

GRADING SCALE FOR MICROTHEMES USING IN-CLASS FEEDBACK

1. The instructor reads the microthemes rapidly, scoring them on the following 6-point scale. The instructor makes no comments on the papers or very minimal ones.
2. The instructor returns the papers, giving the scoring guide to students.
3. The instructor provides feedback by reproducing examples of one or more microthemes that scored a 6. The instructor explains what was effective about the arguments.
4. The instructor then discusses representative problems that showed up on the lower scoring microthemes. This discussion session serves to review the course concepts and explain to students how to conduct arguments when you “think like an economist” [accountant, etc.]

Grading Criteria:

6-5 Microthemes in the category will show a confident understanding of the economic [finance, marketing, business] concepts and will support the thesis with effective reasons and evidence for the intended audience. A 6 theme will be clearly written throughout, will contain almost no errors in spelling, punctuation, or grammar, and will have enough development to make a convincing case. A 5 theme will still be successful in arguing the case but may have more errors or somewhat less development than a 6. The key to microthemes in the 5-6 category is that they must display a correct understanding of the concepts and use argumentative strategies and evidence appropriate to the discipline. If your microtheme is in this category you are thinking like an economist [accountant, finance professional, marketing professional].

4-3 Microthemes in this category will reveal to the instructor that the writer probably understands the concepts, but lack of clarity in the writing or lack of fully developed explanations means that the microtheme would not make an effective case to the specified audience. Microthemes in the 4-3 category are usually "you know what I mean" essays: Someone who already understands the concepts and knows the assignment can figure out what the writer is doing; but a new reader would be confused and unpersuaded. This category is also appropriate for clearly written essays that have some misunderstandings of the concepts or flaws in the argument. It may also be appropriate for strong arguments marred by frequent sentence level errors.

2-1 These microthemes will be unsuccessful either because the writer fails to understand the concepts, because the argument is illogical or undeveloped, or because the writing is so unclear that the instructor cannot determine how much the writer understands. This score is also appropriate if the microtheme is well written but shows a major misunderstanding of the concepts.

MICROTHEME EXAMPLE FROM PHYSICS

Microtheme Assignment in Physics:

Suppose that you are Dr. Science, the question-and-answer person for a popular magazine called Practical Science. Readers of your magazine are invited to submit letters to Dr. Science, who answers them in "Dear Abby" style in a special section of the magazine.

One day you receive the following letter:

Dear Dr. Science:

You've got to help me settle this argument I am having with my girlfriend. We were watching a baseball game several weeks ago when this guy hit a high pop-up straight over the catcher's head. When it finally came down, the catcher caught it standing on home plate. My girlfriend told me that when the ball stopped in midair just before it started back down, its velocity was zero, but its acceleration was not zero. I said she was stupid. If something isn't moving at all, how could it have any acceleration? Ever since then she has been making a big deal out of this, and she's thinking of breaking up with me. I love her, but I don't think we can get back together until we settle this argument. We checked some physics books, but they weren't very clear. We agreed that I would write to you and let you settle the argument. But, Dr. Science, don't just tell us the answer. You've got to explain it so we both understand because my girlfriend is really dogmatic. She said she wouldn't even trust Einstein unless he could explain himself clearly.

Sincerely,

Baseball Blues

Can this relationship be saved? Your task is to write an answer to Baseball Blues. Because space in your magazine is limited, restrict your answer to what can be put on a single 5X8 card. Don't confuse Baseball and his girlfriend by using any special physics terms unless you explain clearly what they mean.

[Source: Bean, Drenk, and Lee, "Microtheme Strategies for Developing Cognitive Skills, in New Directions For Teaching and Learning: Teaching Writing in All Disciplines, 12 San Francisco: Jossey-Bass, 1982, 27-38]

Grading Scale for the Microthemes

6-5 Microthemes in the category will show a confident understanding of the physics concepts and will explain those concepts clearly to the intended audience. A 6 theme will be clearly written throughout, will contain almost no errors in spelling, punctuation, or grammar, and will have enough development to provide a truly helpful explanation to learners. A 5 theme will still be successful in teaching the physics concepts to the intended audience but may have more errors or somewhat less development than a 6. The key to microthemes in the 5-6 category is that they must show a correct understanding of the physics and explain the concept clearly to a new learner.

4-3 Microthemes in this category will reveal to the instructor that the writer probably understands the physics concepts, but lack of clarity in the writing or lack of fully developed explanations means that the microtheme would not teach the concept to new learners. Microthemes in the 4-3 category are usually "you know what I mean" essays: Someone who already understands the concepts can tell that the writer probably does too; but someone who does not already understand the concepts would not learn anything from the explanation. This category is also appropriate for clearly written essays that have minor misunderstandings of the physics concepts or for accurate essays full of sentence level errors.

2-1 These microthemes will be unsuccessful either because the writer fails to understand the physics concepts, because the number of errors is so high that the instructor cannot determine how

much the writer understands, or because the explanations lack even minimum development. Give a score of 2 or 1 if the writer misunderstands the physics, even if the essay is otherwise well written. Also give a score of 2 or 1 to essays so poorly written that the reader can't understand them.

Example of Three Student Microthemes

Student A's Microtheme

Acceleration is defined as the ratio of the change in velocity to the time over which this change occurs. When the pop-up left the hitter's bat it had a certain acceleration in the upward direction. This acceleration soon became deceleration (a decrease in speed with time) as the downward pull of the earth became strong enough to decrease upward acceleration to 0. This force is called gravity and by definition accelerates a free falling body at 32 ft./sec.² in the downward direction. When the ball paused at the peak of its flight, before beginning its descent, the upward acceleration and the downward acceleration were equal, even though the ball was stationary.

Student B's Microtheme

Ask your girlfriend's forgiveness because she is absolutely right. An everyday definition of acceleration means speeding up. But the scientific meaning is more precise. It means the rate at which speed or direction changes over a certain period of time--two things really.

Thus it is indeed possible for the ball to still be accelerating even when it has zero velocity. If the baseball had no acceleration when it stopped in mid-air, it would float in the air where it stopped forever.

A baseball can accelerate in either of two ways. It can change its speed or it can change its direction of travel. If it does either or both of these things over a period of time, it has accelerated. As the baseball stopped in midair its speed--or velocity--became zero. Yet the acceleration was not zero because, like a stretched out spring, gravity was pulling at it. As you noticed, it soon turned around from going up and came thundering straight down toward the catcher's mitt. During any given interval of time, it was changing direction or speed (velocity). Because of this, its acceleration (a measurement taken over a period of time) was never zero.

Student C's Microtheme

It makes me sad to hear that you have lost your girlfriend over such a trivial problem. I have some good news for you, though. You are right. An object cannot have 0 velocity and have acceleration too. I hope that with the arguments I lay forth in the next few paragraphs you two can reconcile.

First, velocity is defined as how far an object moves during a certain time. If an object is moving then, in any direction, it has velocity. An airplane is a good example of this. It flies at a certain velocity such as 160 mph, which means it covers 160 miles every hour it is in the air. Next we need a definition of acceleration. This is simply the change in velocity over a certain period of time. If you have an object that is moving at a constant velocity, and covers the same amount of distance during each time period, then it cannot have any change in velocity and thus any acceleration. Going back to the airplane we see acceleration when it speeds up or slows down.

Now we can use these two above concepts to give an answer to your question. If you have an object having no velocity it can have no change in that velocity, thus it cannot be accelerating. If this is still not clear think of the airplane sitting in its hanger. It has no velocity just sitting there, right. Therefore it cannot be accelerating or it would run through the side of the building. The baseball is the same way. I hope that the explanation above will help your girlfriend to see the light.

Discussion Questions

- 1. Using the grading scale, how would you score each of these microthemes?**
- 2. How would you describe the difference in the thinking/studying practices of Student A and C?**

Source: Bean, J. C. (2002, October 16). Low cost writing assignments: How to use writing to enhance learning and critical thinking without increasing the teacher's burden. Presentation given at Kansas State University as a Faculty Swap Session. (*Permission to post was granted by the author*).