# Themes of Information Problem-Solving

# Themes

1. The IPS process can be applied in all subjects, with students of all ages, and across all grade levels (K-20).

    The Big6 is not just for kids.

# Themes

**2. IPS is adaptable and flexible; it can be applied to any information situation.**

# Everyday Contexts

‣ buying a birthday gift

‣ deciding what movie to attend

‣ finding out if somebody likes you

‣ choosing colleges or careers or jobs

‣ making a banana split

‣ _____???

# Worksheet 3-1—Information Problem-Solving in School, Life, and Work Contexts

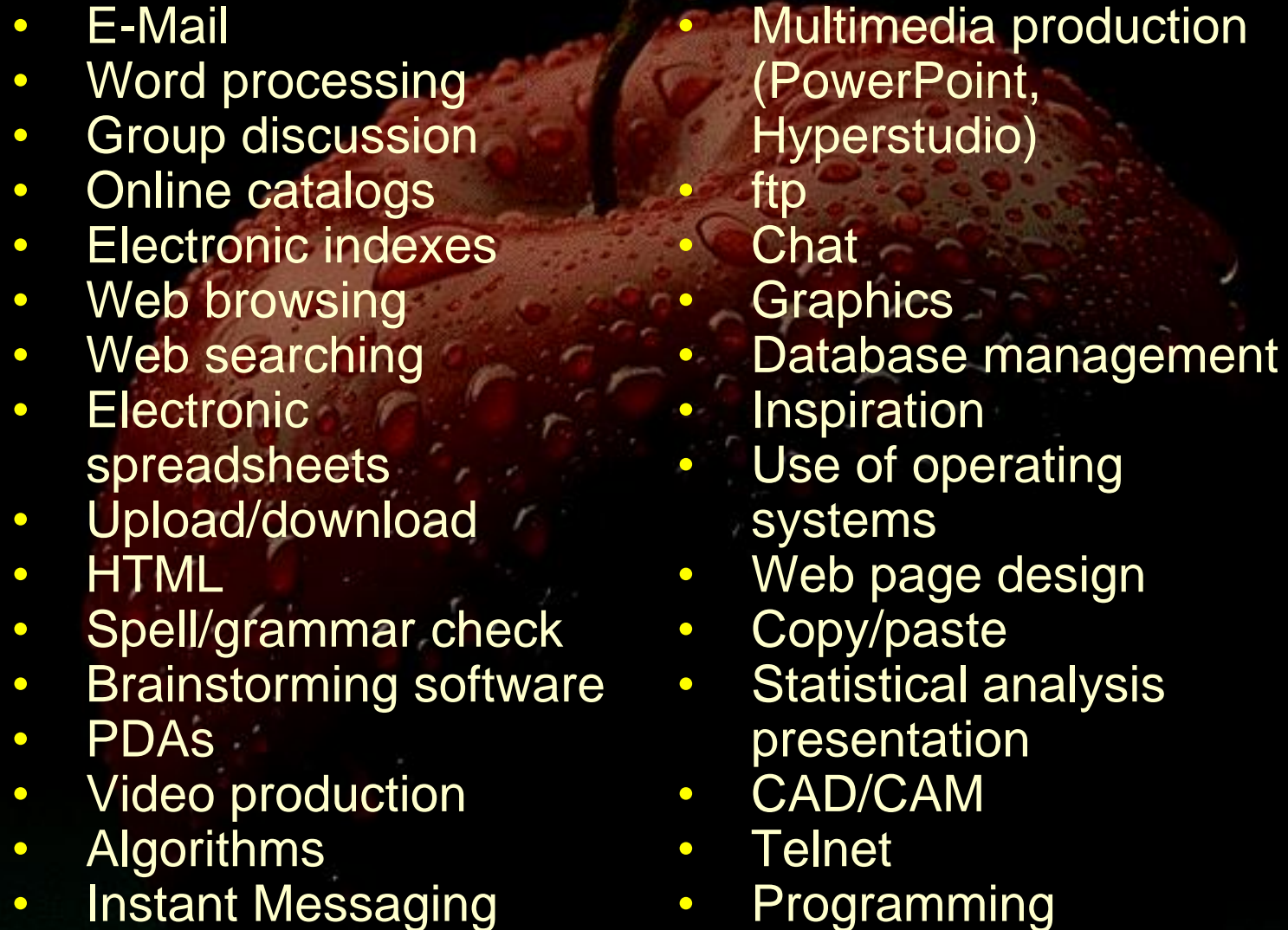| Information Problem-Solving Process | School Context | Life Context | Work Context |
|---|---|---|---|
| Task Definition | | | |
| Information Seeking Strategies | | | |
| Location & Access | | | |
| Use of Information | | | |
| Synthesis | | | |
| Evaluation | | | |

# Themes

**3. Technology skills take on meaning within the IPS process.**

# Technology - Out of Context

- Word processing
- Electronic spreadsheets
- E-Mail
- Web browsing
- Spell/grammar check
- Hyperstudio
- Web page design
- Instant Messaging
- Upload/download
- Statistical analysis presentation
- Web searching
- Online catalogs
- Multimedia production (PowerPoint)
- Database management systems
- Video production
- Inspiration
- Chat
- Group discussion
- Electronic indexes
- CAD/CAM
- Graphics
- Use of operating systems
- Copy/paste
- Telnet
- Brainstorming software
- PDAs
- ftp
- Algorithms
- Programming
- HTML

# Better, But Still Out of Context

- E-Mail
- Word processing
- Group discussion
- Online catalogs
- Electronic indexes
- Web browsing
- Web searching
- Electronic spreadsheets
- Upload/download
- HTML
- Spell/grammar check
- Brainstorming software
- PDAs
- Video production
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- Multimedia production (PowerPoint, Hyperstudio)
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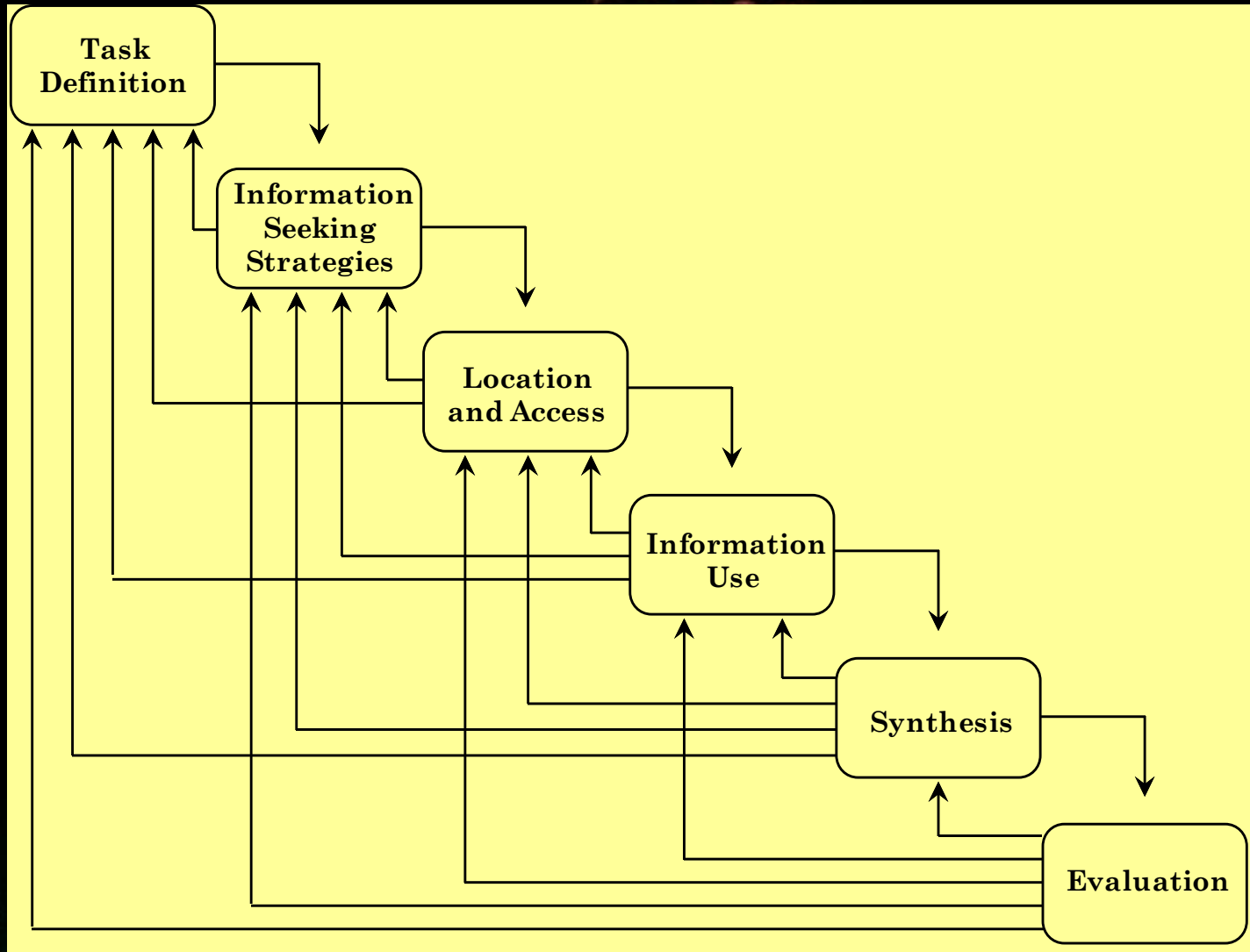- Programming

# Technology in Context

| | |
|---|---|
| *TASK DEFINITION* | Students use e-mail, listservs, newsgroups, chat, videoconferencing, and other online communication methods to clarify assignments and brainstorm problems. Students may also use software to generate timelines, organizational charts, etc. to plan and organize complex problems |
| *INFO SEEKING STRATEGIES* | Students identify and assess computerized resources as they develop information seeking strategies toward their problem. |
| *LOCATION & ACCESS* | Students use online catalogs, searchable periodical indexes, electronic encyclopedias, Web search engines, and other online searching tools to locate useful information. |
| *USE OF INFORMATION* | Students connect to and access online or locally stored electronic information sources, view, download, and decompress files, and use copy-and-paste features to extract relevant information. |
| *SYNTHESIS* | Students organize and communicate their results using word processing, database management, spreadsheet and graphics software, and distribute their projects via e-mail, Web publishing, or other media. |
| *EVALUATION* | Students evaluate the impact of the technology they used, including its effectiveness and efficiency |

# Themes

**4. Using the Big6 is not always a linear, step-by-step process.**

E

S

UI

L&A

ISS

TD

# The Big6: Not Linear

# The Big6: Non-Linear

TD

E    ISS

S    L&A

UI

# The Big6: Not Linear



TD

S

ISS

L&A

UI

S

UI

S

E

ISS

L&A

UI

S

E

# Themes

**5. The Big6 process is necessary and sufficient for solving problems and completing tasks.**

# The Big6™ Skills Necessary and Sufficient

1. Task Definition

2. Info Seeking Strategies

3. Location & Access

4. Use of Information

5. Synthesis

6. Evaluation

The BIG6

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The BIG6

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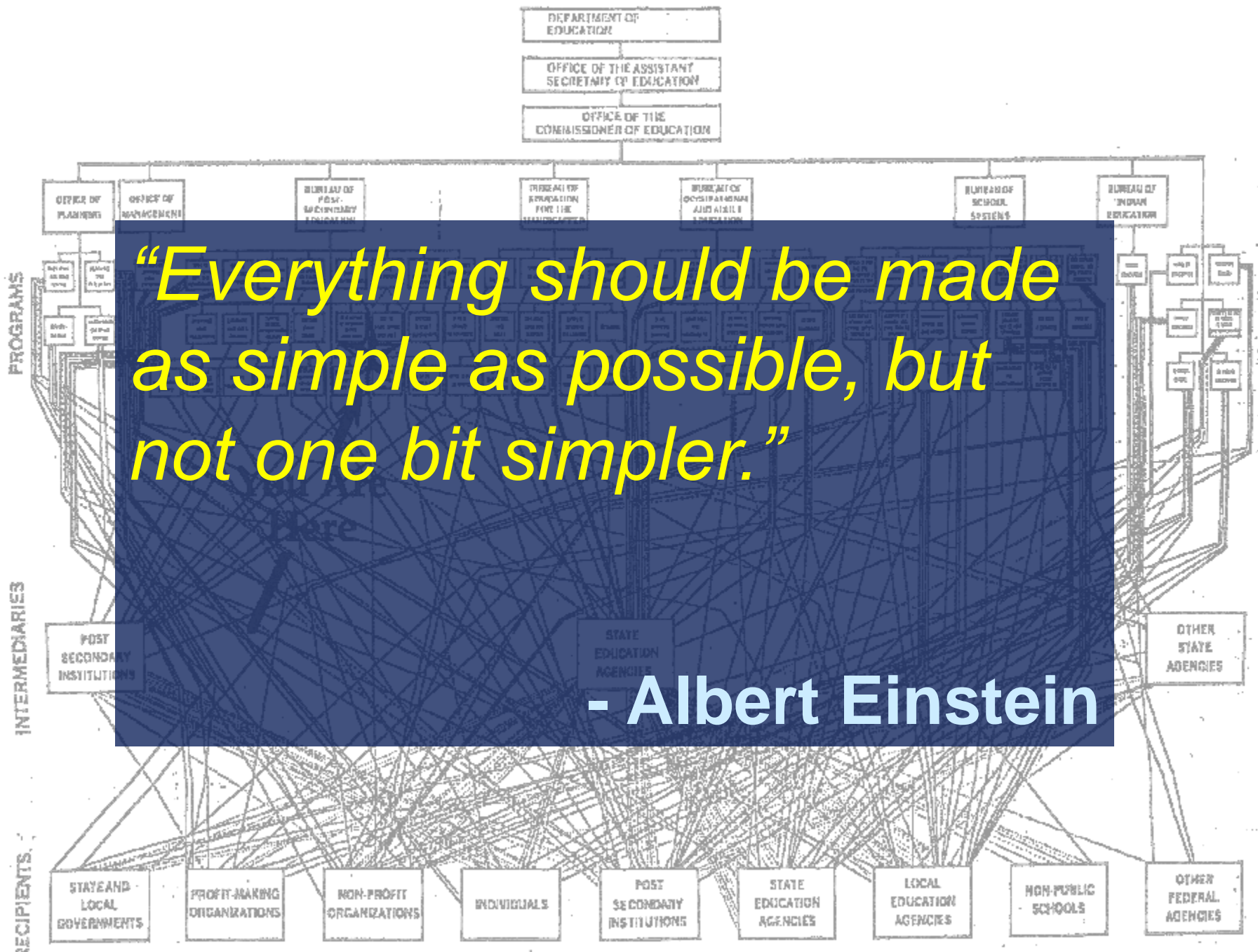6. The Big6 appears simple, but is multi-layered and powerful.

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LOCAL EDUCATION AGENCIES

NON-PUBLIC SCHOOLS

OTHER FEDERAL AGENCIES

*"Everything should be made as simple as possible, but not one bit simpler."*

**- Albert Einstein**

# Information Literacy Models

**Comparison of Information Skills Process Models**

| Eisenberg/Berkowitz Information Problem-Solving (The Big6 Skills) | Kuhlthau Information Seeking | | Irving Information Skills | Pitts/Stripling Research Process | New South Wales Information Process |
|---|---|---|---|---|---|
| 1. Task Definition<br>  1.1 Define the problem<br>  1.2 Identify info requirements | 1. Initiation<br>2. Selection | 4. Formul-ation (of focus) | 1. Formulation/analysis of information need | 1. Choose a broad topic<br>2. Get an overview of the topic<br>3. Narrow the topic<br>4. Develop thesis/purpose statement | Defining |
| 2. Information Seeking Strategies<br>  2.1 Determine range sources<br>  2.2 Prioritize sources | 3. Explor-ation<br><br>(investig info on the general topic) | 5. Collect-ion<br><br>(gather info on the focused topic) | 2. Identification /appraisal of likely sources | 5. Formulate questions to guide research<br>6. Plan for research & production | Locating |
| 3. Location & Access<br>  3.1 Locate sources<br>  3.2 Find info | | | 3. Tracing/locating indiv. resources<br>4. Examining, selecting, & rejecting indiv resources | 7. Find, analyze, evaluate resources | Selecting |
| 4. Information Use<br>  4.1 Engage (read, view, etc)<br>  4.2 Extract info | | | 5. Interrogating/using individual resources<br>6. Recording/storing info | 8. Evaluate evidence take notes/compile bib | Organising |
| 5. Synthesis<br>  5.1 Organize<br>  5.2 Present | 6. Presentation | | 7. Interpretation, analysis, synth., and eval. of info<br>8. Shape, presentation, and communication of info | 9. Establish conclusions/Organize info in outline<br>10. Create and present final product | Presenting |
| 6. Evaluation<br>  6.1 Judge the product<br>  6.2 Judge the process | 7. Assesment (of outcome/process) | | 9. Evaluation of the assignment | (Reflection point -- is the paper/project satisfactory) | Assessing |