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Poems

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also discuss with students ways in which they feel they can best demonstrate what they must learn. An untimed test is frequently requested because it is most commonly recommended by Special Student Services. However, this option may be inadequate. When and where the ADD students take a test are as important as how much time they have to complete it. The environment must be conducive to concentrating. Even taking an exam, timed or untimed, in class with other students can be distracting to some ADD students. Another strategy to assess knowledge is to have the student tape record his responses to test or homework questions.

He submits you both the tape and written work that illustrates what he has recorded. Giving the student an oral exam where your direction keeps her focused is also effective.

Permitting ADD students to leam at their own rates within the framework enhances their opportunity to pass the course. This means the time lines for completion of the course work for your ADD student can be very different from deadlines set for each assignment or test you have given the rest of the class. Students should be expected to attend class even if they are learning or retaining information at a slower rate than you are teaching it, as it facilitates them staying on task. Strategies such as allowing and encouraging ADD students to tape your presentation enables them to replay it until they are able to process the information as described above. Accommodating them with a note taker is quite helpful because the student can then focus all of his or her attention on visualizing and listening to what you are saying and writing. Ideally, important information, like due dates and expectations, should always be in writing. Sending an email to relay a message to an ADD student has its advantages over making a telephone call.

At first some of the suggestions can seem time consuming. However, if your college is receiving federal funding of any sort, it should have in place services that can assist you in accommodating the ADD student's needs. Another strategy is to call the ADD student's major advisor who can be quite helpful with suggestions on how to structure the course work.

If we take seriously the needs of students with ADD, we are challenged to rethink our whole class structure, how we test, and deadlines we impose. Becoming sensitized to differences between our teaching style and how students learn is another possible outcome. Our response to this new awareness can benefit all of our students, whether they have ADD or not.

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NUMBERS - 1

Numbers are such simple little things
Surely known before time begins.

We start by counting fingers and stones
In answer to how many of those.

Then, we number things in measuring
Answering how big and in comparing.

Eventually numbers become symbolic
And finally ensconced and mystic.

This lead us to philosophize
Pondering numbers --- what are they?
Concepts, things, or social entities.

> fallacy. Certainly—even in this calculator age—a child learns that 2 x 2 = 4 before understanding why. The trouble with "new math " was (in part) the fallacy of thinking that understand needs to come first.

At the risk of overstating the point, let me repeat the key phrase: The idea that proofs come first is, I think, a modern fallacy.

THE REFORM CALCULUS QUESTION

There are reasons why the reform calculus is attractive. There are also good arguments for some of the more traditional approaches. I have not given any of these arguments here because they are irrelevant to my point. Whichever approach we choose will trade off one superficial knowledge for another. Any approach, if it is at all a feasible approach, and if it is done well, will provide a foundation for the student to go on to a deeper knowledge of calculus and its applications. If the student is not going to go further, then his taking the sequence in the first place was probably a waste of his time and the teacher's, and the approach used is still irrelevant. Perhaps in twenty years, something of a consensus will emerge about what approach to teaching elementary calculus is most fruitful. In the mean time, the controversy does not deserve the present rancor. It is true that today's students are less well prepared than thirty years ago, and are less inclined to work. Nonetheless, were this not so, I would still suggest: try teaching less material, try to save the theoretical overview for later, and lighten up.

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NUMBERS - 2

Numbers, delight and entrance
Necessary for music and dance

Patterns abound with numbers
Some are found rhyming this verse

Such pure simplicity
Hides vast complexity

Eternal truths found by addition
Show questions without solution

The most basic being
One, two, three
What art thee?

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NUMBERS - 3

Numbers originate with who?
Did God or man define two?

Maybe Plato was right
Possibly a divine insight

Truths existing before time
In an ideal plane they reside

Numbers thus exist there
Not here or anywhere

However, its just possible
Numbers were definable

To appear mysterious timeless
That's speculation, I guess

Nevertheless
Numbers are what they are
Nothingless