TESTIMONIALS FROM STUDNTS REGARDING THE EFFECT COOPERATIVE LEARNING HAD ON THEIR LIVES

From: (James T. Boldway)

Remember me? I was a student in your engineering classes: Thermo 1, Intro to engineering, etc., and graduated in '94. You wrote me a great letter of recommendation - Thanks! I Continued school at UMASS Amherst, and crammed three years of engineering courses into the last two years, graduating this May. I did well, starting with a 3.88 GPA, but dropping down to finish with a 3.25 due to semesters of 21 and 22 engineering credits in the final year.

Your attitude and teaching style of having the students learn on their own or in groups and find information without your instant help (but always there when we were "stumped") is an enormous help in preparation for Umass Amherst. With many courses having over 100 students, the teacher didn't even know if a student was in his class, let alone who they were. There were exceptions to this, but many courses had homework or quizzes and even tests before the information was covered in lecture. Your courses helped prepare me for this. There were group projects, but students were not encouraged to help other students, and in some classes you could increase your grade at the expense of others in your group (each student in a group of three, for example, would be given 150 points, and was asked, confidentially, to distribute the points to all the members of the group. You could give everybody 50 points if you

felt everybody put in equal effort, or, even if you felt everybody put in equal effort give yourself 150 points and none to the others.) You could tell who these students were (the greedy ones, that is), and they actually ended up with better grades than those who contributed more. Fortunately, all the groups I was in had great teammates.

I question the attitude fostered by some professors that the only way to achieve success is at the expense of your co-workers. In today’s global economy we shouldn't be viewing each other as the enemy, but should be focused upon a global economy. I'm a "happy" person, and enjoyed your positive attitude. I don't want to sound like I'm complaining - I had a great time at UMASS! - Just wanted to show how your attitude towards students' independence and the learning process helps out. The students who easily formed or joined groups and knew how to find information on their own had a much higher success rate than those who didn't feel comfortable with the group experience and depended too much upon the instructor for quick answers.

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I use the following assignment at the end of each semester in all my classes. It is intended to have the students reflect on their performance and behavior in the class. It is also used to have them think about how they will approach their next math class and to encourage them to make changes needed to help insure their success in future classes. The responses are very candid as you shall see in the responses which follow. Not all the responses are positive but this reflects the honest and personal nature of my relationship with the students which comes from using cooperative learning techniques throughout the semester. I emphasize that I am never offended by what students write if they are being honest and constructive. To me developing this relationship with my students is as important if not more so than simply making sure students have covered the course content.

Many students comments are positive about the class and my techniques. I see this as a testimonial to the nature of cooperative learning which allows me to express myself and show the students my human side as well as allowing me to get to know each of my students on a much higher level than just finding out about their academic capabilities.

END OF SEMESTER SELF EVALUATION

I WOULD LIKE YOU TO DO AN EVALUATION OF YOURSELF IN RELATION TO THIS CLASS. THIS WILL NOT COUNT IN ANY WAY TOWARD YOUR GRADE, HOWEVER IT IS REQUIRED TO COMPLETE THE CLASS. PLEASE ANSWER THE FOLLOWING QUESTIONS, NOT NECESSARILY IN THE GIVEN ORDER. PLEASE FEEL FREE TO ADD ANYTHING ELSE YOU WOULD CONSIDER APPROPRIATE TO HELP ME UNDERSTAND HOW THIS COURSE WENT FOR YOU.

\* HAS YOUR APPROACH TO MATH CHANGED DURING THIS COURSE OR COMPARED TO PREVIOUS COURSES? IF YES HOW?

\* HAS YOU ATTITUDE OR FEELING ABOUT MATH CHANGED? WHAT WERE THEY BEFORE VERSUS NOW?

\* HOW DO YOU FEEL YOU PERFORMED IN THIS COURSE?

\* WHAT WOULD YOU DO DIFFERENTLY IF YOU HAD A CHANCE TO DO THIS ALL OVER AGAIN?

\* WHAT ELSE WOULD YOU LIKE TO ADD THAT I DID NOT ASK?

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STUDENT RESPONSES:

"In the past as you know, Ted, I have taken a class with you and have enjoyed your approach in learning the material. Before your classes I disliked math. I was always getting aggravated and scared by it. Working together with those around me in a group has been a great help in understanding the material and the many different ways in which a problem can be tackled and solved. For me the beauty was being able to work one on one with someone every day. I was constantly learning something new and leaving class feeling relaxed and in control. On those days I could not understand something I did not feel half as bad as I normally would have, I knew that if it were something I could not figure out at home or at the next class period I could count on receiving help."

"If I had a chance to di it all over again I would do what I always say I am going to do at the beginning of the semester, and what I had wished I had done more of at the end of the semester, to do more math work at home by myself. With other classes, a job and still living at home it is hard. This semester was particularly hard for me. My grandfather got very sick and passed away a couple of weeks ago. For a couple of classes in a row I was absent and had difficulty keeping up with the material. I have visited the math lab recently and have received help there and am working on getting everything under way for the upcoming final."

My future plans are to hopefully pass this class and enter into my first credited math class next semester so that I may graduate from Cape Cod Community College in May. I am deciding on Statistice, Survey of Math or Business math. I only wish you were teaching one of these, then my decision would be easy. Wherever I transfer I will take Precalculus since I am majoring in Environmental Science. So it seems my road through mathemetics is just beginning. That is alright since I plan to put a good amount of time into it. The hardest part for some people is just realizing their weaknesses and now since I have already done that I just need to do my best to change them.

"Thanks again Ted for a great class and another wonderful learning experience."

"When I re-entered school almost two years ago I was told that I needed to take an algebra course. I paniced. Even though I had taken a large number of math courses in high school I feared that I had forgotten everything I had learned so long ago. It was a pleasure to realize how much I truly enjoy working with numbers once again. The course was presented in a way that made learning and remembering fun."

During this semester I have not only learned new tricks for doing algebra but I have also enjoyed the exchange of ideas with other students. Working in groups has been one of the most enlightening aspects of the course since we have each had the opportunity to become teachers as well as students. Each of us brought a different approach to learning and everyone was willing to share. Since my own personal objective in life is to enter the educational field, I hope to bring many of the ideas I have learned here with me to my own students in the future."

"I would like to say thank you Ted for rekindling my love of math. You always kept your sense of humor, even when I made some foolish mistakes. By erasing my unfounded fears you have given me back my confidence in an area I was sure I was going to fail. By the way I think I did pretty good over-all in this course."

"I enjoyed this math class more than I had originally planned. Getting to know the other students in the first class helped me feel more comfortable from the start. Also, the group approach gave me a better chance of learning when I didn't quite get the concept of something. Having the opportunity to ask other students helped me learn more than having to fend for myself."

"Even though I feel I learned almost everything you set out to accomplish, I will never take such a course during the summer when the sessions are so short. Having a part-time job, a family and extremely high humidity during one of the hottest times of the summer, did not make the assignments any easier when time was limited."

"I knew I would pass because I enjoy working with numbers, but not having a clear direction in school was becoming frustrating. During the course I realized I was doing well enough and found math exciting, which helped me decide I would take the next step into Intermediate Algebra to see where this will lead me. You said to me during one of the classes "Why are you surprised? There is probably a mathematician rolling around in there somewhere.". Maybe you were right. I now have a direction and have learned more than math in your class. An A+ for you Ted."

"Before taking this class I had negative attitudes towards math. I did not understand too much and focused little on learning it. However, my thinking has begun to change. I am able to figure out problems that I once thought were too complicated to complete. You made the atmosphere one in which it was fun to learn. I feel that my performance has improved as a result of this. Students were able to communicate and work through problems together. The grades I received were higher than any other math course I have been in. I was happily surprised."

"My approach to math has changed during this course. Previously I would not have bothered picking up the book outside of class to study. I would beging the day with a lecture and then try to learn from that. But now I am willing to do my part in order to understand the material, and it has worked."

"Overall I would have to say that the laid back, conversational and non-threatening way the course was structured seemed to help me overcome some of my preconceived notions about math. The course was set up in such a way that made learning a little more fun than in previous math classes. Also, being able to converse openly to my neighbor, or the teacher, if I had a problem, certainly helped me feel relaxed, non-threatened, and at ease if I ever had trouble finding an answer to a problem. I had a feeling that if I ever had a problem I could go to the teacher or a student and I could troubleshoot or dig until I got the information I needed. The uninhibited atmosphere in the classroom made me feel that no matter how difficult a particular problem was to grasp, I could use the resources available to me in the classroom without feeling intimidated. Being less intimidated meant that I could ask more and more questions until I got the information that I needed to succeed.

"I think I performed rather well in the class but I felt I could have done better. If I had done more of the problems in the book I may have gotten a better grasp of the material. I think, however, that I did a very good job considering my circumstances of having a full time job a family and taking another course (general chemistry)."

"Prior to my entrance in this class my experience with math has been a struggle. I have learned from this class that math can be enjoyable if you make it a group process. I gained a lot of experience from working closely with the students at my table. I never felt alone, like another face in the classroom. My wish is that I find another open-minded professor that will allow me to continue to learn in the same manner.

"My attitude to mathematics has changed with this class. I do not perceive math to be something I just do not "get" any more. I come away with the knowledge that in order for me to comprehend math I need to get explanations from multiple sources. I cannot learn from a book nor can I learn from just one instructor, I need multiple sources of instruction."

"I feel my performance in this class was fair. I was lax in doing my homework and for that alone I feel my performance could have improved. I was, however, very instrumental in my groups learning process. I served two purposes there: 1. I helped others grasp what I knew when they were having difficulties; 2. When I was lacking in understanding I helped to re-enforce their knowledge by having them explain their perspective to me."

"What can you do to make this course better? Well, I am grateful to you for developing your techniques. I was able to grow because of it. But, I feel that a more regular pattern of homework expectancy from you would allow DE students to further cement the practices needed for future college level courses. I realize it is not your job to baby-sit, but the DE students are here to re-learn (or learn for the first time) proper math habits."

"My approach to math has not changed during this course. I'm pretty much set in my ways. My attitude toward math has definitely not changed. I still dislike it. I try and try but it seems to take me a little longer than the rest of the class. I did spend a great amount of time this semester in the math lab, which helped me some. I don't think I could have gotten by without the help of Joyce, my table partner. Joyce spent extra time with me helping me understand that one problem, or word problem. But I can honestly say that I pretty much dislike math. My performance was average. I've always felt that if your heat is into it, you can accomplish anything. If your heart isn't into it, you are only going to do average or worse. I know that I could have done better, but my whole heart wasn't into it. How could you do great in something you don't like. I get by because I have to. I didn't have a choice. I have to take math to be where I want to be, so I simply bear with it. As for my future plans I hope to finish my math requirements to graduate, then hopefully never see it again. But I know that sooner or later it will find me again. I would like to thank you again for a great semester. I wish things were done a little differently, but on the whole it was a fun, good learning experience."

"Before I signed a contract with you Ted, I made a pact with myself to try to keep trying in algebra. I kept that pact. My math confidence went up at first, then it slid a bit. Then it went up again; but, I have never gone down to the point I was at once, which was to completely shut down. You have certainly had a lot to do with my "hanging in there". You have been patient and have tried to attend to everyone's confusions with your simple and direct style."

"I was amazed that I am able to think through as much as I can with these problems. Although it was 26 years ago (in high school), I can remember feeling totalli lost and hopeless. I don't feel that way any more. If only for that reason alone I think I performed well this semester in algebra."

"I signed up for this class in June with a fairly set idea of what I should expect and how I would use this course to help me in future classes. I had taken algebra before but it was three years ago so I wanted to have a refresher course. I can honestly say that I was not looking forward to the class at all, but the material the teacher sent me prior to the beginning of the semester made me forget about any preconceptions I had about math courses. The course started very smoothly and it was easy to become adjusted to the style of teaching the instructor used."

The class itself was exactly what I was looking for in a math class and I found after a quick review of the material that I remembered it from high school. I found it was more of a math practice rather than a math class, with the class being made up primarily of peer aides and the teacher acting as more of a coach showing the students what they had been doing wrong or how they could do what they were doing right more efficiently."

" All in all I am veyt pleased with what this course has given me. I find myself in a much better position to handle more advanced math and science courses. I plan to use my refound knowledge of algebra before I forget it again, and not wait another three years before taking another math course."

"This course has been a delightful experience. As you know I like math and this has reinforced that feeling. Although taken as a prerequisite to statistics, I feel it will be a greater help on it's own. After twenty years as a manager I am still shy. Your gentle pressure to participate and work in groups has helped a good deal. Thank you. I don't feel I have performed to my full potential. Job and family seemed to require inordinate amount of my time and energy. Unfortunately I had planned the trip to Virginia well in advance and could not disappoint my daughter anf grandchildren. When I returned I'm sure you could see how lost I was. In spite of this I feel I got a great deal out of the course and feel confident with what I have learned. Working with my group enabled me to get back on track and salvage the class."

"If there were anything I could change it would be the course you teach next semester. You would make a great statistics instructor. The transition from fun to utter boredom will be difficult. I am however, confident I will pass statistics with the foundation you have provided me."

"I am very happy to say that I actually enjoyed this math class. I very much enjoyed working in a group. I got to know a few of my classmates much better than I would have had we been working on our own. I know I wrote in the beginning autobiography that I disliked algebra and did not believe that I was going to do well in this class. However, I seemed to pick it up easier in this class and understand it more fully. I feel that I am ready to tackle precalculus and I don't feel so apprehensive about taking the course. I feel I did pretty well in this class, however, I could have spent more time studying had I had the time. I did spend as much time as I could going over the material, but the classroom was where I learned most about the subject matter. A also must give a lot of credit to the teacher who seemed to make it all simple to understand. If I had this all to do over again, I'd make sure I had the same teacher and I wish he was teaching precalculus next semester. I made it through Intermediate Algebra with no big problems and I feel good about they way I performed and learned."

"A final Note. Let me first begin by saying that I have never had so much fun taking an ALGEBRA class! I feel as though my approach towards math changed because I actually want to go to class and do my homework. I like math (a little bit more anyway) and I don't feel as intimidated when I walk into a math class anymore.

I feel that I have performed well in this class as compared to my other math classes previously taken. As for something differently I think working on fractions and word problems more would help. I had a great semester in Algebra, you made it fun and were open for questions and different Attempts of doing problems."

"For many years algebra was a difficult subject for me. I couldn't grasp the formulas, procedures or the concepts. I asked, 'Why do we need algebra?'. My attitude has changed over the past semester. I feel more comfortable with doing problems.

I believe your method of teaching has helped me in this process. Your classroom ret a comfortable atmosphere, a group help attitude, and a feeling of confidence I never had. Being in a group gave each other a chance to help one another out while teaching ourselves."

"I am not afraid of math any more. Thank you for showing me there is a light at the end of every tunnel. I have a long way to go before I completely finish with school, but you have taught me a base that I never had before. I believe my performance in class was good, It was the only class I had where I never felt self conscious. Everyone was treated equal and were given the opportunity to shine when ever they found their solutions were right."

"This has been one of the most exhausting classes I have ever taken. I work an average of 45 hours a week as well as raising two children. I don't know what I was thinking of when I signed up for this particular course. Two years ago I completed two summer courses and didn't find it a problem, but what I didn't recall was the fact that I didn't work that summer. That wasn't the case this summer. By the time I got home from work I just didn't have the energy left to study. Realistically the only time to study was the weekend, but that meant studying for ten to twelve hours at a stretch, something you advised against before we even met. I did feel I got through alright, but the stress wasn't necessary. I could have waited until the Fall."

"When I received your introduction letter, and read your homework requirements I should have re-evaluated the situation, Having always done well in math I just assumed I could handle the load. You weren't kidding about doing every problem that was humanly possible. It was the only way to learn the material. This class was basically a self taught class, not because you didn't instruct well, but because there was no time to spend reviewing. The pace was incredible."

"Needless to say my self-confidence has taken a nose dive. I've had to struggle with this course, and now I wonder if it was the material that gave me a hard time or just the pace of the class. The struggle has made me question my abilities, something I have never questioned before. With this in mind, my advice to any student considering taking this course in the summer semester is.....don't, unless you don't work."

"I would like to say thank you for making this fun. I get so proud of myself when I solve the word problems (which are by far the easiest part of algebra for me now. Your method of teaching forces a student to come to class prepared because of the group worksheets. Your testing processes forced me to do every problem and not give up until it is right."

"Because this is a developmental class, the point of learning the material is appropriately focused upon. The grade is not important and I think every developmental class should be taught in this manner. In my other algebra class you would take the test, get a grade; if you failed the test you would make an appointment with your instructor to retest. Sometimes with everyone's schedule this could take up to a week. I believe that one can not go on to the next lesson with the mind set a chapter behind. Therefore I think your method is by far more beneficial to the student. The student deals with the problems right there and then."

"Having better study habits in algebra has helped in my approach to math. Tackling a chapter before class discussion helped to make the material interesting. Many a frustrating hour will lead to wanting the information. I did not apply myself in my last algebra class, mostly because I was lost from the beginning. Now that I have put the time and energy into the material I can say that my feeling about my mathematical abilities has not changed. I could not have passed that course even applying myself. In the group setting I had major difficulty doing the work. Even though I knew the process I could not concentrate in this setting. My brain's processing of math is much slower than my classmates, I always though that, now having put the time into the class I know it!"

"I feel I can do all of the work but not in any pressure situation. Math is a process that for me requires a mindset of total privacy to get through. One problem I have is the lack of attention to detail. For example, I will use an equal sign in place of an inequality sign in solving an equation only to forget to replace the correct sign at the end. I feel however, that I worked to my ability. I would and could not do anything differently. For me I needed to have this class twice. Unfortunately this class did confirm to me that I will never get through algebra 2 just once and that is an expense I cannot incur just now."

"Yes, my approach to math has changed during this semester. I have found that working with others in class has given me insight into algebra problems that I was having trouble solving. I also found that spending some time every day on algebra helps reinforce it in my memory. My attitude towards math has changed greatly in the last 14 weeks. I have overcome much of the fear associated with doing algebra. I can now look at math problems as a challenge instead of something to run from. I feel that I performed well in this course."

"If I had a chance to do this over again I would spend more time in the math lab, and I would find a study partner early on to do homework assignments with. It was rewarding to have the opportunity to begin to learn a subject that I originally felt I had no aptitude for. In learning some algebra it has become apparent to me that I do have an aptitude for math."

"This was my second time taking this course. Two semesters ago I enrolled in algebra 2 with another instructor and did well throughout the semester until finals came. I completely blanked out on the day of the final. I looked at my paper and had no idea what to do with it, therefore I did not pass the class even though I had a B throughout the semester. So I took a semester off being depressed because I had wasted my money and decided to take it again as a night class. I had taken Ted's class in the summer a year ago, algebra 1, and did very well. I liked the way the class was run and the fact that we worked in groups helped me exceed. It's not that I do not know the material it is just that I sometimes need a reminder of the process. Working in groups helped me remember things I forgot."

"This semester was tough and took a lot of effort but I feel I have been successful. Once again having the opportunity to work in groups helped me through the semester. We were able to help one another in the process of learning the material. When I was stuck and a group member said this is the formula I thought 'oh yeah, that's it!'. Hopefully this time will be the last time for me in this class and I'm much more confident with algebra."

"My approach to math has changed and most of the change is due to working in groups so much. Groups are a very effective way to learn new concepts. It is a positive experience for everyone because even if you don't understand it, it is likely that someone in the group will understand and can therefore help out those who do not.

My attitude really hasn't changed much about math because I never really minded it in the first place. I was a lot more intimidated by word problems before, but now that we have done so many a feel slightly better---but not 100%!!! I guess I could say I look at them a little more calmly, but I don't think they have gotten any easier. I think I performed well in this class. A lot of it was a review from high school but it was good to review it all again. I knew what was going on and I followed the class well. My test scores proved that I had a good understanding of the material."

"There is really not much I would do differently if I were to do this class again. I liked the group work and the freedom and independence we were given with the material. I think that it was helpful that if we made an error on a test, were able to bring it back to our seat to fix it or to think about it. I really had fun in this class and met some great people. The thing I didn't like was that it was three hours long and even with breaks it was sometimes hard to take math for that long. I did think I got quite a bit from this class and would recommend it to anyone!. Thanks for everything."

" I have never received any great pleasure from doing math. Math has always been something that I've had to do whether I wanted to or not! My feelings about this issue have not changed because of taking your course. Being forced to take a math class that I find irrelevant to my life, not to mention gives me no credit towards my degree, makes me extremely resentful. Perhaps if given a chance to chose math for myself, I may have found one of interest to me, or maybe not, at least the choice would have been mine."

"My approach to math has changed in one significant way. I now stay awake for class, it makes it easier to learn. I still do just enough work to get the grade. I have met the requirements without giving (or getting) anything extra. If I had an interest in math I would no doubt make a very good mathematician, unfortunately I don't. I recall telling my nine year old daughter 'Anything worth doing, is worth doing well', so if I had to do it over again (which I do in algebra 2 with you Ted) I would put more effort into my work. My future plans for math are obvious, I have one more algebra top take before I can take the math that I need to graduate. Then hopefully I will be done with it. I have heard of 3 for the price of 1, but arounf here it is 1 for the price of 3!".

"This class has changed my approach to math in that I have struggled through this course, done all the work that I could possibly fit into my life with a full time job and being a single parent with two kids. I have somehow lost the attitude that I would not make this class and attempted to learn all that i could with a new attitude of 'I will do my best'."

"I am not afraid of math anymore. I actually had fun figuring out how to do some things and derived great pleasure out of getting an answer. Mr. Panitz you are a wonderful teacher. Because of you I made it through this class. Your sense of humor made math fun and exciting. You took the pressure off math and created an atmosphere where learning could thrive. I wanted to go to your class just to see what you would do next and what I could learn. Before I took this class I actually hated math. I was afraid and had a defeatest attitude. Now I feel math can be fun. I feel I performed the best I could have. I am never sure how I did on the problems and tests until they were returned to me. As in algebra a small mistake such as an incorrect sign can destroy the problem."

"If I had the chance to do this course over again I would sell my children and do better. That being impossible, since they are priceless, I would retake the class. Like seeing a movie twice you get more the second time around. If I had the time and money I would actually enjoy that. I have always loved learning, it is fun to learn new things and I will probably be a perpetual student even after I accomplish my career goals."

"Now, I'm glad this is not getting graded because you'd think I was buttering you up, so I can tell you how I really feel. What you have given me "Sir" and I thank you very much for is an appreciation for math and a willingness to add math to the list of things I would like to learn. I feel much more confident plus my math skills have sharpened considerably. I enjoyed being in your class and appreciate your time and work. If I were to change one thing about this class I would find a better textbook. I feel the book we used did not give enough examples and was very hard for me to follow."

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The following is a writing assignment I give at the end of the semester instead of the "self evaluation". I like to vary the assignment to give myself different types of student responses. In effect I am assessing my approach of collaborative learning by asking the students to explain how they view the course in retrospect. From the responses shown below I think you will see that the collaborative process has a very positive effect on the students and leaves them with a sound understanding of the material, a stronger self esteem and appreciation of this style of teaching. As with the testimonials provided before these are unedited and some contain constructive criticisms or comments that reflect some students difficulties in dealing with group learning.

ALGEBRA WITING ASSIGNMENT- WRITE A LETTER TO A FRIEND

You know someone who is planning to take this course with Ted next semester. They have asked you to give them some advice and information about the course so they will have a better chance to succeed in the class. Among other things they would like to know what the course covers, what the style of the instructor is and how you handled the course including your approach to studying and participation in class. What would you suggest people do to get ready for the class. Also, what things did you especially like and dislike about the course. What would you do differently if you had to do it over again? What would you advise they do to be sure to complete the course successfully?

You may add anything else that comes to your mind or subtract anything that does not. (Pardon the math humor but it was my last chance)

Dear friend,

Well, my algebra course with ted Panitz is almost over, and I must say it has been much better than I expected. You know how frightened I was- I've always had a low opinion of my math abilities- bit ted has made it almost impossible to fail this class.

First of all, Ted asked us to sign a contract guaranteeing that we would pass the course if we lived up to our part of the bargain. Our part of the agreement amounted to working very hard on homework assignments and participating in the classroom. For his part Ted has worked very hard at teaching, making the class interesting and giving feedback all along the way so that we always had a clear sense of how we were doing. I appreciate the fact that he is one of those teachers who is concerned more with his students learning the concepts of algebra rather than having them memorize theorems and equations. I really think that this is the class for you, if you need to take algebra.

Although I never thought I would be able to work with letters in place of numbers, I found that certain parts of the course were actually fun, partly because I gave it my best shot. There a few bits of advice I would give you. The first is don't fall behaind on the homework! It is pretty important to go over the assigned modules in the textbook before Ted goes over them in class. Other advice came from Ted himself:

a) Don't think too hard about what you are doing- Some of this stuff works but is hard to rationalize, like negative numbers. Ted likes the commercial that says "Just Do It!".

b) Don't work on algebra for more than about an hour at a time.

c) The best way to prepare for a chess match is to be in top physical condition so that your mind functions clearly. A test is like a chess match. I personalized this chance bit of information and tried to exercize regularly, eat healthy meals, and get plenty of sleep. I think is helped me with my allgebra.

I hope you will enjoy this class as much as I did. Although it wasn't my favorite subject, I fared much better than I expected. Ted has made it as painless as algebra could possibly be.

Educationally yours,

Dear friend,

This is my advice to you if you are planning to take elementary algebra with Ted Panitz. Relax, have a positive attitude, realize that you will succeed in the course, and enjoy the class. Also, in order to succeed in the course you must do the homework. If you don't do the homework, it may appear to be difficult and you may not feel confident about it.

The course covers most of the material in chapters 1-8 of the book as well as written assignments designed to help students understand the roll of mathematics in our daily lives. The style of the instructor is an effective one because he makes learning algebra fun and not frightening. He shows respect for the student as well as confidence in the fact the he or she will succeed. He initiates the student to participate in class with the use of groups. This helps the student to understand the material and relax while learning it.

I feel that I handled the class well because I approached it with an open mind and with confidence. I did the homework and participated in small groups. In order to get ready for the class I suggest that you chose to dismiss any further feeling of anxiety

about math. If the subject intimidates you as it usually does me, continue a positive attitude throughout the course and dedicate yourself to the homework to the best of your ability.

What I liked about the course was the relaxed environment in which we learned and the teaching style of Ted panitz. If I had to do it over again I would have asked for more instruction from the teacher in the areas where I had difficulty. In those areas where I did have difficulty, it was because I didn't do the homework completely because I had a busy week and didn't manage my time properly. So I advise you, when you take the course, be sure to complete all homework assignments so that you will feel confident and succeed. I enjoyed the class very much and recommend taking a math course with Ted Panitz.

Dear Jeff,

Hey, what's up? Not too much happening here. Right now I'm in Ted Panitz's Intermediate Algebra class, you know the one you are taking next semester. Well anyway, dude the time flies in this class. It feels like I've only been in here for ten minutes, but only have five to go. There are no lectures at all in this class, just total hands on. I mean he comes around and helps us, but basically he keeps quiet. We work together in groups which is keen and he chats with us and acts like Judge Wapner when we disagree. Dude listen to this. There are no tests at all. Instead he gives us these "mastery demonstrations". You pass it in and any problems that you get wrong he circles and gives it back right there so you can do it again. A passing grade on these is eighty, which isn't bad, but I wish it was seventy. You'll love this one- NO ATTENDANCE. You can blow off any class time you want. But I'll tell you right now that he does something new everyday, so try not to miss any. Well guy, Ted walking towards me now, so I gotta look busy.

See ya,

Jim

Dear Friend,

If you have to take a developmental math course, make sure you get into one of Ted Panitz's classes. He makes math interesting. He has a unique approach to teaching. Instead of presenting material first and then having students go over it in the homework, he asks you to do the homework first, then ant questions you have can be answered in class. Another way he gets you to understand stuff is by asking you to write about it and keep a journal. He figures if you can understand the material well enough to interpret the concepts in words you will know what you are doing.

Be careful not to shrug off the workload. Just because the course is only a pass/fail course it's easy to let the work slide because of the other courses you might have, If you flunk this you just have to pay for it again and do it all over again. I see this happening to a number of students. ted only collects the journals twice and then you're on your own. My advice is keep up with the journal and do some homework problems in the journal every night.

One thing you will have to get used to is that he likes to be called to use first names so you can call him Ted. This is the first time I have called a teacher by his first name. You get used to it and it is kind of nice, like he is a real person or even a friend.

Good luck in algebra.

Dear Friend,

So you're taking elementary algebra with Ted panitz next semester. I think you will really do well and you may actually like math by the end of the class. The course covers algebra from factoring to polynomials to radical expressions. ted's style of teaching includes a good deal of class participation, which really helps you grasp the concepts. You must still prepare for class pon your own, but anything you don't understand in the homework can be explained in class by ted or another student by working in groups.

I prepared for class by reading each assigned chapter, section by section and doing margin exercizes on each section as I went along. I did all of the margin exercizes first, then I did the exercize sets for each section later so at least I would be sure to cover the material first. If I didn't finish all the exercize set problems, I would do them after class before starting the next chapter. Having the answers to the problems is very helpful.

The tests are actually called "mastery demonstrations". You do all of the problems and sometimes Ted corrects them or you correct them together. Either way, you eventually get them all right because you have to keep trying to correct any that are wrong. The idea is to master each chapter before continuing on in the course and getting lost! Ted also gives writing assignments. They help relate math to things in your life so that you can understand its usefulness.

In order to complete the course successfully, go to class every week and keep up with the syllabus. If you fall behind one week, catch up by the next week. Overall, I honestly enjoyed the course and have definitely improved both my math skills/aptitude and my math attitude.

Sincerely,

Cindy

Dear Nina,

I'm writing to you to give you a few tips for success in Ted Panitz's Intermediate Algebra class this summer. Ted is a people person, and tries real hard to keep the class motivated. First, have a positive attitude and expect to spend a lot of time on your homework. Don't get behind, you are already doing it the hard way by taking it in the summer. Ted is big on class participation, but I felt that our class was sometimes oput of control. When the class splits into partners or groups I believe the noise level is too hiogh; confusion has to be kept at a minimum.

The first half of the semester Ted did not teach us before the assignment. For material I knew this was fine, but for the new concepts NADA! I found the other way of getting material firat better. Communication is important, and Ted will bend over backwards to accomodate his students. So COMMUNICATE! Ted also requires writing assignments, like this one. Do them, they will benefit you and your fellow classmates. A journal is also required in Ted's class, be faithful to write in it. This will be your algebra reference guide. By doing this journal, and writing it in english as required you will have a reference guide at your finger tips. P.S. Don't quit. Help is there if you ask for it. You can call Ted or me and we'll help you all we can.

Sincerely,

Jane

Dear algebra student,

Welcome to the beginning algebra class. ted panitz will be your instructor. You will like him! Ted has a wonderful sense of humor, and puts an incredible amount of energy and enthusiasm into each of his classes; you are fortunate to have him. I really think he should be teaching "other math instructors" how to conduct a positive, confident and successful math class.

Before you even start this class you really have to go over the review chapter in your algebra book. Ted will send you a letter asking you to do this--please do it-- if not you may find yourself in a dense math fog. Essentially you are responsible for learning the material yourself, and Ted will go over the basic points of each chapter in class. Always to the chapter written on the syllabus before coming to class. If you have any questions or uncertainties, the material will then be reviewed and you can ask any questions you may have,

Math has never been easy for me, I was never good at it, and need I say that it has always been my least favorite subject, something I really, really dread. Because of this I tried to allow myself plenty of time to study (I always needed it). I suggest that you set up a study schedule for yourself and stick to it, studying a good 1-2 hours at a time. Also, studying early on in the day when your energy level is highest is best. For myself, studying was often a time of frustration and broken concentration. For the most part I am a single parent with one child in kindergarten, and one in a two-day-per-week preschool. My husband is in the Coast Guard abd is away a lot. I could have gone to the library to give myself some "quality study time" but with the girl's father away I chose not to. Everyone's situation is different and you have to find some kind of nitch that is right for you, and fit that algebra class (and all the study time that you will need) into your life-style and stick with it the best you can! But more than anything else, never let yourself fall behind in your studies and try to attend every class.

For the most part, I think I did fairly well in algebra. I worked hard at it and have "mastered" some things better than others (I liked working with binomials, trinomials and factoring quadratic equations better than graphing or word problems.) I really had to force myself to attend every class and to write out answers on the board. Basically I had to make myself get involved with algebra to be receptive to what it had to offer. Ted would vary the classes: some days we (the class) would work problems on the board, sometimes willing individuals would go up and work out and explain problems, we also had algebra "partners" and would work problems together (I enjoyed this the most, and always got a lot out of working with someone one-on-one more than anything else.), we also worked in small groups at times, did some "algebra games" and of course Ted would go over the main theme of every chapter, work problems on the board and answer any and all questions.

Yes, I feel better for having taken this class, and I wish you all the very best in your up and coming Ted panitz algebra semester.

Sincerely,

Kathy