



Writing Workshop:

Telling your research and extension story

UC ANR Statewide Conference

Jennifer Caron-Sale, Analyst, Program Planning and Evaluation

Jim Downing, Executive Editor, *California Agriculture*

Ann Filmer, Director of Communications, UC Davis Plant Sciences Department

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Audience

Focus

Impacts

Editing

Courtesy to the bewildered reader

Compassion for the writer

Audience

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Identifying your audience

What's your message?

Want to reach the correct audience

Who's your audience

What do they need?

What is their skill / knowledge level?

What platform will you use to send your message?

Online (blog), social media (Twitter), email, newspaper, journal ...

How you present the message may change

Be specific about the audience

“General public” is too vague

Sometimes easy — narrow, focused audience

Recruiting children for 4-H event

Educating master gardeners on irrigation

Providing focused, technical data for target audience

Broad audience base with different needs/uses for information

More challenging

May want to be less detailed

Remember — Audiences have their own needs

Audience	Audience Needs
Polymakers	Does it support <i>their</i> legislation or agency needs?
Elected officials	Do <i>their</i> constituents (voters) care about the message?
Colleagues, Peers, Managers	Will it solve <i>their</i> problems? Provide info they can use?
NGOs, Agencies	Does it fit <i>their</i> agenda or platform?
Scientists	Does it relate to <i>their</i> work? Is it groundbreaking?
Media	Is it news? Will it sell? Do <i>their</i> readers care?
Foundations, Grantors, Donors	Does it fit <i>their</i> portfolio? Does the message have <i>impact</i> ?
Diverse audiences	Will they interpret it as you expect?
Youth / Children	Is it a message they can understand and will inspire them?
Concerned citizens, “Public”	Does it matter to them: affect health, family, community, environment ... ?

Knowing your audience — and why they need the information — helps you frame the message and set the tone

Do they want “big picture” general overview? Do they need detailed information?

Does your message fit their needs, interests, agenda?

What is your distribution method? (print, digital, social ...)

Now that you’ve identified the audience, go back and tweak/reframe your message

Audience



Focus

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Editing

Defining the focus

Writing with focus

Defining the focus

Writing with focus

Focus ≠ Topic

Focus ≠ Topic

The focus is the story

Focus ≠ Topic

The focus is the story

When you begin to write, try to state the focus as a single sentence, using an active verb

Opposing forces give writing energy

Stakes
Motivations

vs.

Obstacles
Missing pieces
Critiques

State the focus boldly — cymbals and horns

State the focus boldly — cymbals and horns

(this forces a reckoning)

In the latest land war for the American West, the cowboys are losing.

Ranchers who rely on public land to raise their cattle say they have shrinking access to wide open spaces, grass and water because of an array of regulations. Over the last four decades, the number of cows grazing on public lands has dropped by nearly half.

In some cases, government officials curb grazing to protect natural resources from damage caused by cattle, and create preserves for threatened species. In others, officials close land to ranchers to give more access to the public for hiking and other activities that fuel the fast-growing recreation industry.

(WSJ, March 20, 2018)

Baseball teams used to get any old dirt for infields and pitchers mounds, scooping soil from a nearby hillside or riverbed. Now, egged on by specialist baseball-soil suppliers, they apply nearly as much science to the dirt as they do to the pitching rotation. They demand just the right mixture of sand, clay and silt to provide a smooth, predictable surface—even if that means dirt is no longer dirt cheap.

(WSJ, March 26, 2018)

With a smartphone in many people's pockets, scientists are turning to the public to gather reams of data that would be too costly and impractical for professional researchers to obtain.

Among the options for so-called citizen scientists are tracking rabbits in New Hampshire, surveying dragonflies in Ohio and sending photos of clouds to the National Aeronautics and Space Administration. One website, SciStarter.com, recently listed about 1,000 projects.

But relying on smartphone-wielding amateurs to collect information means scientists might get data that isn't completely relevant and could be difficult to analyze. Still, some scientists think even more public participation can help ease the workload.

Defining the focus

Writing with focus

Expository structure is a good place to start

Introduction:

Brief introduction and thesis statement

Body:

First supporting paragraph

Topic sentence

Three pieces of evidence

Concluding sentence

Second supporting paragraph ...

Third supporting paragraph ...

Conclusion:

Summarize and wrap up.

Each sentence supports the article focus

How rising CO₂ levels can alter plant water use

Plant physiology and genetics

Climate change

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Plant physiology and genetics

Climate change

Increased risk of
drought

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Historical CO₂
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Groundwater
situation in Texas
panhandle is dire

How rising CO₂ levels can alter plant water use

Plant physiology and genetics

Climate change

What this research adds

Increased risk of drought

Some places may get more rain

Prospects, next steps

Historical CO₂ trends

Potential impacts

Groundwater situation in Texas panhandle is dire

How rising CO₂ levels can alter plant water use

Plant physiology and genetics

Climate change

What this research adds

Increased risk of drought

Prospects, next steps

~~Historical CO₂ trends~~

~~Some places may get more rain~~

Potential impacts

~~Groundwater situation in Texas panhandle is dire~~

Consult references

Strunk W, White EB. 1999. The Elements of Style, Fourth Edition. Pearson. (\$7 on Amazon and in bookstores)

Blum D, Knudson M, Henig RM. 2006. A field guide for science writers. Oxford University Press. (eBook available through UC libraries)

Schultz D. 2013. Eloquent science: A practical guide. Springer Science & Business Media. (eBook available through UC libraries).

Consult the ANR Publications staff

jdowning@ucanr.edu

Audience

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Impact Stories

Audience: decision-makers, funding partners, media

An impact statement is

a brief description of the difference or *potential* difference your work makes in people's lives



*Not how many worms
the bird feeds its young,
but how well the fledgling flies*

- United Way of America, 1999

How to write impact stories

1. Explain the issue

Context, clientele, goals

2. Briefly describe your action

Methods: activities / outputs

3. Focus on the outcomes / impact

3 R's of impact stories:

1. Relevance
2. Response
3. Results

(Texas A&M Cooperative Extension)

Logic model

The **chain of connections** showing what the program is to accomplish

Issue

**What
we
invest**

What you do

What results

Situation:

Background,
Rationale,
Clientele Needs,
Goals

Inputs:

Time,
Volunteers,
Research base

Methods:

Activities,
Outputs/Products,
Participation

**Learning
Outcomes:**

Knowledge,
Attitude,
Skill

**Action
Outcomes:**

Behavior,
Policy

**Condition
Outcomes:**

Economic gain,
Societal or
Environmental
improvement

Example: Improved management of Lygus bugs

Issue

Inputs

Methods

Outcomes/Impact

Lygus bugs damaging row, field, and vegetable crops

Advisors conducted

Research projects on crop patterns to reduce movement into susceptible crops

Individual consultations and participatory meetings with PCAs to share management practices

PCAs and growers gained knowledge on how to mitigate Lygus bug movement

20 Growers and PCAs now employ best IPM practices

Reduced unnecessary insecticide applications, reduced risk to crops, soil, and water

How to write *strong* impact statements

1. Be **specific** about the benefit and to whom or what area
2. Include **quantification**
3. Focus on **participant behavior changes** and your **evaluation methods** for measuring these outcomes
4. Make the issue-action-impact **connections very clear**
5. Articulate **link to long-term outcomes / impacts** — for both program participants and public value

Example: Nutrition education results in healthy behavior changes

Issue

Inputs

Methods

Outcomes/Impact

37% of low-income households are food insecure-with uncertain access to healthy food

A UCCE CalFresh and Riverside County multi-agency partnership funded by USDA

Developed and evaluated lessons on preparing healthy meals on a budget

In 3 years, 9,000 low-income residents reached at CalFresh offices, food pantries, distribution sites

Post program survey showed statically significant behavior changes- 39 % inc. fruit and vegetable consumption

Participants greater intent than comparison group to make healthier food choices, increasing food security and community health and wellness

Long-term change in condition outcomes / impacts?

Challenges:

- Take a lot of time to be realized
- Difficult to measure



Explain as **potential, anticipated**

Refer to how your work **contributes**

Use **existing research** to make the connection

Use *existing research* to make connection to long-term outcomes

Example: Mexicali Valley CIMIS weather station and bilingual information cut water use

“... Growers in California extensively use evapotranspiration information from CIMIS. Parker et al. (2000) estimated that California growers save approximately \$64.7 million per year in water and energy savings by using CIMIS. The estimated benefit to growers in our region is \$6.5 million in water and energy savings...”

UC Delivers

A simple (layman's terms) one-page impact story of a project you've completed that had a notable impact on your clientele

Format

- *The issue*
- *What has ANR done?*
- *The payoff*
- *Photo*
- *Clientele testimonial*



Cooperative Extension Teams with Strawberry Industry to Identify New Disease Developments

The Issue

In California, strawberry is a dominant coastal commodity. It is a very high value industry in the state, and it is popular with consumers throughout the country. However, new plant problems (such as patches of plants exhibiting severe yellowing of foliage, calices turning brown and withered, and changes in preplant soil fumigation) have caused loss of fruit quality and decline or death among plants. Strawberry collapse, as well as yellowed plants and calyx tissue damage, are all problems that cannot be diagnosed and understood without focused investigations and laboratory testing. Growers have lacked the time and facilities needed for discovering the causes behind these dilemmas.

What has ANR done?

With support from the California Strawberry Commission and local growers, CE coastal farm advisors Steven Koike and Mark Bolde teamed up to tackle these recent developments. Field visits and investigations were supplemented with testing conducted at the Cooperative Extension diagnostic lab in Salinas. This system successfully discovered the following: 1) Leaf yellowing issues are not due to a pathogen but instead to high levels of sodium. 2) Fruit calyx damage is caused by two factors, with some cultivars having a physiological defect that expresses itself as calyx browning. Furthermore, the leaf blotch pathogen, previously known to only affect leaves, is also infecting fruit calices. 3) Strawberry collapse is the greatest disease concern for this industry, and the CE lab has been instrumental in identifying the precise cause (one of three fungal pathogens) of collapse cases found throughout the coast. Following these field investigations and lab confirmations, Bolde and Koike rapidly informed the strawberry industry of findings via blog entries, online newsletters, e-mail reporting and the traditional farm calls and phone contacts. The growers have thus been kept apprised of these new developments and in a timely manner.



CE advisors documented for the first time that the leaf blotch fungus infects the calyx of strawberry fruit.

The Payoff

The California strawberry industry is continuously educated about problems as they arise through a unique CE diagnostic program that efficiently discovers, investigates and solves industry problems.

CE farm advisors and the strawberry industry have partnered to support growers with a diagnostic service program. It has become the first place growers and agricultural professionals go to when faced with tough, unolved issues. Field problems and diseases are efficiently investigated with this combined field and laboratory approach.

Contact

Supporting Unit:

Santa Cruz County Monterey and Santa Cruz Counties: Steven T. Koike, stkoike@ucdavis.edu; and Mark Bolde, mpbolde@ucdavis.edu



University of California
Agriculture and Natural Resources

Cooperative Extension

ANR impact writing references

Writing Impact Statements

http://ucanr.edu/sites/CEprogramevaluation/Writing_Impact_Statements_for_Program_Reviews/

Program Development & Evaluation

<http://ucanr.edu/sites/CEprogramevaluation/>

"Telling Our Story" tools

http://ucanr.edu/sites/Toolkit/Telling_our_story/

Audience

Focus

Impacts

Editing

Why edit?

More than just proofreading

Why edit?

Error-free documents

Clarity, consistency, coherency

Reduce confusion for the reader

Better communication

For whom are you editing?

Yourself

Another writer, author

The publisher or producing unit (could be your ANR unit)

The reader

Your editing ‘friends’

Style guides

ANR writing style guide – in the ANR branding toolkit

Associated Press Stylebook

Why use style guides?

Style consistency and uniform voices across ANR

- Is it: UCANR, UC ANR, U.C.ANR, or DANR?
- Is it: (530) 555-1212, or 530-555-1212, or 530.555.1212 ?

Four steps in editing

1. Cut, Cut, Cut
2. Simplify, Simplify, Simplify
3. Edit, Edit, Edit
4. Re-read, Re-read, Re-read

Four steps in editing

1. Cut, Cut, Cut

How much can you remove and have it still make sense?

(Too much detail in academia)

Don't repeat yourself (except in the summary)

2. Simplify, Simplify, Simplify

Reduce technical jargon

Avoid overuse of acronyms

Four steps in editing

3. Edit, Edit, Edit

Assume everything is wrong — spelling, facts, grammar, etc.

Most readers assume everything is correct — not editors

Use your style guide

Be slow and meticulous

Four steps in editing

4. Re-read, Re-read, Re-read

Pretend this is the first you've ever heard of the topic

Does it make sense (to a beginner)?

Is there a clear overview/introduction

Do the results make sense?

Is there a strong summary and/or impact statement

Ask someone outside your work circle to read and edit

Make sure all web links work

Common editing errors

Overuse of capitalization

“The professor said ...” (no need to capitalize ‘professor’ unless used as a title – ‘Professor X’)

Double spaces between sentences (use a single space)

Ampersands (&)

Use primarily in acronyms — PG&E

Don’t use as a substitute for ‘and’

‘Viticulture and Enology,’ not ‘Viticulture & Enology’

‘Sheep and Cattle Day,’ not ‘Sheep & Cattle Day’

Common editing errors

Grammar

lay / lie

it's / its

him and I / him and me / she and I

that / which

flesh out / flush out

Common editing errors

Postal codes — use only in mailing addresses

'CA' for 'California' is a postal code; use 'CA' only in addresses

In running text, spell out 'California'

Dates

Use cardinal numbers, not ordinal

Correct: The meeting is on April 29

Incorrect: The meeting is on April 29th

Summary — Why edit?

Error-free documents

Clarity, consistency, coherency

Uniform institutional voice

Reduce confusion for the reader

Better communication

Thank You

Now, some practice