

## Part II: Workshop to enhance research writing and quality publications



Dr. Ramon Sanchez  
Harvard T.H. Chan School of Public Health  
[rsanchez@hsph.harvard.edu](mailto:rsanchez@hsph.harvard.edu)

# Outline

---

- **Recap** on reasons on why Mexican researchers damage their chances of getting published in journals with high impact factors
- **Recap** on workshop to enhance your research writing skills + **tables, figures and transitions**
- Comparison of incentives for research in Mexico and the United States of America
- Operational practices to enhance acceptance rates for publications

---

# Recap

# Reasons that hinder publications by Mexican researchers

---

- Lack of skills when writing a research paper
  - People don't know what is the basic structure when writing a research paper
  - People don't know what are the best practices when writing a research paper like when should you present a table instead of a figure, how many lines should you have in the text of a table or figure, etc.

# Reasons that hinder publications by Mexican researchers

---

- Misunderstanding about the use of language structures in different paper sections
  - People don't know what tense to use for each section of the paper
  - People don't know how to properly punctuate (when to add commas, periods, semi-columns, etc.)
  - People don't know how to create a balanced discussion

# Reasons that hinder publications by Mexican researchers

---

- Being verbose and excessive use of the passive voice
  - **Mexican researcher:** “Excelentísimo Rector de la Universidad de Sonora-Presente, Por medio de la presente quisiera solicitar su amable presencia al multitudinario acto de inauguración del Programa de Vinculación...”
  - **U.S. researcher:** “Dear Mr. President, you are invited to attend the inauguration of Programa de Vinculacion...”

# Reasons that hinder publications by Mexican researchers

---

- Unintended plagiarism and lack of proper in-text citations
  - A lot of people get ideas or they paraphrase from literature and other documented sources without properly doing in-text citations
  - A lot of people copy-paste fragments of research papers and/or books without citations of any kind

# Introduction

---

- State the main problem related to your research
- Describe related literature or operational practices that dealt with this problem in the **past**, state their results and the degree in which they have solved/addressed the problem described above



# Introduction

---

- Identify a “gap” (what is not know, a question that was not answered in previous research). A “gap” could be a contradictory statement, an effort to reconcile a paradox, two conflicting findings or observations, lack of evidence or very limited information, inconclusive evidence, etc.
- A gap could also be a deficiency or challenge to a previous answer, start with “However”...

# Introduction

---

- State your proposed research and why it is different from previous approaches
- Describe in 1 or 2 sentences your basic research methodology
- Describe the potential benefits of your research in terms of \$, time and quality of life improvements, then invite the reader to spend time in analyzing your document

# Introduction

---

State the problem and why it matters

Describe what has been done in the past to solve, research or address this problem

Identify a gap of knowledge/ opportunity for research (“However”)

Describe your proposed research to address this gap and/or solve a problem

Describe potential benefits of your research in terms of \$, time or quality of life

# Background

---

- In this section you make sure that your reader is able to understand preliminary information and identify your research topic before reading your methods and the rest of the information for this study



# Background

---

- In the background section you also identify some shortcomings of previous research and how these previous works relate to your proposed research and how your approach is original



# Background

---

- Your background should be well-organized, a proposed structure is:
  - The origins of the research question or problem and why it is important
  - Previous relevant state of the art and/or research
  - Description of previous methods and their limitations, then state why your research approach or methodology is different
  - State what you are about to do in simple words (summary of methodology in 200 words or less)
  - Invite the reader to see the outcome of your research and your discussion of results

# Background

- The secret of a good background section is that it has to stand alone and read like a short story (and you will be providing the temporary end to this story with your research paper)



# Research Methods

---

- What is a Research Method?

It is an objective and repeatable process to give validity to the results and/or inferences of your research



# Research Methods

---

- A research method is like a recipe accepted by the scientific community, it needs an objective criteria so people trust that its results are as unbiased as possible, it has to be repeatable so other people can repeat the research if they need to. Validity is derived from these two conditions.

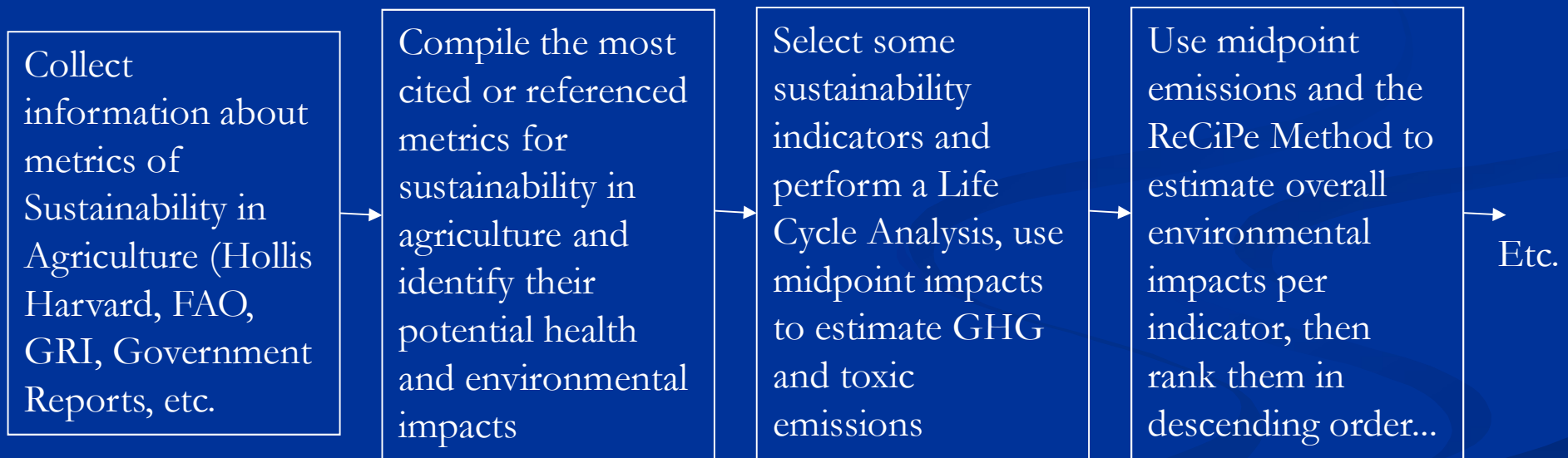
# Make sure to have an objective methodology

---

- Whatever your methodology is, it needs to be:
  - Objective
  - Structured/Valid
  - Replicable
- Imagine that you are ordering someone else to do the procedure that you conceived for your research.

# Make sure to have an objective methodology

- A good way to define if your methodology is objective, structured and replicable is to do a Block Diagram



# Recommendations to improve your limitations' section

---

- **Acknowledge your Selection Bias:** Occurs when you select groups, individuals, cases, etc.
  - You usually get this in any case study because you don't have an unlimited number of cases to choose from, so you have to pick whatever you have available.
- **Critique your randomization or any other method to reduce selection bias**
  - Random selection, single blind study, double blind study, triple blind study

# Recommendations to improve your limitations' section

---

- Single-blind
  - Subject knows treatment status; investigator blind  
OR
  - Investigator knows treatment status; subject blind
- Double-blind - Ideal design
  - Subjects and investigators blind to treatment status
- Triple-blind
  - Subjects, investigators, monitoring committee blind to treatment status

# Recommendations for writing about results and discussion

---

- In the **Methods** section you report what you did
- In the **Results** section you report what you found
- The **Discussion** section repopulates your results compared to all research done by others to **justify your conclusion with a degree of certainty**

# Recommendations for writing about results and discussion

---

- Results
- Combines words and graphics to show what you found
  - Minimize overlap between text and graphics
  - Use graphics for visual display of findings
  - Use words to point reader to key findings and to detailed data in tables and figures

# Recommendations for writing about results and discussion

---

## ■ Results

- Don't repeat table data in words, except for the MOST important features
- Don't put too many numbers and stats in text
- Make sure that numbers in text and tables agree



# Recommendations for writing about results and discussion

---

- In writing up your results
  - Present findings in order of importance
  - Begin with an “answer” to your aim or hypothesis, making clear whether positive or negative
  - Write up your findings in the past tense
  - Don't give pages and pages of results, your readers will be lost

# Recommendations for writing about results and discussion

---

- In writing up your results
  - Report, don't interpret meaning of findings, that's the function of the discussion

# Recommendations for writing about results and discussion

---

- Discussions are a discourse to show what we know by critically assessing all the relevant evidence
  - Your own study and findings
  - Work that would seem to support yours
  - Conflicting evidence

# Recommendations for writing about results and discussion

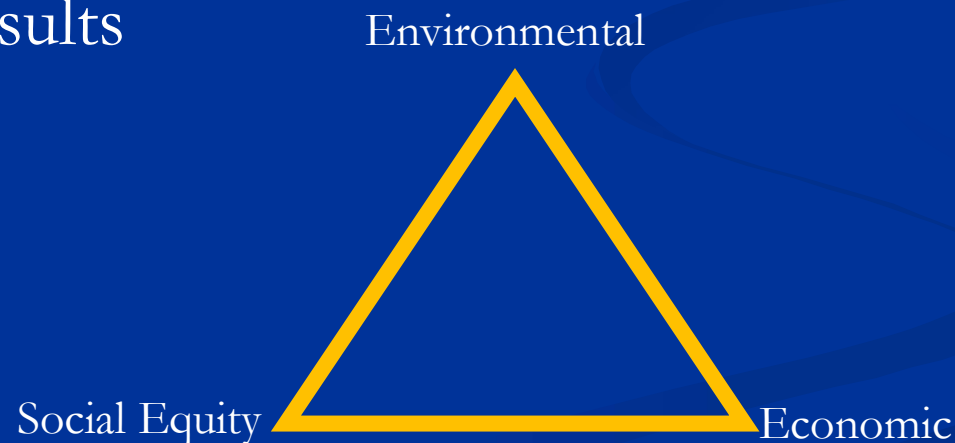
---

- Use variety of tenses when writing the Discussion
  - Past for completed actions, present for events that are valid, repeatable, generalizable
  - Use active voice as much as possible to describe who did what
  - Remind us why your research is important

# Recommendations for writing about results and discussion

---

- It is easier if you follow these rules:
  - Make a list of your main results in descending order of importance
  - Then, write about the Environmental, Economic and (Social) Equity implications of each one of your results



# Recommendations for writing about results and discussion

---

- Guideline for discussion
  - End with a justified conclusion and recommendations for future research

---

# New Materials

# Use of tables and figures

---

## ■ Graphs

- Compress large volumes of data into meaningful findings and relationships (trends, proportions, etc.)

## ■ Tables

- Summarize detailed information
- Present precise numeric values instead of trends and proportions



# Use of tables and figures

---

## ■ Tables

- They can be hard to read, they need to be as clear and simple as possible (make short tables easy to read)
- If possible avoid writing “as shown in table x”, instead use parenthesis next to your regular text (table x)

# Use of tables and figures

---

- Tables and Figures
  - Need to stand-alone, without readers looking at text
  - Write comprehensive titles and legends: up to 3 lines is often permissible
  - All of the context should be in the text for titles and legends

# Use of tables and figures

- Use tables when you want to be precise and objective when expressing numbers and values
- For a table, the label is called a “title” and it is set flush above the table

<b>Type of Practice</b>	<b>Modifies Habitat</b>	<b>Use Wild Fish for Feed</b>	<b>Fed Fish Meal and Fish oil</b>	<b>Increases Influx of Wastes in Nearby Areas</b>	<b>Threatens wild populations</b>	<b>Potential Pathogen Invasion in Surrounding Areas</b>
Extensive	Moderate	N/A	N/A	Low	Low	Moderate
Semi-Intensive	Moderate	N/A	Moderate	Moderate	Moderate	Moderate
Intensive	Moderate	Moderate	High	High	High	High

# Use of tables and figures

- Use figures when you want to present a visual image that communicates values less precisely than exact numbers, but it has more impact (trend line, picture, graph, bar chart, etc.)
- For a figure, the label is called a “legend” and is set flush left below the figure

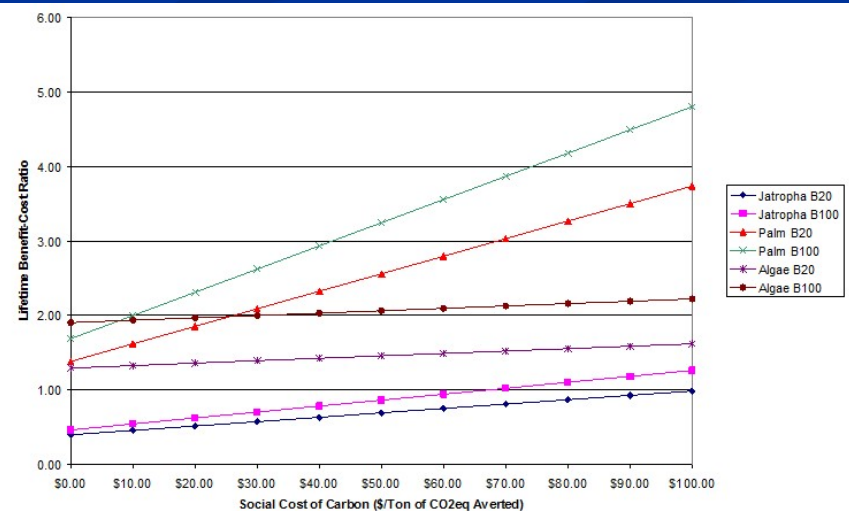


Figure 3-5. Sensitivity of lifetime Benefit-Cost ratios to Social Cost of Carbon for biodiesel for different biodiesel introduction scenarios in Mexico City's Metropolitan Area

# Use of tables and figures

---

- Avoid making the title or legend a general topic
  - For example: “Health effects of diesel substitution” is really general, you should be specific and have something like “Health effects of substituting diesel with biodiesel fuel in Boston, 2013-2014”
- Don’t give background information or drive the meaning of data for the reader
  - For example: “Cleaner emissions of introducing biodiesel in public transportation in Boston” , instead you should say “Exhaust emissions of introducing biodiesel...”

# Use of tables and figures

- Keep the visual impact simple
  - Box a graphic only if you have 2 or more figures
  - Don't color or shade the background

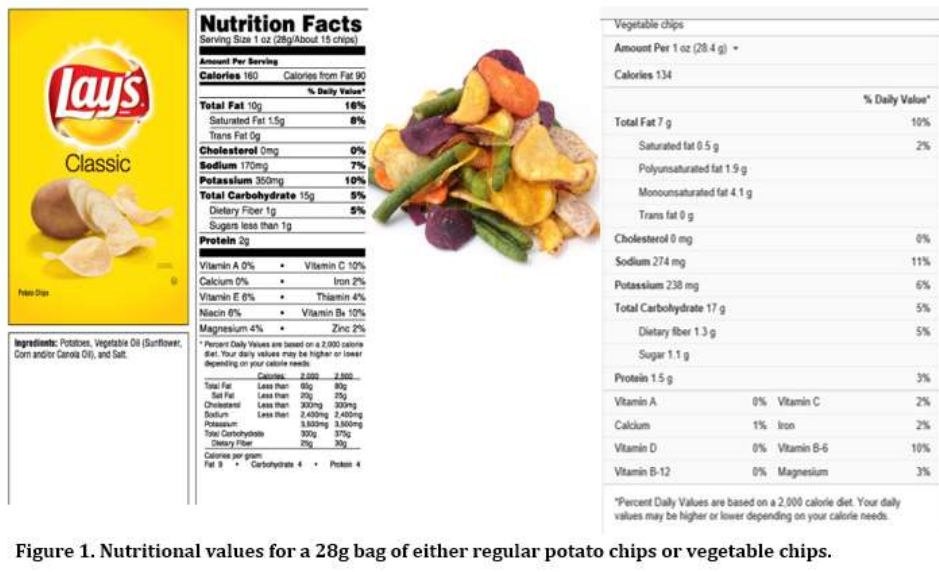


Figure 1. Nutritional values for a 28g bag of either regular potato chips or vegetable chips.

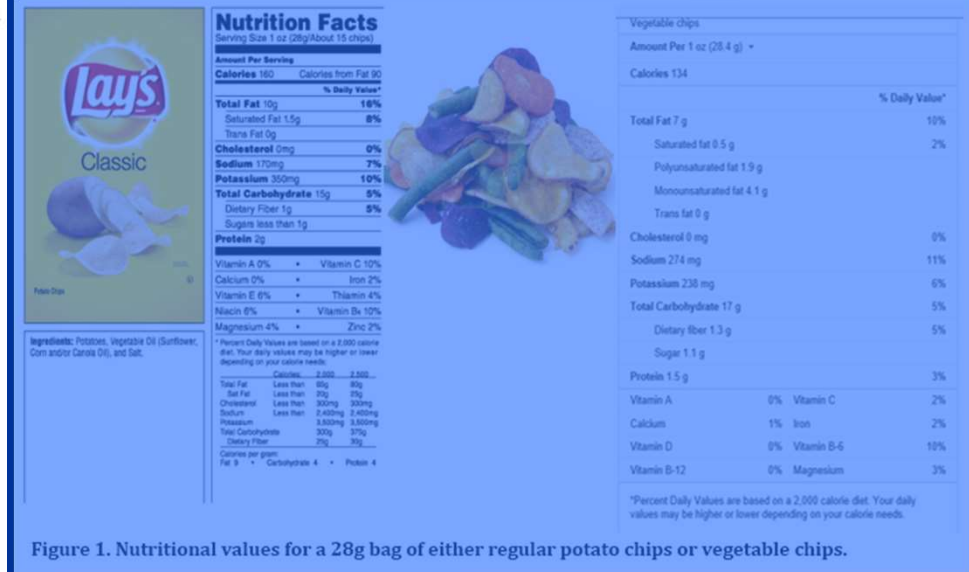


Figure 1. Nutritional values for a 28g bag of either regular potato chips or vegetable chips.

# Use of tables and figures

---

- In a table, don't divide rows and columns with dark black lines, use light gray lines only if the table is complex or you want to direct your reader to some specific information
  - For tables with many rows, lightly shade every 5<sup>th</sup> row
  - Label rows and columns in tables
  - Round numbers to a relevant value, if you are dealing with small numbers, use no more than 2 decimal points
-

# Use of tables and figures

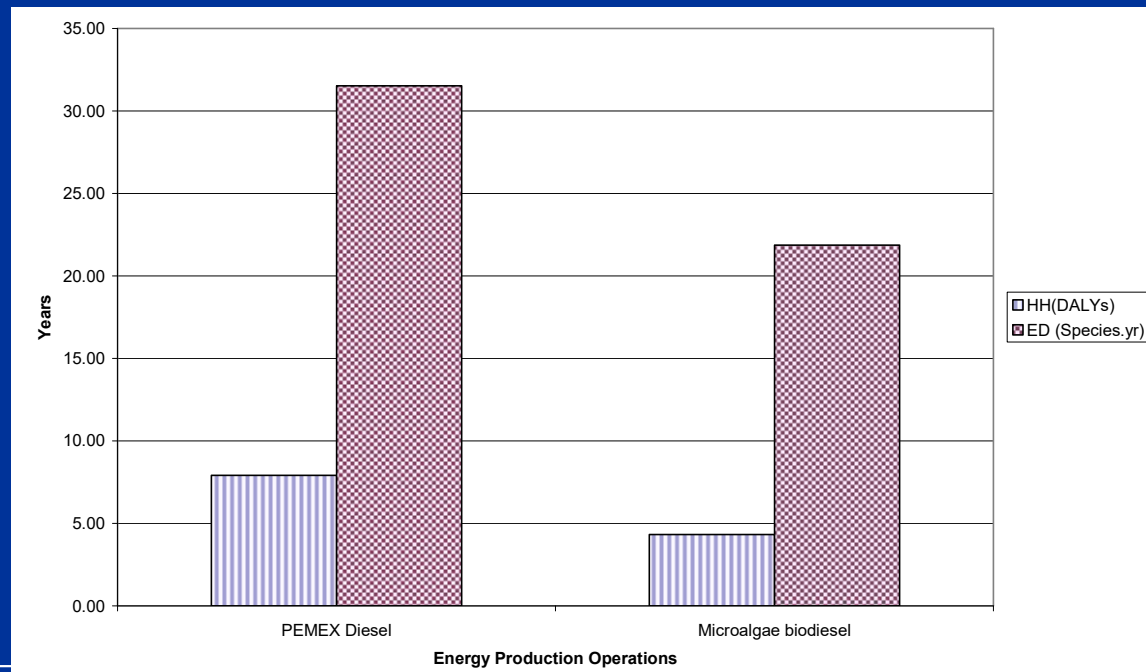
---

- In a table, order rows and columns in such a way that readers can always find what you want them to see first, do not use an alphabetical order by default
- Sum totals at the bottom of the column or at the end of each row, don't do it at the top of the column or to the left of the row



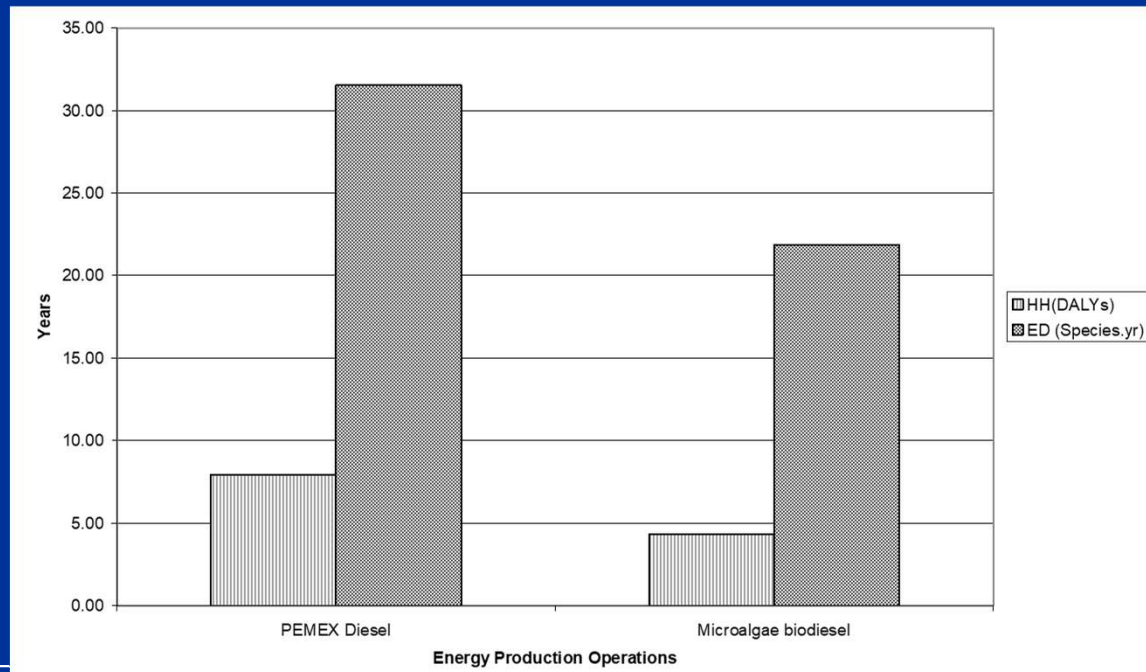
# Use of tables and figures

- A bar chart emphasizes contrasts between discrete items. Don't use different colors unless you know your document will be printed in color all the time, use shade lines to show contrast instead.



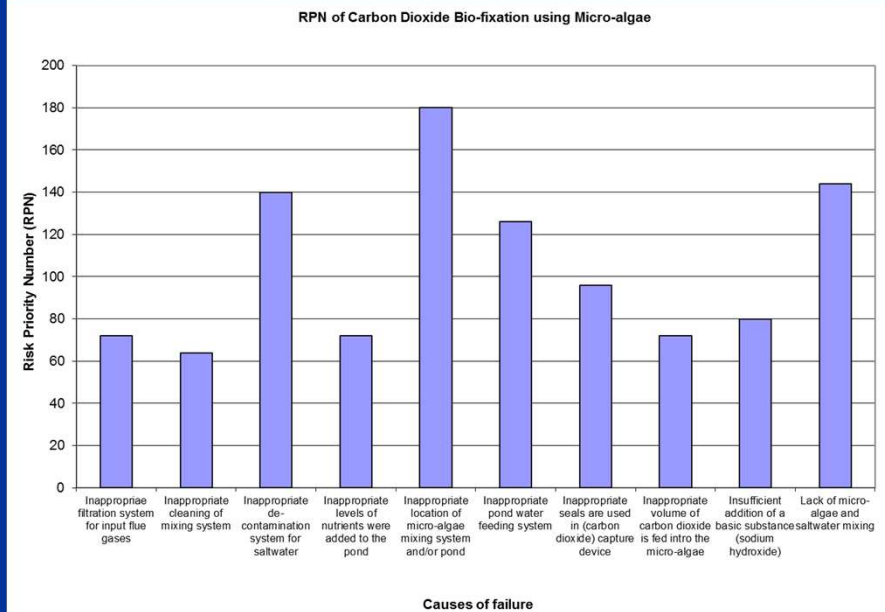
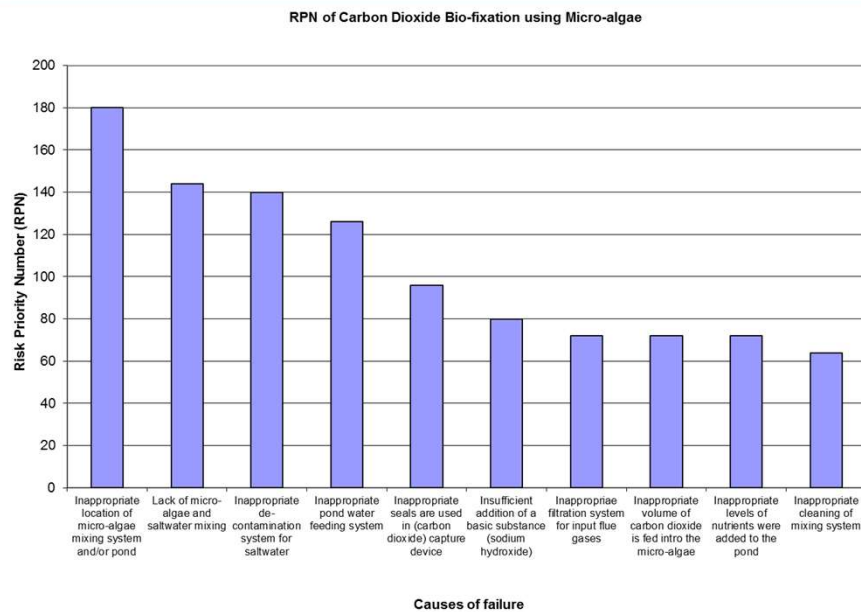
# Use of tables and figures

- A bar chart emphasizes contrasts between discrete items. Don't use different colors unless you know your document will be printed in color all the time, use shade lines to show contrast instead.



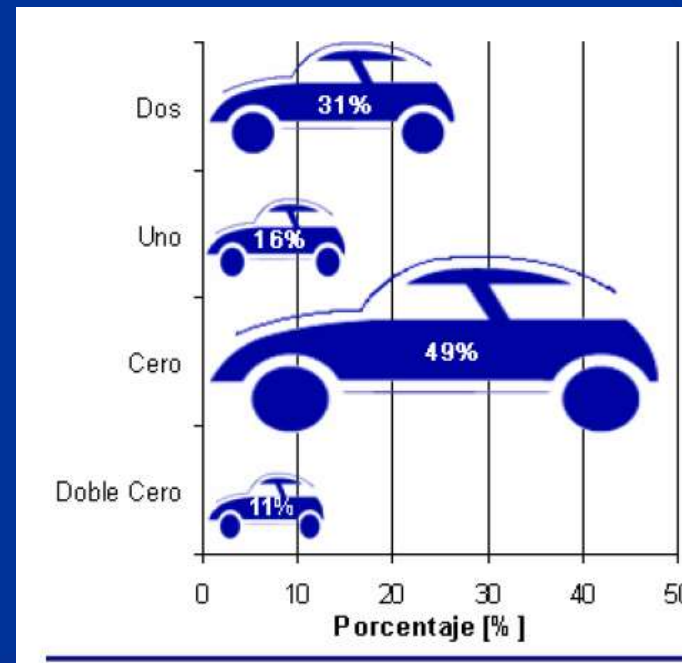
# Use of tables and figures

- Bar charts should be arranged to create an image that matches your message (compare both charts below)



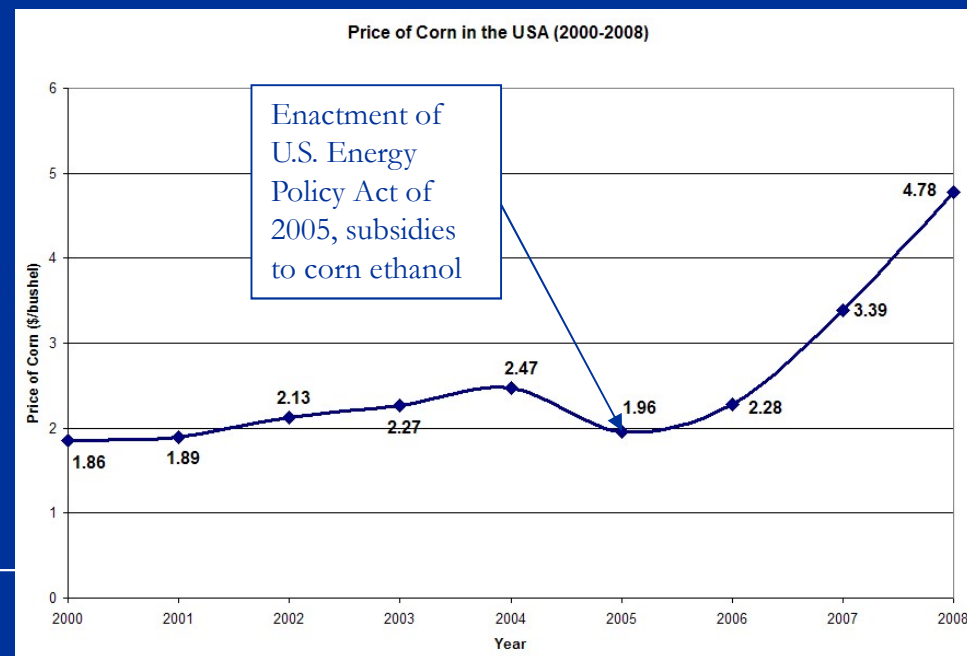
# Use of tables and figures

- Never use “iconic” bars like coins to show profits or cars to show cars’ sales, it doesn’t look good and might distort how readers see values



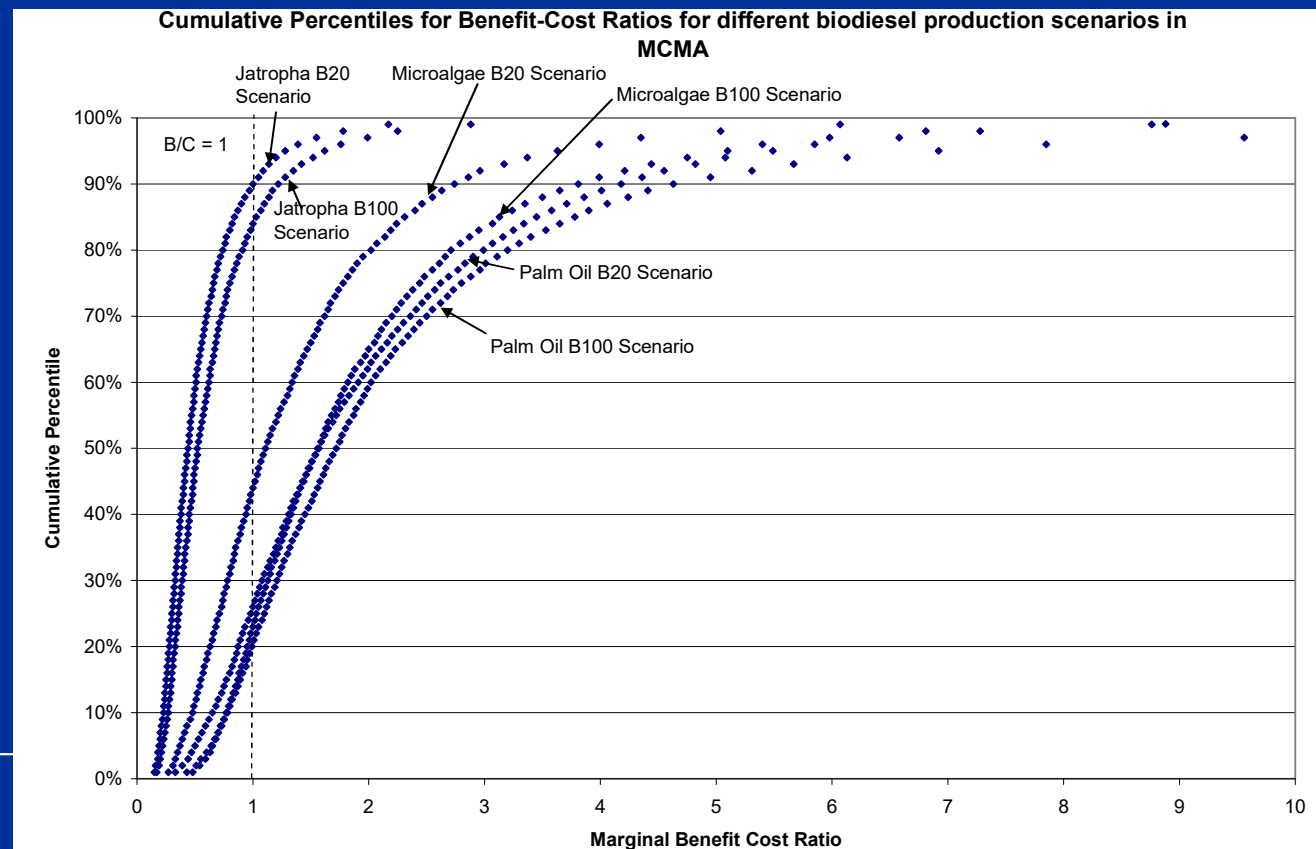
# Use of tables and figures

- In graphs with trend lines make sure that you label both your “X” and “Y” axis
- If a line in a graph changes in response to something not mentioned on the graph, add text to the image to explain it



# Use of tables and figures

- If possible, label lines and bar segments on the image rather than in a legend set to the side. Use a legend just in case labels would make the image too complex to read



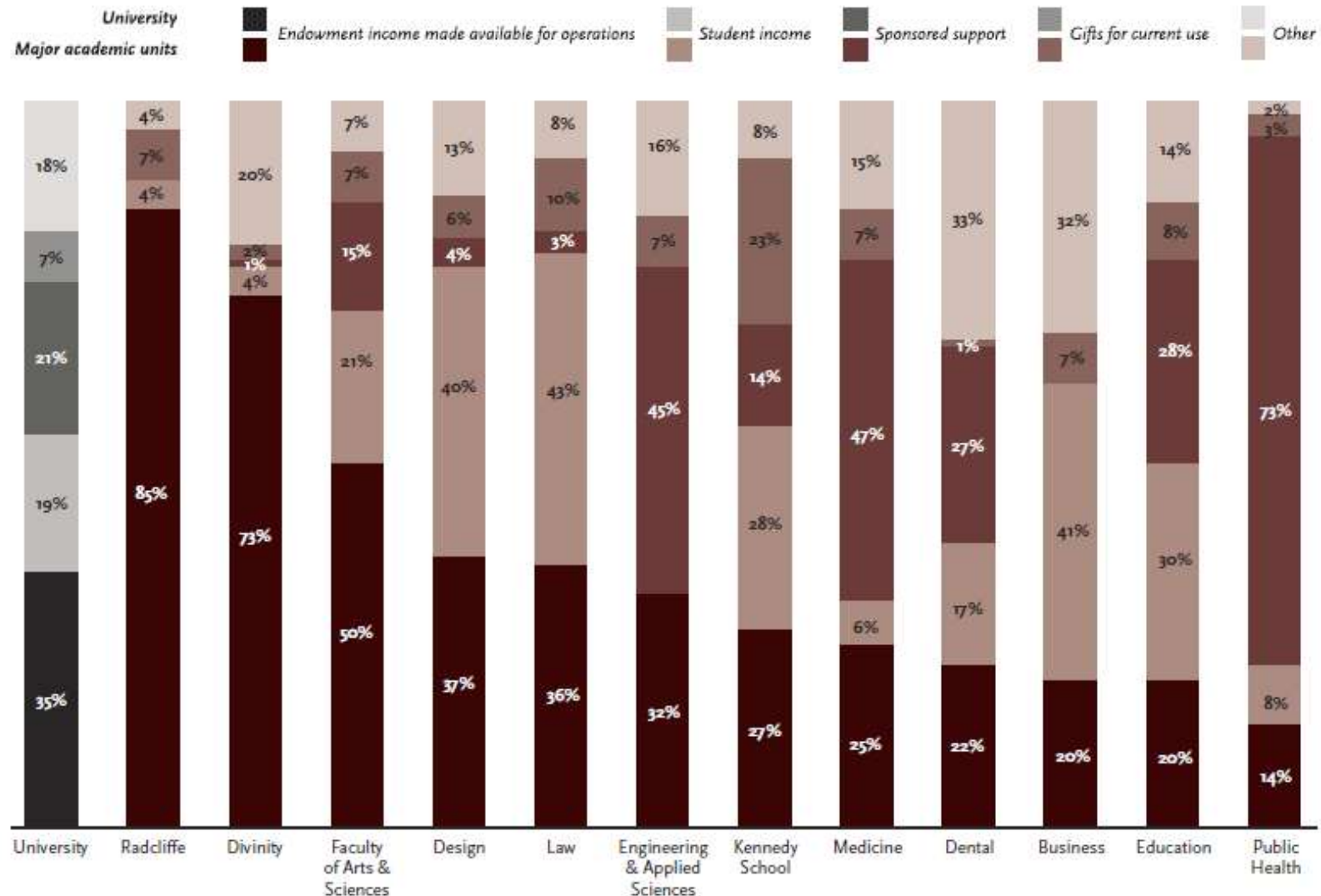
# Use of tables and figures

---

- Stacked bars are used when you want to compare whole values for different bars rather than their divided segments
- Arrange segments in a logical order , try to put the largest segment at the bottom in the darkest shade
- Label segments with specific numbers, if possible connect corresponding segments with gray lines

# Use of tables and figures

FISCAL 2012 SOURCES OF OPERATING REVENUE





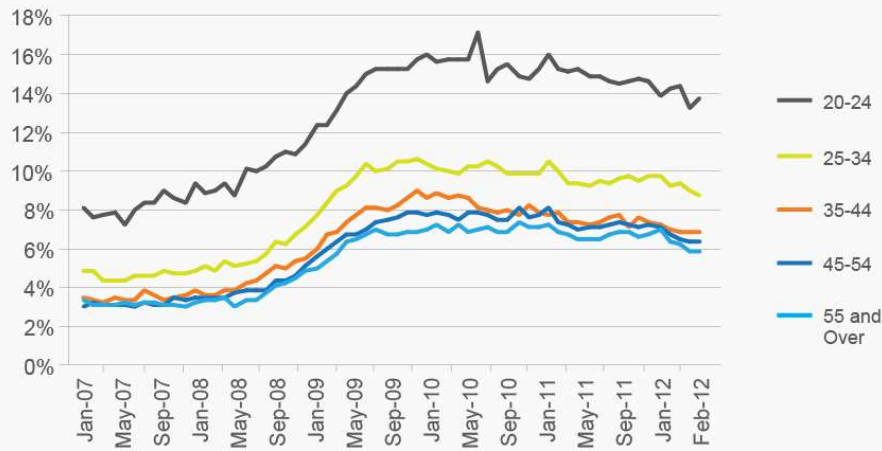
# Use of tables and figures

---

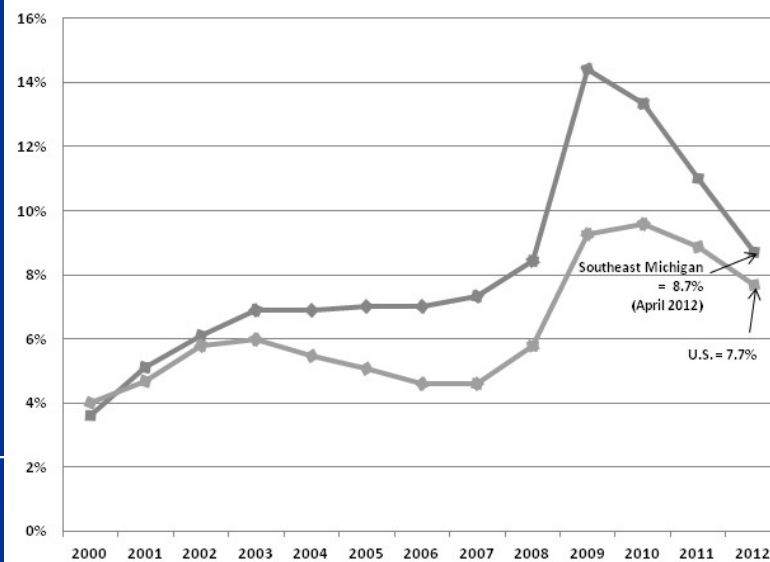
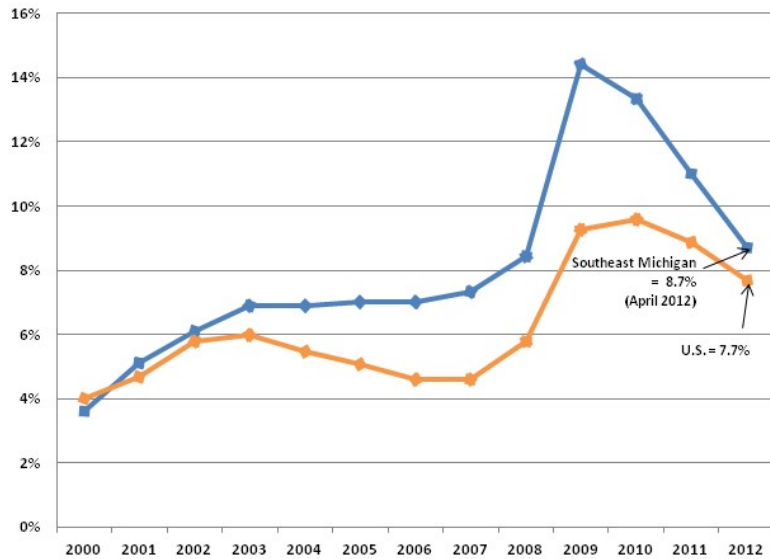
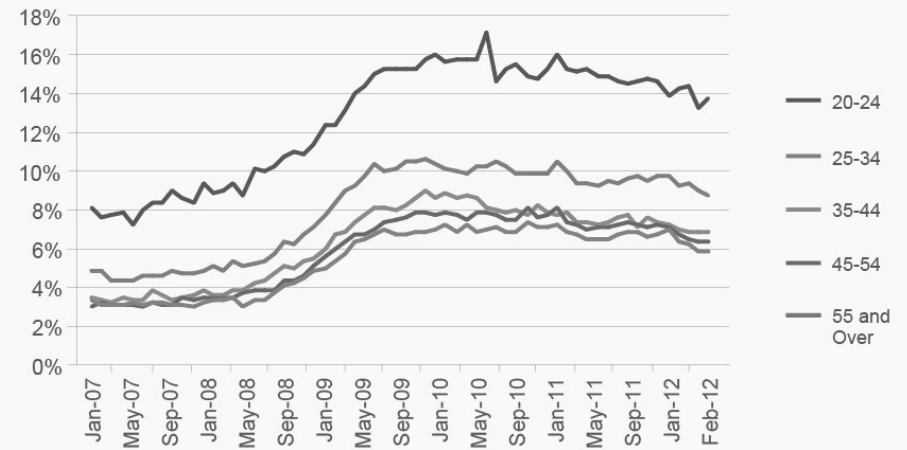
- Line graphs usually show trends
  - Choose the variable that makes the line go in the direction (up or down) that supports your point
  - Don't plot more than 6 lines in one graph, go beyond this limit only if you can't make your point any other way
  - If you have ten data points or less, indicate them with dots and insert numbers to indicate their exact value
  - Do not depend in different shades of gray to distinguish lines (use different shapes in connecting points instead)

# Use of tables and figures

UNEMPLOYMENT RATES BY AGE GROUP, 2007-2012

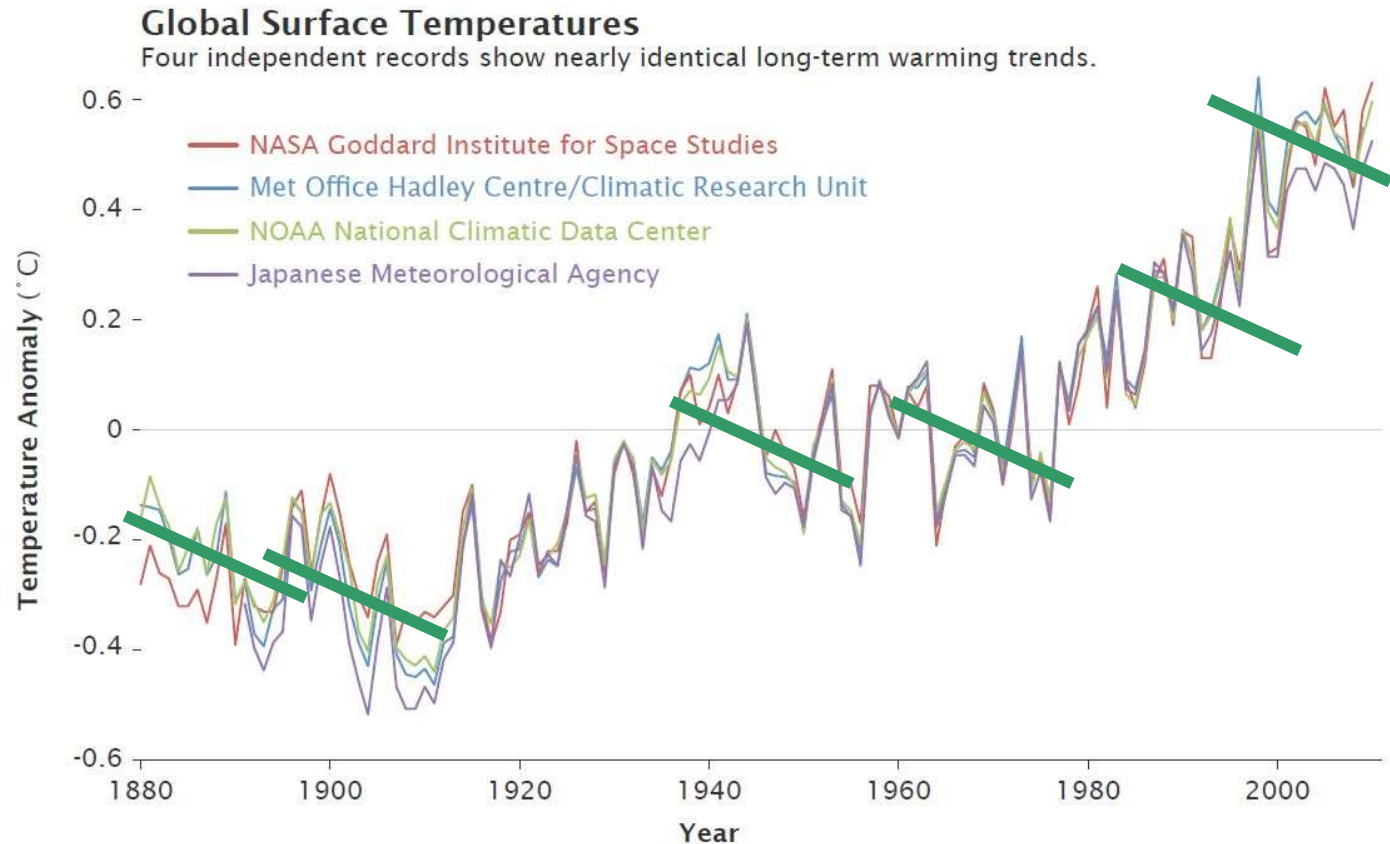


UNEMPLOYMENT RATES BY AGE GROUP, 2007-2012



# Use of tables and figures

- Since graphs usually show trends, be ethical and don't "cherry pick" data points to force your point into the reader



# Use of tables and figures

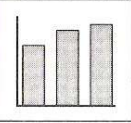
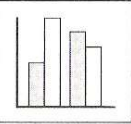
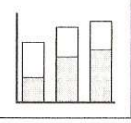
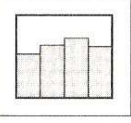

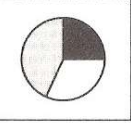
- Don't "cherry pick" data points to force your point into the reader

<http://www.pbs.org/wgbh/pages/frontline/climate-of-doubt/>

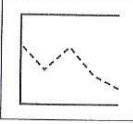
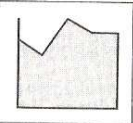
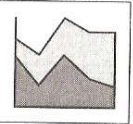
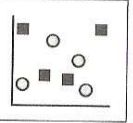
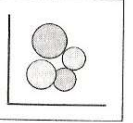




**Table 15.7 Common graphic forms and their uses**

	Data	Rhetorical Uses
<b>Bar Chart</b>		Compares the value of one variable across a series of cases (e.g., average salaries for service workers <sub>variable</sub> in six companies <sub>cases</sub> ).
		Creates strong visual contrasts among individual cases, emphasizing individual comparisons. For specific values, add numbers to bars. Can show ranks or trends. Vertical bars (called <i>columns</i> ) are most common, but can be horizontal if cases are numerous or have complex labels. See section 15.4.3.
<b>Bar Chart, Grouped or Split</b>		Compares the value of one variable, divided into subsets, across a series of cases (e.g. average salaries <sub>variable</sub> for men and women service workers <sub>subsets</sub> in six companies <sub>cases</sub> ).
		Contrasts subsets within and across individual cases; not useful for comparing total values for cases. For specific values, add numbers to bars. Grouped bars show ranking or trends poorly; useful for time series only if trends are unimportant. See section 15.4.3.
<b>Bar Chart, Stacked</b>		Compares the value of one variable, divided into two or more subsets, across a series of cases (e.g. harassment complaints <sub>variable</sub> segmented by region <sub>subsets</sub> in six industries <sub>cases</sub> ).
		Best for comparing totals across cases and subsets <i>within</i> cases; difficult to compare subsets across cases (use grouped bars). For specific values, add numbers to bars and segments. Useful for time series. Can show ranks or trends for total values only. See section 15.4.3.
<b>Histogram</b>		Compares two variables, with one segmented into ranges that function like the cases in a bar graph (e.g., service workers <sub>continuous variable</sub> whose salary is \$0–5,000, \$5,000–10,000, \$10,000–15,000, etc. <sub>segmented variable</sub> ).
		Best for comparing segments within continuous data sets. Shows trends, but emphasizes segments (e.g., a sudden spike at \$5,000–10,000 representing part-time workers). For specific values, add numbers to bars.
<b>Image Chart</b>		Shows value of one or more variable for cases displayed on a map, diagram, or other image (e.g., states <sub>cases</sub> colored red or blue to show voting patterns <sub>variable</sub> ).
		Shows the distribution of the data in relation to preexisting categories; de-emphasizes specific values. Best when the image is familiar, as in a map or diagram of a process.
<b>Pie Chart</b>		Shows the proportion of a single variable for a series of cases (e.g., the budget share <sub>variable</sub> of U.S. cabinet departments <sub>cases</sub> ).
		Best for comparing one segment to the whole. Useful only with few segments or segments that are very different in size; otherwise comparisons among segments are difficult. For specific values, add numbers to segments. Common in popular venues, frowned on by professionals. See 15.4.3.

**Table 15.7 (continued)**

	Data	Rhetorical Uses
<b>Line Graph</b>		Compares continuous variables for one or more cases (e.g., temperature <sub>variable</sub> and viscosity <sub>variable</sub> in two fluids <sub>cases</sub> ).
		Best for showing trends; deemphasizes specific values. Useful for time series. To show specific values, add numbers to data points. To show the significance of a trend, segment the grid (e.g., below or above average performance). See 15.4.3.
<b>Area Chart</b>		Compares two continuous variables for one or more cases (e.g., reading test scores <sub>variable</sub> over time <sub>variable</sub> in a school district <sub>case</sub> ).
		Shows trends; deemphasizes specific values. Can be used for time series. To show specific values, add numbers to data points. Areas below the lines add no information, but will lead some readers to misjudge values. Confusing with multiple lines/areas.
<b>Area Chart, Stacked</b>		Compares two continuous variables for two or more cases (e.g., profit <sub>variable</sub> over time <sub>variable</sub> for several products <sub>cases</sub> ).
		Shows the trend for the total of all cases, plus how much each case contributes to that total. Likely to mislead readers on the value or the trend for any individual case, as explained in section 15.5.
<b>Scatterplot</b>		Compares two variables at multiple data points for a single case (e.g., housing sales <sub>variable</sub> and distance from downtown <sub>variable</sub> in one city <sub>case</sub> ) or at one data point for multiple cases (e.g., brand loyalty <sub>variable</sub> and repair frequency <sub>variable</sub> for ten manufacturers <sub>cases</sub> ).
		Best for showing the distribution of data, especially when there is no clear trend or when the focus is on outlying data points. If only a few data points are plotted, it allows a focus on individual values.
<b>Bubble Chart</b>		Compares three variables at multiple data points for a single case (e.g., housing sales <sub>variable</sub> distance from downtown <sub>variable</sub> and prices <sub>variable</sub> in one city <sub>case</sub> ) or at one data point for multiple cases (e.g. image advertising <sub>variable</sub> repair frequency <sub>variable</sub> and brand loyalty <sub>variable</sub> for ten manufacturers <sub>cases</sub> ).
		Emphasizes the relationship between the third variable (bubbles) and the first two; most useful when the question is whether the third variable is a product of the others. Readers easily misjudge relative values shown by bubbles; adding numbers mitigates that problem.

# Quieren ver las gráficas en acción?

[http://www.ted.com/talks/hans\\_rosling\\_shows\\_the\\_best\\_stats\\_you\\_ve\\_ever\\_seen.html](http://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen.html)

**TED** Ideas worth spreading

Talks TED Conferences TED Conversations About TED  
Speakers TEDx Events TED Community TED Blog  
Playlists **NEW** TED Prize **NEW** TED-Ed **NEW** TED Initiatives  
Translations TED Fellows

Search

## TALKS

### Hans Rosling: Stats that reshape your worldview

FILMED FEB 2006 • POSTED JUN 2006 • TED2006

4,638,355 Views Like 47k

You've never seen data presented like this. With the drama and urgency of a sportscaster, statistics guru Hans Rosling debunks myths about the so-called "developing world."

In Hans Rosling's hands, data sings. Global trends in health and economics come to vivid life. And the big picture of global development—with some surprisingly good news—snaps into sharp focus. [Full bio »](#)

**THE JOHNSON MBA. Collaboration on a greater scale.**

RELATED PLAYLISTS **NEW** [View more »](#)

Enjoyed this talk? Watch this playlist, which is full of fascinating ideas on similar topics.

Embed Download Favorite Rate Show transcript

Get this talk on DVD

Dr. Ramon Sanchez  
Harvard University

# Transition between sections

---

- **Transition between introduction and background:** You need to remind the reader why your topic is important and inform him that more detailed information will be described in the background section.
- Example: “In summary, pollution prevention in thermoelectric power plants is important to reduce air pollution which is likely to reduce cardiovascular mortality in surrounding areas. Some pollution prevention techniques as well as the mechanism in which air pollution causes cardiovascular mortality are discussed in detail in the next section of this document”



# Transition between sections

---

- **Transition between background and methods:** You need to remind the reader about the gap in scientific knowledge that you found and the methodology you will use to close this gap
- Example: “Uncertainty in indoor air pollution exposure concentration for human populations living near power plants reduces the power of environmental legislations. Therefore, I will estimate emission rates for fine particulate matter from coal-fired power plants while performing indoor and outdoor measurements of particulate matter in nearby areas and recording main building features for each site to create a multiple regression statistical model to establish the relationship between coal use for electricity generation and indoor exposure to particulate matter”



# Transition between sections

---

- **Transition between methods and results:** Usually you achieve an effective transition by using your study limitations to start an argument that will be discussed in the next section
- **Example:** “This study is accounting for a time-shift in cardiovascular disease between chronic exposure to fine particulate matter and mortality. However, information about this time-shift is limited and could be affected by the fact that susceptible populations might be already gone due to acute exposures to high pollutant concentrations which are prevalent among low-income housing with poor insulation. The influence of low socio-economic status in the time-shift for cardiovascular mortality will be discussed in the next section of this research”

# Transition between sections

---

- **Transition between discussion and real life implications:**  
This transition is not between sections of a research paper, but between your research paper and tangible actions. You need to summarize the main conclusions of your research and their implications in shaping policies and environmental practices
- **Example:** “Cardiovascular disease is more prevalent among low income house-holds in the area because of two main causes:
  - Poverty leads to close proximity to industrial and energy production facilities which are sources of air pollutants and,
  - Low income reduces the likelihood of proper insulation and good quality building materials which increase indoor exposures to external air

# Transition between sections

- It may be useful to check the list of words of transition (but don't abuse them or you will be really wordy)

## WORDS OF TRANSITION

*Directions:* Two steps should be used when you consult this list. First, determine the type of signal you need. Next, select from that signal group the word that is most appropriate to the meaning of your sentences.

<i>Types of Signals</i>	<i>Words to Use; Signal Group</i>
To signal an addition:	in addition, furthermore, moreover, also, equally important,
To signal an example:	for example, for instance, thus, in other words, as an illustration, in particular.
To signal a suggestion:	for this purpose, to this end, with this object,
To signal emphasis:	indeed, truly, again, to repeat, infact,
To signal a summary:	in summary, therefore, finally, consequently, thus, accordingly, in short, in brief, as a result, on the whole,
To signal the development of a sequence	<p><i>Value Sequence:</i> first, second, secondly, third, thirdly, next, last, finally,</p> <p><i>Time Sequence:</i> then, afterward, next, subsequently, previously, first, second, at last, meanwhile, in the meantime, immediately, soon, at length, yesterday, today, tomorrow, eventually,</p> <p><i>Space Sequence:</i> above, across, under, beyond, below, nearby, nearer, opposite to, adjacent to, to the left/right, in the foreground, in the background,</p>
To signal a relationship:	<p><i>Similarity:</i> similarly, likewise, in like manner,</p> <p><i>Contrast:</i> in contrast to, however, but, still, nevertheless, yet, conversely, notwithstanding, on the other hand, on the contrary, at the same time,</p> <p><i>Cause and Effect:</i> consequently, because, since, therefore, accordingly, thus, hence, as a result.</p>

# Citing Strategies

---

- The “Pocket Guide to APA Style” describes 3 types of plagiarism
  - Whole-paper plagiarism: “Literal plagiarism”
  - Copy-and-paste plagiarism: “Use of a few paragraphs...”
  - Careless Plagiarism: “Material is processed but unquoted..”
- On reference page all citations must be in the Hanging Indent Format with the first line flush to the left margin and all other lines indented

# Citing Strategies

---

## ■ Book Citations

- Book by one author. Last name, Initials (Year in parentheses), the title in italics, city and state (or country) and the publisher.

Sanchez, R.A. (2006). *Microalgae farming in North America*. Boston, MA: Harvard University Press.

- Book with an Organization as an Author. When the organization is also the publisher use the word Author in the publisher position.

Mexican National Council of Science and Technology (2009). *Renewable Energy Potential*. Mexico City, Mexico:

Author

# Citing Strategies

---

## ■ Citations for **Journal Articles**

- List author first, followed by the year of publication and title for the article with sentence style capitalization. Next, include the title of the journal (with headline style capitalization), a comma, the volume number, and another comma (all italicized). Finish the entry by listing inclusive page numbers, without a page abbreviation

Levy, J.I. et al. (2008). Health effects of coal-fired power plants in Georgia. *Environmental Health Perspectives*, 47, 1214-1218.

# Human Subjects

---

- Are you Interviewing Anyone for your Paper?
- If your answer is NO, then you should just keep finding references.
- If your answer is YES, THEN YOU ARE REQUIRED TO DO A TRAINING IN HUMAN SUBJECTS
- DO NOT INTERVIEW ANYONE WITHOUT THE APPROVAL OF YOUR STUDY DESIGN BY AN ETHICS BOARD




# Human Subjects

## Committee on the Use of Human Subjects

University-area Institutional Review Board at Harvard

[ESTR](#) [OHRP](#) [DATA SECURITY](#)

Search  

[Forms](#) [Guidance](#) [Ethics Training](#) [Calendar](#) [FAQs](#) [People](#) [For Research Participants](#)



### Do You Need A Faculty Sponsor?

FAS policy requires all non PI-eligible researchers to have a faculty member sponsor their projects. [Click here to learn more.](#)

#### Application Quick Links

[What's New with ESTR?](#)

[7-step Guide to Creating and Submitting a New Application in ESTR \(including Exempt studies\)](#)

[6 Tips for Speeding up the Review of your Application](#)

[How to Submit a Modification](#)

[How to Submit an External IRB Application](#)

Click to add notes




# Human Subjects

## Committee on the Use of Human Subjects

University-area Institutional Review Board at Harvard

[ESTR](#) [OHRP](#) [DATA SECURITY](#)

Search  

[Forms](#) [Guidance](#) [Ethics Training](#) [Calendar](#) [FAQs](#) [People](#) [For Research Participants](#)



### Do You Need A Faculty Sponsor?

FAS policy requires all non PI-eligible researchers to have a faculty member sponsor their projects. [Click here to learn more.](#)

#### Application Quick Links

[What's New with ESTR?](#)

[7-step Guide to Creating and Submitting a New Application in ESTR \(including Exempt studies\)](#)

[6 Tips for Speeding up the Review of your Application](#)

[How to Submit a Modification](#)

[How to Submit an External IRB Application](#)

Click to add notes

# Comparison of incentives for Research in Mexico and the USA

---

## ■ In Mexico:

- Publishing a large number of papers with a good enough impact factor is enough to complete your teaching/research activities to keep or improve your position in a university and/or research center
- Personal politics and/or loyalty groups seem to be more important in getting promoted
- There are low economic incentives for doing academic outreach (Vinculacion) and/or commercializing applied research (Patents)

# Comparison of incentives for Research in Mexico and the USA

---

- In Mexico:

- There is a centralized national system to promote scientific and technical publications called “Sistema Nacional de Investigadores” (SNI). For many years, researchers did as many publications as they could in order to get into this system because people in the program receive monthly stipends that increase with a higher SNI level

# Comparison of incentives for Research in Mexico and the USA

---

## ■ In the USA:

- Publishing a large number of papers with a good enough impact factor is NOT enough to keep or improve your position in a university and/or research center, promotion boards consider the quality of your past N papers (No SNI System)
- Personal politics and/or loyalty groups are there, but final decision on promotions are made mostly by boards, individuals don't play such a preponderant role in getting tenure as in Mexico

# Comparison of incentives for Research in Mexico and the USA

---

## ■ In the USA:

- There are attractive economic incentives for doing academic outreach (Vinculacion) and/or commercializing applied research (Patents). In my university, researchers get approximately 50% of the royalties of any patent developed within the school, so many people view this as a partnership
- Getting a tenured position is getting tougher due to the large number of doctoral graduates, the only way to be considered is by having high quality publications

# Operational Practices to Enhance Acceptance Rates for Publications

---

- Write meaningful papers geared to society's most pressing needs (make them important)
- Create writing groups and/or specialized courses in every school that teach international scientific writing rules to every graduate student
- Research centers and universities should have explicit programs to reward mentorship, so experienced authors participate with new researchers in their first papers

# Operational Practices to Enhance Acceptance Rates for Publications

---

- Avoid the practice of just presenting your research as a poster in a conference and then doing a paper in a local scientific journal (NO SE CONFORMEN)
- Use the format and guidelines described previously in this presentation, even if they seem different to your previous scientific training

# Operational Practices to Enhance Acceptance Rates for Publications

---

- Write your articles in English and look to submit in international scientific publications
- Check the required style of your first choice for a journal, then adjust your scientific paper to it
- Don't be afraid of aiming high. If you submit to a peer-reviewed journal with a high impact factor and you get rejected, check the feedback from reviewers, fix your paper and re-apply to another journal with a comparable impact factor



# Questions?



# Citing Strategies

---

- Citations for **articles found in magazines, newspapers, etc.**
  - Author(s) (year, month). Article. Magazine, Volume (issue number), page numbers.

Perez, K.R. (2011, July). Storing Solar Energy in Massachusetts. *Journal of Renewable Energy*, 47 (3), 27-33

- Newspaper

Perez, K.R. (2011, July 21). The Perils of Solar Energy. *The Boston Globe*, pp. B4,B7.

---

# Citing Strategies

---

- Citations for articles found in **online journals, magazines, newspapers, etc.**
  - Author(s) (year). Article. *Journal*, Volume, page numbers.  
DOI: DOI Number

or

- Author(s) (year). Article. *Journal*, Volume, page numbers.  
Retrieved from <http://www.....>

# Bibliography

---

- Booth W.C., Colomb G.G. a & Williams J.M. (2008). *The Craft of Research* (3<sup>rd</sup> ed.). Chicago, Il: The University of Chicago Press
- Public Broadcasting System- PBS (2012, October 23). Climate of Doubt [Digital Video]. Retrieved from the Frontline web site:

<http://www.pbs.org/wgbh/pages/frontline/climate-of-doubt/>

# Citing Strategies

---

- Citations are needed to avoid plagiarism, which is “the use of someone else’s words, ideas, or line of thought without acknowledgment” (Perrin, 2007)
- We are using the APA Style. The American Psychological Association (APA) Style is widely accepted in science and other fields such as education, business, social studies and nursing. The APA Citation Style requires parenthetical citations within the text rather than endnotes or footnotes. In-text citations provide brief information to lead the reader to the source of the information in the reference list at the end of the paper.

# Citing Strategies

---

- In-text citations (for more details please check the “Pocket Guide to APA Style”)
  - List the author’s last name and the year of publication or presentation
  - If you have two authors with the same last name, include initials with the last name, for example:  
(Sanchez, R.A., 2011) and (Sanchez, J.L., 2007)
  - If you have up to five authors, include all names in the first notation (Sanchez, Buckley, & Spengler, 2012). Subsequent citations use the first author’s name and et al. (Sanchez et al., 2012)



# Citing Strategies

---

- In-text citations (for more details please check pages 67 to 70 of the “Pocket Guide to APA Style”)
  - When summarizing a source, provide the author and year
  - When quoting or summarizing a passage, include the specific page or paragraph number as well
  - When quoting in your paper, if a direct quote is less than 40 words, incorporate it into your text and use quotation marks. If a direct quote is more than 40 words, make the quotation a free-standing indented block of text and do not use quotation marks

# Citing Strategies

---

## ■ Book Citations

- A book with no author. List the book by title. When an editor is listed, begin with the editor's name.

Smith, J.E. (Ed.) (2008). *Guide for creating an Alumni Network*.  
Boston, MA: Harvard School of Public Health

- An Edition other than the first. Indicate edition in parentheses and not italicized after the title.

Ley, A.I. (2004). *Post-colonial Female Literature* (3<sup>rd</sup> ed.). New  
York, NY: Free Press.



# Citing Strategies

---

- Citations for a **Government Report**

- Author(s) (year). *Italicized title* (number for government document). City and State: Government Printing Office

Sanchez, R.A. et al. (2006). *Microalgae Farming Production Parameters (CONACYT 2010-1)*. Baja California, Mexico: Mexican National Council for Science and Technology

# Citing Strategies

---

## ■ Citations for Interviews

- An interview is a personal communication, it is not included in a reference list. However, it is cited in the text of the paper by enclosing the phrase personal communication and the date in parentheses.

Capture and reuse of carbon dioxide from power plants (J.L. Sanchez, personal communication, October 12, 2012)

# Citing Strategies

---

- Citations for podcasts, blogs, etc.
  - Sanchez, R.A. (2012, October 15). Sustainable Manufacturing Strategies [Video Podcast]. Retrieved from the *Harvard Extension School blog*:  
<http://www.extension.harvard.edu/podcasts/Manufacturing>
- Changing Website
  - Environmental Protection Agency (EPA) (2012, October 15). Profile of pollution in Massachusetts. Retrieved from  
<http://www.epa.gov/massachusetts>