Technical Writing & Presenting 2.0

CSCI 373

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Labels and Citations

- Labels:
  - \label{label_name} and \ref{label_name}
- Use ~:
  - In Smith and Jones~\cite{2014SmithJones}, we see that …
  - In Section~\ref{intro}, …
  - In Figure~\ref{fig1}, …

Figures

- Figures:
  - Clearly labeled: Units, legend, title.
  - Captions: Should explain the figure in summary.
- Use minipage for complicated figure arrangements.

```
\begin{wrapfigure}{r}{0.5\textwidth}
\begin{center}
\fbox{
\begin{minipage}[b]{0.45\textwidth}
\raggedright

\end{minipage}
} %fbox
\end{center}
\end{wrapfigure}
```

minipage environment

\begin{figure}[h!]
\includegraphics[width=20pc]{figures/scaling2008_4strong.pdf}\hspace{1pc}

\begin{minipage}[b]{17pc}\caption{ \label{fig:scaling1}\small{Strong scaling of Tramonto for 3D calculations on Thunderbird and Blue Gene. In order to compare all the results against a single standard, we assumed perfect scaling on the smallest number of processors where the problem could be solved ($Nproc_{min}$). Thus the 16 processor result for the $D=5\sigma$ (Thunderbird) case, the 128 processor result for the $D=20\sigma$ (Thunderbird) case, and the 512 processor result for the $D=5\sigma$ (Blue Gene) case are all shown on the ideal line. When using a large memory per node system (such as thunderbird) there is a window of processor counts where near linear (in some cases superlinear) speedups can be expected. The width of this window is approximately an order of magnitude in the processor count. }}

\end{minipage}

\end{figure}

Writing Rules

Rule #6:

- Use pictures, charts and graphs,
- But keep in mind #4 (Simplicity).

Rule #7: Use examples to explain complex ideas.

Rule #9: Use:

- Headings (Chapter, Section, etc.).
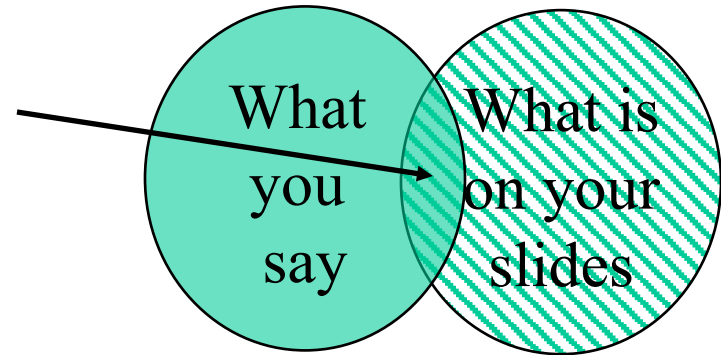- Bulleted Lists.
- Numbered lists.

to provide structure, clarity and conciseness to your document.

Rule #10: Provide guidance :

- Table of Contents.
- List of Figures, list of Tables.
- Index and Glossary.
- Abstract.
- Note: LaTeX provides these!

Slide Guidelines

1. Let us read the data.

2. Use diagrams, charts, figures.

3. Intersection: minimal.

    What you say → What is on your slides

4. Prepare for disaster.

5. If slides are big notecards, don't have slides.

PowerPoint Defaults

- The default format for PowerPoint is:
  - Outline Format.
  - Brief statements.
  - Slide is a big notecard for the speaker.
- This is BAD:
  - Credible argument:
    - Problems with space shuttle O-rings were known.
    - Poor PowerPoint hid the issue.
    - NASA Challenger exploded in 1986.
  - The best default for a new PowerPoint slide?