken into elements is to allow it to be examined closely and different options in each element to be explored.

2.3.8.3 *Material*

Since the earliest printed books, like the Diamond Sutra of 868 AD, the content of books has been their prized possession. Technology has evolved to the stage where, words and pictures are joined by sound, video and interactive elements.

Presentation of material is vital to engaging the reader's interest. Marketing students, alongside graphic designers spend years, learning the principles of catching people's attention and delivering messages. Smashing magazine provide free articles on how to better improve presentation and create more effective messages. In one article alone, they list fifty considerations for a designer to make content more attractive and engaging.

When developing material for eLearning, there are a number of design principles proposed and substantiated by research by Colvin Clarke & Mayer that should be considered.

The **Multimedia Principle** details that words and pictures should be used to help students engage in active learning. The Contiguity Principle states that words should be placed near images to help integrate concepts. The Redundancy Principle explains that graphics explained by audio alone works better than with text. The Coherence Principles explain that extraneous words, pictures and sounds should be removed.

The **Personalisation Principle** purports that a conversational one to one style is more effective than a neutral conversational approach. Students participate more effectively when encouraged to engage with the online instruction as a social conversational partner.

The **Segmentation Principle** clarifies that breaking instruction into smaller manageable chunks is a more effective teaching approach. Pretraining on key words and phrases allows the student prepare for complicated concepts that may follow. Leveraging examples should also be included, as Victor Jeurissen clarified "*70% of employees' learning is learning by doing*"

2.3.8.4 *Medium*

Learning is defined by Colvin, Clark and Mayer as active processing or rehearsal, prior to encoding for later retrieval. This introduces the following theory of cognitive learning by multimedia by E. Mayer as in figure 3. Learning is achieved through comprehension of material by channel.

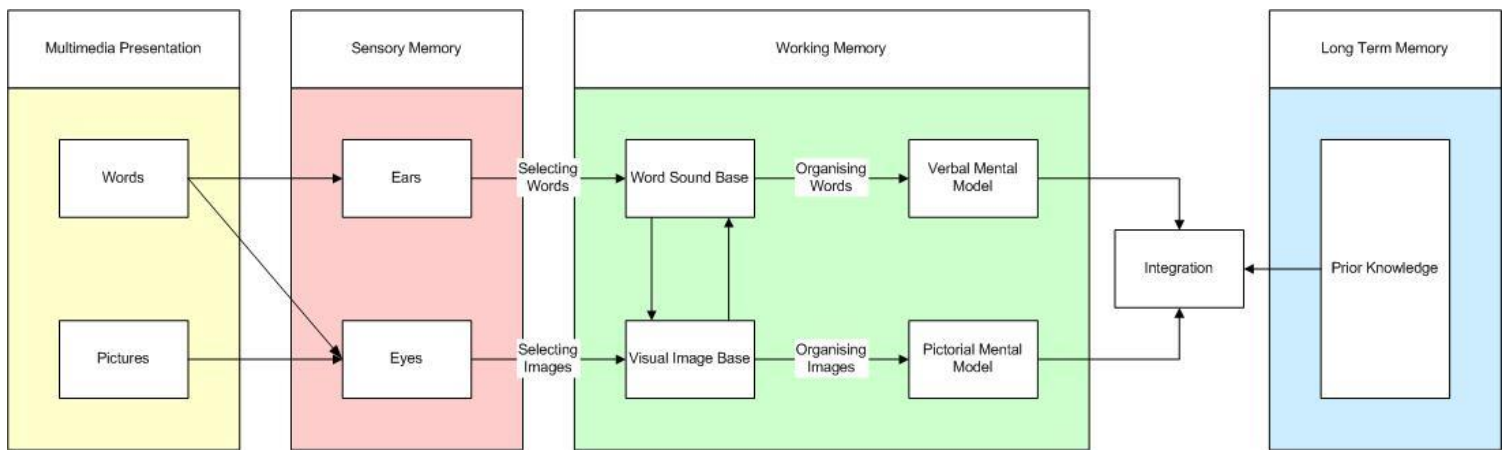


Figure 3: E. Mayer’s Multimedia Theory of Cognitive Learning

Certain material is learnt more easily through different mediums. Mathematical tables are easy to read printed on paper, in a table format. Sign language is more expressive when delivered through video with sound. Delivering either through the other’s medium is possible but may not be as effective in helping the student assimilate the knowledge.

The material, whether generic in nature or specific to a business, is attempting to convey knowledge to the student. Using different mediums can achieve more effective results. The elements of mediums can be considered as text, images, audio, live audio, interactivity, animation, video, interactive material, live video, live video interactivity, virtual reality.



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Each medium or media presents different challenges and benefits: cost, time to develop, availability of developers and appropriateness. These are the key consideration factors when selecting one or more mediums of delivery. Each of these types are called **media** and leads to the term **multimedia** which is the collection of various media types in one delivery.

Leveraging one or more of these mediums requires technical expertise. This is a challenge to most businesses as writing a quick document in word, poses less obstacles than developing video training. Video training through cost effective web cam recording, is just as feasible if the business knows how to use the technology available.



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2.3.8.5 *Methodology (Instructional Design)*

Psychologists have been reviewing how people react to different teaching approaches. **Instructional Design (ID)** can be defined as the philosophy, methodology, and approach used to deliver information. Gus Presterá’s graphic as in figure 4 provides a pictorial representation of the theoretical Instructional Design landscape

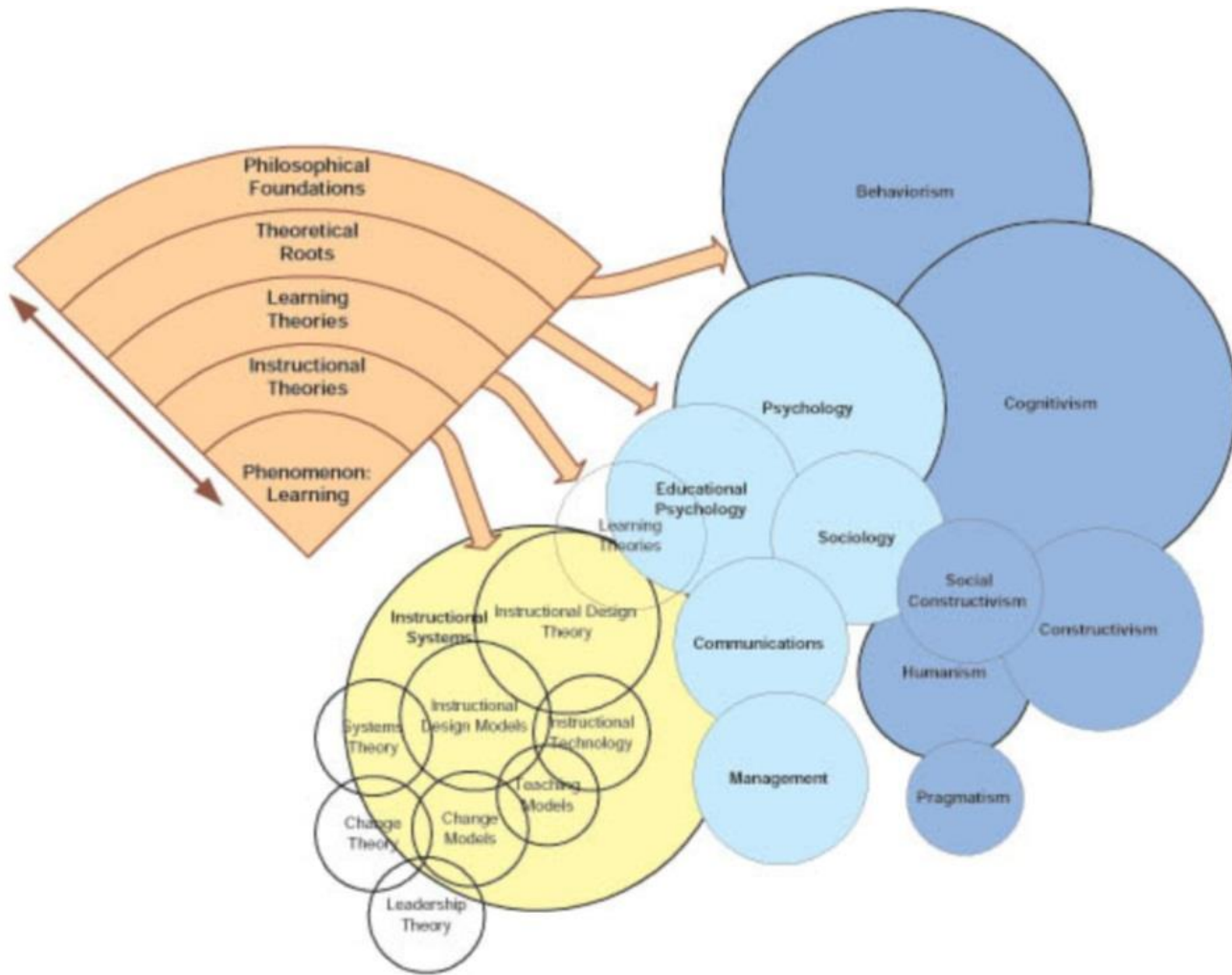


Figure 4: Gus Presterá’s graphic of the theoretical Instructional Design landscape



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Three major philosophical foundations of ID which apply to the development of eLearning material are **Behaviourism, Cognitivism** and **Constructivism**.

Behaviourism focuses on repetitive action to drill home an idea. It does not promote creative thinking. Strategies and tactics include: instructional cues, negative reinforcement, punishment and shaping.

Cognitivism focuses on the memory of the student, following lists and pattern recognition. Strategies and tactics include: chunking information, concept mapping, mnemonics, outlining, pattern recognition and summarisation.

Constructivism promotes more creative thinking by building a framework of knowledge from which the student can derive the answer. Strategies and tactics include: coaching, encourage curiosity, exploration, learning by discovery, problem solving activities, role-playing and self-directed learning.

Modern eLearning teaching suggests that Constructivism is the only proper approach to eLearning. For pure academic learning this may be true, but for business oriented training and delivery, learning is implemented to deliver the business strategy, not necessarily what is best for the individual.

For a small business ID may be too much of an overhead to be given much consideration; however where training is to be reused or used for large groups, consulting an expert could be beneficial.

2.3.8.6 *Instructional Systems Design approaches*

The ADDIE model offers trainers a structured approach to developing training. Each of the phases are supported by different tools and approaches.

Wiki defines the ADDIE model as:

<http://en.wikipedia.org/wiki/Addie>

The ADDIE model is a framework that lists generic process that instructional designers and training developers use. It represents a guideline for effective training and performance tools in five phases.

building
support

- Analysis
- Design
- Development
- Implementation
- Evaluation



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2.3.8.7 Certification of Learning

Certification requires independent review and verification of material and methodologies, in order to independently assert the validity and level of the material.

Within Ireland, providing this independent reviewing, are nationally recognised awarding bodies the **Further Education and Training Awards Council (FETAC)** and **Higher Education and Training Awards Council (HETAC)**. They have established a **National Framework of Qualifications (NFQ)** to allow awards to be graded according to the level of education they provide. The Councils determine whether bodies of material and related examinations are of a particular standard according to the NFQ culminating in the framework as seen in figure 5.

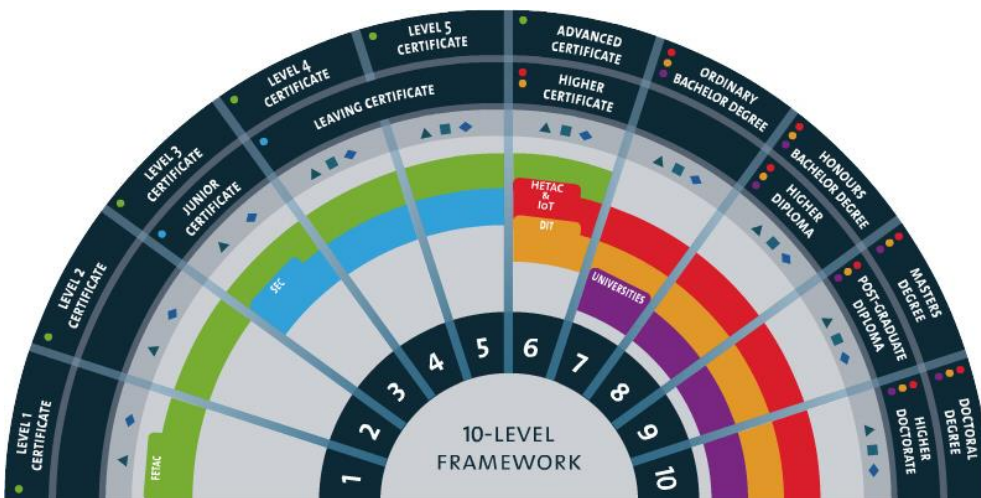


Figure 5: National Framework of Qualifications

<http://www.fetac.ie/fetac/aboutfetac/amalgamation.htm>

On 6 November 2012, FETAC completed its amalgamation with HETAC, NQAI and the IUQB and a new integrated agency, **Quality and Qualifications Ireland (QQI)**, was established. FETAC will continue to provide continuity of service as the new agency evolves.



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Large businesses, such as Microsoft and Cisco, produce such diversified products and services that they provide their own standards and qualifications systems. Students who complete a Professional certification by Microsoft can earn various awards, depending on the complexity and variety of products a student seeks certification in. The types of certification are valuable as Microsoft and Cisco have such large international recognition.

For a small business certification will be most practically provided by external bodies. This is especially relevant to Health and Safety where external certification, mitigates risk. Internal certification can be used as a mechanism for managing promotions.



2.3.8.8 *Standards in eLearning*

Developing material can be a costly and involved process. Making material reusable is desirable, especially from a cost and time perspective. Allowing content to be shared between businesses can be even more desirable again, as now modules can become monetary assets of the business. By introducing standards to the packaging of information of a module, it allows the module to be easily transferred between systems that comply with the standard.

There are a number of standards, the most popular of which is the **Sharable Content Object Reference Model (SCORM)** as developed by **Advanced Distributed Learning (ADL)** under the oversight of the American Department of Defence (DoD) in 1999.

SCORM has been adopted by the American Military, Federal Agencies, K-12 education and by educational delivery systems around the world. SCORM allows content to become separate from its delivery system. Delivery is usually performed using a **Learning Management System (LMS)**.

The latest version of SCORM is SCORM 2004 4th Edition. SCORM parameters have adopted elements from the Institute of Electrical and Electronic Engineers (IEEE) , **Aviation Industry Computer-based training Committee (AICC)** and Instructional Management System (IMS) specifications.

"The AICC exists to provide and promote information, guidelines, and standards that result in the cost-effective implementation of computer-based training (CBT) for the aviation industry. "

Anne Montgomery, AICC Technical Director 2010



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The AICC standard was first developed in 1988 by Boeing, Airbus and McDonnell-Douglas to address the cost issues associated with the changing media and format of developing multimedia training. The guidelines provide direction for development, delivery and evaluation of Computer Based Training and Web Based Training. In 2007 AICC and ADL formally announced plans that they would be collaborating.

IMS Global Learning Consortium first came into being in 1997, following on from the National Learning Infrastructure initiative of Educause of 1995. Its more recent developments have seen the creation of the "Common Cartridge" standard for content.

Standards are important to the eLearning process as they allow content, once developed to be used by numerous Learning Management Systems, which support the standard. Choosing the most popular standard for the industry being developed for, would be critical as part of the establishment of an electronic content marketplace.





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2.3.8.9 *Challenges in eLearning*

There are many challenges in the creation and delivery of eLearning as there is any form of training delivery. These challenges include:

- Technology hurdles
- eLearning creates significant change in any enterprise
- Redevelopment of materials
- Skills available
- Must learn from past failures and best practices to find what is most suitable
- Key factors in deciding what the learning delivers also needs to be refined
 - Learning should be driven by business requirements
 - Learner is at the centre of learning
- Capturing measurable statistics and deciding what is valuable return when considering ROI can be exceptionally difficult to capture and collate.
- Different approaches to the development and implementation of material is difficult to manage especially with larger teams of trainers and content developers.

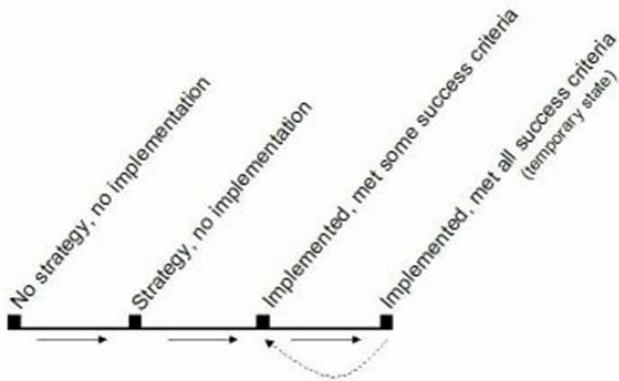
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2.3.8.10

The maturity of eLearning with your organisation



Every enterprise will find itself at one of the four points on the e-learning continuum

In Ireland, enterprises using the Internet for training is continually growing:

<http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=ICA01>

Values are percentages. Taken 2014-03-04.

Industry	2009	2010	2011	2012	2013
Real estate activities (68)	38	34	54	..	..
Manufacturing (C)	38	45	50	..	..
Construction (F)	31	42	46	..	..
Wholesale and retail trade; repair of motor vehicles and motorcycles (G)	35	40	45	..	..
Transportation and storage (H)	35	36	36	..	..
Accommodation and food service activities (I)	20	20	27	..	..
Information and communication (J)	64	82	79	..	..
Administrative and support service activities (N)	35	51	52	..	..
Food, beverages, tobacco, textiles, wearing apparel, leather, wood, printing and paper products (10 to 18)	32	41	43	..	..
Manufacturing, construction and selected services (10 to 33,41 to 63,68 to 74,77 to 82)	36	42	46	..	..
Petroleum, chemical, pharmaceutical, rubber and plastic products (19 to 22)	55	57	72	..	..
Other non-metallic mineral products, basic metals and fabricated metal products (23 to 25)	28	32	42	..	..
Computer, electronic and other equipment, repairs and installation, other manufacturing (26 to 33)	46	56	54	..	..
Selected services (45 to 63,68 to 74,77 to 82)	36	41	45
Professional, scientific and technical activities (69 to 74)	57	61	67

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2.3.8.11

Business Express for eLearning Delivery

Stimulated Events

- **Interactive exercises** Content via eCourse and LogicFlow
- **Simulations** Content via eCourse and LogicFlow
- **Discussion** Content via eCourse and Conference Centre
- **Real-world context** Training / Briefing days for BE System Champions
- **eLearning** Content via eCourse and LogicFlow

Synchronous Events

- **Classroom** Content support material via eCourse
- **Live eLearning** Content via eCourse using Webex / Adobe Connect
- **Real time interactions** Content via Conference Centre
- **Telephone** Content via eCourse using Phone APIs
- **Video Conferencing** Content via eCourse using Webex / Adobe Connect
- **Virtual Classroom (eLearning)** Content via eCourse using Webex / Adobe Connect
- **Web conference** Content via eCourse using Webex / Adobe Connect
- **Instant Messaging** Content via Conference Centre
- **VoIP** Content via eCourse using Phone APIs

Asynchronous Events

- **Book (written, used later)** Content via eCourse
- **Email** Content via Form Management
- **Podcasts** Content via eCourse
- **Blogs & wikis** Content via eCourse
- **Self-paced e-learning course, including interactivity**
Content via eCourse

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3 Scenarios

3.1 Overview

As with all of the scenarios listed below, the primary consideration is hands-on ability to use BE. All of the terms in the Lexicon that are used in this training permeate subsequent training.

NOTE: Different browsers and versions will show different layouts and options so this learning document will use a reference browser to demonstrate the How To scenarios

3.2 eCourse content delivery

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3.3 Testing Centre tests



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3.4 Conference Centre conference



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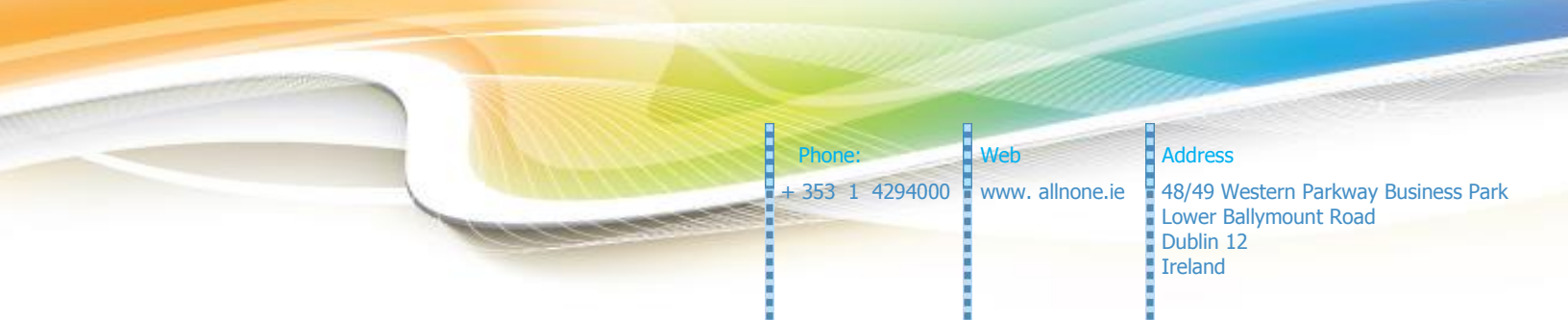
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3.5 Information Centre messages



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3.6 LogicFlow decision tree

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4 Processes & Procedures

At this level there are no associated relevant processes or procedures for the user to note.

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5 Appendices – Trainer Notes

5.1 Set up steps

5.1.1 User configuration

5.1.2 Data File Configuration

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5.2 User Profile

User profile will be as follows:

5.2.1 Functional Access:

eCourse

Read

LogicFlow

LogicFlow



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5.2.2 Content Access:

eCourse

CC-1-2 01 Customer Care Support



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