



DESIGN & PRODUCTION

ODL MATERIALS

Universidad Politécnica de Valencia

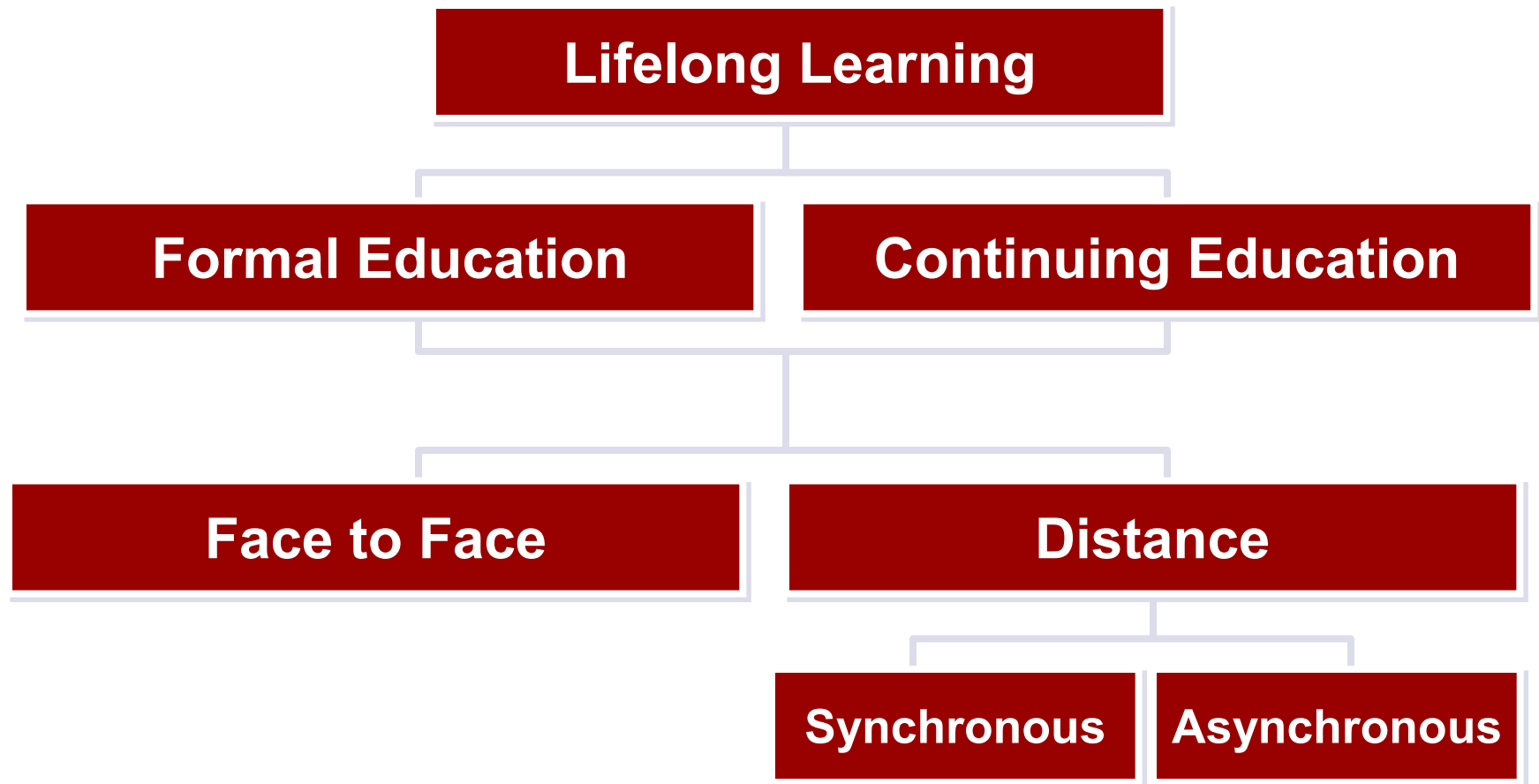
Centro de Formación de Postgrado

Jun.2006

INDEX

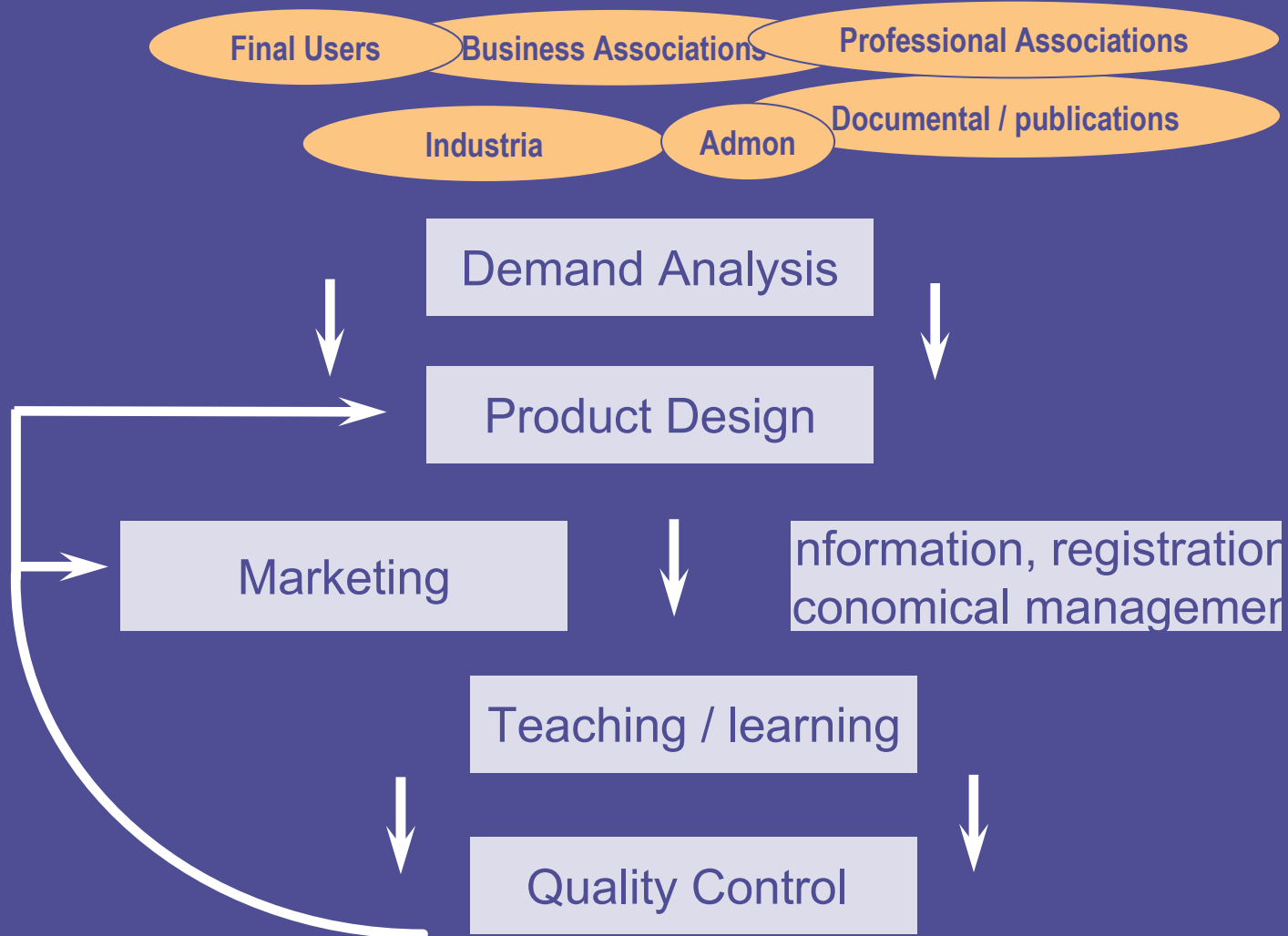
- Taxonomy of Education
- Continuing Education Customers
- Value Chain
- Learning Styles
- Learning Model
- ODL Production
- Production Process Actors
- Technical Structure
- Online Course Structure

Taxonomy of Education



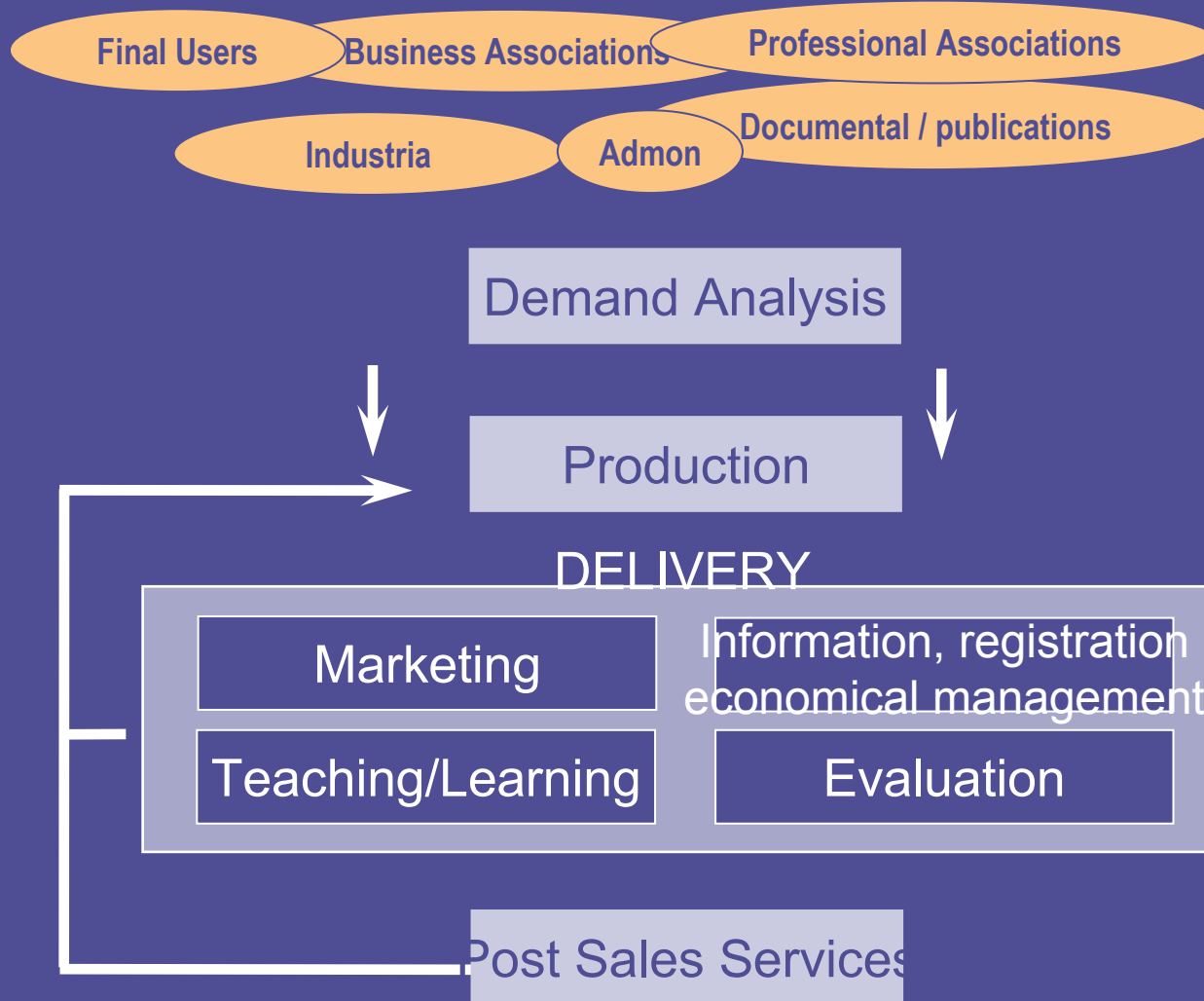
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Value chain for “face to face offer” products



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Value chain for “Open and Distance Learning” products



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? - learning

e-Learning

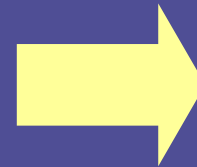
Distance-Learning (DL)

Open-Learning (OL)

Open & distance-Learning (ODL)

Online-Learning

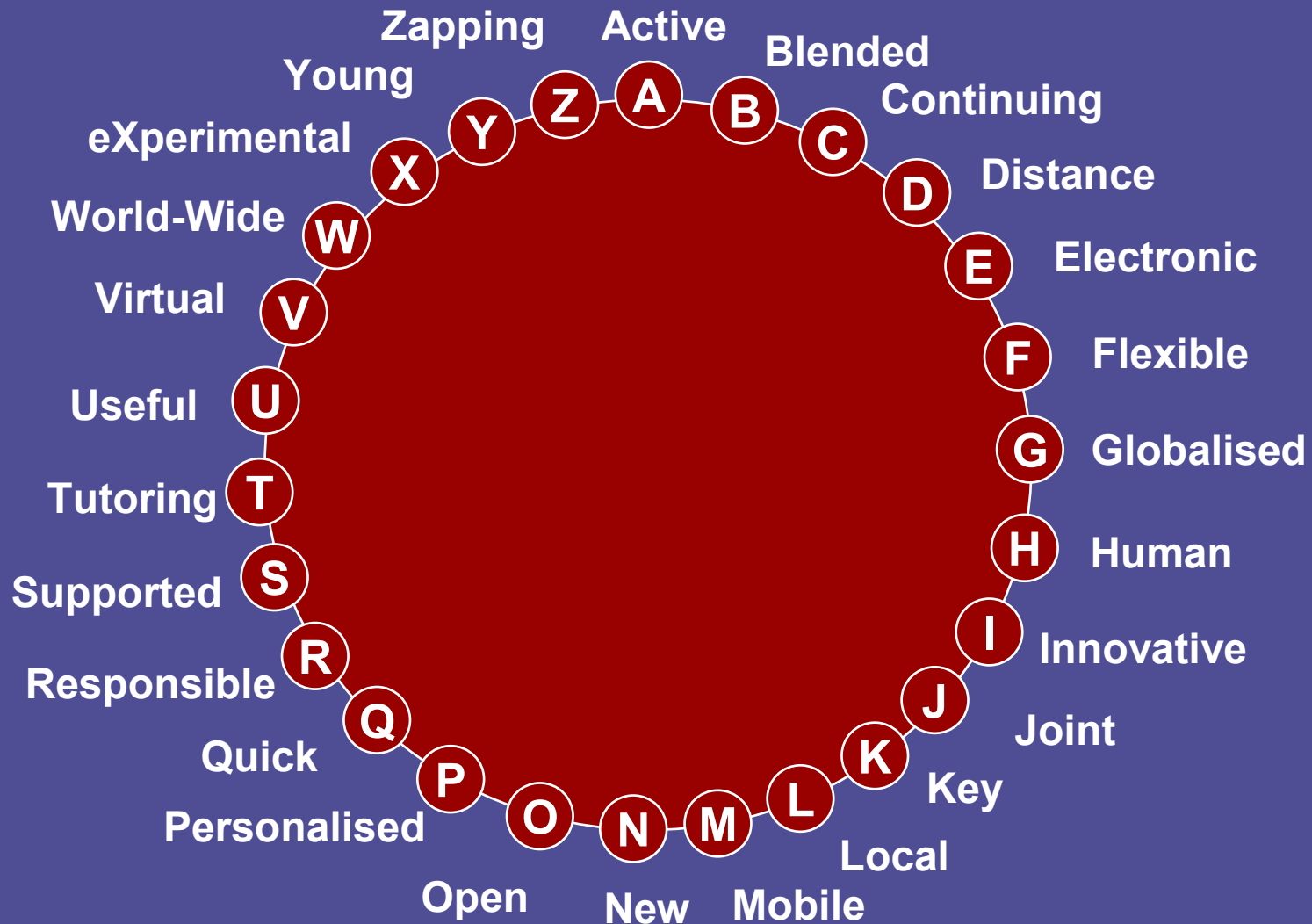
Web-based-Learning



LEARNING

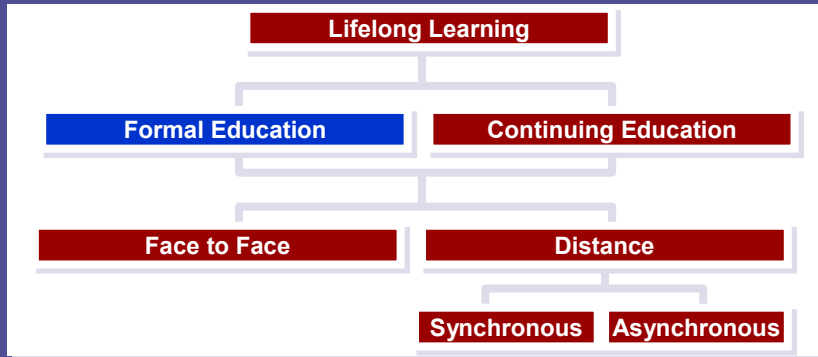
APRENDIZAJE

? - learning



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Taxonomy of Education

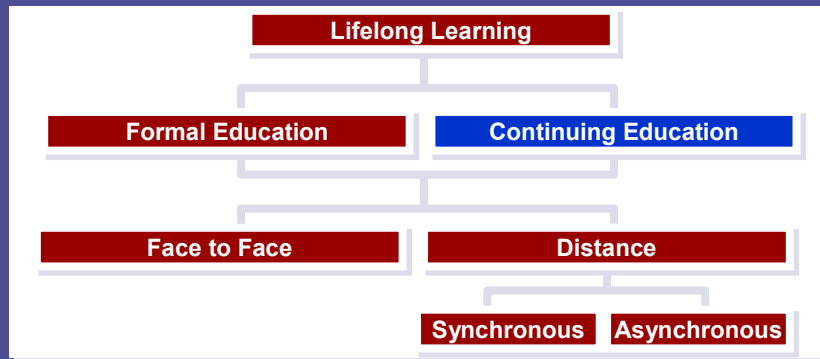


Formal Education

- Young people
- Study is the main activity
- No additional problems

...Teaching

Taxonomy of Education

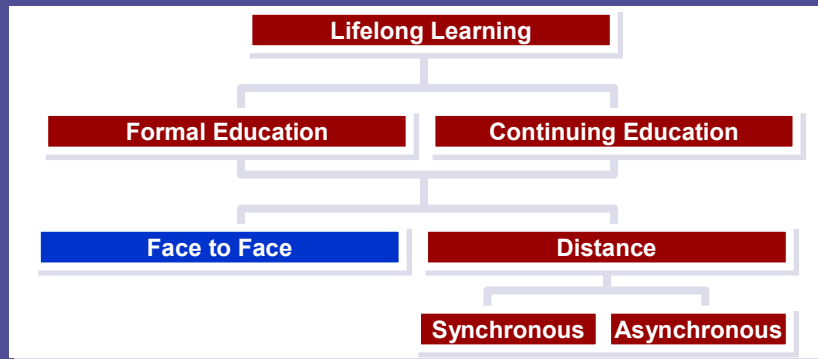


Continuing Education

- Mature people
- Learning is necessary
- Personnel responsibilities
- Professional responsibilities

...Learning

Taxonomy of Education

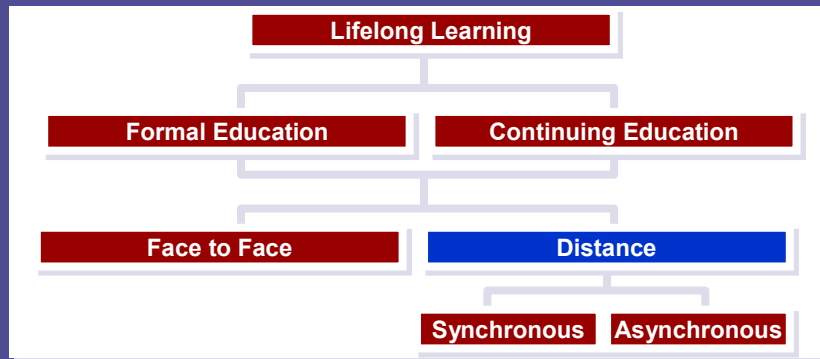


Face to Face

- Direct contact between actors
- Teacher's experience can solve eventualities
- Time restricted
- Group is directed by the teacher

...Teaching

Taxonomy of Education

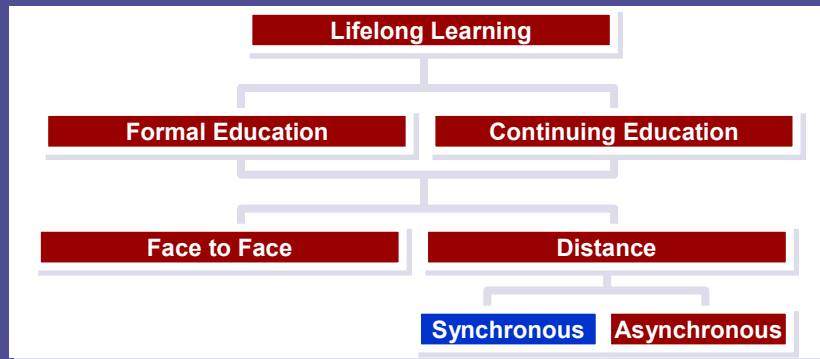


Distance

- Space flexibility
- Personnel speed to follow the course
- To create the group is not easy
- Technical difficulties

...Learning

Taxonomy of Education

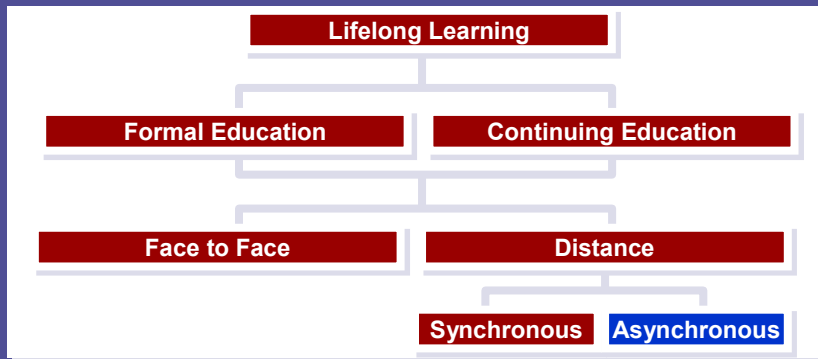


Distance: Synchronous

- Actors can contact using technologies
- Actors don't need to move
- Technology can create some difficulties
- Facilitator is a very important role

...Learning

Taxonomy of Education



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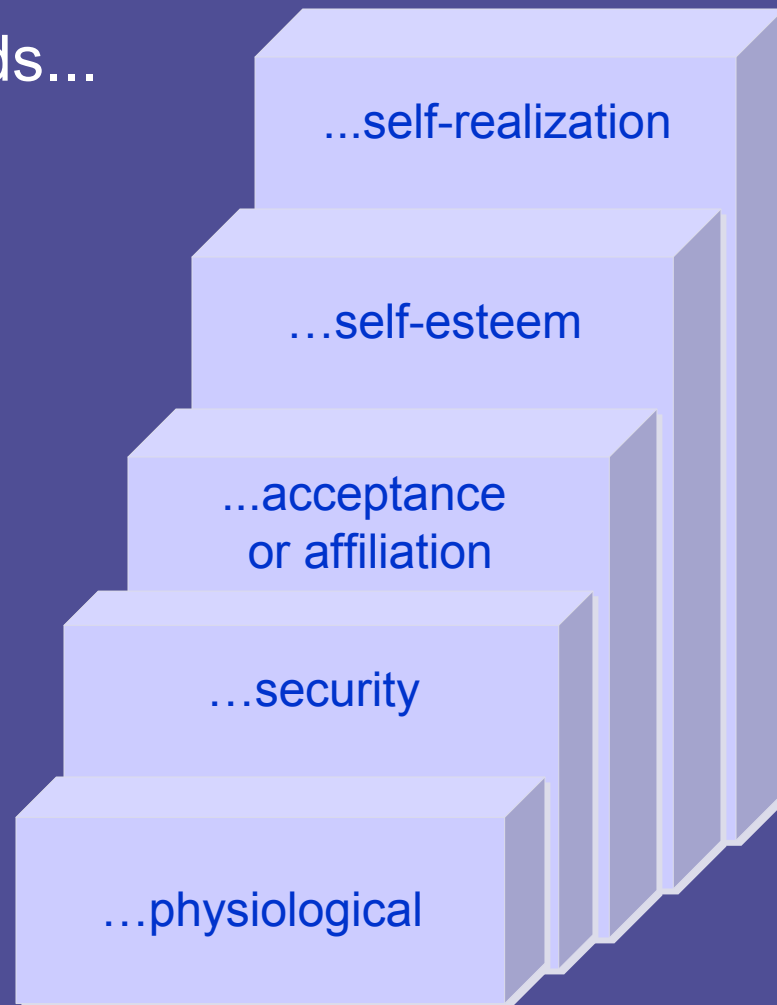
Distance: Asynchronous

- Space and time flexibility
- Personnel speed to follow the course
- Learner is totally alone
- Everything must be ready at the beginning

...Learning

Hierarchy of Needs Theory

Needs...



(Abraham Maslow,
Motivation and
Personality, 1954)

Herzberg Bimodal Theory



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Hygiene Factors Theory

Hygiene factors:

They are those whose absence can create job dissatisfaction

Motivator factors:

They are increasing job satisfaction

(Frederick Herzberg, *Work and the Nature of Man*, 1966)

Hygiene Factors Theory

Hygiene factors

- Supervision
- Company policy
- Working conditions
- Salary
- Peer relationship
- Security

Motivator factors

- Achievement
- Recognition
- Work itself
- Responsibility
- Advancement
- Growth

(Frederick Herzberg, *Work and the Nature of Man*, 1966)

Hygiene Factors Theory: Face to face

Hygiene factors

- Cleanliness
- Noise Level
- Temperature
- Sonority
- Teacher
- Information

Motivator factors

- Communication
- Additional material
- Tutoring
- Real examples
- Continuing evaluation
- Organisation

Hygiene Factors Theory: Distance

Hygiene factors

- Connection
- Materials
- User friendly
- Schedule
- Necessary tools
- Tutoring

Motivator factors

- Support services
- Mentoring
- Group tools
- Information
- Personalisation
- Time response

Hygiene Factors Theory: Distance

Hygiene factors

- Connection (9)
- Materials (4)
- User friendly (4)
- Schedule (3)
- Necessary tools (4)
- Tutoring (10)

Motivator factors

- Support services (13)
- Mentoring (7)
- Group tools
- Information (4)
- Personalisation (2)
- Time response (5)

Successful Learning Activities

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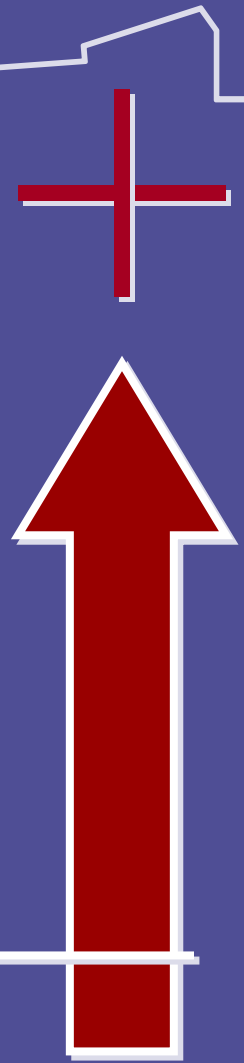
5

Motivator Factors

Satisfaction

Hygiene Factors

No dissatisfaction



Who contract UCE?

➤ Categories:

- Companies
- Institutions
- Professionals in Big Companies
- Professionals in SME
- Free-lance
- Recently Postgraduate

- Why Companies contract a course ?
 - New competencies
 - Solve problems
 - Subject Confidentiality & non availability
 - Keep the workers confident
 - To own Company core competence
 - Common background & language

- Why individuals contract a course ?
 - Change to another work / company
 - Improve inside the organisation
 - Get a job
 - Solve one / more problems
 - Technological Fascination
 - Social needs

Demand analysis

Information Sources

Industry

FINAL USER

Universities

Administration

Professional Associations

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Clients: Characteristics

- Adult people
- Lack of economical resources
- Lack of time resources
- Responsibilities
- Learning Styles

How actors differ

Children

- A content model
- Teacher directed
- Experience poor
- May use later
- Motivation suspect
- Time rich
- Self concept “under construction”

Adults

- A **process** model
- **Self**-directed
- Experience **rich**
- Want to use **now**
- Motivation **high**
- Time **poor**
- Self concept **strong**

Facilitating Learning

Children

Pedagogy

How to teach

**Techno-
Pedagogy**

Teaching

Adult

Andragogy

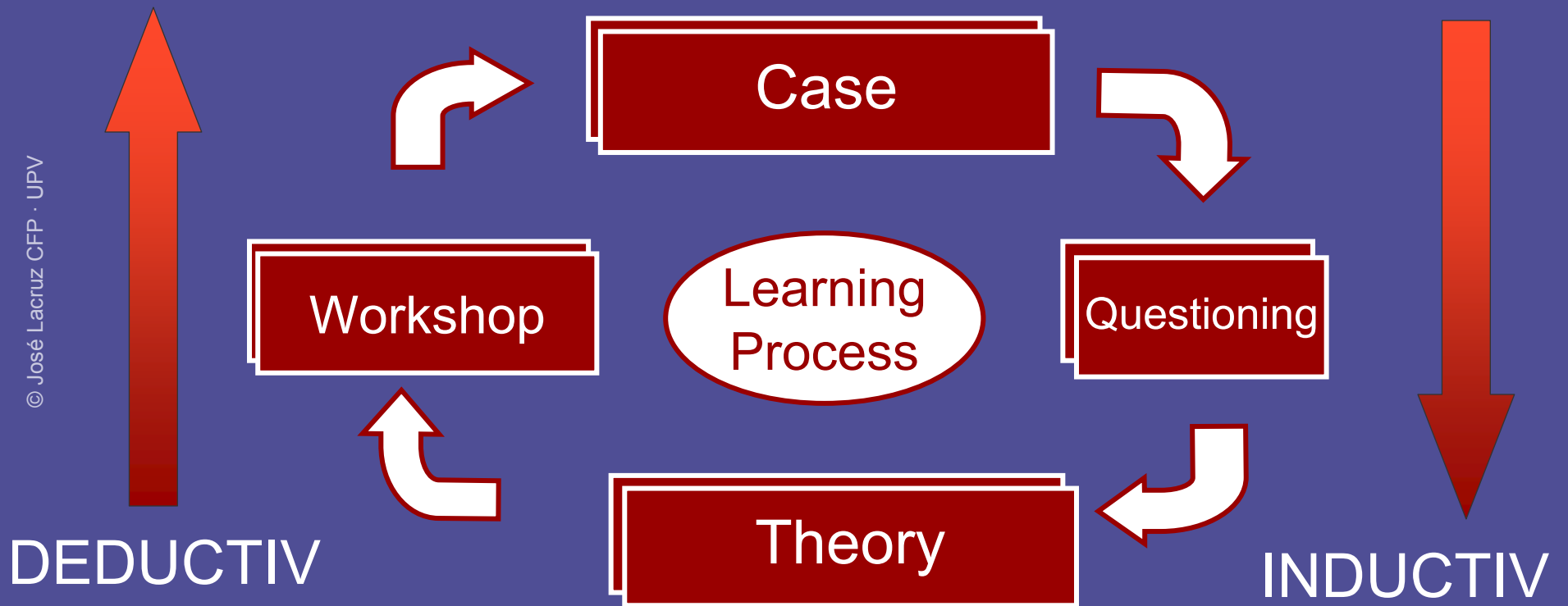
**How to help
to learn**

**Techno-
Andragogy**

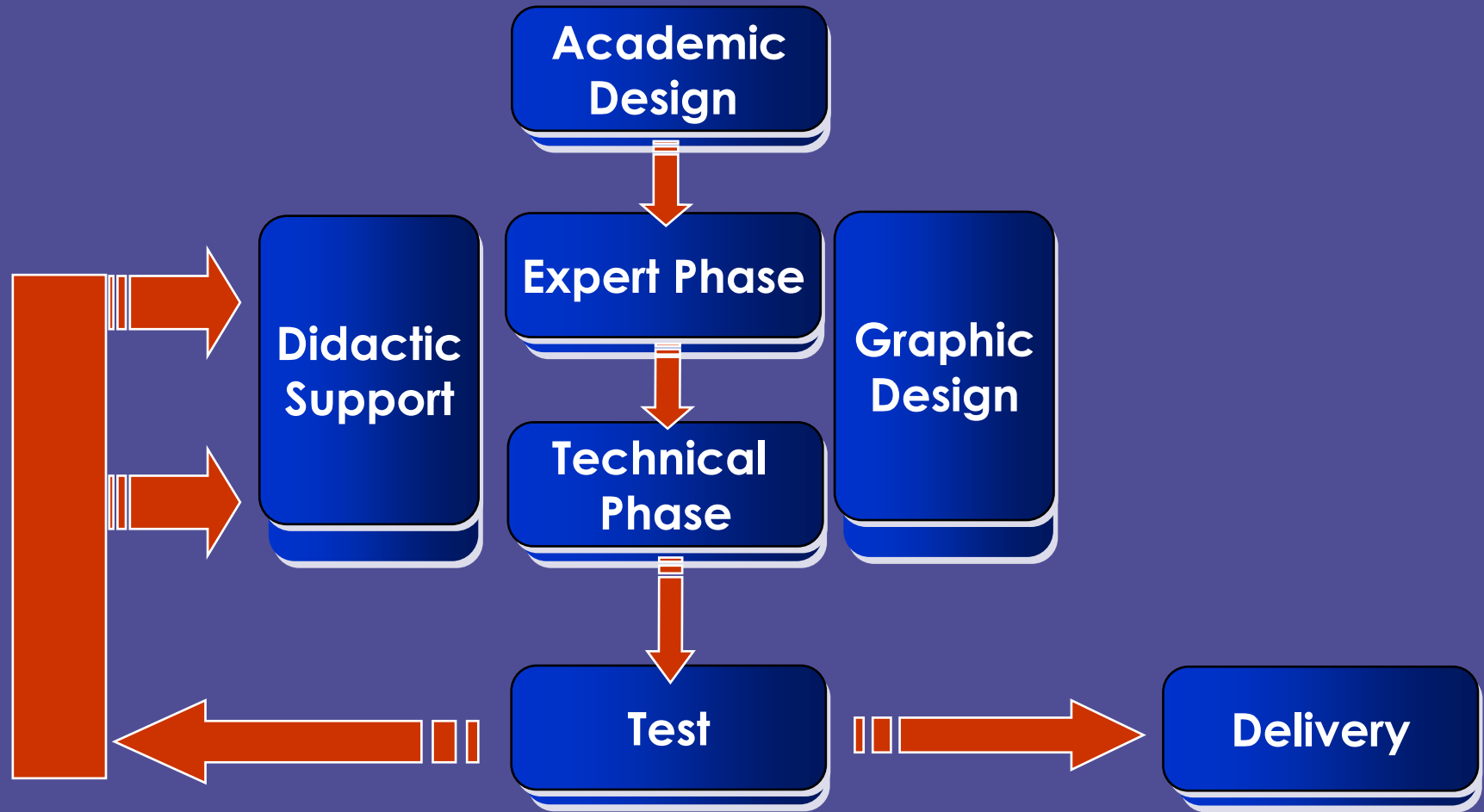
Learning

vs

Learning Styles



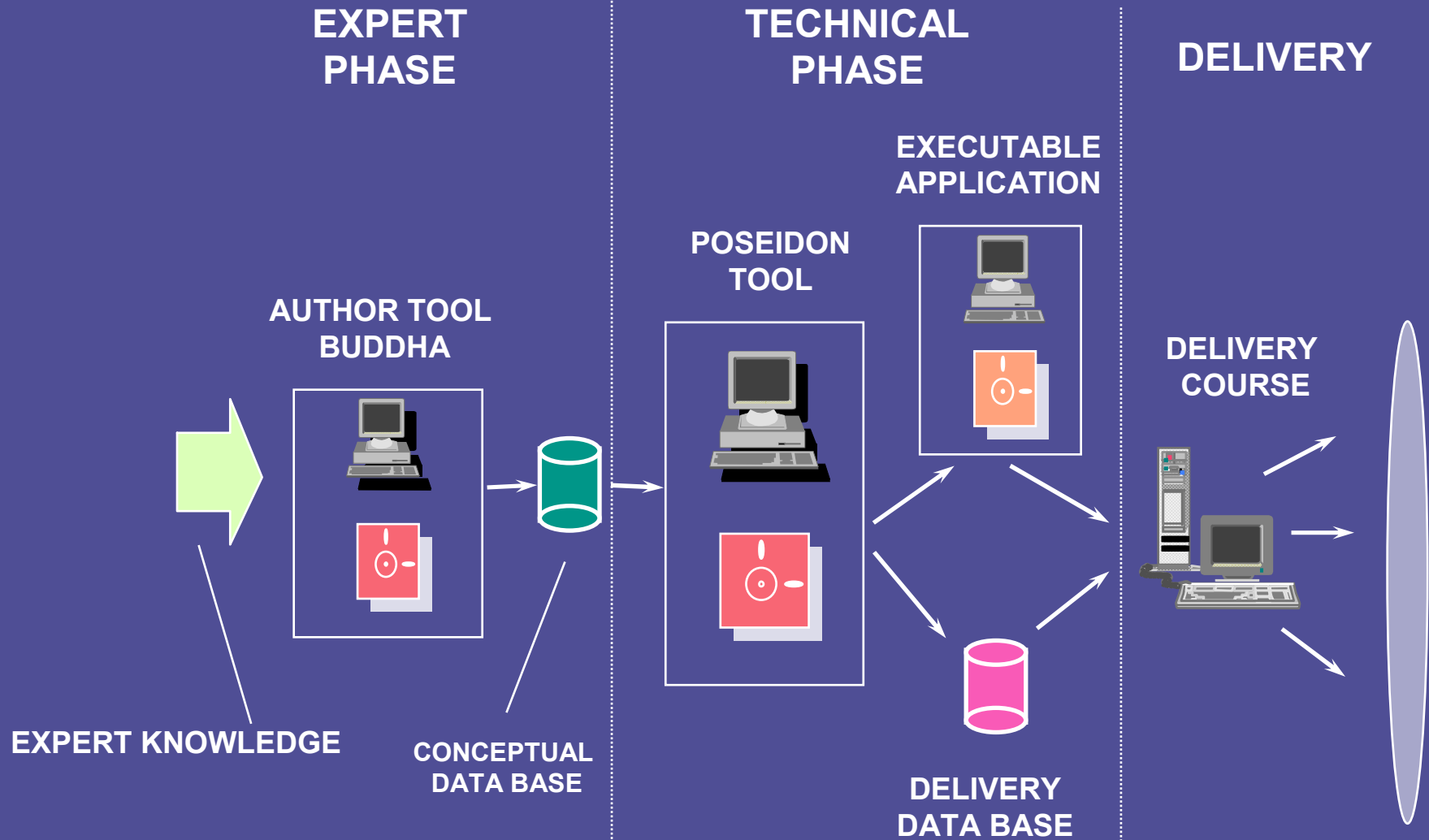
Production: Phases



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Production: HOW

© José Lacruz CFP · UPV



Production: Budget

Experts

10

COORDINATOR

2

Technical Team

2

Pedagogic & Editorial Support

4

Graphic Designers

2

1 hour course =
= 10 + 10 = **20 hours**

Online Course structure

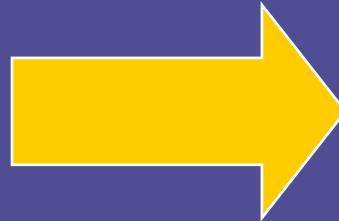
Traditional Course

Module 1

Module 2

Module ...

Module N



Technical Form

Module 1

Module 2

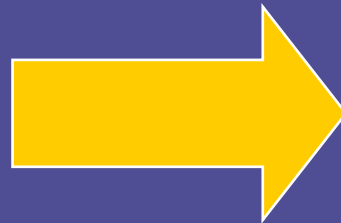
Module ...

Module N

Online Course structure

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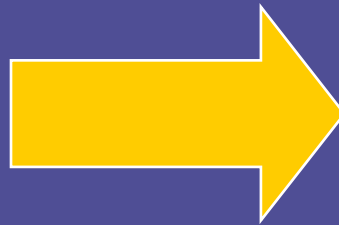
Module N



Online Course structure

Mini-Course/ Thematic Unit

MiniCourse
Thematic Unit

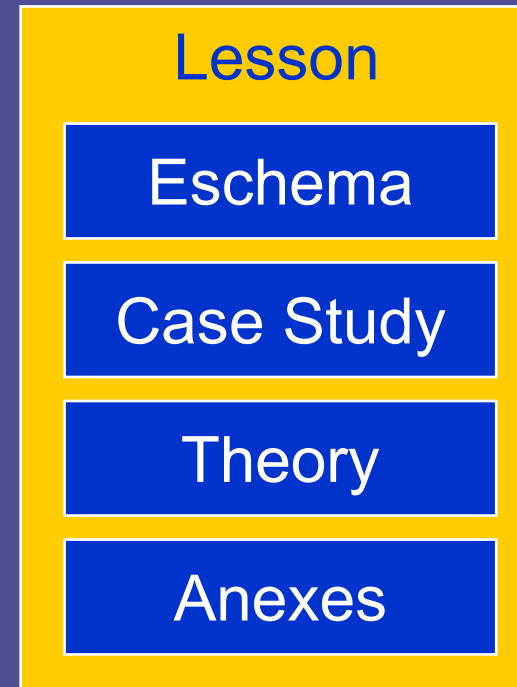
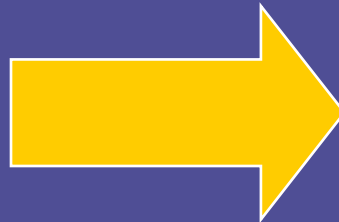


- Introduction
- Objectives
- Class 1
-
-
- Class X (Max 8)
- Remember
- Glosary
- Bibliography
- Common Mistakes
- Workshop
- Self evaluation

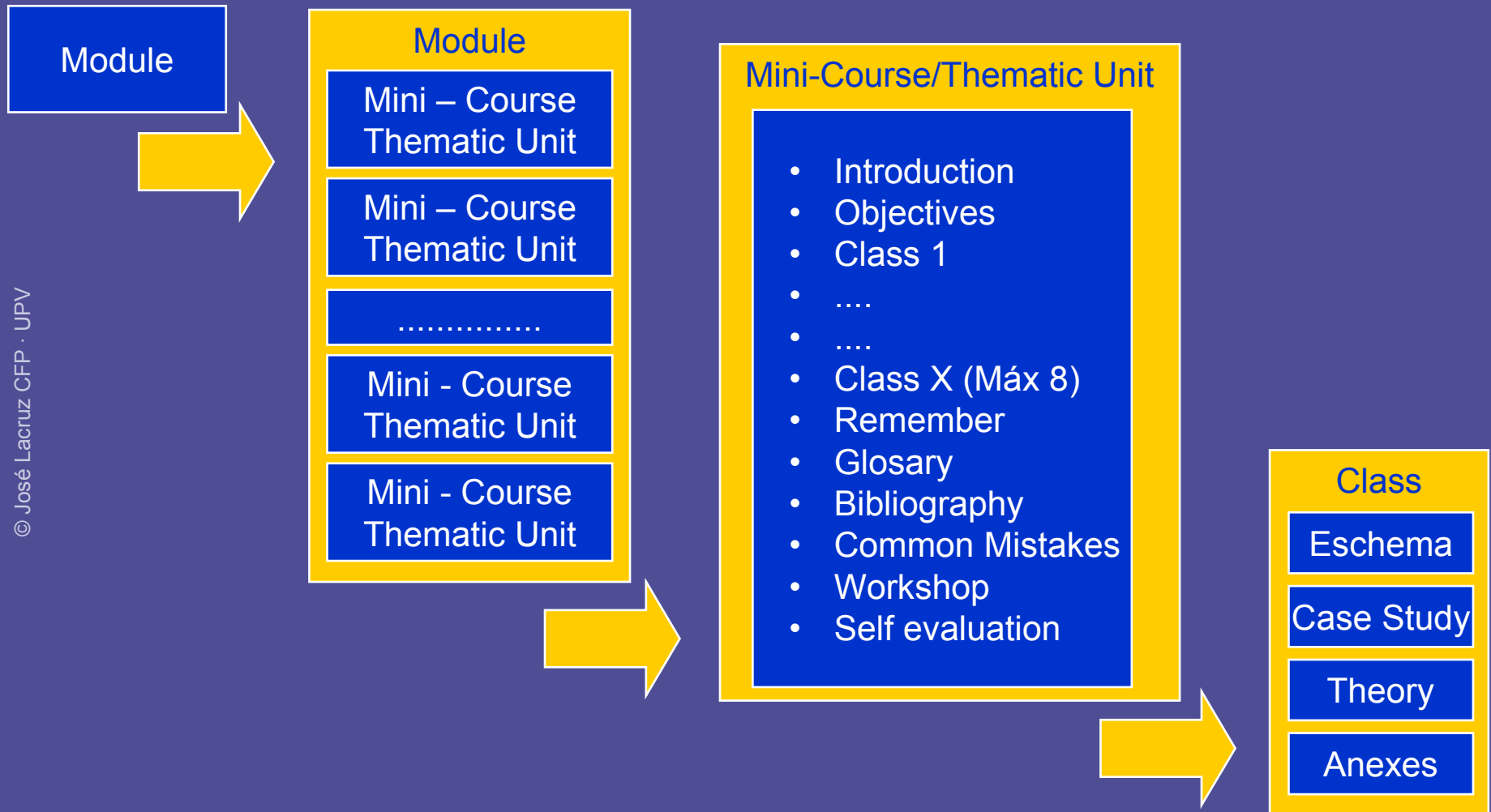
Online Course structure

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Class



Online Course structure



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Online Course structure

Introduction

- Locate the student inside the context
- Make reference to the whole unit
- Maximum 15/20 lines

Objectives

- Oriented to the student
- Using infinitives
- Can refer to Concepts, Procedures or Attitudes

Remember

- Remark more important aspects of the unit
- Short Sentences

Bibliography

- Books, URL, Papers...
- Focused to the student

Online Course structure

Glossary

- Keywords
- Important definitions of the unit

Self evaluation

- Self control
- 30/40 questions
- Comments focused to the student

Workshop

- Practical Activities related with the content
- Objective information about the student progress
- Comments and discussion are important

Online Course structure

Case

- Locate the student inside the context
- Real situations to apply the content

Schema

- Contents to develop
- Relations between contents

Knowledge

- Develop main ideas
- No books
- Max 2 pag

Annexes

- Complementary information
- Indexed

Web based learning

- Web-based learning can be applied successfully in adult education.
- Requires new kind of materials that take into consideration medium specific learning models, limitations and restrictions.

- *Can be applied on all levels of education and training.*
- *Is an effective way to reach any learning goal.*
- *ODL and face-to-Face teaching/learning can use the same materials*

Production of ODL materials

- Producing Learning Materials for Web-based delivery requires:
 - Simple tools
 - Multidisciplinary teams
 - New Roles & Skills
 - Specific didactical support: Learning Models
 - Training of teachers
- Production of new kind of materials is an expensive and labour intensive task.
- You cannot improvise!

- Requires special computer programmes, that teachers need to learn how to use.
- Teachers can do it.
- Teachers can do it alone.
- Is expensive

Delivery of ODL materials

- Delivery of Learning Materials on Web requires:
 - New Roles: Facilitators of Interaction and Learner Support
 - Hygienical and Motivational environments
 - Complementary materials e.g. Books
 - Face-to-Face meetings and support
- Teacher training
- You cannot improvise!

- Is cheap and simple once the materials are ready
- Professional teachers do not need any special skills in tutoring over Internet.
- Teachers will do tutoring as a part of their normal work without any extra compensation.
- A good delivery system for Web-based training is automatic and runs alone.

¡Thank You!

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or

José Vicente Lacruz

jlacruz@cfp.upv.es

<http://www.cfp.upv.es/>

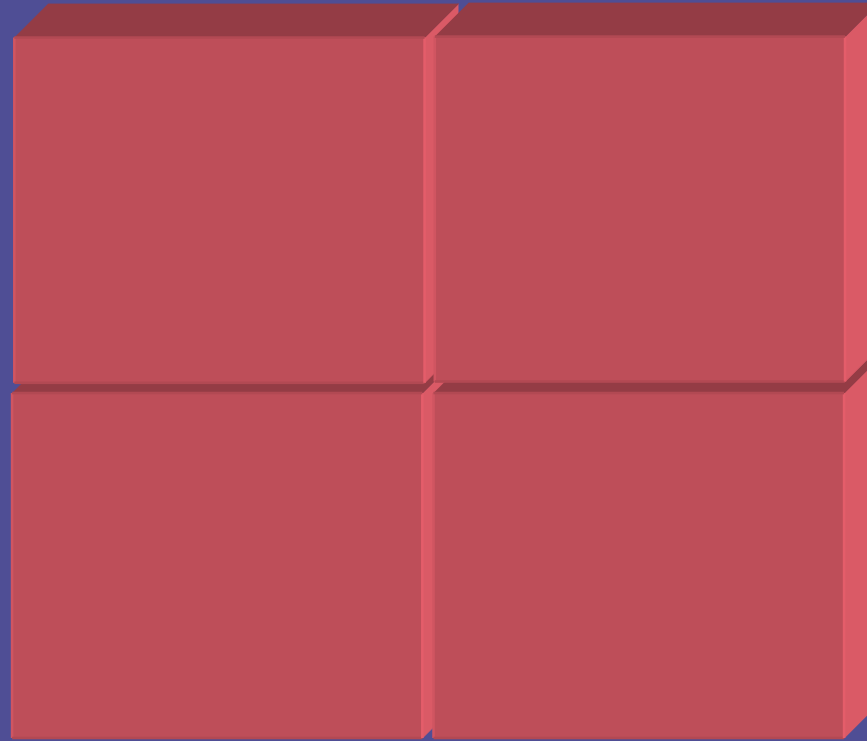
Modalities in the Interaction

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Time

$=$

\neq



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$=$

Space

Modalities in the Interaction

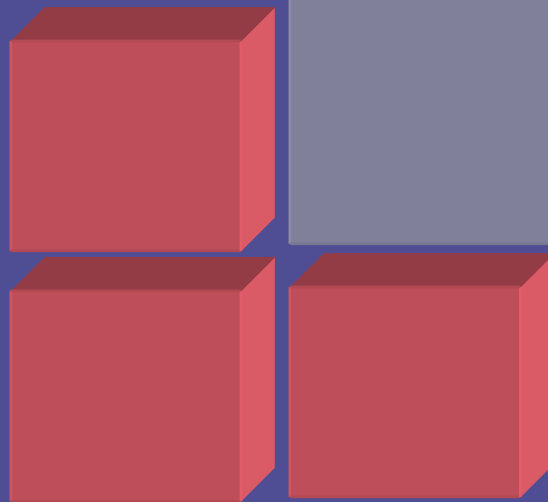
Space-temporary coincidence

- ☒ Actual Formation
- ☒ Personal Relation

Time

==

≠



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≠

▪ Space

==

Modalities in the Interaction

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Tiempo

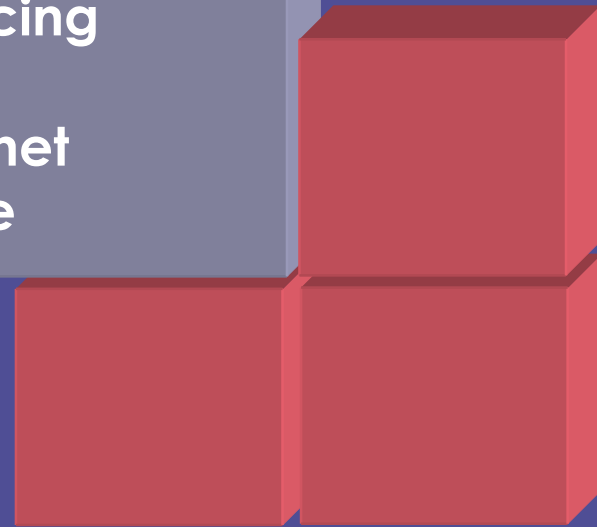
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Temporary Coincidence

- ☒ Telephone
- ☒ Radio
- ☒ Direct TV

- ☒ Videoconferencia
- ☒ Teleconferencing
- ☒ Chat /IRC
- ☒ Radio in Internet
- ☒ Broadcast live

≠

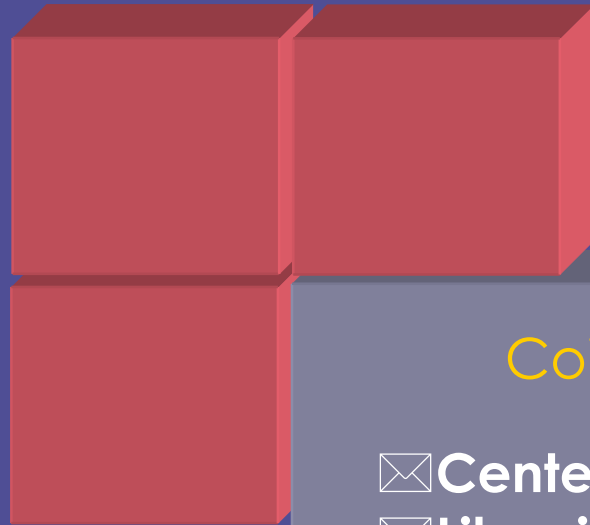


Modalities in the Interaction

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Time

||



≠

Coincidencia espacial

- ✉ Centers of Resources
- ✉ Libraries
- ✉ Hemeroteca

- 📖 SW Autoformativo
- 📖 CDtecas
- 📖 Computer Science classrooms

≠

||



Modalities in the Interaction

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Time

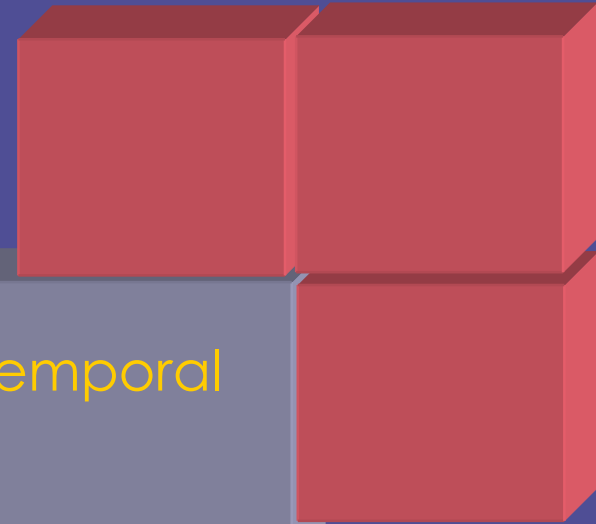
≡

≠

No Coincidencia espacio-temporal

- ✉ Conventional mail
- ✉ Books and publications
- ✉ Fax
- ✉ Deferred Vídeo/audio

- 📄 E-mail
- 📄 News
- 📄 Broadcast
- 📄 WWW



Modalities in the Interaction

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Time

||

Tutorías on line
Videoconf.

Actual
Formation

≠

Autoestudio
Tutorías off line
Forums

Center of Resources

≠

=

Modalities in the Interaction

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Time

||

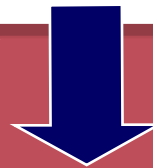
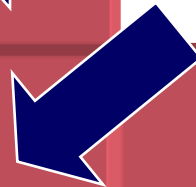
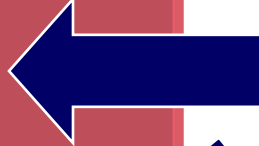
Tutorías on line
Videoconf.

Actual
Formation

≠

Autoestudio
Tutorías off line
Forums

Center of resources



≠

=

Modalities in the Interaction

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Tiempo

||

Tutorías on line
Videoconf.

Actual
Formation

≠

Autoestudio
por Internet

Center of Resources

≠

=



Curso Online

60 Horas
Presenciales

Módulos



Curso

Mini-Curso
Bloque Temático

Mini-Curso
Bloque Temático

Mini-Curso
Bloque Temático

Mini-Curso
Bloque Temático

?? Horas
Presenciales

Impartición

Clase

X Horas
Trabajo del
Alumno

Autoestudio: 2X/3
Horas

Conexión: X/3
Horas

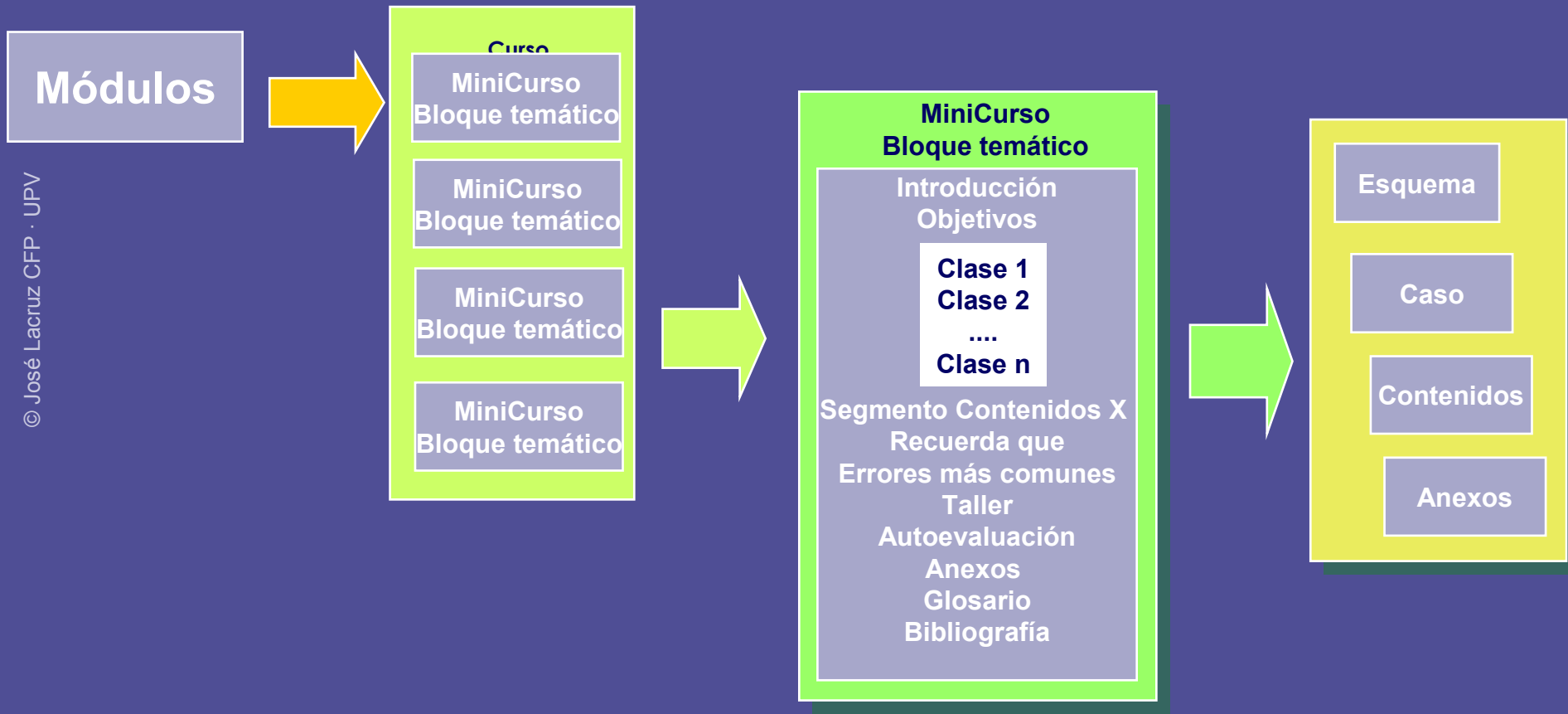
Introducción
Objetivos
Clase 1
....
Clase n
Recuerda que
Glosario
Bibliografía
Errores más comunes
Taller
Autoevaluación

Libro
Apuntes
Anexos
Talleres

Atención al tiempo
empleado por el
alumno en los
elementos comunes



Curso Online



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Introducción: de unas 10/15 líneas en las que se introduzca al alumno en el tema que trata el minicurso. Puede apoyarse de ejemplos introductorios o motivadores (organizadores previos)

Objetivos: orientados al alumno (lo que va a alcanzar el alumno tras realizar el minicurso), definidos de forma que se utilicen infinitivos. Los objetivos pueden referirse a Conceptos, Procedimientos o a Actitudes.

Introducción

- **Objetivos**

Clases

Clase 1

- Esquema
- Contenidos
- Caso/artículo
- Anexo.

Clase 2
Clase 3
Clase n

Clase: Es una sesión en la cual nuestro principal objetivo es la enseñanza de los contenidos. Su duración vendrá limitada por el tiempo de conexión de un alumno de forma que no exceda a 3/5 horas presenciales que se debe reducir a 1/1,5 hora por Internet aprox.

Esquema: es un elemento gráfico cuyo papel es facilitar la comprensión de los contenidos que se van a tratar, de forma que en el aparezcan las ideas principales y la relación que existe entre ellas.

Caso/artículo: Es un apartado que sirve para introducir un caso real y práctico basado en lo que se ha tratado o se va a tratar en la unidad.

Contenidos: Divididos en segmentos de contenido (tantos como ideas principales tenga la clase) de forma que en total estemos hablando de unas 4 din-A4. Por lo tanto hablamos de unos contenidos sintetizados que podrán ser complementados con el apartado **Anexos**.

- **Recuerda que**
- **Errores más comunes**
- **Taller**
- **Autoevaluación**
- **Anexos**
- **Glosario**
- **Bibliografía**

Recuerda que: Elemento cuyo objetivo es señalar al alumno los aspectos más importantes tratados en el minicurso, de forma que refresque en su organización mental las ideas que tienen mayor peso.

Errores más comunes: Intenta clarificar al alumno qué tipo de errores es más frecuentes evitando que así se cometan.

Taller: Es el elemento que permite al alumno poner en práctica los conocimientos adquiridos en la unidad (conocimientos de todas las clases). Debe tener mucha más importancia a la hora de evaluar al alumno que la Autoevaluación.

Autoevaluación: ver documento adjunto.

Anexo: Repositorio de materiales, ya sean URL's, artículos, apuntes, etc. que complementen lo que se a tratado en el minicurso.

Glosario: Debe contener las definiciones de las palabras más destacadas de la unidad, los "términos clave", de forma que sus definiciones sean claras y sencillas.

Bibliografía: ver documento adjunto.

Coste Producción
Aprendizaje

Unidad de

20 Hours
Development of
Expert

+

1 hora

Adaptación
Técnica
y Gráfica

+

2 hours

Publishing
Revision

+

Lacruz CFP · UPV

Coste Producción
Bloque Temático

MiniCurso

?? Horas
Desarrollo del
Experto

+

?? hora

Adaptación
Técnica
y Gráfica

+

?? horas

Revisión
Editorial

+

Lacruz CFP · UPV

Coste Producción TOTAL

20
Horas * UA



20
UA * Curso



400 Horas de
Experto

100 Horas de
Revisión

20 Horas
Técnicas

Curso

Unidad de
Aprendizaje

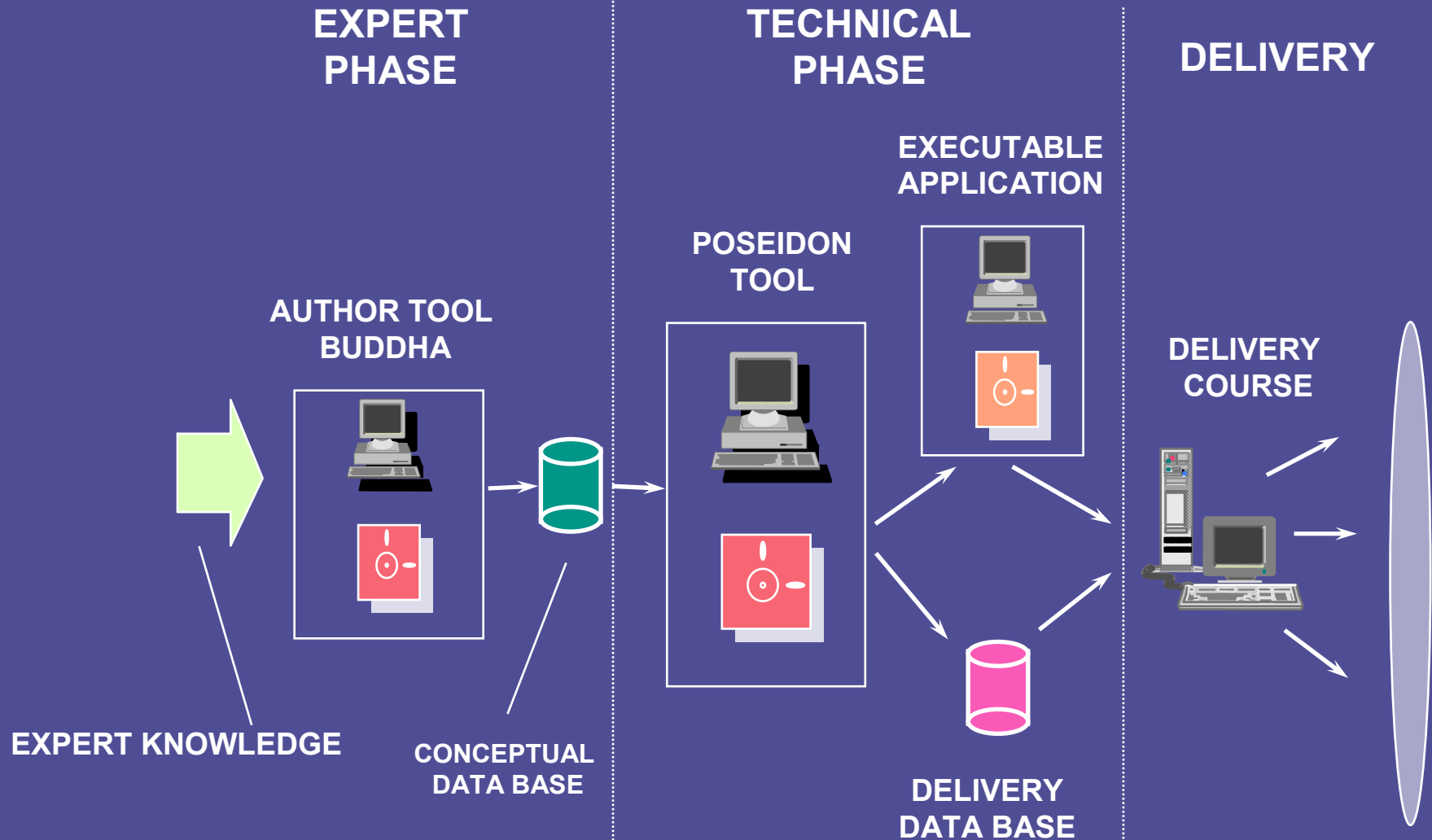
Unidad de
Aprendizaje

Unidad de
Aprendizaje

Unidad de
Aprendizaje

Production: HOW

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EXPERT PHASE

Experts
UPV

TECHNICAL PHASE

COORDINATING

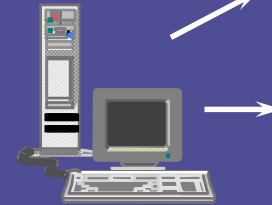
Equipo
Técnico

Pedagogical
Reviewer

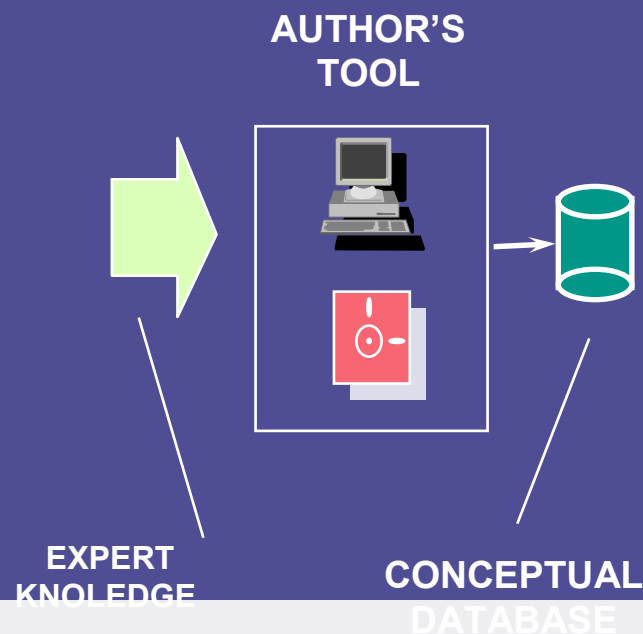
Graphical
Designers

EXPLLOTACIÓN/ OPERATION

Course in
Operation

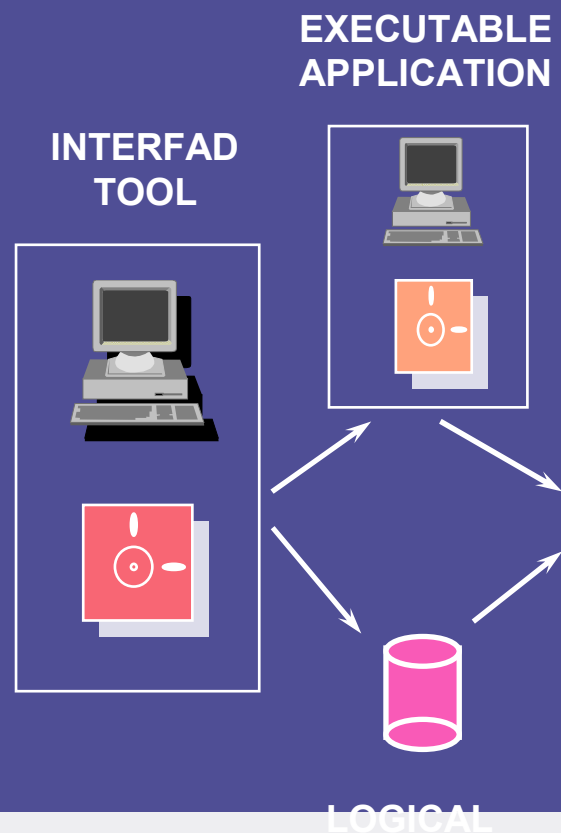


EXPERT PHASE



- **Interf@d** Teacher Assistant (IFTA)
- Tool of Author
- Academic Desing
- Expert Phase
- Production in Local
- Pedagogical Revision
- Test
- Graphical Desing

Technical Phase



- ◆ Entorno Interf@d
- ◆ Automatic generation
- ◆ Technical Phase
- ◆ Logical Data base
- ◆ Test
- ◆ Graphical Desing

Learning modalities

▪ Espacio

≠

On line tutoring
Videoconferen
ce

Self study
On line tutoring
Discussions

=

Face to Face
teaching

Resource
Centres



DATA BASE

PROCESSES

Tele Gestión

USERS

EXPLOTACION

COURSE IN EXPLORATION

USERS

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