

# Excellence through Ethics™

Session 17

*Buyer Beware*



**Middle School**



Junior Achievement®



*Excellence through Ethics*

**Middle Grades**

**Session 17**

*Buyer Beware*

**Content:** Ethics and Fair and Accurate Marketing

**Methods:** Project and Statistics

**JA Foundational Pillars:** Ethics and Financial Literacy

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# Acknowledgements

## Sponsorship

JA Worldwide® (Junior Achievement) gratefully acknowledges Deloitte & Touche USA LLP for its commitment to the development and implementation of the supplementary program *Excellence through Ethics*. JA Worldwide appreciates its relationship with Deloitte & Touche USA LLP to develop and implement vital and innovative programs designed to foster ethical decision-making skills.

## Buyer Beware

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### Overview

Students learn that statistical analysis of marketing data can sometimes be used inappropriately in advertising. Businesses have an ethical obligation to offer fair and accurate analyses of the products and services they market. Buyers are accountable for understanding the ways in which statistical data may be used in marketing; they should be able to recognize when such data are misused.

### Objectives

Students will be able to:

- Recognize that statistical analysis of marketing data can be misused by businesses.
- Evaluate the ethical use of statistics in advertising.
- Design ethical or unethical advertisements to demonstrate their understanding of the concepts discussed.
- Express the buyer's role in ensuring the ethical use of statistics in advertising.

### Preparation

Review the activity. Prepare the necessary copies and session materials.

Group work is incorporated into this session. You may consult with the teacher to determine how best to form the groups.

Post Key Terms and definitions in a visible place.

- **Ethics:** The standards that help determine what is good, right, and proper.
- **Mean:** Mathematical average.
- **Median:** Mathematical midpoint.
- **Mode:** Mathematically, most frequent.

### Recommended Time

This session typically takes 45 minutes to complete. Ask the teacher to help you keep track of time.

### Materials

- Statistics Worksheet (1 per student)
- Recent issues of miscellaneous popular magazines (2 per group)
- Posterboard, newsprint, or construction paper (10)
- Markers (10)
- Pens or pencils (1 per student)

## **Presentation**

### **Introduction (5 minutes)**

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Greet the students. Tell them that today you will be discussing the ethical use of statistics in marketing. Review the terms ethical and unethical with students. Explain that you will begin by recalling some concepts from mathematics and statistics.

Ask the following questions:

- If you buy a product for \$100 and resell it for \$200, your profit is \$100. What is your profit expressed as a percentage? **Answer:** Your profit is 50%, calculated as 50% of the \$200 retail price – not 100% of the \$100 wholesale price. The markup, however, is 100%.
- How high would the price have to be in order for the profit to be 100%? **Answer:** In this case, it is impossible to have 100% profit because you incur a cost. In order to achieve a 100% profit, you must be able to acquire your product free of all cost. Retail price is irrelevant.
- Suppose a company purchased a product for \$100 and then resold it for \$200. If someone wanted to suggest that this company is greedy, would it be ethical for that person to say the company has profits of 100%? **Answer:** No. It is a false statement. However, it is ethical to say that the company has a 100% markup.
- What, if any, is the ethical responsibility of someone hearing such a claim? **Possible Answer:** That person should realize that it is a false claim and should not repeat this false accusation to others.

Tell students that such a false claim is a good example of how statistics are misused. As a result, some interesting perceptions about the use of statistics have developed over the years. Read the following quotations to the class:

- “There are three kinds of lies: lies, damned lies, and statistics.” – Benjamin Disraeli
- “Figures never lie, but liars always figure.” – Unknown
- “Get your facts first, and then you can distort them as much as you please.” – Mark Twain
- “Caveat emptor” (“Let the buyer beware.”) – Unknown

Ask students what common view of statistics is presented by these remarks. **Possible Answer:** People who want to fool us often use statistics.

Statistics are often used in advertising. Does this mean that all advertisements are false? No, but it does mean we should use our knowledge of mathematics and statistics to separate the useful information from the useless. While most problems with advertising are unintentional errors, anti-fraud laws—which prohibit such unethical behavior as invention or suppression of data—have been created to protect unwary buyers. Tell students that they will now examine ways in which statistical data can be presented in advertisements.

## Activity

### Part One: Mean, Median, Mode (10 minutes)

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Write these terms on the board and review them with students. Distribute the Statistics Worksheet. Then, organize the class into eight groups. Ask students to work as teams to calculate the mean, median, and mode. Tell them they will have five minutes to complete this exercise.

Briefly review the answers with the class:

The **mean, or mathematical average** = \$184,546

The **median, or midpoint** = \$125,000

The **mode, or most frequent** = \$120,000

Draw an imaginary line through the middle of the class, and tell half of the class that they will role-play home-sellers; the other half of the class will role-play home-buyers.

Pose the following questions to the class:

- a. Sellers: If you were advertising a relatively modest home for sale in this neighborhood, and you wanted to show how your house compares in price to others sold this year, would you use the mean, median, or mode price for comparison? Why? (Hint: Would you want to make your house seem more or less expensive than others in the neighborhood?)
- b. Buyers: Would the mean, median, or mode price be most helpful to you? Why?
- c. Sellers and Buyers: Would using the mean (calling it the average price of a home in the neighborhood) be misleading? Would selection of the mean rather than the median or mode be an ethical decision?

## Activity

### Part Two: Evaluating Print Advertising (10 minutes)

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Ask students to pair up. Distribute one magazine to each pair. Instruct students to look through the magazines to find advertisements that use statistics within the advertisement's copy. Tell students to evaluate each advertisement by posing questions regarding the use of statistics. Students should decide if the statistics being used are distorting reality and whether the company is using statistics fairly to promote their product or service in an ethical manner.

For example, in one advertisement a product promises to "lower bad cholesterol an average of 15-18%." In this case, students might ask, "Which average does the advertiser refer to: mean, median, or mode?"

Again, an advertisement for a brand of disinfectant observes that "kids get 5 to 12 colds a year" and that the product "can help prevent the spread of cold germs by killing 99.9% of cold viruses in 30 seconds." Students should ask what this means. How many viruses were included in the study? How many viruses might there be in the remaining .1%?

Have each pair of students present their findings to the class.

## **Activity**

### **Part Three: Designing Print Advertising (15 minutes)**

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Separate the class into eight groups. Distribute a marker and a sheet of posterboard, newsprint, or construction paper to each group.

Ask each group to produce either an ethical or an unethical print advertisement that uses statistics in such a way that buyers would really have to pay attention not to be fooled by the claims made in the ad.

Have each group present its poster to the class. Each group must specify if and how it used statistics to distort reality.

After all presentations are made, conduct a class vote to determine which group produced

- The most original ad.
- The most ethical ad.
- The most unethical ad.
- The ad most likely to fool buyers.
- The ad most likely to sell the product.

### **Summary and Review (5 minutes)**

Briefly review the vocabulary introduced in the session.

Congratulate students for doing such great work. Explain that the concepts and skills they've learned will be very useful in both life and work. Remind students that statistics can be valuable tools to help us understand the world of advertising, but statistical data can also be used to distort reality.

Explain that the activities students participated in focused on some of the problems with using percentages and averages (mean, median, and mode) in marketing. In fact, statistical data can have broader implications than what is advertised. The truthful representation of data is directly related to a company's accurate financial reporting. It is this accurate reporting of the financial health of a company that the investing public relies on to make product or investment decisions.

Companies—including workers, managers, and owners—have an ethical obligation to ensure that the data provided to customers are accurate. Companies also have an ethical obligation to use statistics in a fair and honest way. Still, buyers always need to be aware that mistakes can happen. As such, they should carefully analyze any statistics being used.

Ask the class, “How would you define ethical advertising based on this activity?”

Thank the students for their participation.

## **Session Outline**

### **Introduction**

- Greet the students.
- Review the concepts from mathematics and statistics.
- Introduce the idea of ethical and unethical use of statistics.
- Read the famous quotations about mathematics and statistics.

### **Activity**

#### **Part One: Mean, Median, Mode**

- Distribute the Student Handout. Have students work in groups to calculate the mean, median, and mode.
- Separate the class into “buyers” and “sellers.” Have students discuss the best average to use when advertising a house for sale.

#### **Part Two: Evaluating Print Advertising**

- Have students work in pairs.
- Distribute a magazine to each pair of students. Ask students to search for advertisements that use statistics.
- Have students evaluate the advertisement statistics to see if they are distorted.

#### **Part Three: Designing Print Advertising**

- Separate the class into eight groups; distribute poster boards, newsprint, or construction paper to each group, as well as a marker.
- Have groups design ethical or unethical advertisements using statistical data. Have them explain why their advertisements are ethical or unethical.
- Have students vote on five categories of best advertising.

### **Summary and Review**

- Review the Key Terms for the session.
- Explain that statistical data can be a valuable tool or be used to distort reality.
- Tell the class that companies have an ethical obligation to use statistics in a fair and honest way.
- Explain that buyers need to carefully analyze statistics used in advertising.
- Thank the students for their participation.

## Statistics Worksheet

There have been 11 home sales in a neighborhood over the last 12 months:

<u>Date</u>	<u>House price</u>
January 6	\$125,000
March 17	\$135,000
April 12	\$120,000
June 6	\$130,000
June 19	\$440,000
June 22	\$115,000
July 8	\$120,000
August 15	\$140,000
August 19	\$110,000
September 6	\$475,000
November 20	\$120,000

Calculate the following price:

1. The mean (mathematical average)     \$ \_\_\_\_\_
2. The median (midpoint)                 \$ \_\_\_\_\_
3. The mode (most frequent)             \$ \_\_\_\_\_

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## Welcome to Junior Achievement's *Excellence through Ethics*

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As a Junior Achievement (JA) volunteer or teacher, you are joining other teachers and volunteers from across the United States in providing students with a unique educational experience. Junior Achievement's *Excellence through Ethics* offers students learning opportunities to share knowledge and information regarding ethics in business. JA strives to show students how business works, and to better evaluate organizations that conduct their operations in the right way.

*Excellence through Ethics* is designed to equip volunteers and teachers with supplemental, ethics-based activities for use with JA in-class programs for grades four through twelve. All these activities provide students with current and essential information about business ethics.

These activities are designed to reinforce students' knowledge and skills, teach them how to make ethical decisions, assist them in learning to think critically, and help them to be better problem-solvers. All the activities are hands-on, interactive, and group-focused to present the material to students with the best instructional methods.

Within these supplements, you will find sections to help you effectively implement the activities in your volunteer experience. Materials include: (a) an introductory discussion of business ethics, marketplace integrity, and the growing capacity of students for ethical decision-making; (b) activities and student materials that connect to and expand current classroom-based Junior Achievement programs; and (c) a functional glossary of terms relating to a wide spectrum of ethics, quality, service, and social responsibility considerations in business.

JA greatly appreciates your support of these important and exciting activities. If you have comments about the *Excellence through Ethics* program content, curriculum, and/or instruction, please access <http://studentcenter.ja.org.aspx/LearnEthics/> and choose the “*Excellence through Ethics* Survey” link located in the middle of the page.

# Appendix

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## Introduction and Overview

- *How do I do the right thing in this situation?*
- *Should I be completely honest, even if it puts others in jeopardy?*
- *What kind of community do we want to be?*
- *How do we do what's best for the long term?*
- *Who should cover the cost of "doing the right thing"?*

These are all questions having to do with business ethics. They are valid and necessary questions, and good business people have asked them for generations. They form the backdrop of vital discussions as business, community, and political leaders grapple with significant issues. Many students would ask these questions, even if Junior Achievement hadn't developed this ethics curriculum.

## Business Ethics Discussions Are Here To Stay

Business ethics has been in the spotlight for much of the past decade, especially as examples of wrongdoing come to light in the media. New technologies and international competitive pressures cause a steady focus on the question, "Is it possible to be competitively successful in business today and still operate in an honest and ethical manner?" The past decade has seen individuals search for deeper personal meaning in the workplace, which has contributed to lively ethics discussions in the business realm. For these reasons, the discussion of business ethics is not a passing fad; it's here to stay.

Many graduate schools of business have either required ethics coursework or integrated ethics principles throughout all areas of study. That is commendable. We believe this vital area of exposure and instruction also should happen at earlier ages and continue throughout the students' educational journey. Many of today's students haven't had access to a well-rounded education in economics and free enterprise or have come to see these in a very negative light. They have limited awareness of the extent to which good business leaders engage in the challenging exercises of ethical decision-making amid heavy competitive pressures. As students learn the general principles of economics and business, it's critical that these be underpinned with a strong foundation in ethics. This will accentuate the best in American business traditions, while laying the groundwork for students' continued evolution into future generations of leaders.

## Integrity in the Marketplace?

Many adults and young people choose to believe that the marketplace is driven only by greed. They view it as bringing out only the worst in human behavior, demoralizing the human spirit, and driving out any sense of idealism. While elements of greed and extreme self-interest among some individuals cannot be denied, solid research has shown time and again that companies with a long-term focus on ethics and a broad consideration of stakeholders' interests are much more profitable than those lacking such a focus.

James A. Autry, in his book *Love and Profit: The Art of Caring Leadership*, said it well: "I do not doubt the presence of greed in the marketplace because I do not doubt the presence of greed in people. But, I also do not doubt the ennobling aspects of work, of the workplace, of the community, of endeavor, of

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the marketplace. So I choose to believe that most of the marketplace is driven by people who want to do good work for others and for themselves.”

*Excellence through Ethics* accepts the challenge of educating youth in the basics of economics and business while establishing a positive balance on the side of well-informed, ethical business practice. This may appear to place a heavy burden on Junior Achievement volunteers, who are not trained ethics experts. The following informational pages will not turn you into an ethics expert. That’s not what we’re striving for here. What students need most is meaningful interaction with people who are willing to engage in a discussion of these vital issues.

## **Lively Practitioners Rather Than Dry Theorists**

This program is more about day-to-day ethics practice than the nuances of ethics theory. Some believe that working in business requires a disconnect from one’s personal ethics. We do not believe this is the case. Students need to know that what they learn about fairness and honesty in general also applies to business. While business ethics may address some specific areas of business practice, it’s not a separate and distinct specialty to be set apart from the general ethical principles that apply in other areas of life. Young people need to encounter the wisdom of age and experience that volunteers bring to the classroom.

## **Students’ Growing Capacity for Ethical Decision-Making**

*Excellence through Ethics* is designed to foster discussions at the appropriate level for each age group. The curriculum developers have designed the ethics activities with sensitivity to student’s mental maturity. At the late elementary and middle-grades levels, students’ capacities for ethical reasoning tend toward good personal behavior as determined by adult rules and authority. In relationships, personal trust, loyalty, and respect are of paramount importance. For these students, corporate ethical behavior is viewed in much the same light as their own personal behavior: it’s governed by rules.

As students advance into high school, their ethical decision-making moves into the larger arena of social contracts and systems that guide and govern societal and group behavior. Here the rationality and utility of laws are scrutinized, as students become more capable of higher-ordered, principled thinking. Students are increasingly aware of the diversity of values among different cultures and communities. At this level, students’ capacities for processing the complex, ethical dilemmas that may be encountered in business are greatly enhanced.

You will gain confidence as you come to realize that conducting a robust, provocative discussion with students is more important than “having the right answer.” The activities have been designed to leave room for lively discussion and multiple points of view. Having the courage to share your own experiences is very valuable to students.

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You don't have to apologize for the excesses students may see in business. Don't assume responsibility for actions that are not your own, and do not try to defend the indefensible. While accentuating the fact that most businesses operate ethically, it's okay to scrutinize the unethical players in the marketplace who give business in general a bad name.

## **Continuing Education**

Teaching this material to students will no doubt strengthen and enhance your own ethics awareness and continuing education. Some students will challenge your best reasoning capacities. Having your own support network of professional colleagues with whom you can share and discuss some of these issues is very valuable. It's also helpful to seek out colleagues with philosophical views that differ from your own. This serves as a valuable "cross-pollination" function because you will be able to understand and discuss a variety of views with students, as well as share students' perspectives with your colleagues. In this way, everyone learns.

Finally, please be assured that your contributions here have tremendous value to students and will serve to upgrade business ethics in the future. We're dealing with the future generation of leaders in their formative years. We can take pride in the fact that we've had a hand in shaping the very people who will be responsible for business ethics and social responsibility in the future.

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## Acknowledgements

Many educators, economists, businesspeople, and consultants have contributed to the development of *Excellence through Ethics*. We would like to acknowledge the following individuals and groups for their efforts, creative talents, and support in creating these materials:

### **Deloitte & Touche USA LLP**

#### **Junior Achievement Blue Ribbon Panel on Ethics**

Charles E. Abbott, Director, Ethics and Compliance, Textron Inc.

James D. Berg, Director, Ethics and Business Practice, International Paper

Arthur P. Brief, Ph.D., Lawrence Martin Chair in Business, Director of Burkenroad Institute, A.B. Freeman School of Business, Tulane University

Frank Daly, Corporate Director of Ethics and Business Conduct, Northrop Grumman Corporation

Gary L. Davis, Executive Vice President, Chief Human Resources and Administration Officer, J.C. Penney Company, Inc.

Jacquelyn Gates, President and CEO, SOARing LLC

Patrick J. Gnazzo, Vice President Business Practices, United Technologies Corporation

Frances Hesselbein, Chairman, Leader to Leader Institute (formerly the Peter F. Drucker Foundation)

Evelyn Howell, Executive Director, Business Practices & Compliance, Sara Lee Corporation

William A. McCollough, Ph.D., Director, Business Ethics Foundation and Research Center Administration, Warrington College of Business, University of Florida

John H. O'Byrne, Vice President, New York Life Insurance Company

John Pepper, Chairman, Executive Committee of the Board, The Procter & Gamble Company

Eric Pressler, Director of Legal Compliance and Business Ethics, PG&E Corporation

Jack Robertson, Ph.D., Charles T. Zlatkovich Centennial Professor in Accounting, Department of Accounting, University of Texas–Austin (retired)

Harold Tinkler, Chief Ethics Officer, Deloitte & Touche LLP

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## **Excellence through Ethics Writers and Consultants**

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Insight Education Group

Motion Picture Association of America Public Relations Council

Dave Somers, Owner of Brevity; Adjunct Professor, DeVry University

## **Excellence through Ethics Junior Achievement Pilot Offices**

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JA of The Heartland, Inc.

JA of The National Capital Area, Inc.

JA of The Upper Midwest, Inc.

JA of West Texas, Inc.

JA of Wisconsin, Inc.

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## **Excellence through Ethics Evaluation**

Junior Achievement has discontinued all paper versions of program surveys. However, we greatly appreciate your comments and feedback about *Excellence through Ethics*. Please help us improve the quality of *Excellence through Ethics* by sharing your comments through our new online survey process. The online survey should take less than 10 minutes to complete.

If you have comments about the *Excellence through Ethics* program content, curriculum, and/or instruction, please access <http://studentcenter.ja.org/asp/LearnEthics/> and choose the *Excellence through Ethics* Survey link located in the middle of the page.

**Thank you for participating in JA!**



## Excellence through Ethics Volunteer Survey

1. Including this session, how many individual sessions of Excellence through Ethics have you presented? \_\_\_\_\_
  
2. Do you feel that the students were engaged through this session?
  - A. Not at all
  - B. Somewhat engaged
  - C. Engaged
  - D. Very Engaged
  - E. Unsure
  
3. Do you feel the session was relevant to students?
  - A. Not relevant
  - B. Somewhat relevant
  - C. Relevant
  - D. Very relevant
  - E. Unsure
  
4. Do you feel students are more prepared to make ethical decisions after participating in this session?
  - A. Significantly more prepared
  - B. Somewhat more prepared
  - C. Somewhat less prepared
  - D. Significantly less prepared
  - E. Unsure
  
5. On a scale of 1 to 10 (10 being excellent), how would you rate the overall quality of the Excellence through Ethics session? \_\_\_\_\_
  
6. After this JA experience, how likely are you to volunteer for JA again?
  - A. More likely to volunteer
  - B. Less likely to volunteer
  - C. No more or less likely to volunteer
  - D. Unsure
  
7. What comments or suggestions do you have regarding the overall session (including format, content, etc.)?

Optional: City \_\_\_\_\_

State \_\_\_\_\_ Country \_\_\_\_\_

Email \_\_\_\_\_

## Excellence through Ethics Student Survey

1. What grade are you in? \_\_\_\_\_

2. Please fill in the circle that best describes how you feel about the following statements.

There is no right or wrong answer.

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
This topic is very important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to apply what I learned in this session to the real world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The activities were interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learned something about ethics from this session.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Do you feel more prepared to make ethical decisions after participating in this session?

- A. Significantly more prepared
- B. Somewhat more prepared
- C. Somewhat less prepared
- D. Significantly less prepared
- E. Unsure

4. I saw someone at my job taking money from the cash register, I would:

- A. Ask someone I trust what I should
- B. Tell a supervisor
- C. Talk to the person taking the money
- D. Do nothing
- E. Not sure

5. To help us better understand who you are, please answer the following questions: How do you describe your ethnicity (family background)? (Fill in all that apply)

- A. African American
- B. Asian American
- C. Latino (a) or Chicano (a)
- D. European American (white)
- E. Native American
- F. Other – how do you identify yourself? \_\_\_\_\_

6. Do you have any additional comments regarding this session?

Optional: City \_\_\_\_\_ State \_\_\_\_\_ Country \_\_\_\_\_