probably a central prop. The stalk is so tall its top is out of sight. Clues a
first picture can provide are just these: characters, setting, time.

The six-year-olds referred to earlier turned next to this first picture, after
speculation using only the title in the Table of Contents. A first and spontaneous reaction was: "Oh, Jack and the Beanstalk!" Others quickly picked
this up and agreed. Others comments were: "I think now its not about a
magic pumpkin but about a magic beanstalk. It may still be about a magic
hat. Maybe one of the boys will climb the beanstalk and find a magic hat.
Maybe all the children will climb up and see a giant. Maybe they'll climb
up and see Jack and the giant. Maybe they'll climb up and see all kinds of
things."

TITLES AND SUBTITLES. In another D-R-T-A session, the group was
asked to turn to a story (39, pp. 83-94) on page 83 and to read to the bottom
of page 85. In this approach the pupils were given an opportunity to read
the first fourth of the story on their own. They were like detectives (reading
detectives) who had been given a fourth of the clues available to examine.
With this much information given, how will they examine the evidence and
weigh the clues; and what conjectures will they make concerning the second
quarter of the story?

Pupils performing as thinking-readers will analyze and synthesize the
ideas as they search for plot clues. They will not memorize the story. First,
they will examine the title and subtitle. "Washington’s Scout" (the title of
the story) could refer to George Washington and the struggle for independence. "Maybe he is a Revolutionary War scout. Maybe he does something
that saves the day for the Continental Army. Maybe he is a Boy Scout
from Washington, D.C., who saves the day on the Deering Farm. ("Deer-
ing Farm" is a subtitle.) Maybe Washington's Headquarters are on
the Deering Farm. Perhaps the Deering Farm is an ideal hideout for one of
Washington's Scouts." These are just some of the ideas that pupils reported
they had thought about as they reflected over the title and subtitle to this
story.

PICTURE CLUES. Told that they should read to the bottom of page 85,
some pupils examined both pictures after they had used the titles. The pic-
tures give clues to the setting for the story: (space concepts, or geographical
concepts) a small farmhouse and barn with a log-cabin annex located on
some flat land, maybe a meadow, and nestled among rolling hills. The pic-
tures give useful time clues: (time concepts or historical concepts) the
type of farmhouse and barn, the dress of the men, the kind of gun used—
all these suggest colonial days. These same factors also suggest aesthetic
concepts: color, dress, architecture, and so on. Social concepts are also
suggested: Washington’s Scout, who is he? Does he operate alone? Does
he meet with Washington? Whom is he scouting?

As a reader matures chronologically, intellectually, socially, emotionally,
experientially, and scholastically, he realizes more and more the importance of pictures as source material. He studies pictures as described to obtain all the clues he can that will be helpful in following a plot development. To him a picture may, depending on its quality, be worth a hundred words, five hundred words, or maybe the proverbial thousand words! Experience in reflective reading and thinking teaches the reader to seek facts as evidence with which to develop and test his hypothesis, rather than to fear the tyranny of facts dealt with on a memorizer basis. This kind of reader will never say, as one boy did who read under the "memorize all, parrot all, forget all approach": "Nothing but one damn fact after another."

USE OF STORY LANGUAGE CONTEXT. To the trained reader, schooled in the art of reading-thinking philosophy, all the examination of clues—title, subtitle, pictures—takes but a few seconds. Words and pictures trigger his thinking, and ideas course through his mind with astonishing rapidity.

Now, primed to deal with the language part of the plot development, he reads on, ever alert to clues to support or reject his conjectures, and to facts that suggest new hypotheses. Reading is a continuous process of searching, examining, weighing, changing, adjusting, creating and testing meanings. The reader finds out that the story is about one of George Washington's scouts; that he is taking a message through the British lines commanded by General Howe; that he does so at midnight; that he is aided by Jack France, a lad not old enough to be in the army; that the Dearings are friendly to the British, and so on. By the time he has finished reading to the end of page 85, he is prepared to offer conjectures about events to follow, how they may develop, why things may go one way or another. Jack has shown himself to be a loyal and resourceful American patriot, ready to render courageous services, and to give up his favorite horse if Washington needs it. He is ready to spy on the Dearings, to do so at night, to make the long ride alone. Apparently what he is doing meets with his mother's approval. Washington's situation is rather desperate. How will Jack fare? Ask some young reader, and he will give you an answer that sparks with emotion and high spirit and that reflects the rebellious and defiant bravado of the developing story. In many instances girls, even more than boys, speak with zest as they embrace with ardor the spirit of the occasion and espouse the cause of freedom.

USE OF MAPS, GRAPHS, AND CHARTS. Unschooled readers—and this includes many college-level adults—have a strong tendency to skip maps, graphs, and charts. Even at the graduate level, students tested on information presented through graphic media frequently fail because of their inattentiveness to information of this type. Sound reading habits acquired early in the learning-to-read program and the total educative process can overcome such major delinquencies.

Figure 3 shows the second page of a four-page article entitled: "Catch
That Airplane" in a basic reader (Winston Basic Readers, 42) designed for use at the sixth-grade level. To read this article, the procedure recommended is to ask the group to study the illustration and to speculate concerning the meaning of the title and the process used to catch the airplane.

Pupils trained to examine such diagrams will look first for the diagram label: "Arresting System for Airports." Speculation about the meaning of the word arresting may require some thought-provoking questioning on the part of the teacher, or a quick check by the pupils in a dictionary for different meanings of the word, or both. Other labels are studied: tapered tube, pistons, retriever pit, and so on, as the details illustrated are examined.

Typical conjectures obtained are: "The article will tell how this system works. Maybe it tells how it is built. Probably it tells why it is needed, since planes can stop on their own. If the system stopped a plane too quickly, what would happen to the passengers and the crew?" Thus armed, the readers are ready to study carefully the body of the article. Reading discursive or content material of this type demands that the reader approach the reading with a questioning mind. This is not the time to memorize or try to soak up isolated discrete facts. Now it is all the more urgent that creative reading of a scientific nature be done so that meaning may be obtained.

This approach to the use of a diagram is only one of a number that may be used to teach pupils why and how to read graphic aids. Asking pupils to study the diagram first should help them make a quick appraisal of what they know and do not know, and of what to look for when they read the article. Certainly the teacher might have first discussed each item in the diagram in detail, but this would have resulted largely in teacher-telling. On the next page of the book, this article has another illustration and a photograph. Pupils turning to these two pages are asked to read ahead on their own. No group-study of the two illustrations is done first. Each pupil is being required now to make his own analysis or to do his own reading. If lack of skill is revealed, subsequent training can be provided. At a later point there is presented in greater detail a discussion of this topic.

The reader's background

To examine sets of reading circumstances like those described (in "The One-Time Magic Garden," "Washington's Scout," "Catch That Airplane") and to make conjectures about either plot development or selection content is triggered primarily by the reader's background of relevant experience, intellect, language facility, interests, and needs. These conditions are true of all readers at all levels.

It must be kept in mind constantly that a Directed Reading-Thinking Activity in which basic readers are used represents to a large degree a captive-audience situation. The selection or story to be read is dictated by
the book being used. The opposite circumstance occurs in an individualized program (see Chapter 3) in which materials to be read are chosen on a self-selection basis. That is the time when the purpose(s) for reading as well as the material to be read is determined and selected by the pupil. A halfway position between these two extremes—teacher selected materials and pupil self-selected materials—might be the circumstance in which a student searches for more information as a result of some class activity in science, or social studies, or arithmetic, and so on. Under these conditions the pupil has some choice about materials to be used, even though at times his choice is limited to a predetermined bibliography.

On occasion, staunch advocates of an all-or-nothing basic-reader approach question the lack of freedom of choice imposed on pupils when a basic reader is being used. Some say they allow pupils to select the next story to be read in a basic reader. This is a weak defense that deceives no one really, especially not the pupils. They know what story is the “next story.” Others say they do not follow the sequence of stories as declared in a basic reader but “skip around.” It is true that this gives readers some choice as to what will be read next, but it is also true that the opportunity is very limited and is restricted to the confines of a single book. Furthermore, teachers who use this “skip around” plan are violating the sequences set up by the authors of the basic reader series. It is difficult to understand why these teachers defend a basic reader so vehemently on the one hand, and on the other violate one of the so-called sacred doctrines of a basic series—systematically and sequentially prepared content. In short, these arguments add up to not much more than idle chatter.

Readiness to read a basic reader story is usually spoken of in hushed voices because it, too, represents a basic reader “sacred cow.” It is not that the doctrine of readiness is being questioned; rather, it is the way in which it is practiced. Let us examine a typical readiness directive that represents an adaptation of a set of instructions appearing in a recently revised series of readers. The instructions accompany a story appearing in a reader planned for use at a third-grade level.

Explain: Our story for today is about a hungry mother lion and two hungry cubs. They went searching for food in the jungle. Look at the pictures in the story. See if you can tell what they found. What have the lions found in the first picture? Do you think the berries will be a treat for the lion? The first part of the story tells that they also found juicy bugs. Why do you think the lion cubs are standing up and sniffing? Let’s look at the next picture. What has the mother lion found? Explain that the story answers this last question. Suggest: I think you’ll have fun reading the story to find out.

Why explain all this before the children read? Why “tell” the children this much about the story? For what kind of children is this kind of plon intended? Are teachers this incompetent? Why must the children be reassured that they will have “fun” reading the story? It sounds like a “you
had better have fun or else” command. Can’t the children, for whom this is intended, think? Can’t the teachers, for whom this is intended, teach?

Certainly, on occasion, one of the best procedures to motivate interest is to read part of a story to a group. This is a topflight way to arouse their curiosity—to whet their reading appetites. However, the directives used here as illustrative are not of this variety and, furthermore, are not being used “on occasion” only.

Again, staunch advocates of an all-out basic reader approach say in defense: “Maybe this kind of readiness is not the best, especially for pupils able to read at a third-reader level. However, it is necessary at the first-grade level.” This, too, is an undefendable position. Such pablum is no more needed with six-year-olds than it is with eight- or twelve-year-olds.

Still others defend such practices by saying that they are needed to build background of experience or to build concepts. Will talking about a hungry mother lion and about a merry-go-round, or a farm, or a zoo, or a circus, or an Indian, build concepts? Even if pictures are introduced during this so-called readiness period, will they suffice? If pictures will do the trick, then why not use those incorporated in the story to be read?

The answer provided, though, is that this kind of readiness promotes “language” readiness for the reading of the story, particularly for the so-called “new words” introduced in a story. In the illustrative case cited, the teacher did most of the talking. She first used key words such as: hungry, lion, jungle, berries, bugs, juicy, cubs, sniffing, and so on. How did this teacher know that these words were not already a part of the children’s oral language vocabulary? True, the pupils were asked to respond to certain elements in the pictures. But why be this specific and directive in obtaining pupil response? Examine again the responses given by six-year-olds when they reacted to the title and first picture in “The One-time Magic Garden” (see Fig. 2 and pages 46-48). They stand in sharp contrast to what is described here.

Oral language usage of key words in a story prior to the reading and during the reading of a story is of much importance and not to be underestimated. What is questioned here is the way it is done. This chapter will provide illustrations of preferred methods.

Just one more thought will be raised about this kind of readiness and its liabilities. Basic reader stories are planned and prepared to reflect pupil interests, language development, experience, and maturity. This being the case, the stories should, if well chosen, be within the range of most children insofar as these controls are concerned. Why, therefore, these elaborate telltale readiness recommendations? Why? Why? Why?

The group’s background

Each individual’s background, when totaled, comprises the sum and substance of the group’s background. The group is made up of individuals. It
is the sum of the experiences, intellects, language facility, interests, and needs that makes the difference, though, and warrants this separate section.

To illustrate the why of a group's background—when directing a so-called “low” group of second-grade level children as they read a second-reader level story, the following occurred. The first picture of the story being read showed a man and woman in the living room of a house—perhaps a father and mother. The room was stripped down; boxes and packages were on the floor; items of furniture were grouped together; and the two seemed to be busy packing. In this group of five, one boy said he thought the parents were wrapping packages but he did not know why. Another said they might be wrapping gifts, perhaps for a party. Two had no different ideas to offer. At this point the fifth pupil was asked what she thought, and she said that she believed the family was going to move. When asked why she thought so, she answered: “We have moved, and that is how we got ready to move.” None of the other children had ever moved, but they thought Mary Ann’s idea a good one. Subsequent reading showed Mary Ann to be right. It was a story about a family that was moving from a city to the country. Certainly Mary Ann was pleased to have been right. It was not necessary to ask her about this. The moment she read the lines about the family moving, her face lit up with the satisfaction one experiences with having made a right deduction. No, the other children were not depressed and unhappy at having been wrong. To the contrary, they seemed happy in Mary Ann’s behalf. At the same time, their experiences were being extended, their concept of moving refined, and their picture examination skills were sharpened. Granted that this was a vicarious extension of experiences and concepts; yet it was a practical one.

Thus we see that the sum of the group’s experiences permitted this learning to occur. Even though this story dealt with “moving”—a concept that is common to almost all children in one form or another—the particular concept of moving used here was not that common. This was true even though it is reported that approximately 30 percent of the population in the United States changes residence on an average of once a year. In this group, only one of the children was touched by this experience.

Think how unfortunate it would have been if this teacher had been instructed to develop readiness for the reading of this story by saying: “Listen. Today’s story is about a family that moves from the city to the country. Look at the first picture and tell me what you think Father and Mother are doing here. Now look at the next picture, and the next. The children are concerned about whether or not they will find suitable playmates in the country. You will have fun finding out if they will or will not.” This kind of pabulum would never liberate the individual and permit him to use the richness of his experiences, limited as they may be, and expose him to the exciting and illuminating ideas induced by a “process in which he could gain the techniques of controlling them” (18, p. 9).
This kind of directing of a reading-thinking activity is best accomplished in the dynamics of a group situation. This is especially true when material is structured for basic reading instruction as it is in most basic readers. The fertile and varied experiences, interests, and needs of a group are likely to be productive.

The content

The content of basic readers, or of any book for that matter, consist of concepts or mental constructs. Concepts are the “characteristics common to certain objects, attributes, or ideas, so that those objects, attributes, or ideas having elements in common may be grouped into a separate category or class.” (19, p. 468) This recent definition of concept is as concise as any and will do here. Chapter 7, “Concept Development,” will discuss different phases of conceptualization in greater detail.

Concepts are cognitive structures. As such, they link an individual’s present perceptions and learnings to his previous experience and knowledge. (46) In Chapter 1, the term mental construct was used synonymously with concept and cognitive structures. Mental construct is preferred here because it seems to be more definitive. Concepts are of the mind—cognitive structures—and are mental. Concepts are constructs in that they are built from or emerge “from such materials as perceptual experiences, memories, images, and the products of imaginative thinking.” (29, p. 118) Although many concepts may emerge on a fortuitous and saltatory basis among children in particular, the objective of acquiring knowledge (the sole objective of education) demands a planned and systematic approach to the construction of concepts. Mental construction work, or the building of concepts, is the primary task of the learner and, to be accomplished effectively, requires the direction of a skilled teacher.

Dewey (10) refers again and again to the need for examined experience. Socrates said that the unexamined life is not worth living. Both philosophers, modern and ancient, were so right. Mental constructs, to be built and acquired, must be based on examined discriminations and on wise generalizations.

As stated on page 14, the semantic triangle illustrates in a most effective way the fundamentals of conceptualization. Needed are referents, or experiences and symbols. Use of the word symbol indicates clearly that the individual may use both verbal and nonverbal symbols, or words and signs, or graphic aids. Figure 4 shows the relationship of symbol and experience to mental construct.

Stories in basic readers involve concepts of time, place, number, people, animals, aesthetics, humor, and so on. Children come to school with many concepts from a concrete-perceptual to an abstract-conceptual level. Many of their concepts are sound and accurate, especially those of the concrete
variety. Abstract concepts, while formed early, are not as accurate and adequate.

At the primary level in particular, stories are carefully selected and written so as to deal with the common concepts that children bring with them to school. One big reason for such story controls is so that the child learning to read is not also preoccupied with the need to acquire new concepts. Story control is just as important as is control of vocabulary. Certainly, this does not mean that no concept work is done in the primary-level basic-reader program. What it does mean is that the work done is largely that of seeing and grasping and appreciating the different relations that known concepts may have as they appear and reappear in different plots, actions, suspenses, surprises, novelties, and outcomes.

Gradually as the content of the basic reader changes, in keeping with the maturing individuals, the concepts introduced also change. Now the teaching of concepts becomes the primary function. Children must be taught how to acquire new concepts, what to do when they meet a new concept, what to do when they meet a word that is used in a new way and represents a modification and extension of meaning; in short, how to discriminate and generalize.

In “The One-Time Magic Garden” story, the key concepts are substantially known concepts to six-year-olds: one-time, magic, garden, big, little, fast,
going up, uncle, give away, toys, coat, hide, find. In “Washington’s Scout” many of the concepts are common, but some are not. Some need to be understood clearly to grasp the plot: scout, for instance, and its use here as: to go about to explore a region, to obtain information of the movements and plans of an enemy. Other key ideas are: messages, delay, horses, friendly, enemies, and so on. Still other concepts—sandy path, saddle, wrapped box, Howe, army, and the like—while important, are not as essential. In fact, in the minds of children these concepts may be neither accurate nor adequate; and yet, they will not block the grasping of the plot—its nuances, intensities, and effects. This, of course, does not mean that a check should not be made on adequacy and clarity of these mental constructs. It does mean, though, that at this point, in order to develop and accomplish the reading skills essential for successful reading, it will be more important to check on key concepts than to spend an inordinate amount of time on concepts of secondary value to the purpose.

In addition, at this level the pupils are introduced to a glossary or dictionary. Pupils now need to know how this source of information can be used to obtain meaning. Here words are used to define words, illustrations frequently are provided, and illustrative sentences given.

In the article “Catch That Airplane” (42), the concept burden is considerable but not out of keeping with the expectancies one might rightly have for students competent to read and to be instructed at this level. At this stage of progress or of reading maturity, some of the concepts may be completely new to the students. This being the case, it is of utmost importance that the students know how to acquire mental constructs built on vicarious experience. A useful means of contrasting the circumstances that tend to distinguish concept differences at the primary level from those that exist at the intermediate level and at increasing frequency beyond is as follows:

**Primary Level**

- known—word meaning (experience)
- known—oral language usage (speaking)
- unknown—printed language (reading)

**Intermediate Level**

- unknown—word meaning (experience)
- unknown—oral language usage (speaking)
- unknown—printed language (reading)

At the intermediate level, for sound instructional purposes, the unknown concept burden may not be too great. It must be controlled so that pupils may be taught how to deal with such demands without being overwhelmed and frustrated. This is as essential as rate of “new word” introduction is at the primary level.
One might draw a line and illustrate the concept burden shift from primary level and beyond on a continuum. At one end would be the conventional concepts known to so many children: house, dog, tree, and so on. For these concepts the children have quite adequate concept content. They know the pronunciation of the word and can, when circumstances require, remember the right word and produce it orally (talk) and, in instances, write it. At the other end of the continuum are concepts that are completely unknown. In the middle one might find words that are partially known. If someone speaks a word, a child may recognize the word. However, the child may not be sufficiently familiar with the word to produce the word on his own.

At the intermediate level, then, some of the words will be recognized because the author used them in the material. Others, though, may go unrecognized even though they are presented in a context. Now the use of a glossary becomes more and more important. In addition, since all of the words that might need to be defined cannot and should not be given in a basic reader glossary, it now becomes essential that pupils learn to check also in an appropriate dictionary. Therefore, at this level it would be helpful if each pupil could be supplied with a desk dictionary. If this is not possible, such dictionaries should be readily available in the room.

In "Catch That Airplane" the words tapered and pendant are in the glossary. Other key words may need to be located in a dictionary: pulley, arresting, piston, retriever, and the like.

A question frequently asked is when to teach new concepts—before the reading is done or during and after. The answer is critical. In materials such as these (basic readers) using controls and designed for use in developing basic reading skills, the concepts should not be "taught" in advance of the reading. To do so is to vitiate the use of the glossary. It makes its use ineffective, either wholly or in part, by destroying the validity of its use and making it largely a fraud.

Word-attack skills are taught from the very beginning of a basic-reader program. Throughout the primary levels these skills are primarily those of structural, phonetic, and context analysis. At the intermediate level the glossary and dictionary provide meaning and pronunciation help. The structural and phonetic skills taught at the primary level lay the groundwork for the use of the phonetic guide, which usually appears at the bottom of a dictionary page; the phonetic respellings; the syllabiifications; and the accent marks. Training in the use of context clues started at the primary level provides essential preparation in the use of dictionary definitions and in selecting a meaning that fits a context.

All a basic reader program can do is simulate typical reading circumstances. A pupil in a library or the privacy of his home, or anywhere for that matter, needs to be a self-reliant, resourceful reader. Usually at such times no one is available to provide word-recognition crutch aid. A pupil,
meeting a word he does not know or a concept he does not grasp, must be so trained that he knows what to do about the need.

**Developing Comprehension**

In discussing "speed reading," Tinker (45) said the phrase was misleading and that he preferred "rate of comprehension." He preferred this label because, as he said, there is no reading without comprehension. Similarly, in a Directed Reading-Thinking Activity, there is no reading without comprehension.

**Producing and reproducing content**

There exist, however, polar differences between methods of teaching for and checking comprehension. At one extreme or pole is the comprehension check best described by the word reproduce. At the other extreme is the comprehension check best described by the word produce. If reading is taught as a thinking process, the comprehension checks will be largely on the produce side of the bipolar arrangement.

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reproduce *--------------------------* produce
parrots                        thinkers
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Pupils asked to do their own prereading and thinking, to set their own purposes, should be asked to defend or refute their purposes. This means that after they have done some reading they should be required either to prove they were right or wrong or to give reasons why they should alter their conjectures. To do so will require that they produce evidence from the material read. This children can do; and, furthermore, they thrill to the intellectual challenge. To produce evidence is the obligation of the detective and the lawyer as well as the scientist. Readers required to perform in a similar manner acquire enduring attitudes. These attitudes will render them eager for and comparatively competent in situations that require effort and perseverance, thought and proof. These are the attitudes that count in the future.

To produce evidence means to produce facts. The realm of fact is distinct from fancy. Speculations advanced must now be supported by the facts. The person who produces facts must be an alert person. No fact must be left unturned. This places a considerable responsibility upon the producer. The six-year-old referred to in the first episode described in this book was started on the road to being a producer of facts. "I've found my answer and can read the line that proves it," she said.

Pupils asked to prove their points are far more attentive to facts than would
otherwise be true. They seek out all the evidence and do so on a selective basis. Not all facts given, even in a story, are of first-order relevance.

On the other hand, pupils asked to reproduce facts may tell back a story and do so in excellent sequence. Actually they may make their recitals with considerable enthusiasm. If this is the kind of “reverence” the teacher is seeking, the pupils are sure to recognize her desire and to play their roles accordingly. They will bow and scuff upon the stage of idolatrous recital as long as the teacher-audience applauds—either with both hands, with a smile, with a look of satisfaction, a nod of the head, or with an A. Not once are these pupils concerned with selecting facts to prove, with searching for the relevant, or with the consequences of the sequence of a story plot or a scientific report.

Obviously, then, when reading is directed as a thinking process, the teacher is concerned with how pupils produce facts to prove or disprove their conjectures. Certainly, too, she is interested in sequence, but only as the consequences of a certain order help confirm or deny a conjecture.

Checking purposes

“Honor pupil purposes” must be the motto! After the reading has been done, an easy way to honor the pupils’ prereading thinking is to ask: “Did you find the answer to your question?” or “Were you right about what you thought would happen?” Open-ended questions of this kind will get things started, if this is necessary. Teachers soon discover that, once pupils understand that their thinking and their producing of evidence is being honored, even a teacher-question to get started is not needed. As soon as all the pupils have finished reading, they will voluntarily offer to prove that they were either right or wrong. In fact, on many occasions the teacher will need to restrain the overenthusiastic. This is a far cry from the situation in which teacher coercion—by fear, by sugar-coated threats, by vacuous inquiry—is employed.

“Read the line(s) that proves it” is a request consonant with the laws of proof—that degree of cogency, arising from evidence, which convinces the mind of any truth or fact and produces belief. What could be more timely in this age of science than to foster in our children the attitude of demanding and providing proof, and to do so from the very beginning of their school days?

At times all members of a group may have declared individual purposes. This is especially true when purpose setting has been done on a limited clue basis such as predicting from a title only; a title and first picture only; a title, first picture, and first page only. This is the time when divergent thinking is most likely to occur. As Guilford has defined it, divergent production is the ability “to produce a variety of ideas, all of which are logically possible in view of the given information.” (14, p. 177) Pupils reacting to the story