Course Materials Development in the 21st Century

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Focus

- Introduction
- Types of Materials Development
- Materials and levels of Development
- Approach to Course Material Development
- Delivery Modes
- Components of Programme and Course Design
- The Role of Technology
- E-Learning specifications
- LMS and LCMS
- Webagogy
- Design Pitfalls

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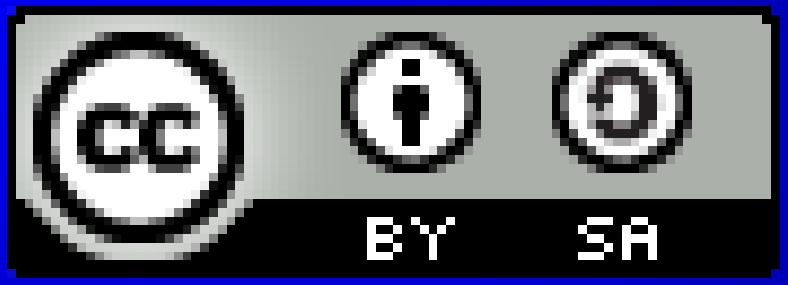

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Materials

Course Development → **Delivery Modes**

Developed from scratch

- new materials
- new format
- library search

Course adoption

- acquired
- minor revision
- 10% modified

Course adaptation

- Acquired/existing
- Major revision
- >30% modified/addition

Delivery Modes

- print
- telephone
- audiocassettes
- videocassettes
- radio broadcast
- TV broadcast
- CD-Rom/VCD/DVD
- computers
- multimedia
- e-learning
- m-learning
- Open Educational Resources

Material Development

- Team Approach (Subject Matter Experts, Instructional Designers, Language Editors, Graphic Designers, Multimedia Producers)
- Instructional Multimedia design
- Blueprint, Outline Programme Proposal (OPP) and Detailed Programme Proposal (DPP)
- Usually 9-12 months head start
- Cycle of review (3 to 5 years)

Programme Design

- The process for the design is in two parts:
  - pre-design information and
    - The pre-design information provides basic information required for the courses in each programme.
  - the course design. The programme
- The programme competencies
- Courses in the programme
- Mapping of Courses to Programme Competences

Course Design

- Course Information
- Course competency(s)
- Course Objectives
- Structure: Derived the Modules and Units from the course objectives to meet the expected course competency(s)
- Alignment. Defined Unit Intended Learning Outcomes (ILOs) and align the teaching approach, learning activities, resources/learning devices, assessments and Required Hours for Study required.
- Course/Programme Evaluation

Course Team

- Course Developer and or Course Writer (Subject matter Expert)
- Instructional Designer
- Learning Technologist, Graphic Designer
- Content Editor
- Copy Editor

Course Template 1

- **Basic Course Information**
  - **Course Code:** ***CSS 101***
  - **Course Title:** ***Introduction to Criminology 1***
  - **Credit Unit:** ***2***
  - **Course Status:** ***Compulsory***
  - **Semester:** ***1st***
  - **Required Study Hour:** ***4 hours per week***
  - **Course Edition:** ***First***

Course Template 2

- **Course Guide**
  - Introduction
  - Course Objectives
  - Working Through This Course
  - Study Units: *Modules and Units*
  - References and Further Readings
  - Presentation Schedule
  - Assessment: Continuous and Final
    - CBT and participation and portfolio presentation
  - *How to Get the Most from the Course*
  - *Facilitation*

Course Template 3

- **Course Contents**
  - **Modules:** ***Title and all Units listed***
  - **Unit:** ***Title and Contents listed***
  - **Content:** ***e.g. Unit 1***
    - **Introduction**
    - **Objectives (*Intended Learning Outcomes*)**
    - **Main Content (*break into sections or chunks*)**
    - **Self-Assessment Exercise**
    - **Conclusion**
    - **Summary**
    - **Tutor-Marked Assignment**
    - **References/Further Reading**
      - **Online Resources**

Student Workload and Study Hours

- The student study hours are determined by
  - credit unit,
  - hours of self-study,
  - hours to respond to forum discussions and posts,
  - hours to do learning activities and assignments,
  - hours to participate in facilitation through video conferencing. Every Unit will have one hour of facilitation through video conferencing.
- Due consideration is also given to:
- The number of hours per day - 24 hours
- Recommended hours of sleep - 8 hours
- Official working hours per day - 8 hours
- Other Activities - 8 hours

Determination of Unit Length

- Most students loose interest in reading text after 30 minutes, and on the average students can read and assimilate between 2,400 and 7,000 words per hour.
- Based on this premise a Unit will be between 2 to 4 pages or between 1,200 – 3,200 words.
- Where a lesser number of words are used, there will be more interactivity in the areas of scenarios, animations, videos, web links, etc for further explanations.
- But should be such that can be covered within the recommended hours.

Determination of Unit Length

Therefore, the required hours of study are determined thus:

S/N	Weekly Activities per Unit	Hours per Week	
		2 Credit Units	3 Credit Units
1.	Video conferencing per week	1	2
2.	To read and respond to posts including facilitation comments	1	1
3.	Self-study including reading text (may or may not include illustrations), listening to instructional videos if any and responding to self-assessment exercises.	2	3
4.	Assignments (Assignment is at the end of each module and it covers all the units in the module)	1	1
Weekly minimum hours required for study per course		**5**	**7**

For 2 credit units, the number of hours required per course per semester of 13 weeks - 5 x 13 = 65 hoursof study
A student with six courses in a semester for instance will require - 6 x 65 = 390 hours of study

For 3 credit units, the number of hours required per course per semester of 13 weeks - 7 x 13 = 91 hours of study

Resources/Learning Devices

- The resources and learning devices that are compulsory in all the units are classified as Generic Resources.

These are:

- Computer/Tablet/Laptop/Mobile Phone
- Internet
- Course Materials
- Instructional Videos of 5 – 10 mins (will be available in all the Units)

- These may not be mentioned and where mentioned may be classified as generic resources.

ICT Development

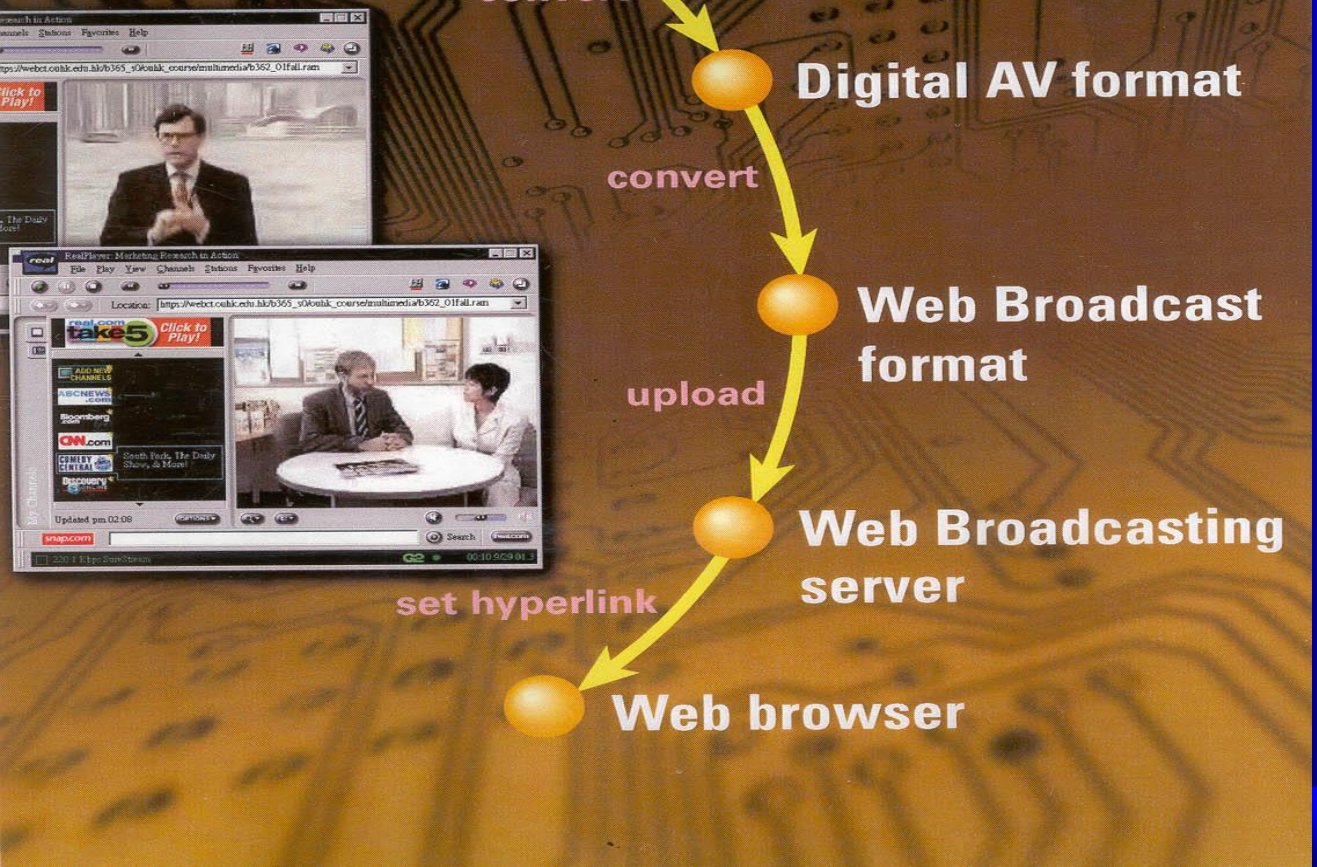
Information and communication technology (ICT)

- Convergence of computing, telecommunications and networking facilities to communicate and share information
  - computers, fixed-line communications, mobile phone and other wireless networks, broadband, internet, satellite communications and other networking technologies
- Covers any product that will store, retrieve, manipulate, transmit or receive information electronically in digital form

Technology

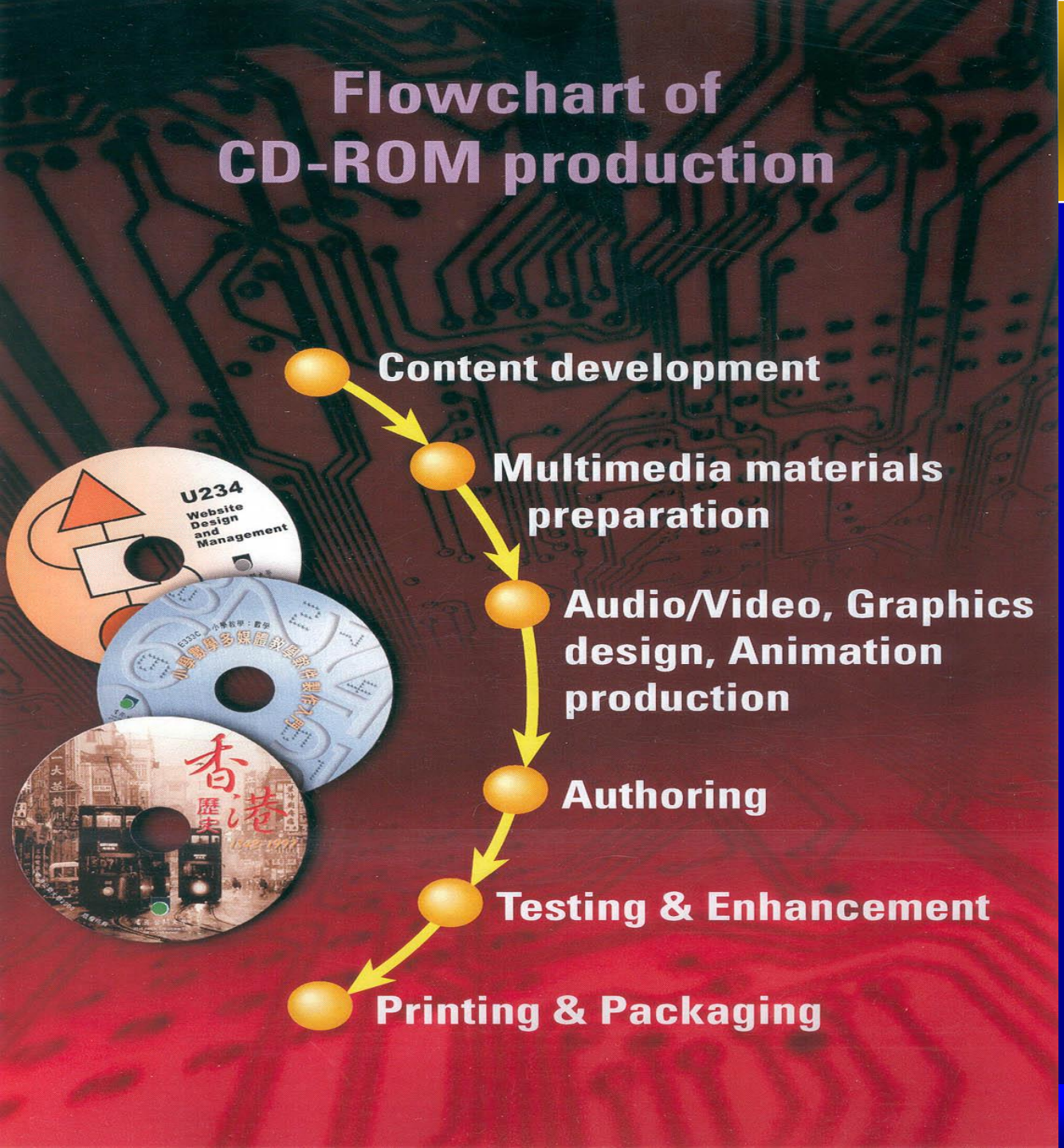
- Only a medium and not the message
- What technologies: multi-media or multimedia?
- Ensure total coverage and reach to all students
- Be as simple as possible
- Consider cost effectiveness
- Review usage and policy regularly

Flowchart of online audio-visual learning materials development



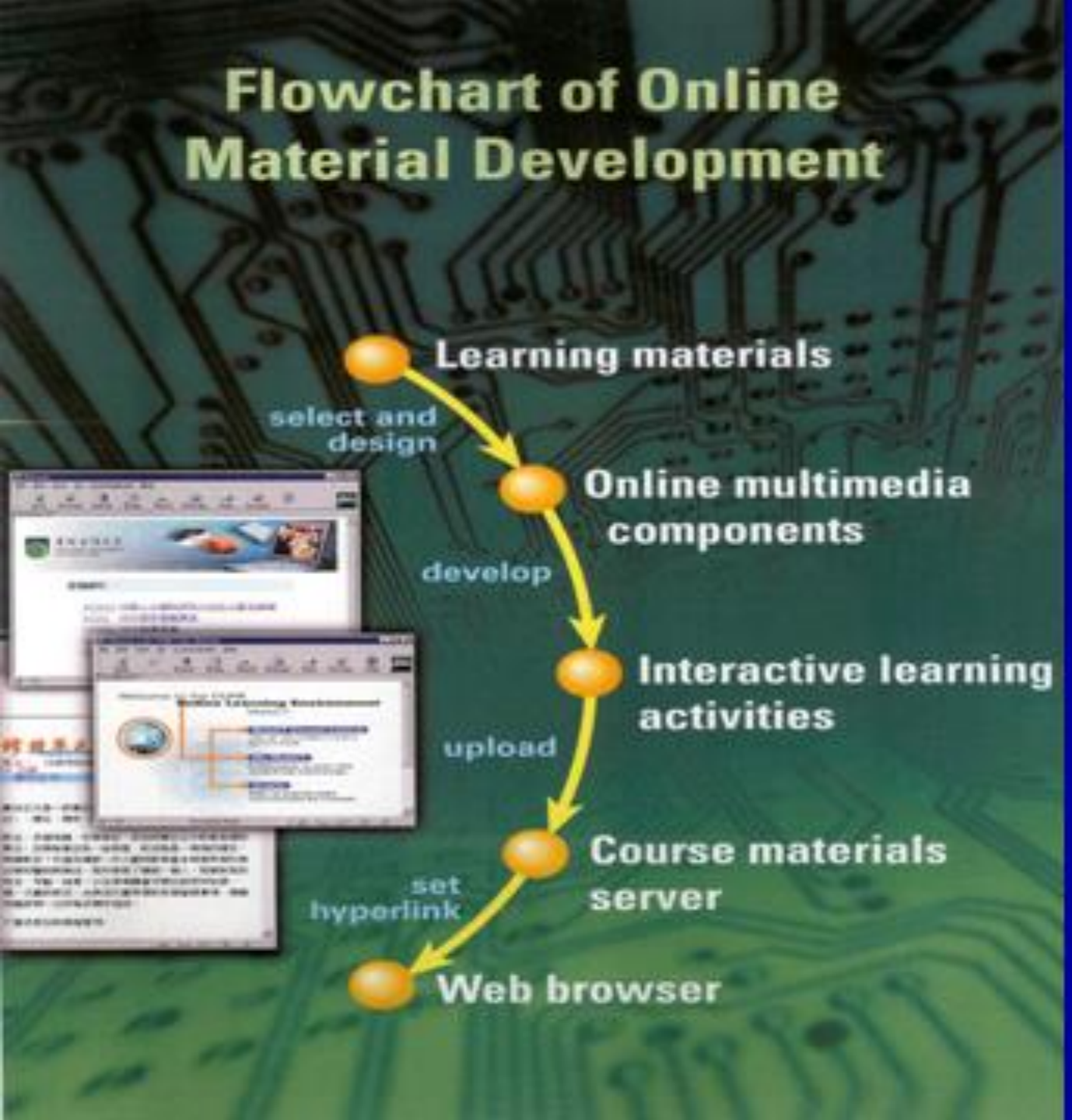
A decision taken about audio-visual component of online learning materials

This generic model is used to develop the materials



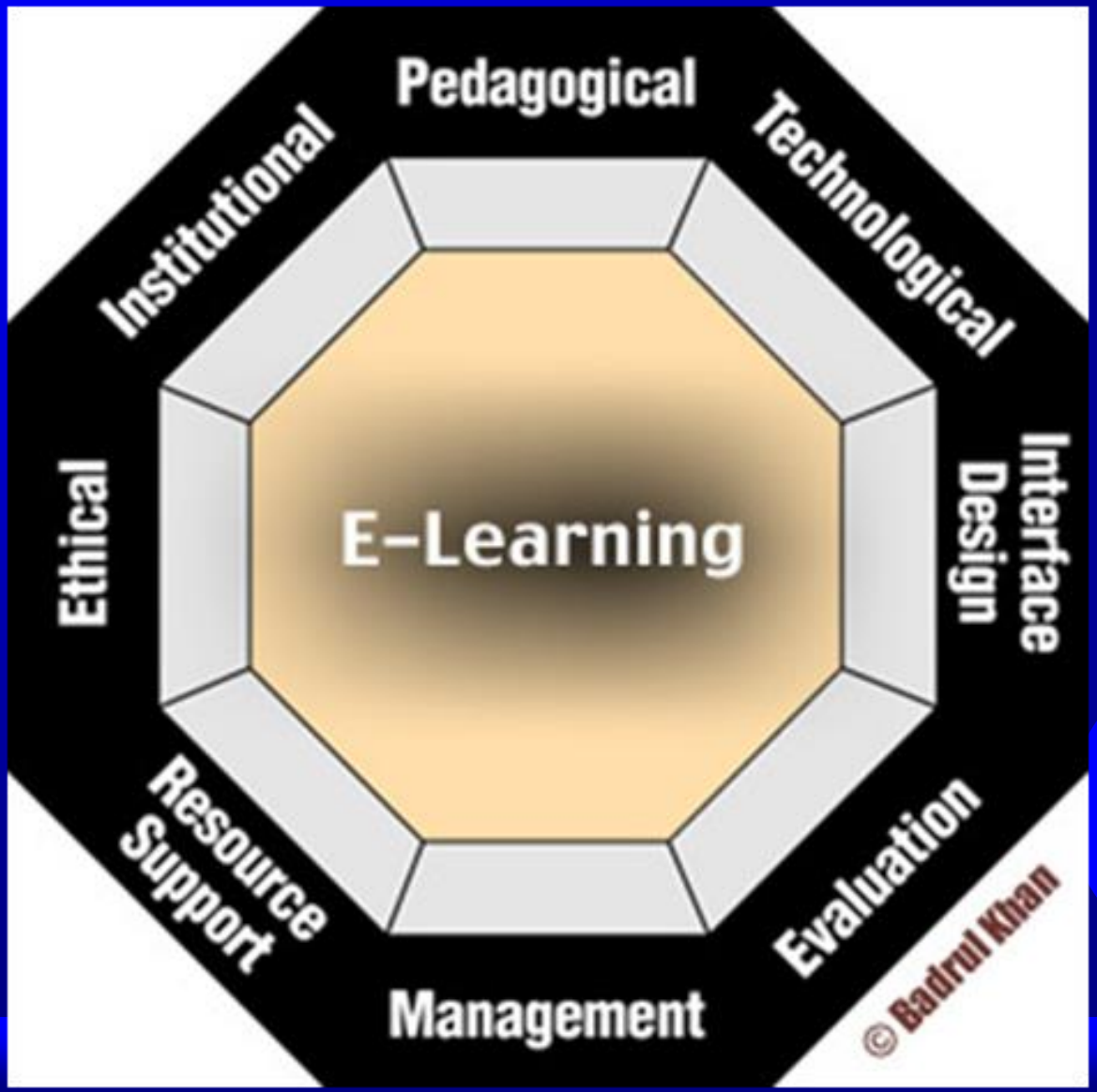
CD-ROMs have become very common in instructional materials development

They hold lots of information, light, easily replaceable



Modern Instructional E-Learning development

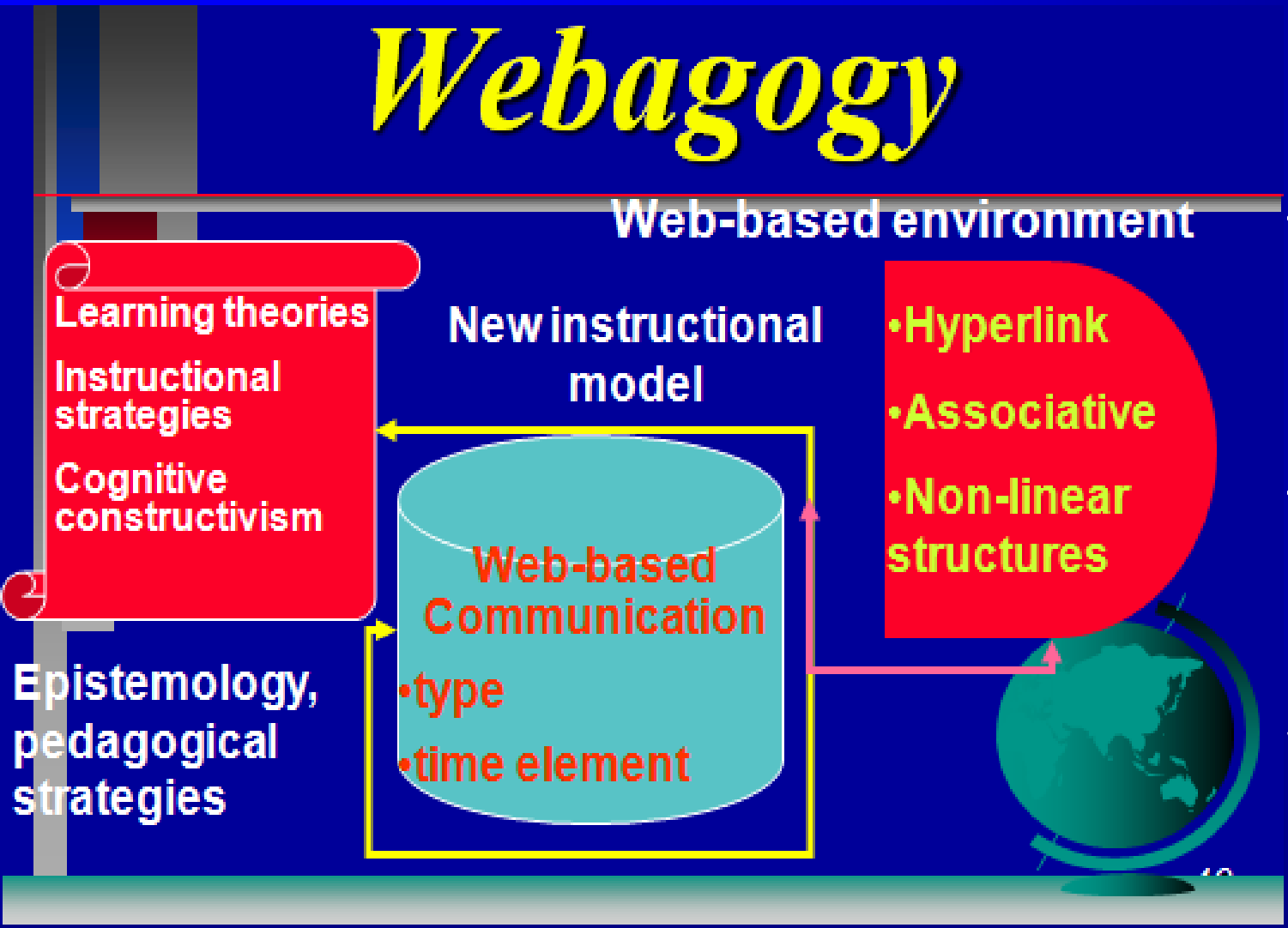
Patterns of Specs and Standards for E-Learning



Use of LMS and LCMS

- A Learning Management System (LMS) is software used for delivering, tracking and managing training/education.
- LMS used for managing training/educational records, distributing courses over the Internet and offering features for online collaboration.
- A Learning Content Management System (LCMS) is software for authoring, editing and indexing e-learning content (courses, reusable content objects).
- An LCMS may be solely dedicated to producing and publishing content that is hosted on an LMS, or it can host the content itself.

Webagogy: An E-Learning Course Materials Development Approach



Pedagogical approaches or perspectives:

Instructional design – the traditional pedagogy of instruction which is curriculum focused, and is developed by a centralised educating group or a single teacher.

Social-constructivism – this pedagogy is used in discussion forums, blogs, wiki and on-line collaborative activities. It is a collaborative approach that opens educational content creation to a wider group

Conclusion

The Journey of Learning

- The trends come together to demonstrate that Learning is a Journey not a destination
- Constantly close the creativity Gap in Instructional Design
- Reimagine, Redesign, Redeploy
- Instructional Designer's Checklist
- Subject matter Expert Checklist
- Copy Editor's Checklist
- Videographer's Checklist

Top Trends for ID to Note

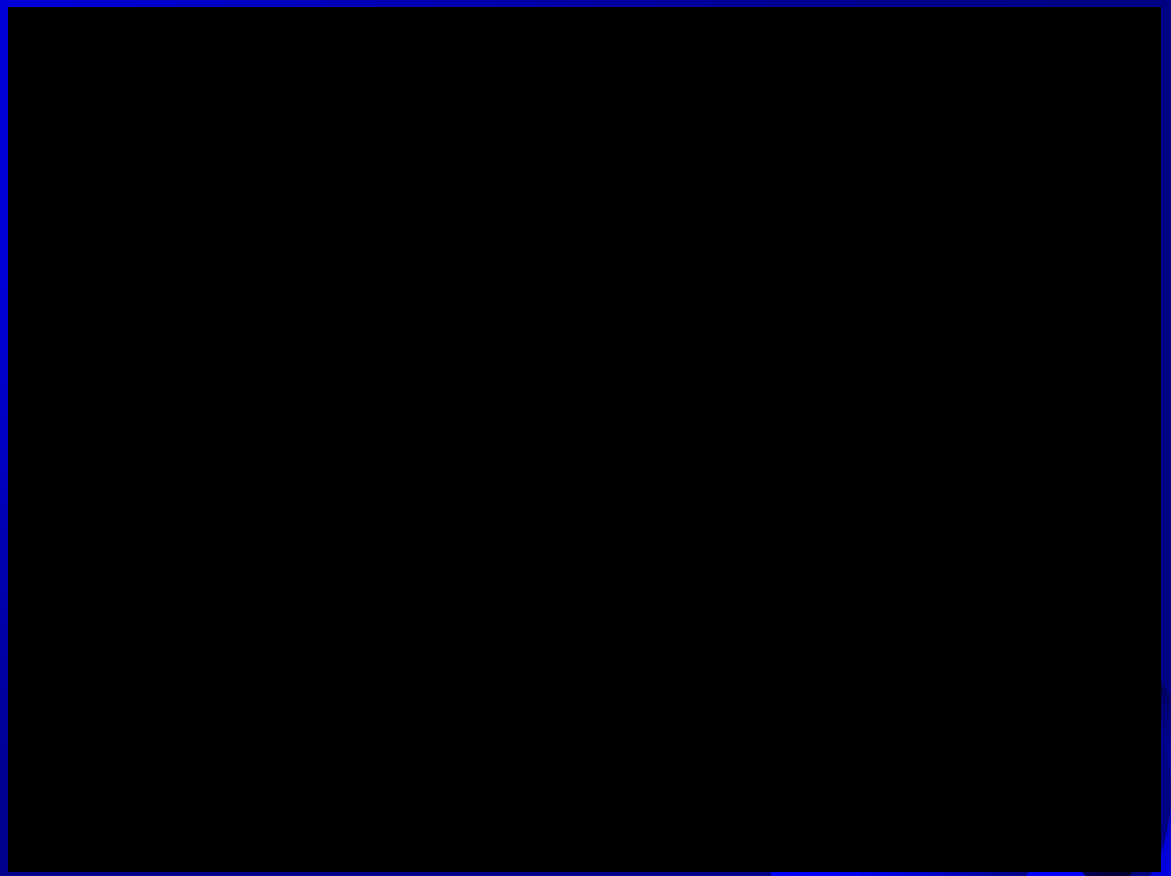
- **top trends that need the immediate attention of instructional designers:**
- **Augmented Reality (AR) and Virtual Reality (VR) ...**
- **Digital Textbooks. ...**
- **Learning Analytics. ...**
- **Micro-learning./ Bite-Size Learning ...**
- **Game-based learning. ...**
- **Natural User Interfaces. ...**
- **Mobile Learning…**
- **Personalised Learning..**
- **Video as a Learning Modality – Video+Microlearning, Video+social learning, Vidoe+story telling**
- **Applications (Apps)**

From Ghetto to the Bank

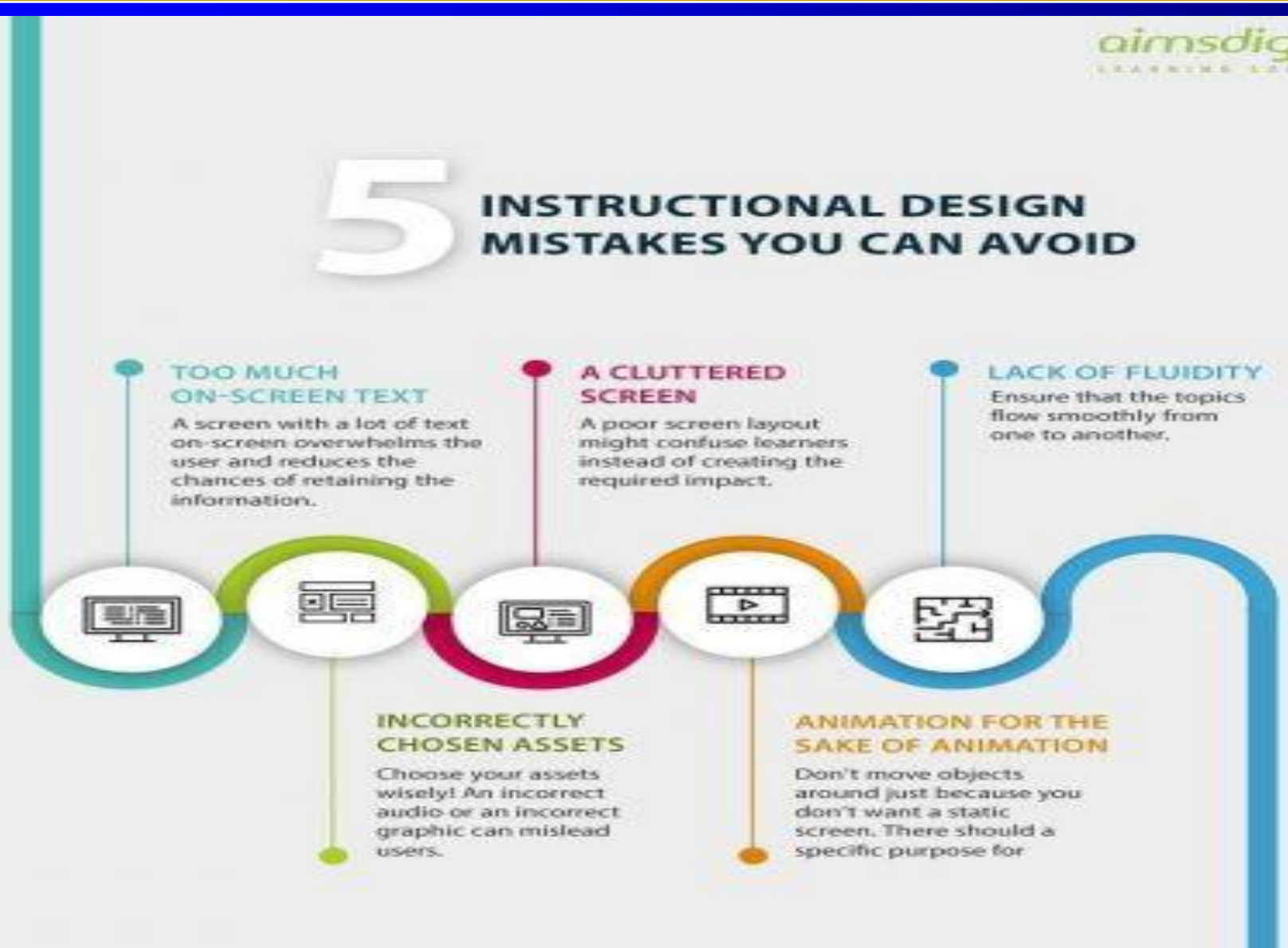
Wave

to

Wave



Design Pitfalls



Specific Messages

- **Quality first**: quality digital, open and flexible education
- **Collaboration**, on all levels, on content, courses programmes, methodologies, infrastructure, internationalisation….
- **Take leadership:** for the future we want – lead educational transformation

Thank you

Enjoy the rest of the Retreat