

Being an Actuary: Beyond the Mathematics

Warren Luckner, FSA

A concise description of the work of the actuary is: The work of the actuary to identify, quantify, and manage risk and uncertainty to the benefit of society. Identify, quantify, and manage emphasize the importance of technical skills. The phrase “to the benefit of society” adds the importance of professionalism, consistent with Precept 1 of the Code of Professional Conduct.

This presentation highlights the importance of communication skills, ethics and professionalism in being a successful actuary.

Being an Actuary: Beyond the Mathematics

2020 Actuarial Research Conference

University of Nebraska – Lincoln

Virtually!

Three Key Messages OR

“What I learned as an FAC facilitator”

- ▶ “Eat food, not too much, mostly plants”
- ▶ Communication Skills Essential
- ▶ Ethics Too
- ▶ Professionalism Resources Available

Communication Skills Essential

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The overall composition is clean and modern, with the text centered in the white space.

Communication Skills Essential

Communication Wisdom

“This Treasury paper, by its very length, defends itself against the risk of being read.”

– Winston Churchill

Communication Skills Essential

- Written, oral
- Answer the questions
- Appropriate level of detail
- Peer review

Communication Skills Essential

Actuaries –

The (not so) Great Communicators

- ▶ Ask actuaries what time it is, they'll ...
- ▶ ... tell you how to build a watch”
- ▶ ... tell you how to build a smartphone

Communication Skills Essential

- ▶ The Precepts: 4, 5, 6
- ▶ One ASOP: ASOP 41, Actuarial Communications

Communication Skills Essential

Actuarial Communication: A written, electronic, or oral communication issued by an Actuary with respect to Actuarial Services.

Communication Skills Essential

- ▶ **PRECEPT 4.** An Actuary who issues an Actuarial Communication shall take appropriate steps to ensure that the Actuarial Communication is **clear and appropriate** to the **circumstances and its intended audience** and **satisfies applicable standards of practice.**

Communication Skills Essential

Communication Wisdom

“Perfect is the Enemy of Good”

Communication Skills Essential

- ▶ **PRECEPT 5.** An Actuary who issues an Actuarial Communication shall, as appropriate, identify the **Principal(s)** for whom the Actuarial Communication is issued and **describe the capacity in which the Actuary serves.**

Communication Skills Essential

- ▶ **PRECEPT 6.** An Actuary shall make appropriate and timely **disclosure to a present or prospective Principal of the sources of all direct and indirect material compensation** that the Actuary or the Actuary's firm has received, or may receive, from another party in relation to an assignment for which the Actuary has provided, or will provide, **Actuarial Services for that Principal.** The disclosure of sources of material compensation that the Actuary's firm has received, or may receive, is limited to those sources known to, or reasonably ascertainable by, the Actuary.

Communication Skills Essential

ASOP 41, Actuarial Communications

- ▶ Applies to “all assignments in all practice areas”
- ▶ Communication between actuary and intended users
 - ▶ Scope of assignment
 - ▶ Methods, procedures, assumptions, data
 - ▶ Communication of results

Communication Skills Essential

ASOP 41

Cover Page, Title, and Table of Contents
Transmittal Memorandum

Communication Skills Essential

ASOP 41: Section 1

- ▶ 1.1 Purpose—This actuarial standard of practice (ASOP) provides guidance to actuaries with respect to actuarial communications.
- ▶ 1.2 Scope—This standard applies to actuaries issuing actuarial communications within any practice area.

Communication Skills Essential

ASOP 41: Section 2. Definitions

- ▶ 2.1 Actuarial Communication – same as in Code
- ▶ 2.6 Deviation - The act of departing from the guidance of an ASOP.
- ▶ 2.8 Oral Communication - An actuarial communication made orally that has not, to the knowledge of the actuary, been recorded or transcribed verbatim.
- ▶ Other terms defined include: Actuarial Document; Actuarial Finding; Actuarial Report; Actuarial Services; Intended User; Other User; Principal

Communication Skills Essential

ASOP 41: Section 3. Analysis of Issues and Recommended Practices

- ▶ 3.1 Requirements for Actuarial Communications
- ▶ 3.2 Actuarial Report
- ▶ 3.3 Specific Circumstances
- ▶ 3.4 Disclosures Within an Actuarial Report
- ▶ 3.5 Explanation of Material Differences
- ▶ 3.6 Oral Communications
- ▶ **3.7 Responsibility to Other Users**
- ▶ **3.8 Retention of Other Materials**

Communication Skills Essential

ASOP 41: Section 4. Communications and Disclosures

- ▶ Responsible actuary; assumptions, methods prescribed by law; responsibility for assumptions, methods ...
- ▶ 4.4 Deviation from the Guidance of an ASOP
 - ▶ “If, in the actuary’s professional judgment, the actuary has **deviated materially** from the guidance set forth in an applicable ASOP ... , the **actuary can still comply** with that ASOP by **providing an appropriate statement in the actuarial communication with respect to the nature, rationale, and effect of such deviation.**”

Communication Skills Essential

A few thoughts about:

- ▶ **Written Reports**
- ▶ **Emails**

Communication Skills Essential

Include Info for all Audiences

▶ Executive Summary

▶ Introduction

▶ Data

▶ Model Selection

▶ Analysis of Results

⇒ Body

▶ Conclusions/Recommendations

▶ Appendices and References and/or
separate file memorandum

Communication Skills Essential

Meet Every Reader's Needs

Reader

- ▶ Requester of report
- ▶ A little background
- ▶ Answer only people
- ▶ Those in need of more detail

What they will read

- Executive Summary
- Introduction
- Body
- Conclusions, Recommendations
- Appendices and/or separate file memorandum

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Communication Skills Essential

Executive Summary

- ▶ Important skill
- ▶ Goal: What decision-maker needs – briefly!
- ▶ Meeting the goal: What an Executive Summary should include

Communication Skills Essential

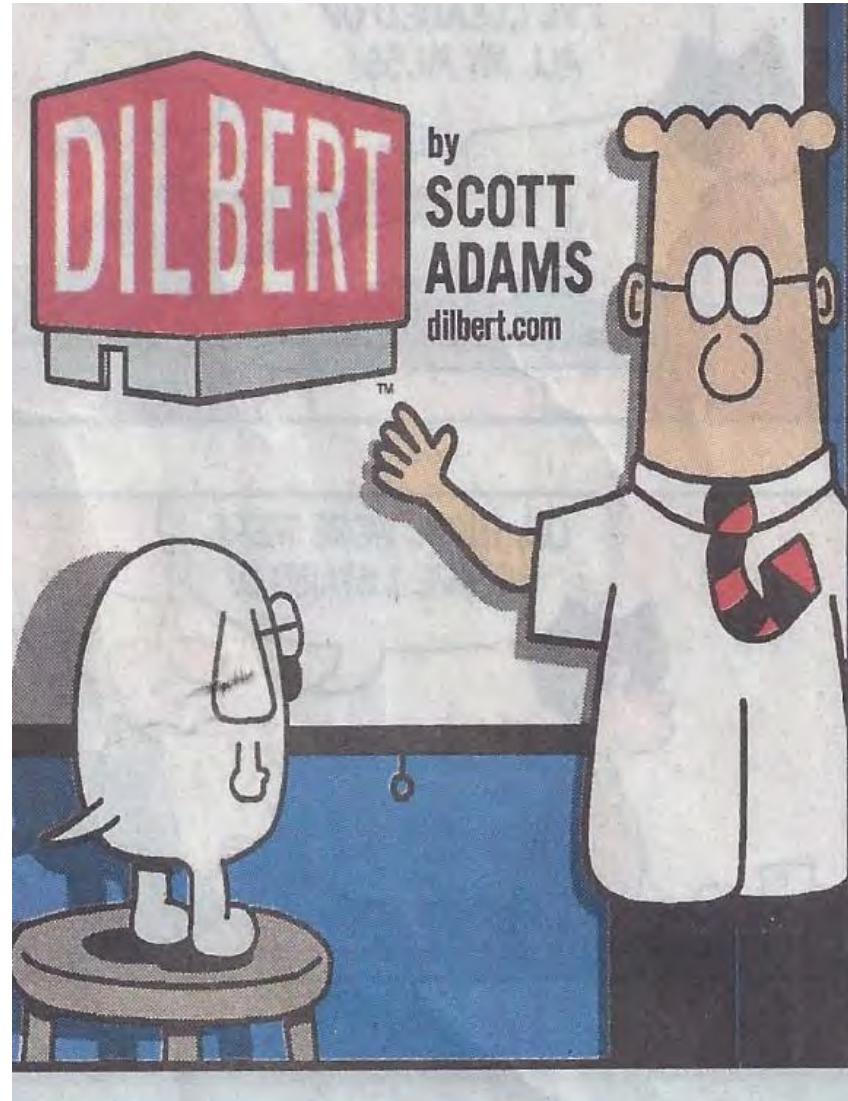
Professional Standards of Written Report

- ▶ Document all major assumptions
- ▶ Detailed enough for another actuary
(or other professional) to verify results
- ▶ Acknowledge responsibility

Communication Skills Essential

What about Emails??

Communication Skills Essential



Communication Skills Essential



Communication Skills Essential



Communication Skills Essential



Communication Skills Essential



Communication Skills Essential

Communication Wisdom

“Far better an approximate answer to the right question, which is often vague, than an exact answer to the wrong question, which can always be made precise.”

Tukey (1962)

Communication Skills Essential

Communication Wisdom

“Understand deeply.
Communicate simply.”

- Darryl Wagner, FSA,
Deloitte Consulting

Ethics Too

Ethics Too

“Ethically Speaking”, Linden Cole, FSA What is Ethical Behavior?

- Imagery

Ethical high ground - Top of hill: fresh air, pretty birds



Ethics Too

“Ethically Speaking”, Linden Cole, FSA What is Ethical Behavior?

- Imagery

Ethical swamp –
foggy air, murky
water, lurking
alligators!



Ethics Too

Ethical Models

- ▶ Teleological – goal oriented
 - ▶ Utilitarianism (J.S. Mill)
 - ▶ What are the consequences?
 - ▶ The end justifies the means!
 - ▶ The greatest good for greatest number
 - ▶ Pragmatic

Credit Charly Pazdor, FSA, FCIA

Ethics Too

Ethical Models

- ▶ Deontological – Principles
 - ▶ Duty, obligation,
 - ▶ Rules
 - ▶ Unyielding
 - ▶ George Washington
 - ▶ Cannot/will not tell a lie

Credit Charly Pazdor, FSA, FCIA

Ethics Too

Ethical Models and Abraham Lincoln

- ▶ Teleological vs. Deontological
- ▶ “Does this dress make me look big?”
- ▶ How should “Honest Abe” respond?
- ▶ Be completely honest? OR
- ▶ Be pragmatic?

Ethics Too

Ethical Models

- ▶ Observations
 - ▶ Most people have some combination of Pragmatism and Principle
 - ▶ Key question: Where is the Line?
The line that they won't cross

Ethics Too

Ethical Principle

- ▶ The Golden Rule?

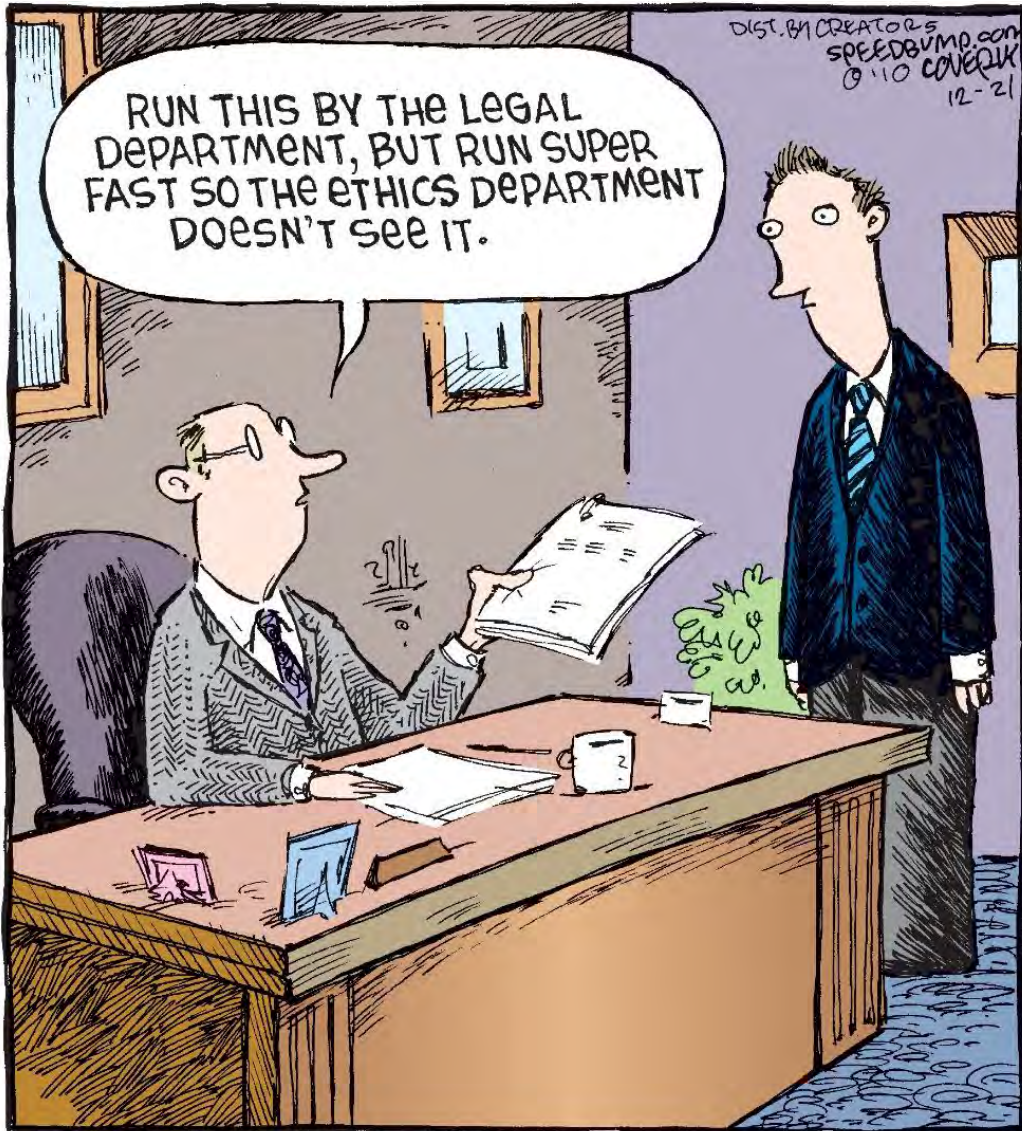
Ethics Too

Addressing Ethical Dilemma

- ▶ Personal ethical principles – foundational resource
- ▶ Law and regulations

Ethics Too

Keep in mind ...



- ▶ “Ethically Speaking”
Linden Cole, FSA
- ▶ “Barely Legal Line”

Professionalism Resources Available

Professionalism Resources

Questions to keep in mind ...

Who could be treated unfairly or harmed?

What resources are available?

Professionalism Resources

- ▶ Personal ethical principles
- ▶ Law and regulations
- ▶ What else?
 - ▶ Company Rules
 - ▶ Colleagues, Friends

Professionalism Resources

- ▶ CAS, CIA, SOA Candidate Codes of Conduct
- ▶ CAS, CIA, SOA Candidate Professionalism Courses
- ▶ CIA and U.S. Professional Actuarial Organizations Codes, Rules of Conduct
- ▶ CIA, International and U.S. Standards of Practice
- ▶ Qualification Standards
- ▶ Continuing Education
- ▶ CIA Discipline Process and U.S. ABCD

Professionalism Resources

Code of Professional Conduct: Member, U.S. The Precepts

- ▶ PRECEPT 1. An Actuary shall act honestly, with integrity and competence, and in a manner to fulfill the profession's responsibility to the public and to uphold the reputation of the actuarial profession.

Professionalism Resources

Charitable Actuarial Organizations



The Actuarial Foundation's mission is to enhance math education and financial literacy through the talents and resources of actuaries.



The Actuarial Foundation of Canada is a registered charity to support youth education, financial literacy, and research initiatives that utilize actuarial skills in the public interest.

Professionalism Resources

Code of Professional Conduct: Member, U.S.

The Precepts

- ▶ PRECEPT 2. Only when qualified
- ▶ PRECEPT 3. Satisfy applicable Standards of Practice.
- ▶ PRECEPTS 4, 5, 6. Communications and Disclosure:
Be clear; Satisfy ASOP 41 on Communication; Identify Principal, Role of Actuary; Disclosure of compensation and sources

Professionalism Resources

Code of Professional Conduct: Member, U.S. The Precepts

- ▶ PRECEPT 7. Conflict of Interest
 - ▶ NOT preclude performing actuarial services involving an actual or potential conflict of interest
 - ▶ HOWEVER to do so requires
 - ▶ Ability to act fairly is unimpaired;
 - ▶ Disclosure of the conflict to principals whose interests would be affected by the conflict; and
 - ▶ All such principals expressly agree to the performance of the actuarial services

Professionalism Resources

Code of Professional Conduct: Member, U.S.

The Precepts

- ▶ PRECEPT 8. Control of Work Product
- ▶ PRECEPT 9. Confidentiality
- ▶ PRECEPT 10. “An Actuary shall perform Actuarial Services with courtesy and professional respect and shall cooperate with others in the Principal’s interest.”

Professionalism Resources

Code of Professional Conduct: Member, U.S.

The Precepts

- ▶ PRECEPT 11. Advertising
- ▶ PRECEPT 12. Use of Titles and Designations
- ▶ PRECEPT 13. Knowledge of possible violations of the Code of Professional Conduct

Professionalism Resources

Code of Professional Conduct: Member, U.S. The Precepts

- ▶ PRECEPT 14. Responding to request for information related to possible violation of Code of Professional Conduct

Professionalism Resources

U.S. Actuarial Standards Board (ASB)

“The ASB establishes and improves standards of actuarial practice. These ASOPs identify what the actuary should **consider, document, and disclose** when performing an actuarial assignment. The ASB’s goal is to set standards **for appropriate practice for the U.S.**”

Professionalism Resources

U.S. ASOP Applicability Guidelines

- ▶ Provides guidance as to which standards might apply to tasks that actuaries perform.
- ▶ Not standards of practice; not promulgated by ASB
- ▶ Not binding on any actuary - the actuary has ultimate responsibility to identify the applicable standard(s)

Professionalism Resources

AAA Council on Professionalism, April 2015

“Key Ethical Concerns Facing the Actuarial Profession”

- ▶ More than 3,300 Academy members responded to 2012 survey
- ▶ 18 potential ethical concerns rated on a scale of 1 to 5
 - 1 = not an ethical problem today (2012)
 - 5 = it is a major ethical problem today
- ▶ Responses analyzed by: Area of practice; Type of employment
Length of Academy membership; Geographic location

Professionalism Resources

AAA Council on Professionalism, April 2015

“Key Ethical Concerns Facing the Actuarial Profession”

▶ Top six concerns

- ▶ “Responding to pressure from principals and/or management to select inappropriate assumptions used in pricing or reserving,” **Precept 1, 41% 4 or 5 ratings**
- ▶ “False or misleading representation of products or services in marketing, advertising, or sales efforts,” **Precept 11, 31% 4 or 5**
- ▶ “Failure to take appropriate action when another actuary misrepresents information,” **Precept 13, 29% 4 or 5**
- ▶ “Conflicts of interest between opportunities for personal financial gain (or other personal benefits) and proper performance of one's responsibilities,” **Precept 7, 29% 4 or 5**
- ▶ “Misrepresenting or concealing limitations in one's abilities to provide services.” **Precept 2, 28% 4 or 5**
- ▶ “Misuse of proprietary/confidential information” **Precept 9, 27% 4 or 5**

Professionalism Resources

AAA Council on Professionalism, April 2015

“Key Ethical Concerns Facing the Actuarial Profession”

Lowest rated situation?

“Failure to provide timely responses to inquiries from the principal,” **Precept 1, 13% 4 or 5 rating**

Professionalism Resources

A few more words of advice...

- ▶ Signature test
- ▶ Newspaper test
- ▶ Be ready to walk

Being An Actuary: Beyond The Mathematics

What matters?

“Not everything that **can be counted** matters.”

“Not everything that **matters** can be counted.”

Being An Actuary: Beyond The Mathematics

Revisiting the key messages ...

- ▶ Communication Skills Essential
- ▶ Ethics Too
- ▶ Professionalism Resources Available

Being An Actuary: Beyond The Mathematics

- ▶ **YOUR Questions, Comments**
- ▶ **MY Questions, Comments**

Click on the "Participants" icon at the bottom center of your screen. At the bottom right, click on "Raise Hand" button. Your microphone will be unmuted and you may speak.

Communication Skills Essential

Let's Talk ...

What are your communication tips?

What does your company, or college or university, do to enhance your communication skills?

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Professionalism Resources

Code of Professional Conduct: Member, U.S. The Precepts

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Professionalism Resources

Think and Share

- ▶ How do members of the actuarial profession act “in a manner to fulfill the profession’s responsibility to the public”?

Click on the "Participants" icon at the bottom center of your screen. At the bottom right, click on “Raise Hand” button. Your microphone will be unmuted and you may speak.

Professionalism Resources

A few thoughts ...

- ▶ Each profession has a “special public interest”
- ▶ The work that actuaries do helps individuals, organizations, and society achieve financial security
- ▶ Special public interest: Ensuring the viability and sustainability of financial security programs involving risk

Professionalism Resources

AAA Council on Professionalism, April 2015

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Professionalism Resources

Think and Share

- ▶ Do the results of the Ethical Concerns survey surprise you?
- ▶ Would the results be better or worse if a similar survey was conducted today?

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Ethics Too

Ethical Situation: Two for the Price of One

- ▶ A pop (soda?) machine at a hotel malfunctions and you receive two cans for the price of one.

Ethics Too

Two for the Price of One

Think and Share

- ▶ What would you do? Poll
- ▶ Would your action be different if you had received no cans?
- ▶ Would your action be different if your bank credited your account with twice the amount you deposited?
- ▶ Would the amount make a difference?
- ▶ At what point do you reach the line you won't cross, and the issue becomes "material" to you or others?

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Ethics Too

Two for the Price of One

Think  and Share

▶ Actual Result: Went to the Hotel Desk

1. It seemed like the right thing to do
2. Make the hotel aware of the malfunctioning machine

Being An Actuary: Beyond The Mathematics

- ▶ Thank you for your participation in this session
- ▶ Best to you in your actuarial career!
- ▶ Unanswered questions? Feel free to email me at wluckner2@unl.edu