

**The Seventh Triennial AEESEAP Conference**

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# Communicating Engineering Effectively

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# Ultimate success formulae



# Ultimate success formulae

- 1952 Yale University Final Year Student Goal Survey
- Only 3% had goal in mind
- 1972 follow-up on surviving batch
- The 3% had 3 x more combined income than the 97% combined income

We are creatures of habit

$$E + R = O$$

E = Event

R = Response

O = Outcome

# The initial question ...

- What the speaker intended to say
- What the speaker thought he stated
- What the speaker actually said
- What the recipient heard
- What the recipient understood



- Is there and why is there a difference?

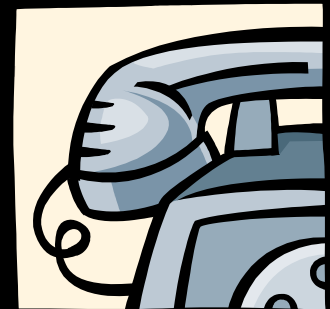
# Our topic breakdown



- Background of Obviousness
- Communication model
- Improvement methods
- Specific communication needs

# General intro

- Communication is an interchange of thoughts, ideas, and opinions between people



# Background of Obviousness

B.O.O

- Experience may distort reality and could be positive or negative
- Experience reinforces beliefs, biases, attitudes and expectations
- It is selected, interpreted and distorted to maintain consistency with personal view

# Background of Obviousness

B.O.O

"Each acquired attitude or habit, useful though it may be, makes us a little less receptive to alternative ways of thinking and acting"

*John W. Gardner*



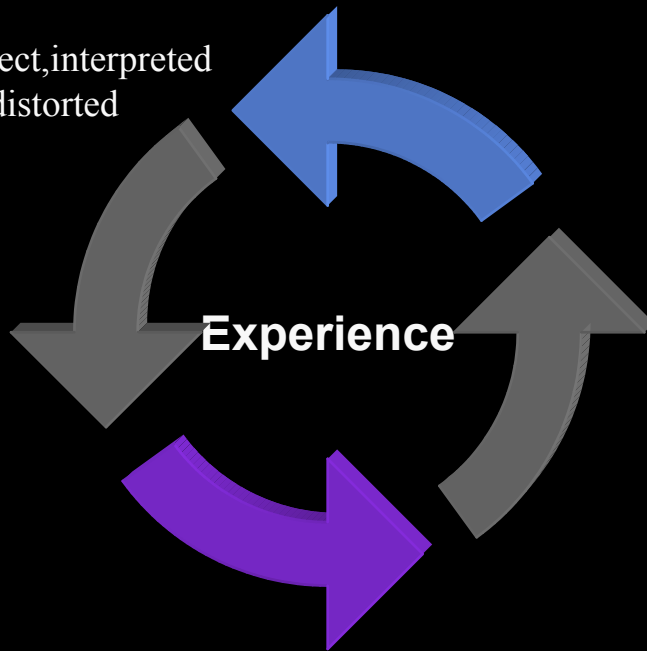


# Background of Obviousness

**B.O.O**

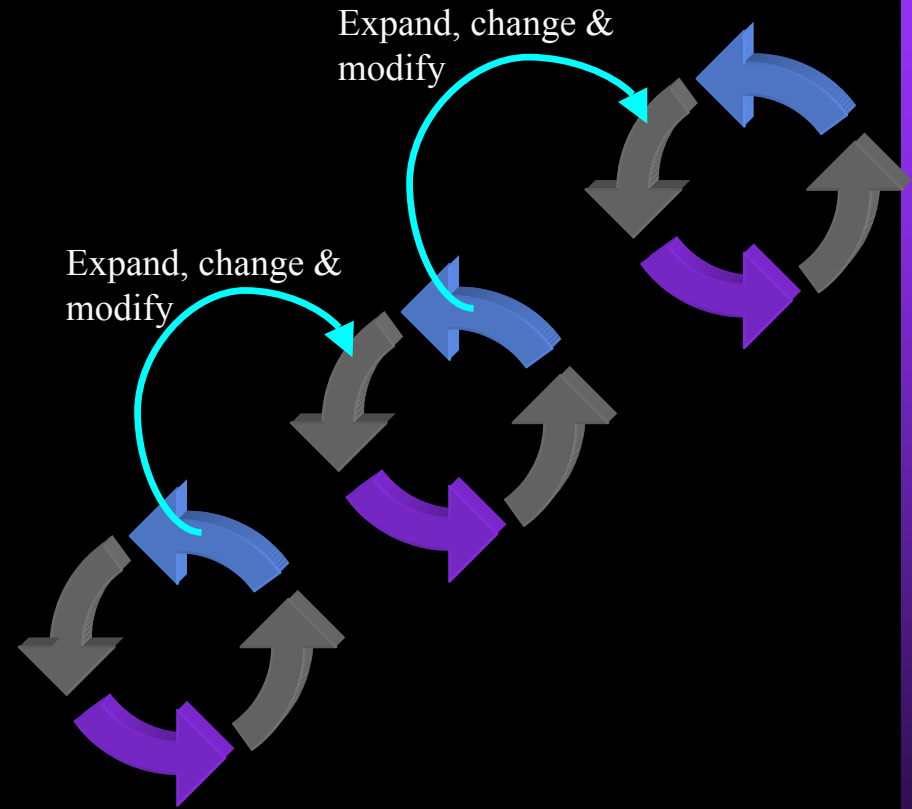
*John W. Gardner*

Select, interpreted  
& distorted



**Experience Doesn't Pay**

Expand, change &  
modify

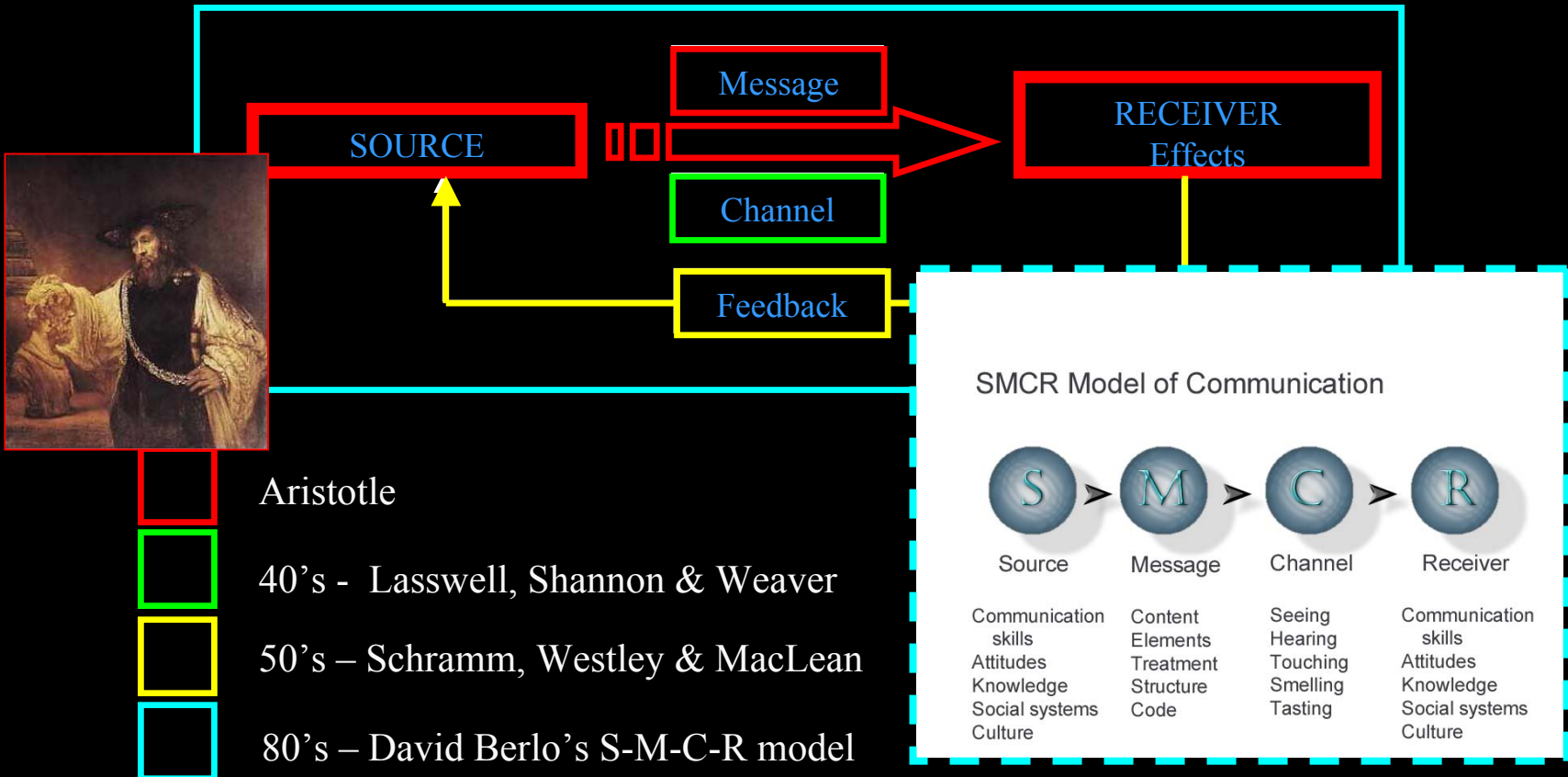


**Experience Pay's**

# Communication model

S.M.C.R

- **Source-Message-Channel-Receiver** model



# Communication model

S.M.C.R

- An individual's experience is continuous
- Therefore meanings are relative and open to subjective interpretations
- Berlo (1960) stated " meanings are in people, not in the message "

# Communication model

S.M.C.R

- Similarity in terms of attributes are like beliefs, culture, education or social status
- The source must not take the receivers understanding for granted

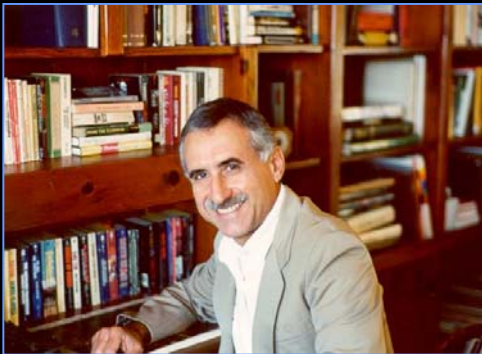
# Communication model

- What the speakers INTENDED to say
- What the speaker THOUGHT he said
- What the speaker ACTUALLY said
- What the recipient HEARD
- What the recipient UNDERSTOOD

**INTENDED**  
**THOUGHT**  
**ACTUALLY**  
**UNDERSTOOD**  
**HEARD**

# Communication improved

- Communication synergy – Synchronization of verbal and non-verbal signals
- Dr Albert Mehrabian developed a classic statistic for the effectiveness of spoken communication



- 7% of meaning is in the words that are spoken
- 38% of meaning is in the way that the words are said
- 55% of meaning is in facial expression

# Verbal communication

We

Us

Our



Common interest, concern and benefit

- Why? – the person you are talking to is more interested in what he or she needs and wants than in what you want or need

# Verbal communication

Rapport

- A relationship of mutual trust or emotional affinity
- Typically develops over a long period of time between friends, business partners, teachers and students
- However most business relationships are brief exchanges



# Verbal communication

Rapport

- People mastery builds rapport and influences people



# Non- Verbal communication

- 12 essential rules for non-verbal development

1. Make an effective entrance
2. Walk tall
3. Enter with a purpose
4. Smile
5. Make eye contact
6. Give a great handshake
7. Think before you sit
8. Convey relaxed energy
9. Use your head and face
10. Use your hands
11. Stick to the basics when speaking in public
12. Communicate with clothes

# Techno Savvy Communication

- Tools include e-mail, video conferencing, phone conferencing, internet, PDA's, pocket PC's.....  
digital stuff
- Evergreen methods include meetings, discussions down the corridor, reports, phone calls,

# Techno Savvy Communication

- Points to remember
  1. KISS – Keep It Short Stupid
  2. A picture says a million words
  3. Never AssUMe
  4. Smile when typing a mail.....it shows
  5. Keep up or be left behind

# Team communication / dynamics / politicking

- Points to remember
  1. TEAM – Together Everyone Achieves More
  2. Positive politics – organizational savvy to get your ideas and recommendations accepted

Said does not mean heard

Heard does not mean understood

Understood does not mean agreed

Agreed does not mean applied

Applied does not mean retained

*Thank You*