Table 1. Five principles and pedagogical goals for an integrated approach (Kern, 2015)

<table>
<thead>
<tr>
<th>Principles</th>
<th>Pedagogical goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meanings are situated and relational, not autonomous.</td>
<td>→ Develop learners' awareness of how reframing and recontextualization affect meaning.</td>
</tr>
<tr>
<td>2. Language, literacy, and communication rely on both convention and invention.</td>
<td>→ Show learners the fundamental importance of social conventions in discourse, but also how people adapt conventions, resources, and designs for their individual and collective purposes.</td>
</tr>
<tr>
<td>3. The medium matters.</td>
<td>→ Encourage learners to reflect on how language forms are conventionally constrained by material contexts, and how they change over time. Familiarize them with historical precedents that have helped shape the communication technologies they use. Develop their ability to analyze mediums critically for ideological or commercial underpinnings.</td>
</tr>
<tr>
<td>4. Texts and communication are always multimodal.</td>
<td>→ Encourage learners to reflect on how linguistic and non-linguistic elements interact in texts, as well as in face-to-face communication.</td>
</tr>
<tr>
<td>5. Language, technologies, and texts mediate between the social and the individual; between ourselves and real and imagined worlds.</td>
<td>→ Develop learners' awareness of this mediation and the consequences it can have for understanding. Get learners to think about how they create social identities when they make texts.</td>
</tr>
</tbody>
</table>

Table 2. Production Variables (based on Meyrowitz, 1998, p. 100)

<table>
<thead>
<tr>
<th>Writing</th>
<th>Print</th>
<th>Photography</th>
<th>Radio/Audio</th>
<th>TV/Film</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of surface or material with which writing is done</td>
<td>Size/shape of page</td>
<td>Framing</td>
<td>Mike pickup pattern(s)</td>
<td>(most photo variables)</td>
</tr>
<tr>
<td>Color(s) of paper</td>
<td>Angle</td>
<td>Sound perspective</td>
<td>(all audio variables)</td>
<td></td>
</tr>
<tr>
<td>Thickness of paper</td>
<td>Selection of focus</td>
<td>Electronic volume</td>
<td>Visual fade in/out</td>
<td></td>
</tr>
<tr>
<td>Texture of paper</td>
<td>Depth of field</td>
<td>Electronic tone</td>
<td>Cuts</td>
<td></td>
</tr>
<tr>
<td>Shape of surface or material</td>
<td>Lens (wide-angle vs. telephoto)</td>
<td>Frequency filter(s)</td>
<td>Dissolves</td>
<td></td>
</tr>
<tr>
<td>Nature or texture of surface or material</td>
<td>Aperture setting</td>
<td>Fade-up/fade-out</td>
<td>Cross-cutting</td>
<td></td>
</tr>
<tr>
<td>Type of stylus or other mechanism for forming signs</td>
<td>Shutter speed</td>
<td>Cross-fade</td>
<td>Length of shots</td>
<td></td>
</tr>
<tr>
<td>Color(s) of type</td>
<td>Type of film</td>
<td>Multitracking</td>
<td>Zooms vs. dollies</td>
<td></td>
</tr>
<tr>
<td>Use of italics/bold</td>
<td>Filter(s)</td>
<td>Segue/silence</td>
<td>Pans vs. trucks</td>
<td></td>
</tr>
<tr>
<td>Widths of columns</td>
<td>Double exposure</td>
<td>Echo</td>
<td>Tilts up/tilts down</td>
<td></td>
</tr>
<tr>
<td>Spacing</td>
<td>Color balance</td>
<td>Speed changes</td>
<td>Still or shaking camera</td>
<td></td>
</tr>
<tr>
<td>Paragraph breaks</td>
<td>Contrast</td>
<td>Backwards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punctuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3. Heuristic Questions for the Five Principles (Kern, 2015)

**Principle 1: Meanings are situated and relational**

- What are the contexts relevant to the interpretation of this text (e.g., material, situational, social, ideological etc.)? How might the text and context inform one another?
- How does this text allude to, contest, build on other texts, even in other mediums?

**Principle 2: Language, literacy, and communication rely on both convention and invention**

- How have conventional semiotic resources been appropriated, adapted, or recontextualized for individual or collective purposes? To what effect?

**Principle 3: The medium matters**

- How does the medium affect language form? Are words written differently? Is syntax modified? Is text length affected? Are cohesion and coherence devices the same and if so, are they used in the same ways?
- How do such differences affect reading and writing?
- How could the meanings expressed in the medium be expressed/re-mediated in a different medium?

**Principle 4: Texts are multimodal**

- How do linguistic elements interact with nonlinguistic textual elements to produce particular meanings?
- How are time (e.g., rhythm, timing) and space (e.g., visual layout, movement) used to create particular meanings or effects?
- What communicative acts (e.g., establishing rapport, sharing ideas and information, persuading, negotiating, expressing feelings) are facilitated or rendered more difficult by the medium?
- What are the social consequences (in terms of who is included or excluded, how participant interactions might be reconfigured, how cultural processes and products might be affected) of using one medium and technology versus another?

**Principle 5: Language, technologies, and texts mediate**

- How does our use of language, technologies, and texts affect how we think about, produce, and use knowledge?
- How are traces of the communicator’s identity or persona signified?
- How do aesthetic qualities contribute to meaning?
- Whose interests are at stake, and how are those interests identifiable? Are beliefs, attitudes, myths, and assumptions marked as such or can they be mistaken for facts?
Short Bibliography


