

Strategies for Success
Study Skills for the College Math Student

Instructor's Manual

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Preface to the Instructor

Many of our students arrive at their first college math class without a clue about what it takes to be successful in college. They may have no role models of successful college students in their communities. They may not be aware of the support services the college offers them. Many students are burdened with job and family responsibilities making demands on their time. Some may expect that their course grade will be based on attendance rather than performance. They may not realize that one hour spent in class usually means at least two hours work outside of class. Even if our students can do some mathematics, their weak study skills hamper their overall success.

Strategies for Success are study skills activities specific to fostering success in college mathematics. They force students to take a pro-active approach to determine specifically what they can do to become successful math students. By using *Strategies for Success*, students develop effective study skills to help them succeed in college. *Strategies for Success* take little class time and need few directions from the teacher, yet they produce big rewards in changed student behavior.

The *Strategies for Success* workbook contains 32 student activities. The Teacher Manual includes a “To the Instructor” page with our suggestions about when and how to use that specific activity in your class. The following suggestions address more general questions about implementation:

- **I’ve never taught study skills! How can I feel confident about integrating these worksheets into my curriculum?** For those of us who are used to teaching math, thinking about teaching study skills may seem uncomfortable. As with any new endeavor, start slowly. We encourage you to try just one or two activities at first. Then try to use one new activity a month, and, as you build confidence, try one a week and eventually you’ll be using the activities in almost every class meeting. By rolling them in gradually, as you feel comfortable, you’ll find that they will become a natural part of your teaching repertoire.
- **How do I find class time to do the *Strategies for Success* activities?** Students derive great benefit from time spent helping them develop effective study skills, yet teachers are reluctant to give up time they use ‘doing the math’. We felt the same way, but recognized that our students could not master the course content without effective study skills. *Strategies for Success* activities were designed to require very little class time, and students usually ‘get the point’ without much teacher input. Each activity can be used in several ways—for individual work, group work, large group discussion—and so you can be creative in how you use it in

your class. We have students discuss a worksheet in small groups while we take attendance. We introduce a worksheet during the final few minutes of class and then assign it for homework. We sometimes sandwich an activity around a scheduled class break. We often plan to use an activity on no specific day, but have it ready for that day when there are few questions on the homework, or we finish more quickly than anticipated. We are confident that once you have tried a few *Strategies for Success* activities with your students, you'll see the benefit and find ways to fit them in!

- **Do students do the worksheets on their own?** Most of the *Strategies for Success* activities can be done individually or in small groups. Some can be started individually and completed in small groups, and vice versa. The “To the Instructor” page for each activity gives suggestions for how to implement it. Whether students do the activity in groups or individually, they always benefit from a teacher-led wrap-up with the whole class.
- **How do I grade the *Strategies for Success* worksheets?** In order for students to take the activities seriously, we recommend that you assign some credit to completed worksheets. We usually give homework or classwork credit. Points are awarded for thoughtful completion of the assignment, since there are no right or wrong answers. Grading the worksheets takes very little of your time; yet reading students' responses gives you valuable insights into their lives.
- **Can I modify the worksheets to meet my class needs?** Definitely! The worksheets have evolved over several semesters of classroom use. You may want to make changes to fit your own course requirements and students' needs as well.
- **Can I split the longer worksheets into smaller parts?** Yes, many of the worksheets can easily be split. Whenever you see the symbol ¶ at the right-hand margin, it indicates a place where we suggest a split would be appropriate.

We are happy to share our *Strategies for Success* activities with you, and eager to get feedback from you as you use them in your classes!

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Preface to the Student

Congratulations! You are taking a college math class, one course on your path towards your educational goal. You have taken the initiative and enrolled in math, knowing that you have to succeed in this class in order to reach your dream.

Now that you are in a math class, you must do more than sit back and wish for success. Become pro-active in setting yourself up to reach your dream! Identify what successful study habits you used in your earlier school years and vow to continue using them in college. Think about some areas where you could improve and resolve to work on them. Find out what resources your college provides to help you succeed in your math class and take advantage of them.

We, the authors, have seen hundreds (thousands?) of students at different stages of their college math careers. We know that many students are unsuccessful at college math, not because they can't do the math, but due to weak study skills. We have noticed what behaviors and habits are common to successful students, and we wrote *Strategies for Success* to help you recognize and develop those habits, too.

Strategies for Success will guide you in determining specifically what you can do to become a successful math student. By using *Strategies for Success* diligently, you will develop effective study skills, which you can use in your other college classes, too. You'll see that the *Strategies for Success* activities take just a little of your time, but they produce big rewards in changed behavior.

We are honored to accompany you along this part of your educational path and wish you success in reaching your dream.

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Strategies for Success Syllabus Search

To the Instructor:

The ideal time to do a syllabus search is the first day of class. You may want to have students get started on it while you are taking attendance. Starting group work immediately as the class begins encourages students to meet each other, and it sets a good precedent for collaborative activities you may be doing later in the term.

Since students are actively engaged as they search the syllabus for answers to the questions, they take ownership of the information. They will remember more than if they were listening passively to the instructor reading the syllabus.

The Syllabus Search can be modified to fit the exact course requirements as described in your syllabus.

The Syllabus Search is designed to be used two different ways:

- Copy it all as a two-sided document for use on one day.
- Use the three pieces (General Information, Course Grading Policy, Resources for this Course) separately on three different days.

Strategies for Success **Notebook Preparation**

To the Instructor:

Many instructors assume their students know how to be organized and set up a notebook. This is not always the case. Students often don't realize that being organized can help them be successful in college. Having a system to organize a notebook has made a big difference for many students – some cite it as the most important thing they learned in this class!

One approach to this activity is to introduce it on the first day so that students will know what supplies they need. Set a date, ideally no later than the first test, for students to show their notebooks to the instructor. You may want to award some point value to a properly prepared notebook.

As each instructor has a unique approach to being organized, this activity may easily be modified.

Strategies for Success Reading the Textbook

To the Instructor:

Are you surprised at how few of your students read the textbook? Most teachers expect their students to read the course textbook and then express frustration when it becomes apparent that only a few students actually do read the text. Yet students may never have learned how to read a college textbook. Reading a textbook takes a different set of skills than leisure reading, and reading a math textbook requires its own set of behaviors. Students benefit when textbook reading is addressed explicitly in class.

There are two parts to this activity:

- Part I is a checklist of effective reading behaviors.
- Part II is a detailed guide to reading the first two pages of one section of the text.

In Part I, students are asked to reflect on their own behaviors when reading their math text. Underlining the text or putting question marks in the margins are habits many students have never tried, or avoid in hopes of re-selling their books at the end of the term, and they are surprised to hear that such student annotations are common in the used book market. After completing the checklist, students are asked to identify which behaviors they will try next.

Part I takes very little time, and can be followed by a brief class discussion of 'surprises'--effective reading behaviors that students had been previously unaware of. This is a good time for the instructor to reinforce the benefit of making all the behaviors in the checklist habits.

Part II guides the students through one section of the textbook, pointing out the various features (for example, objectives, examples, Quick Checks, diagrams, etc.) and asking what purpose they serve so that students will see how the book is designed to support their learning. Students are asked to list any words they don't understand and to identify where they can find their definitions. Having students re-state exercise directions and explanations of math steps in their own words is a good way for them to cement the ideas and for you to assess their understanding. Students compare and contrast the Quick Checks to the worked example and, after doing the Quick Checks, they assess their preparation to do the homework exercises.

For Part II, be sure to choose a section with a good amount of narrative and at least one example in the first two pages. All students should use their own textbook. The activity may be done individually outside of class or with partners in class. In either case, it is a good idea to work up through #3 as a whole class, with the instructor modeling active reading behavior of the first paragraph of the section while the students read along in their texts.

The two parts of this activity may be done together or separately. In order for students to derive the greatest benefit from this activity, it should be done fairly early in the term.

Strategies for Success
Math Autobiography

To the Instructor:

Many students come to college math courses with negative past experiences. These experiences may have contributed to the negative thoughts, lack of confidence, and anxiety that students bring to class. By reflecting on the past and identifying some of the negative experiences, students can begin to move beyond them and focus on making a new beginning with math. Then, by acknowledging their strengths, they can better realize that they have some positive qualities that will help them as they move forward.

This exercise is best done early in the term. It was designed to be done individually. Reading your students' math autobiographies will give you valuable insights into their lives and experiences!

Strategies for Success **On Time and Ready to Go!**

To the Instructor:

Many students beginning developmental math courses have never thought about what it takes to be successful in college. They may have passively coasted through their previous educational experiences. The idea that **planning** is necessary for them to get to class on time, fully prepared and with the necessary materials, may not yet have entered their consciousness. By focusing students on this idea, they may begin to practice some of the behaviors that will help them succeed.

Using this as a group exercise brings to light the creative solutions and good behaviors of some of the students in class, and it contributes to building a community of learners as well.

This activity is best used early in the term to encourage good practices from the start of the course. You may want each student to complete a worksheet individually and then discuss their responses in a small group setting. Or you may prefer your students to get into small groups from the start and collectively brainstorm. It is helpful for you to lead a wrap-up or summary with the class as a whole at the end

Strategies for Success

Test Preparation Skills

To the Instructor:

Developmental math students often show up at a test with no preparation and then are surprised and disappointed at their results. Many of them have never been taught how to prepare for a test. They are not aware of the importance of having an organized study plan the days leading up to a test. Some students think it is the teacher's responsibility to structure a review rather than their own responsibility to identify their strengths and weaknesses and make their own personal review plan.

This short worksheet gives students a way to start planning their test preparation. By becoming aware of successful strategies and analyzing their own previous test preparation habits, students can begin to formulate their personal plans for test preparation. You may want to customize the worksheet to include specific strategies you want your students to use to prepare for your tests.

This activity has quite a bit of reading (the first page) and requires some personal analysis, so it is best done individually. After each student has completed an individual analysis, a brief small group and/or whole class discussion may be helpful.

This activity is part of a five-part testing suite:

- **Test Preparation Skills**
- Test Stress Reduction
- Test Taking Skills
- Post Test Check up
- Test Analysis

Strategies for Success

Test Stress Reduction

To the Instructor:

Student anxiety in a test situation is often caused by sensing a lack of control. Once the anxiety forms and builds, students may panic, feel overwhelmed, and either 'freeze up' or give up. Few students see the connection between their prior actions and test anxiety. Making students aware that taking control of their preparation helps build their confidence and reduce stress is a worthwhile activity.

This activity does not take very long and need not be done in class. It requires personal reflection and so each student should fill in the worksheet individually. After each student has completed an individual analysis and action plan, a brief-group and/or whole class discussion is a good way to have them benefit from the ideas of their classmates.

This activity is part of a five-part testing suite:

- Test Preparation Skills
- **Test Stress Reduction**
- Test Taking Skills
- Post Test Check up
- Test Analysis

Strategies for Success

Test Taking Skills

To the Instructor:

Many students do not have an effective test-taking strategy. They simply start with the first problem, continue in the order the problems appear, and hope for the best. This approach is not empowering. By helping students become aware of effective strategies for tackling a test, they gain some control and thus reduce anxiety and build confidence. The strategies themselves can improve test scores and so the benefits of this exercise will be apparent.

This activity requires some self-evaluation, so it is best done individually. Follow-up discussion in class will reinforce these strategies. It is fun to watch students' faces when they realize that strategies they had never considered can help them earn higher test scores!

This activity is part of a five-part testing suite:

- Test Preparation Skills
- Test Stress Reduction
- **Test Taking Skills**
- Post Test Check up
- Test Analysis

Strategies for Success

Post Test Check up

To the Instructor:

Time and again, when students get tests back, they merely look at the grade on the first page and then shove the tests in their backpacks, never to be seen again. They forfeit a valuable opportunity to evaluate their study skills and just continue using their usual habits without considering whether or not they help them succeed in the course. This activity is designed to have students reflect on their study and test preparation skills and to move them towards taking responsibility for their performance on each test and, ultimately, in the course.

Having students correct each and every error on their tests is an important activity that will fill in gaps in their knowledge. It will help them progress through the course and prepare for the Final Exam. Collecting test corrections and awarding points for them guarantees that students fully complete this important follow-up activity.

This activity is best done individually right after a test has been returned. It may be done either in class or as homework. The worksheet encourages self-reflection and self-evaluation.

This activity is part of a five-part testing suite:

- Test Preparation Skills
- Test Stress Reduction
- Test Taking Skills
- **Post Test Check up**
- Test Analysis

Strategies for Success

Test Analysis

To the Instructor:

Many students do not realize that tests can be learning experiences as well as assessment instruments. They may feel they are done with a test the minute they turn it in. They fail to take advantage of the benefits of analyzing their test performance when they receive a graded test. They may never have thought about what led to their score on that test or what they could do to improve their grade on the next test.

The first page of this worksheet describes three of the most common types of errors students make on tests – being unprepared, concept errors, and careless errors. Discuss these three types of errors with your students and then have them make a chart like the one shown. (It may be easier to have them copy it onto notebook paper so they can have a line for each problem on the test.) Clarify that they are to put the number of **missed points** in the appropriate column. Let them proceed through the worksheet and analyze their own errors. Keep in mind that the same error may be classified differently from one test to another, depending on the test content. For example, making a sign error would be a concept error on a test covering operations with signed numbers but might be a careless error when testing linear equations.

Often this is an eye-opening exercise in self-awareness. It may be helpful to follow it up with a personal conversation with each student, particularly after the first test.

This activity is part of a five-part testing suite:

- Test Preparation Skills
- Test Stress Reduction
- Test Taking Skills
- Post Test Check up
- **Test Analysis**

Strategies for Success **Successful Student Behavior**

To the Instructor:

Many students beginning developmental math courses exhibit immature classroom behavior and study habits. They may have never thought about what type of behavior is expected in college or what habits contribute to success in college courses. Students may think of themselves primarily in their roles outside of the classroom--athlete, employee, parent, etc.--and have no image of themselves as students. By identifying a role model and thinking about what constitute successful student behaviors, they can begin to see themselves taking on this role. Using this as a group activity helps students see themselves as part of a community of learners who will help and support each other through the course.

This activity is best done early in the term, ideally within the first couple of weeks. It encourages good practices from the start of the course. Students should be given time to complete the worksheet individually and then form small groups to discuss the behaviors they identify. You could then have each group list some of their successful student behaviors on the board and have the class identify commonalities among the groups.

Strategies for Success Textbook Tour

To the Instructor:

Math instructors usually consider many factors when choosing a textbook for their courses. They may look at the narrative, examples, exercise sets, definitions, chapter reviews, etc., as well as the overall readability of the text. But many students open their textbooks only to find their assigned homework exercises. They fail to appreciate the many features that are designed to support their learning, those very features that may have caused their instructor to select that book.

This exercise provides an opportunity for students to familiarize themselves with the features of their textbook. Students are given a list of ten features common to most textbooks. They match each feature with its purpose. The descriptions of the features provide subtle messages that promote good study habits, such as “Lists answers to the exercises *so I can check my work and correct my mistakes.*” Students are then asked to list other features unique to their textbooks and state their purpose.

This activity is best done individually or in a small group. To be most effective, it should be done early in the course, but after the first chapter has been completed.

Strategies for Success **Time Management**

To the Instructor:

College students have many demands on their time. They may be taking several classes, working at a part-time job, and enjoying an active social life. While they know their class and work schedule, it is not uncommon for them not to plan any specific study time. Studying is low on their priority list and takes place after everything else is finished, if at all. Some students are repeatedly surprised that their next class has arrived before they 'had time' to do the assignment.

This activity guides students through the creation of a weekly time schedule. On it, they include their classes, job, personal and family responsibilities. Then they are asked to schedule two hours of study time for every hour of classtime. After study time is committed to paper, they can fill in time for relaxing, friends, etc.

Students derive many benefits from creating and reflecting on their weekly time schedules. They realize how many hours they need to commit to each class. They are forced to think about when and where they will study. By looking at possible 'empty' time slots between classes, they may utilize their time on campus more effectively. Keeping the schedule handy will enable them to make appointments with tutors, counselors, doctors, etc., without conflicting with their classes. And any study time not needed one day becomes a bonus free time slot!

Some students may find they are overscheduled. Looking at their packed schedules, they realize why they are constantly feeling stressed. If that is the case, the worksheet asks them if there are any adjustments they can make to their schedules. They may realize that in order to achieve any success this term, they may need to drop a class or work fewer hours.

This activity is designed to be done individually, but a brief wrap-up discussion with the whole class is helpful to generate ideas for what to do about being overscheduled. To reap maximum benefit, it should be done fairly early in the term.

Strategies for Success **Homework Skills**

To the Instructor:

As teachers, we are often frustrated by the attitudes students have toward their homework. Many students have never thought about the purpose of homework or considered that there may be benefits to doing homework. They only vaguely know when homework is due and in what format it is expected. Students seldom exhibit pride in the homework that they turn in to their teacher.

As far as their grade is concerned, students don't usually think about the point value of each assignment and rarely consider how missing one or more assignments can impact their course grade. If they are aware of the point value, too often they just do their homework to get those points, with little concern for understanding what they are supposed to be learning. Many students see nothing wrong with copying answers from the back of the book or from another student just to have a paper to hand in.

In this activity students reflect on the issues of homework in a way that will help them develop responsibility for their own learning.

This activity is divided into three parts:

- Why do Homework?
- Doing Homework
- Homework Grading Policy

You may choose to assign this activity as three separate parts, or as one worksheet altogether. This activity works best as a group exercise, although you may want students to complete the first section, Why do Homework, outside of class. The second section, Doing Homework, should be done in class, since it requires students to exchange homework papers with their classmates. Allow enough time for discussion in the groups to develop and then bring the class together as a whole to summarize the results.

Students often are surprised at the ideas of their classmates. This activity is quick to do, and yet is powerful in a rather subtle way.

Strategies for Success

Mid-term Check-up

To the Instructor:

Mid-term is a good time for students to reflect on their study habits and grades. There are still plenty of opportunities to improve course grades by making positive behavioral changes. But students often continue their same habits without considering whether or not these habits are helping them succeed in the course, even after they are informed of their midterm grade.

This activity helps students reflect on their study skills and take responsibility for their outcome in the course.

The worksheet can be assigned as homework or used in class. If done in class, allow enough time for students to think quietly. Emphasize to students that the answers are for their own benefit and positive results will result only from honest self-evaluation.

Allow some time for a whole class discussion or wrap-up. If the goal of a large portion of the class is merely to pass the course, it would be helpful to remind them of the sequential nature of mathematics and how success in subsequent courses depends on having a solid foundation. It can be particularly effective to take one or two items from the second page, such as the number of absences or the number of times per week homework is done, categorize responses by midterm grades, and present the tallies to your class.

The worksheet can be modified to meet the needs of your course. You may assign both pages at once or separate them into two.

Strategies for Success

Attendance

To the Instructor:

Have you ever had a student come to you after missing a class and ask “Did you do anything important while I was gone?” This activity helps students face the fact that there are consequences of being absent from class and accept responsibility for finding out what they need to make up. They realize they are accountable for the number of absences they have, and think about why they are absent and how they can improve their attendance. The checklist provides a non-threatening way to give them ideas about what they can do to get back on track after missing one or more class meetings.

This activity can be done any time after the first few weeks of the term. It is best done individually at first, then followed by small group discussions.

You may want to do a wrap-up with the whole class to see which strategies may have been new to them (where they checked ‘never’) and what ‘other’ strategies were listed. It can also be helpful to have students write their ideas about how they can improve their attendance on the board.

Strategies for Success **Study Group**

To the Instructor:

Research has shown that participating in study groups can help students succeed. Yet many students in lower level math classes have never heard of study groups, and don't have the slightest idea how to set one up. Study groups are fairly common in higher level math courses, but this activity get the idea started earlier.

This activity outlines the benefits of being part of a study group and asks students to think about whether or not each would help them. Students who may already be meeting informally with some classmates may find that calling it a study group gives it legitimacy and more importance in their schedules.

This activity can be done at any time, either individually or in small groups. You may want to follow-up by allowing some class time for students to form study groups.

Strategies for Success

Goals

To the Instructor:

It is very common for students to have achievable goals and yet not be prepared for the obstacles that may arise on the path to those goals. With no plan or forethought, students may become discouraged and give up when they encounter a ‘speed bump.’ With the realization that everyone has barriers, and, in fact, many have the same barriers, it is easier for students to look beyond the obstacles and learn to come up with a plan to go “over, under or around” them and persevere towards their goals.

It is also important to have students establish short-term as well as long-term educational goals. For some students in developmental math classes, it may be many years before they reach their long-term goals. They need short-term goals so they can feel a sense of accomplishment along the way!

This activity works best when used in week 2 or 3 after the ‘start-up’ chaos settles down and before the term is too far along. Once the students have finished the worksheet, have the class make a list on the board of the potential barriers. You may want to identify a campus resource that could help them deal with some specific barriers. For example, many students list child care as a barrier and they can be referred to the campus Childcare Center; if they list money as a barrier, they can be referred to the Financial Aid Office, etc.

But as early as the first day of class, you can start teaching students how to brainstorm. The class can brainstorm ideas to help students who cannot buy the book immediately figure out how they will do the homework if they do not yet have the book. Creative solutions are always presented and students are often surprised at all the possibilities. They end up feeling empowered that they can overcome this barrier rather than feeling discouraged or ashamed.

Similar brainstorming can be done on any number of topics early in the semester--time management, arranging childcare, getting help with math, etc. The time necessary to teach this brainstorming skill is time well spent. Many people have never been taught to think this way.

The Goals worksheet may easily be split into two assignments, one for short-term goals and the second for long-term goals.

Strategies for Success

Thoughts in Charge!

To the Instructor:

Unpleasant past experiences with mathematics, derogatory comments made by former teachers or family members, feelings of uncertainty about basic number facts are part of the baggage that some students bring with them to the math classroom. Negative thoughts can become self-fulfilling prophecies.

In this activity, students examine the interrelationships between thoughts, emotions, body sensations, and behaviors. By comparing the effects of neutral and positive thoughts to those of negative thoughts, they see the better outcomes of neutral and positive thoughts.

This activity is one of three dealing with issues of Math Anxiety, adapted from *Managing the Mean Math Blues* by Cheryl Ooten (Ooten, C. (2003). *Managing the Mean Math Blues*. Upper Saddle River, NJ: Pearson Education, Inc.) These three activities are listed below and are best done in this order:

- **Thoughts in Charge**
- Neutralize Negative Thoughts
- Intervention Strategies for Negative Thoughts

This activity can be done at any time. “Thoughts in Charge” was designed to be done individually. After each student has created an interrelationship chart, you may want students to compare their charts in small groups and then have each group put one chart on the board to spark class discussion. A few volunteers may also want to speak individually about their own personal thoughts, emotions, etc

Strategies for Success **Neutralize Negative Thoughts**

To the Instructor:

Negative thoughts about math play over and over again, like a broken record, in the minds of some students. They form barriers between the students and success in math. Yet by changing the wording slightly, negative thoughts can be transformed into neutral statements. The addition of the little word ‘yet’, for example, changes the statement “I don’t understand this” to “I don’t understand this yet” and implies that understanding is a process instead of a fixed state.

By learning to recognize negative thoughts, as they do in this activity, students will begin to change their own self-talk. They see how making small changes in wording can ‘neutralize’ a negative thought. Students who have done the activity ‘Thoughts in Charge’ will realize that this change will have positive effects on their emotions, body sensations, and behaviors.

This activity is one of three dealing with issues of Math Anxiety, adapted from *Managing the Mean Math Blues* by Cheryl Ooten (Ooten, C. (2003). *Managing the Mean Math Blues*. Upper Saddle River, NJ: Pearson Education, Inc.) These three activities are listed below and are best done in this order:

- Thoughts in Charge
- **Neutralize Negative Thoughts**
- Intervention Strategies for Negative Thoughts

This activity can be done at any time. It was designed to be done individually. A useful wrap-up would be to have a few students write their answers to SS2—a negative statement with a corresponding neutral statement—on the board.

Strategies for Success

Intervention Strategies for Negative Thoughts

To the Instructor:

As teachers, we know the effects that negative comments can have on our students' self-image and ability to do math. We know that if we say "that's not quite right" rather than "no, you're wrong", the impact of the comment on the student changes and it provides hope instead of discouragement. Some students have negative beliefs about their ability to do math that are unsubstantiated and lack a logical basis. In addition, some negative thoughts are the direct result of unproductive behavior that can be changed, such as neglecting to do homework.

In this activity, students will become familiar with intervention strategies and practice using them on some common negative thoughts about math. (They will probably recognize some of the examples of negative thoughts as things they have said to themselves!) Once these strategies become part of their own personal 'toolbox', students will find they are useful in everyday life, too.

This activity is one of three dealing with issues of Math Anxiety, adapted from *Managing the Mean Math Blues* by Cheryl Ooten (Ooten, C. (2003). *Managing the Mean Math Blues*. Upper Saddle River, NJ: Pearson Education, Inc.) These three activities are listed below and are best done in this order:

- Thoughts in Charge
- Neutralize Negative Thoughts
- **Intervention Strategies for Negative Thoughts**

This activity can be done at any time. "Intervention Strategies for Negative Thoughts" can be done individually or in small groups. You may want to have a whole class discussion after everyone has had the chance to complete their own worksheet.

Strategies for Success
Can You Hear Me Now???

To the Instructor:

With current technologies, college students are among the many people feel the need to stay connected 24 hours a day, 7 days a week. Many students see nothing wrong with keeping their cell phones on and visible during class. They don't realize that the sound of a cell phone signal or the sight of someone leaving class to take a call disrupts the academic environment of the whole class. Some students don't consider texting the same kind of 'offense' as talking on a cell phone, so texting is also addressed.

This activity addresses two consequences of keeping a cell phone on in class. One is the disrespect for the academic environment for their classmates and teacher. Students should realize that their classmates have a right to an undisturbed academic environment so they can learn. The other consequence is the inability of the cell phone owner to give full attention to the class.

This activity can be done at any time. It was designed to be done individually, but there could be small group discussions after each student has completed a worksheet. You may wish to have students list their answers to SS2 on the board for class discussion. In the discussion, you might let students know that in case of a rare special circumstance requiring a student to be on the alert for a call or message, they should let you know and you will work with them to accommodate that need. That will promote the feeling that you and the students are working together towards their success in the course.

Strategies for Success **A Gift to Yourself**

To the Instructor:

Success in college is the result of a myriad of behaviors and events. In a sequential subject like math, each topic builds upon previous knowledge and each course builds on its predecessor. Many students in basic skills courses don't yet realize the consequences on their learning and long-term college success of not giving 100% in every class.

In this activity students are encouraged to think of their education, and the time required to attain it, as a gift they give themselves. This gift should be protected and cherished, by fully focusing during each class meeting. Distractions, like cell phones, and books and homework from other classes, should be put away so that students can take full advantage of the learning opportunities of every class meeting.

The activity can be done at any time. The worksheet is designed to be completed individually. You may then want to have students list the behaviors on the board, as a springboard for a class discussion.

Strategies for Success

Math Plan

To the Instructor:

Math teachers, of course, are intimately acquainted with the scope and sequence of the math curriculum. We know how each class fits into the big picture, and where the concepts covered in one class will show up in the future. We know that it is best for students to continue through the math sequence without a break, taking math every term until their math goal has been achieved. But many students aren't aware of all this. They see each class as an end in itself, and don't realize its connection to their overall educational plan and success. They cobble together each term's schedule haphazardly, choosing classes at convenient times or with their friends.

This activity asks students to think about their long-term math goal by identifying the highest level of math required for their college or career goal, and to name the math course they should take next term. It also makes them reflect on the behaviors and study skills they have used in this class and commit to making specific improvements.

Since each student's educational plan is uniquely their own, this activity is best done individually. A useful wrap-up activity would be to have students discuss, in small groups or as a whole class, the behaviors and study strategies they felt have helped them the most.

This activity was designed to be done near the end of the term, when students are planning their next term's schedules.

Strategies for Success

The End is in Sight!

To the Instructor:

Fifteen or sixteen weeks, or more, is a long time for students to keep their motivation up. Many students start the term strong and then fall apart towards the end. They get tired of the routine of classes and homework, and overwhelmed by what they have left to do. The end of the term is a very demanding time for students who have to deal with papers, projects, and exams for all their classes in a short period of time. And the fall term has the added stress of holiday preparations and possibly extra hours on the job.

In this activity, students are guided in organizing their time to accomplish the remaining work in their math class. They are asked to list the tests and assignments they have yet to do. Then they decide whether or not the number of hours they usually spend each week on math will be sufficient to get all their work done, and, if not, they figure out how they can adjust their schedules.

This activity is best done three to four weeks before the end of the term. It is meant to be done individually, but a quick class wrap-up might include a show of hands for how many students need to increase the number of hours they spend on math and a brief discussion of their ideas of how to adjust their schedules.

Strategies for Success **Excuses! Excuses!**

To the Instructor:

We've heard them all! It is hard to believe that students really think their flimsy excuses for missing class or not doing an assignment are valid. And even if they were, then what? The student has missed important work. Whose job is it to catch up?

In this activity students are given the opportunity to look at some common excuses and think about their responsibility to remediate them. Students begin to realize, for example, that asking to do a review assignment after a test misses the point of the whole assignment. They think about what successful students would do if they miss class, misplace their textbook, or leave their homework at home.

This activity can be done individually or in small groups. It can be done at any time after the first few weeks of the term, when the class has developed a sense of camaraderie. A whole class debriefing of 'what a successful student would do' can help bring good ideas to light.

Strategies for Success **Support from Family and Friends**

To the Instructor:

Many college students live with their families – their parents and siblings, or spouse and children. Their families may not realize that the time commitment required for success in college extends far beyond class time. They may expect their college students to fulfill all the same responsibilities at home as if they were not taking classes.

This activity helps students identify and give voice to their needs. They learn that they have the right to ask for help, support, and understanding from their family and friends. They see that it is ok to decline to attend social and family events that would cause them to miss class or fail to do their homework. Students will feel empowered to make it known that their education is their foremost priority.

This activity can be done any time after the first few weeks of the term. It was designed to be done individually. You may want to have a quick wrap-up with small groups or the whole class sharing their ideas of what other requests they need to make.

Strategies for Success

Stay on Campus--Stay on Task!

To the Instructor:

Many students need help separating their home and social lives from their lives as college students. When they leave campus, there are many distractions and demands on their time that makes it difficult to complete their schoolwork. These students benefit from encouragement to stay on campus to do their homework and as well as take advantage of campus support services. They may need guidance in finding ways to put 'free time' between classes to good use. They may need help becoming empowered enough to tell their families that they need to spend more time on campus than just class time.

This short activity focuses student attention on the benefits of staying on campus beyond class time to do their homework. Students may recognize benefits such as having time to attend office hours, tutoring, and study groups, doing homework soon after class while the ideas are still fresh, taking advantage of quiet and comfortably heated or air-conditioned places on campus, and more. Students will find out where and when places on campus are available for them to do their math homework.

The worksheet can be done individually or in small groups, at any time after the first few weeks of the term. A whole class wrap-up is recommended, to ensure that everyone has the campus information complete and correct.

Strategies for Success Final Exam Prep

To the Instructor:

Students seem to fall into two camps when final exam time approaches. Some students continue with the same habits and behaviors they have used all term and think that if they just show up for the final exam, they will be sufficiently prepared to succeed. Other students experience stress just thinking about all they have left to do and how they will have to remember so much from the course. Both groups can benefit from some guidance in how to prepare for final exams.

This activity has three parts:

- In Part I – ‘Get the Facts and Get Organized’, students are asked to write down the logistics of their final exam – when, where, what format, what do they need to bring. Knowing they are organized will give students a sense of control and help alleviate some of the stress.
- Part II is titled ‘Make a Study Plan’. Several strategies to review the course material are suggested and a sample study plan is given. Students are asked to create their own personal study plan and to identify the date on which they need to begin.
- Part III – ‘Make a Time Management Plan’ has students create schedule showing all their activities and obligations for the 3 weeks leading to their final exam. They analyze their schedules to judge if they have enough time for final exam preparations, and identify any changes they may need to make to accommodate more study time.

The three parts can be done separately, on three different days, or altogether, as one longer worksheet. To maximize its effectiveness, this activity should be done three to four weeks before the final exam. Part I can be done individually or in small groups, with a whole class wrap-up to ensure everyone has complete and correct information. Parts II and III are better done individually, but a brief class discussion of the schedule changes that can be done to accommodate extra study time would be helpful to all.

Strategies for Success **Grade Check Up**

To the Instructor:

Near the end of a course have you ever had students come to you and ask whether they have even a chance of passing? It is surprising (or dismaying?) how many students don't have a clue of what their grade might be. Yet they probably have had feedback throughout the term, by means of returned graded homework, quizzes, and tests. And students at all levels of mathematics should have the skills to calculate their grade.

This activity, best done in the last week or two of the term, guides students through calculations to determine their current grade, identify what work remains to be graded, and find how much that remaining work contributes towards their course grade. Then they face a reality check: is their grade goal attainable? If not, what is a more realistic goal? Finally, they are asked to commit to three things they will do to make sure they do well enough on the final exam to reach their goal.

Since this activity relates to personal goals and grades, it is best done individually. A quick personal conference with each student can be beneficial to double check their grade calculations and give them a mini pep talk. After all students have filled out the worksheet, you may wish to ask for some volunteers to share their ideas for what they will do to make sure they succeed on the final exam.

Feel free to adapt this activity to accommodate your own grading routine.

Strategies for Success **Look Back, Look Forward**

To the Instructor:

Too often, once final exams have been completed students (and some teachers, too) literally 'close the book' on their schoolwork and put it out of mind until the next term is nearly upon them. We all would benefit from taking some time for self-reflection, to identify what went well this term and what could have been improved.

In this short worksheet, students reflect on the study skills they used in this class. Thinking about the skills that helped most and those that could use improvement can help them become more successful in their next math class.

This activity was designed to be done in the last week or two of the course, possibly incorporated into a 'review for the final exam' lesson. It is best done individually. After everyone has completed the worksheet, a nice positive ending would be to have students list on the board the study skills they found most helpful. This will boost their self-esteem and give them self-confidence right before the final exam.

Strategies for Success

Reward Yourself!

To the Instructor:

Many of our students who successfully finish a developmental math class have had to overcome tremendous obstacles. They have made sacrifices of their time, money, relationships, and more. Some of them have no-one who supports their dream of getting an education. In the day-to-day struggle to get by, they may not take time to celebrate their success. It is surprising how many students have never thought of rewarding themselves with a simple pleasure to recognize their accomplishments! By reflecting on their accomplishments and promising themselves a symbolic reward, they may become energized and ready to tackle a new class!

It is fun to have students share their idea for 'rewards.' Our students have promised themselves a relaxing bubble bath with candles, a shopping trip to the mall, a six-pack of a favorite beverage, a dinner at a favorite restaurant, a day at Disneyland, a trip to some enticing place, and more. This activity can relieve some of the pre-final stress as it gives students a reason to look forward to some event that will occur soon after their exams are done.

This activity is best done in the week before the final exam. As the class reviews their math skills, it is appropriate to bring to focus the overall learning experience. Student responses to 'the most important thing I have learned....' are always insightful, and often have nothing to do with math concepts. And if your students have come to know and support one another as a community of learners, this activity helps them celebrate their accomplishments with each other.