

Media Comparison Matrix

Linear vs Nonlinear

Category	Linear	Nonlinear
Uses		
Variants	Single (except for double entendre or cumbersome cross-references)	Multiple versions, levels, audiences
Narrative	Traditional narrative	Customized narrative / Adventure games
Learning	Text material / Reports	Dynamic research
Cause/Effect	Logical argument / Procedures	Brainstorming / "What if...?" modeling
Audience	Quiet active audience	Stimulate passive audience
Control	Author	Shared between author & consumer
Responsibility	Print: Author held to prior statements, logical progression; Oral: Author gets immediate feedback (which can be <i>ir</i> responsible).	Author's facts easily checked through data retrieval.

Print vs Online/Electronic vs Oral

Category	Print	Online/Electronic	Oral (not recorded or amplified)
Production			
Creation	Creation slow, expensive	Creation slow, expensive	Reinvent/recreate/imitate, not revise
Revision	Revision often slow, expensive	Revision usually fast, cheap	Cannot revise
Distribution	Slow, but can be wide	Fast and normally wide	Fast but very limited range
Presentation			
Quality	Fine resolution / Wide field of view	Grainy / Narrow scope	Varies
Equipment	Requires only printed material	Extensive equipment requirements	None
Education	Requires literacy	Requires additional expertise	Requires minimum language skills
Mediums	Static visual	Multimedia	Multimedia
Feedback	Presenter gets minimum feedback	"Expert" system adapts like feedback	Presenter gets immediate feedback
Comfort			
Emotional	Considered "warm fuzzy" (decreasing)	Not considered "warm fuzzy" (increasing)	"Warm fuzzy" feeling varies
Physical	Fairly comfortable over long periods	Less comfortable over long periods	Fairly comfortable over long periods
Record?	Yes	Normally	No

(As you can see, Linear ? Print; Nonlinear ? Online/Electronic)

Under-Recognized Aspects of Various Media

(Most of these you already "know", but may not have internalized enough to apply instinctively.)

Linear / Print Dichotomy Can Confuse or Clarify

(Use the simplification; just don't get boxed in)

1. Minus links, hypertext topics are linear (procedures, *e.g.*).
2. Recordings, TV, movies are linear – but FastForward circumvents.
3. See-refs are attempt to circumvent linearity; annotations/corrections to printed copy circumvent author's linearity.
4. On/off switch makes everything nonlinear.
5. Acrobat is hybrid that defies classification.

Decision Making

- ✍ Online users decide fast (impact on Responsibility, below)
 - ?? Function/purpose of everything must be immediately clear
 - ?? Problem aggravated by tunnel vision limitations of online display, and persuasion of multimedia.
- ✍ Nonlinear for "What if...?" modeling.

Control vs Interaction

(Basically linear vs nonlinear – but from a slightly different perspective)

- ✍ Linear normally has more author control than nonlinear. But inconvenience or peer pressure can increase author control in nonlinear situations.
- ✍ Mix depends on audience as well as subject & purpose: active audiences often benefit from more control; passive audiences from more interaction.

Recorded / Nonrecorded

- ✍ Required for retention, distribution, or retrieval.
 - ?? Therefore, vital in Responsibility (below)
- ✍ **Primary issue is 1:1 recording, or 1:many recording. Exponential orders of magnitude difference.**
- ✍ Print 100% recorded; most electronic is recorded; oral may or may not be.

Responsibility

- ✍ Linear for logical responsibility
- ✍ Recorded for long-term responsibility
- ✍ Electronic for immediate consequences
- ✍ Hypertext for search and retrieval