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#### RESEARCH ARTICLE

Using Mindfulness/Contemplative Practices to Help Students Focus in Mathematics Classrooms

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AND LEARNING EXCELLENCE THROUGH SCHOLARSHIP

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ABSTRACT

Can using mindfulness/contemplative practices help students become mindful, focused, and present in the mathematics classroom? In this study, mindfulness/contemplative practices were used in the mathematics classroom to determine if students were encouraged to be mindful, focused, and present or engaged in problem solving. During class time, students engaged in the following 2 contemplative practices: a "Mindful Minute of Deep Breathing" and "Beholding the Mathematics". The one minute of mindful Deep Breathing took place usually at the beginning of class. Then, during a regular class period, students used Beholding to look more deeply at topics, probe questions, and investigate answers to questions. The survey responses indicated that the mindfulness/contemplative practices were very useful in the mathematics classroom to help students to be mindful (both inside and outside of the classroom), focus on the mathematics taught, and be present or engaged in the problem solving.

#### INTRODUCTION

In the spring 2016 semester, during a 3-session Mindfulness Workshop at the Community College of Baltimore County (CCBC), delegates were challenged to share at least one contemplative practice with their current students to see what the outcome would be. Even though the workshop attendees originally participated in these sessions for professional development and self-care, at about mid-semester, this research began in one mathematics classroom. The instructor talked with the students about mindfulness, and led them in a "Mindful Minute of Deep Breathing" to see if the practice helped encourage students to be mindful, focused, and present in the mathematics classroom. At the end of the semester, a mindfulness questionnaire was presented to the students and the results were very encouraging. Even though the instructor obtained qualitative results, most of the students had a positive experience from the Deep Breathing exercise done at the beginning of each class period. This originally started out in a co-requisite course, or Accelerated Mathematics Program (AMP) course, at CCBC. The particular AMP course was an AMP MATH 081/082 course which is a blend of 2 developmental mathematics courses, where pre-algebra (MATH 081) and introductory algebra (MATH 082) are dovetailed together and taught twice a week for a duration of approximately 3 hours per day.

Additionally, in the fall 2018 semester, the instructor incorporated the Beholding contemplative practice in the mathematics classroom, where students looked closely at section topics, questions and answers to questions. Anonymous (2007) stated that wrong answers help other people to take a deeper look at the problem. Actually, since spring 2016, the instructor continued to use contemplative practices in almost all classes in some small way, depending on the time allotted for each class. In particular, those

innovative classroom techniques were used in the AMP courses, since there is more time to spend with the students in each class. Thus, in spring 2016, spring 2018, and fall 2018 the instructor surveyed students in the AMP classes to get results on the impact of these mindfulness practices on students. Also, one MATH 081 class completed questionnaires in the fall 2018 semester.

The research showed that the interventions and use of the mindfulness/contemplative practices in the mathematics classroom encouraged the students to become mindful, focused, and present or engaged in the mathematics classroom. When describing mindfulness, McCoy (2019) said that it is being aware, compassionate, and nonjudgmental of what occurs in the present moment, learning from the past, and moving forward to what is in the future. It is worthy to note that Samuel and Warner (2021) mentioned that neuropsychological research suggests that, when harboring negative thoughts in anticipation of mathematical environments, working memory load diminishes, and execution anxiety increases, affecting learning and performance. In addition, Henslee and Klein (2017) stated that the relaxation technique, guided imagery, was used to treat problems related to anxiety. Notwithstanding, Luttenberger et al. (2018) reported that, in one study called PISA (Programme for International Student Assessment), many adolescents exhibited worry and tension while doing mathematics in the classroom. Luttenberger et al. (2018) also mentioned anxiety in mathematics is a global problem and affects people of all ages.

Notwithstanding, the instructor decided to share the findings with a larger audience and submitted an abstract to the Mathematical Association of America (MAA) to present at MathFest 2019. The abstract was accepted by the MAA for presentation at the poster session and on August 2, 2019 the instructor presented some of the findings in a poster entitled "Take A Deep Breath and Behold the Mathematics" during the MathFest held in Cincinnati, Ohio. MathFest is an annual event, sponsored by the MAA, where mostly mathematicians share their current scholarly projects that they are working on in general or with students in their classrooms. These projects seek to enhance the teaching and learning environments. Many MathFest delegates, who stopped by to view the poster and interact with the instructor/presenter, commented that mindfulness or contemplative practices are not commonly used in the mathematics classrooms, so they were curious to find out if those practices produced any positive results on the students. The delegates were pleasantly surprised that the Deep Breathing and Beholding practices helped students become mindful, focused and present in the mathematics classroom, and some delegates expressed that they were willing to try the contemplative practices in their future mathematics courses. It is important to note that even though the instructor realized that there was no available published research similar to this research study, the instructor wanted this work to help contribute to a growing body of knowledge. Thus, the instructor submitted this manuscript, with the findings, to encourage other instructors to use mindfulness/contemplative practices to help their students be mindful, focused, and present in the learning environment.

#### **METHODS**

### Innovative Techniques Used

At the beginning of the semester, students engaged in mindfulness/contemplative practices in the mathematics classroom. During the semester, and using PowerPoint slides (Figures 1 and 2), students saw how the course would incorporate the practices in the classroom. In particular, at the beginning of every class, students began with the exercise of the "Mindful Minute of Deep Breathing" (Figure 3). Students were reminded that the belly must go out when they took a deep breath in, and on the exhale, the belly should go in. Once the minute count started, students breathed deeply and sometimes counted their breaths as they focused on being present in the mathematics classroom. Students set aside their thoughts on whether they just came to class from work or took care of children at home, or planned to go to work or home after class, and they stayed in the present – aware and engaged in the activity. Once the minute was up, the class continued.

Now, for the "Beholding the Mathematics" practice or exercise (Figure 3), especially when the class was scheduled to have new sections covered in class, students had to behold the topic(s) under

discussion, some questions in the textbook, and the answers to those questions. An example for the Beholding practice is illustrated in Figure 4. Then, the students shared their definitions of one word or several words used in the topic, the strategies they used while solving each question, and whether the solutions made sense in the context of the original question asked. Students wrote their responses on the board or in their notebook. It was amazing to see that students were usually on point with their suggestions and problem-solving thoughts. Their ideas were valid and useful to solve the problems and it was encouraging to see them courageous in giving voice to their thoughts in the learning environment. Students also learned from their mistakes or contributed to the solutions using their correct reasoning.

## Innovative Classroom Technique 1: A Mindful Minute of Deep Breathing!

- > Start near the beginning of class.
- > Take deep breaths (in and out) for 1 minute.
- > Focus on being present in the mathematics class.
- Interactive Session: The leader tells the group when to start and stop the one minute count.

Figure 1: Instructions for employing the Mindful Minute of Deep Breathing in class.

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## Innovative Classroom Technique 2: Behold the Mathematics!

#### Behold or Take a deep look at ...

- The topic under discussion and ask: "What do the words mean?"
- The problem and ask: "Does it fit into the mold of a definition or formula and How can I show the work toward a solution?"
- ➤ The **answer/solution** and ask: "Does it make sense?"

Then write down what you see.

Figure 2: Instructions for employing the Behold the Mathematics in class.

# Example: Behold the Mathematics!

**Behold the Topic**: "Solving Systems of Equations"

Students responded that at least two equations must be used.

**Behold the problem**: Solve the system of equations:  $y = -\frac{3}{4}x + 1$  and

 $y = -\frac{3}{4}x + 2$ 

Students immediately recognized that the system of two linear equations were given in the slope-intercept form y=mx+b, where m represents the slope and the point (0, b) represents the y-intercept, that is, the point where the line intersects the Y-axis in the Rectangular Coordinate System. They observed that both equations have the same slope, m = -3/4 but different y-intercepts (0, 1) and (0, 2) respectively, so the lines are parallel. Parallel lines were discussed in a previous session.

#### Behold the solution: The answer is "No Solution."

Students recalled that since parallel lines never meet, there is no solution (or no point of intersection for the two lines if graphed).

**Note**: Students had to behold the equations given in the problem and solve the system **without** graphing the lines.

**Figure 3:** Example of the Beholding practice in a math classroom.

IN THIS ISSUE

Letter from the Preside Participants

Letter from the Provost

Eight students completed the mindfulness questionnaire in the spring 2016 MATH 081/082 AMP course (Table 1). Nine students completed the mindfulness questionnaire in the spring 2018 MATH 081/082 AMP course (Table 2). Eleven students completed the mindfulness questionnaire in the fall 2018 MATH 081 course (Table 3). Eight students completed the mindfulness questionnaire in the fall 2018 MATH 081/082 A AMP course (Table 4). Thirteen (13) students completed the mindfulness questionnaire in the fall 2018 MATH 081/082 B AMP course (Table 5).

#### **Data Collection and Analysis**

At the end of the semester, on the last day of class before final exams, the instructor administered a mindfulness questionnaire containing 4 questions. The original 4 questions were:

Question 1: Write your own definition of mindfulness.

Question 2: Why do you believe we engaged in this activity?

Question 3: How do you think this activity applies to this class?

Question 4: How do you think this activity applies to you and your life?

During spring 2016 and spring 2018, the original 4 questions were the same (Table 1 and 2). However, the survey questions were slightly modified for the 3 classes in fall 2018 (Tables 3-5). Here are the questions in the modified version:

Question 1: Why do you believe we engaged in these mindfulness/contemplative practices (for example, deep breathing or beholding)?

Question 2: How do you think these practices apply to this class?

Question 3: How do you think this activity applies to you and your life?

Question 4: How do you feel today about practicing mathematics exercises?

The fourth question in the modified version helped the instructor identify, near the end of each course, how students felt about their progress solving problems in the mathematics classroom. Question 4 did not speak to the strength of the mindfulness practices; however, some students connected their problem-solving experiences with the mindfulness exercises done in the mathematics classroom.

After conducting each survey, the students' questionnaire responses were typed up in a Word document. For this paper, the responses were transformed into a table format. The actual survey responses can be found in Tables 1-5. In addition, from these tables, a word cloud was created (Figure 4), which highlighted the key words used in the survey responses from students. This also helped in determining the results found.

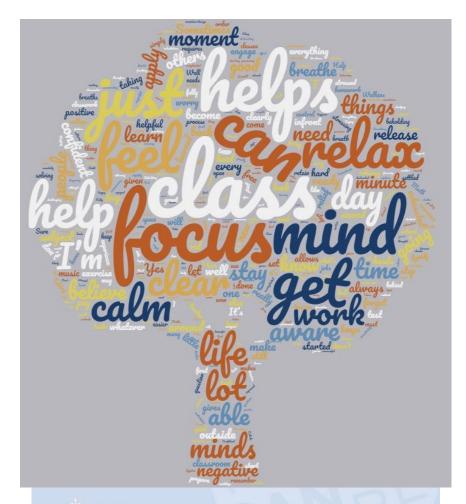


Figure 4: Word cloud of responses given by students to the survey questions.

#### **RESULTS**

#### **Qualitative Results**

According to Hammarberg et al. (2016), especially from the participants' perspective, qualitative research can be used in response to experiential questions. The responses (Tables 1-5) to the mindfulness questionnaire showed that the mindfulness/contemplative practices helped students be mindful, focused, and present in the mathematics classroom. Students indicated that they were mindful (both in and outside the classroom) by using synonymous words like "mindful," "considerate," "aware," "clear mind," and "stress free". Students showed that they were focused by employing similar words like "focus,"

"mentally prepared," and "concentrate on task at hand". Students demonstrated that they were present by using synonymous words or phrases like "present," "grounded in the present," "rid mind of clutter," and "prepared for next moment". The contemplative practices helped students process their thoughts. While solving problems, it gave them peace of mind. Crowley and Munk (2017) stated that mindfulness (or mindful attention) of what is taking place in the present is part of meditation, and their results showed that through meditation, students became more mindful.

Pertaining to how students felt at the end of the semester about practicing mathematics exercises, some of the words they used in Question 4 of the modified survey (Tables 3-5) were "Stressed... I have to keep moving," "okay," "alright," "comfortable," "relief," "better understanding," "good," "tired," "excited," "better," "confident," "successful," "amazing," "enjoyed it," "helpful," "useful," and "able to remember the formulas."

### Quantitative Results TEACHING

To obtain quantitative results, a count was taken of the number of participants in each class who used synonymous words for mindful, focused, and present in the qualitative results. Then, a percentage was found for each class by dividing the number of participants with synonymous words by the total number of participants who took the survey, and then by multiplying the quotient by 100%. Seven out of 8 participants (87.5%) in the spring 2016 MATH 081/082 AMP course expressed that they were mindful, focused, and present in the mathematics classroom. At least one student did not respond in accordance with the question asked. Nine out of 9 students (100%) in the spring 2018 MATH 081/082 AMP course expressed that they were mindful, focused, and present in the mathematics classroom. Eleven out of 11 participants (100%) in the fall 2018 MATH 081 course expressed that they were mindful, focused, and present in the mathematics classroom. Eight out of 8 students (100%) in the fall 2018 MATH 081 A AMP course expressed they were mindful, focused, and present in the mathematics classroom. Thirteen out of 13 participants (100%) in the MATH 081/082 B AMP course expressed they were mindful, focused, and present in the mathematics classroom.

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#### DISCUSSION AND CONCLUSION

Survey responses affirmed and supported the hypothesis that using mindfulness/contemplative practices encouraged students to be mindful, focused, and present in the mathematics classroom. In fact, Higgins and Eden (2018) stated that some argue that in elementary mathematics classrooms, "Mindfulness-based breathing practice itself acted as a heuristic for thinking about learning environments." The results found in this study can encourage the instructor to continue employing the "Mindful Minute of Deep Breathing" and "Beholding the Mathematics" practices. Also, the instructor can do further research to see if using mindfulness/contemplative practices in the mathematics classroom translates into success for the students by using the final grades earned at the end of a semester.

The instructor could change the survey questions (based on the current results) to incorporate a Likert scale using responses like "strongly agree," "agree," "neutral," "disagree," or "strongly disagree" with numeric values and share the quantitative results in a more systematic manner. Unfortunately, further research will not be able to be conducted now on the students who participated in the surveys mentioned in this paper, since the students have now gone their separate ways after taking the courses and their responses were anonymous. However, future research can be done with 2 similar mathematics classes at the same level (preferably), side by side. One class can be an experimental group and be immersed into using mindfulness/contemplative practices daily in the mathematics classroom, and the other class can be a control group conducted without the use of mindfulness/contemplative practices. Then, the instructor can gather information on the performance of each class to see if the mindfulness/contemplative practices had a positive impact on student success.

Although the instructor did not find sufficient available published research similar to this research study, the instructor hopes that this work will contribute to a growing body of knowledge. Thus, the findings could contribute to more effective teaching and learning if instructors intentionally employ

mindfulness or contemplative exercises such as the "Mindful Minute of Deep Breathing" and "Beholding the Mathematics" practices to help students be mindful, stay focused, and remain present or engaged in the mathematics classroom. Other instructors can use the results and start to implement mindfulness/contemplative practices in their mathematics classroom or any classroom for that matter. In addition, other instructors can employ the innovative classroom techniques outlined in the PowerPoint slides in Figures 2 and 3.

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#### **TABLES**

	ocband.cou Table 1. Spring 2016 MATH 081/082 Mindfulness Questionnaire						
	1.Write your own definition of mindfulness.	2. Why do you believe we engaged in this activity?	3. How do you think this activity applies to this class?	4. How do you think this activity applies to you and your life?			
Answer 1.	Being considerate of yourself and others as well as certain factors of life, like if a person is on the phone being quiet would be being mindful of their conversation	To gain peace of mind in the classroom, to respect the classroom and teacher more	This class isn't always mindful of the learning environment so this is a good activity to lead us back on track	Personally, I could be more mindful of a lot of things and others as well			

Answer 2.	Mindfulness is a form of meditation	To clear our minds & thoughts and to relax	Math is a stressful subject for most people, so it helps to calm us down	Everyone needs to take time and just stop and meditate and relax our mind & spirit in this (sometimes) chaotic world
Answer 3.	Being considerate and respectful of something EX, consider studying before a test	Because of our grades or behavior	Yes	Probably so I have 2 jobs so I have trouble remembering things because school doesn't pay for itself
Answer 4.	Built up thoughts that can control your actions and affect your thinking	To release tension	To get you more focused on classwork	It can help everyday if you get too stressed
Answer 5.	The definition of mindfulness: I have a positive mind and stay focus	To make our mind stay in class room and stay focus	To stay focus. To take I min breath and check your heartbeat	To get yourself ready for work and class
Answer 6.	or worried thoughts and make you prepared for the next moment or thing you are about to do mis issue.	To become aware of what we were doing and where we are and to be more focused	It get you prepared to be focused	It might be making me more prepared for math class and concentrated
Answer 7.	To calm down, release inner thoughts and from feelings, being ther from mindful of situations around you Research At	To calm students down, release tension or stress t	It can apply to anything, any stressful situation, not just this class. I think it applies to this class because the subject we are learning could become stressful to students and instructor	Anyone can do it, no matter who you are
Answer 8.	Think about present not in the past and is not an exercise	Yes, because it can clear your mind	Is helping me with processing what I'm doing in class	Yes, because I can focus on what I'm doing

	Table 2.						
	Spring 2018 MATH 081/082 Mindfulness Questionnaire						
	1.Wr	rite your own	2. Why do you	3. How do you think	4. How do you think		
	defin	ition of	believe we engaged in	this activity applies	this activity applies		
	mind	fulness. cobound.	this activity?	to this class?	to you and your life?		
Answer 1.	To be	aware of self.	To become more	It allows us to rid our	I can think more		
	Being	g grounded in the	focused for learning	minds of the clutter so	clearly when I am		
	prese	nt		that we may retain the	grounded and		
				information being	therefore make better		
				given in class	decisions		
Answer 2.		breathing	To be able to focus in	Well it helps us pay	It helps you de-stress		
		ise where you	class better and we are	more attention	yourself. It helps me		
		your head from	more likely to capture		complete the tasks that		
		thing to be able	the information given		I have to get done.		
	to foo	cus on something	to us		And I am more able to		
	else				take control over my		
					mind		

Answer 3.	Breathing exercise to aim your focus on the task you are about to embark on	To clear your mind from all previous activity from the day and help in focusing	It helps to clear your mind to concentrate on the task at hand	It aids in balancing. One's life must be balanced. It can reduce stress
Answer 4.	Being free from negative thoughts; having a clear mind; stress free	To relax our mind	It helps us to stay focus on the topic or an exam	I am able to take a step back and get my thoughts together. It allows me to stay focus and concentrate
Answer 5.	Mindfulness is a way to have your brain aware of what is around oneself	So that it can help us before taking a test but to help us for other classes and other important events for grading	It applies because it helps people who are freaking out to calm down and that everything will be ok	Applies to my life mostly because I worry and put stress on myself where if one relieving source doesn't help but I can do this as a backup
Answer 6.	Mindfulness is being aware of the surrounding environment. This is ratio the people and situations around us every day	To be aware of what is happening around. Sometimes we get caught up on our own situations, what is happening to us and we forget that others go through similar or worse things that we do on a daily basis	Being mindful about my classmates, for example, gives me an open mind about the learning environment. Realizing that there are people from different backgrounds and different cultures gives me a better learning experience	Life happens to all of us, but we are selfish people who are only worried about ourselves. We blame the environment or others for the bad things that happen to us
Answer 7.	To myself, Letter from mindfulness means respecting one's led Pers boundaries and area of safe calm space	To calm nerves and settle ourselves before class because many students come from work	I think it calms it before doing a lot of brainwork	It gives me a chance to calm down after a long day if I'm stressed
Answer 8.	A mental state of awareness	The professor expects attendance, and keeps us fully aware of her expectations in correlation to our capabilities which is why we were given "moment of silence". Dr. Mary Walkins wants us focused to bring out our best	Keeping us mindful of our capabilities deters us from succumbing to our own expectations. Rather, we keep aware of what needs to be done	Better to be focused than utterly clueless
Answer 9.	I would say that mindfulness is a process that helps you transition and be mentally prepared from 1 set of work to another	Because we all come from different background and we all meet in class so the activity helps to be fully aware about what is going on	I think this activity is basically helping the class prepare for the course with a full mind set	It helps the process of transitioning and that is happening through the life

	Table 3.					
	Fall 2018 MATH 081 Mindfulness Questionnaire (Modified)  1. Why do you					
	believe we engaged in these mindfulness /contemplative practices (for example, deep breathing or beholding)?	2. How do you think these practices apply to this class?	3. How do you think this activity applies to you and your life?	4. How do you feel today about practicing mathematics exercises?		
Answer 1.	We engage so we can release some of the stress that we have throughout the day and our minds to be refreshed from everyday life stress	Well, they clear your mind so you can have space for more and participate more. Also, less stress	I know for a fact when I enter this classroom, I be drained and exhausted from work, so then 1 minute breathings be very helpful	Stressed. But I do it because if everyday you do not learn something new, your life is on pause. I hate being paused. I love to keep moving		
Answer 2.	To make the class focus on math & relax us	These practices take time out for us to feel calm & focus on our breathing	This activity helps with stress	Okay		
Answer 3.	To have some peace and quiet and take away all the stress so E we would be able to do the classwork and be focused Letter from I Invited Persp.	It is very helpful because whatever you were going through or whatever stressful moment you had going, you have the time to get it all out and ease your mind for what you're about to do	It applies to my life by calming me down and relaxing and having the time to think and not worry too much	I feel great. I haven't done math in a long time, so just remember, the little steps help me out a lot to do math problems in this class		
Answer 4.	To clear our thoughts and get ready to take notes and do work	To think more clearly on problems	It makes it more clear to do work instead of pressure	Alright		
Answer 5.	To help us concentrate during class	I think it keeps us from getting frustrated	This has helped me become patient with things in everyday life	It is something that requires a lot of time and patience		
Answer 6.	To help us to focus and calm ourselves	Clears our heads to be able to work better	I don't know	I am comfortable with it but I am not sure if I will use it		
Answer 7.	To get ready for math class	Help you to focus	Helps to relax and not worry	Alright		
Answer 8.	To know what we are doing in the class; have relief before the class; stress relief	Good	It makes me to come down in class – feel happy to learn in the class	Feel relief before class		
Answer 9.	To get rid of negative energies & anxiety. Exhale toxins	I personally am medicated for anxiety & the breathing does help relax my mind	Teaches me to stay calm & have faith and to get rid of all negative thoughts & think more positive or feel more positive & believe in myself	I feel I still need a lot more practice but I feel that I have a better understanding than I did before, because I put more effort and have believed a little more in myself		

Answer 10.	To relax us before we engage in our assignments	I think it worked out well for quick relaxation	It reminds me of how I can apply this to stressful situations at home and work with a quick moment	I feel good. I'm exhausted but most college students are exhausted due to the amount of classes we take. Overall, I'm tired but excited about my progress
Answer 11.	So we can relax & focus	I don't know	I don't know	Fine

	Table 4.				
Answer 1.	1. Why do you believe we engaged in these mindfulness /contemplative practices (for practices (for practices) (for practices) (for practices) (for practices) (for practices) (for practices) (for example, deep breathing or beholding)?  I believe it is for everyone to take the stress of the day off of their shoulders and to just relax and concentrate on the from class	2. How do you think these practices apply to this class? You are leaving the stress of the day outside of the class in order to focus	AND LEARNING EXCELLENCE THROUGH SCHOLARSHIP  3. How do you think this activity applies to you and your life?  Sometimes you need to just take a break and take a deep breath and let the stress go	4. How do you feel today about practicing mathematics exercises?  I feel a lot better and accomplished that I know more math than when I started	
Answer 2.	It takes your mind off things and helps you a calm down for a second	Makes you aware of what's going on	It helps you to always be prepared	Tired	
Answer 3.	I believe it helped us set our minds to math; a time to clear our heads and just breathe	I think it helps us focus on math better; I let go of outside worries	It helps me relax; I often do them at home as well	Confident	
Answer 4.	I believe we engage in these mindfulness practices to leave behind all that we have in our heads, all the problems, and focus on what we are learning	Beholding is very important because we have to look at the problem in front of us before actually diving in and solving it	They can help me focus on whatever is going on in my life and leave all the unnecessary, and beholding can help with looking at what is in front of me first before I go and look for a solution	Math is a hard subject for me. It always has been but when I took my placement test at my transfer college, my score was 78! That beats the 43 I got when I started CCBC	
Answer 5.	To help our minds to relax, calm down, and change our focus to math to learn easier and retain more	Help us to focus more and learn the complicated math easier	It applies to my life because I can use it to maintain/change focus	I feel good and successful	
Answer 6.	To get our minds ready and settled for class, so that we could really be focused and not thinking about anything else	Fully focused	Sometimes you need to just breathe and just pay attention to what's in front of you	It helps others but not me. As long as I have my music I'm good. I can focus with music. The music is just in the background of my	

				head and it keeps other thoughts from distracting me
Answer 7.	I think we did it just to take a minute to just think + free our minds of thoughts outside of class and to just relax	In the class, some questions have an underlying question too, so you have a moment to think and look at everything before solving	I have to think before taking action. I can't just act immediately. I have to just focus on what I'm doing	I feel more confident in doing math exercises. I have a better understanding
Answer 8.	It can calm you down	Yes	Helps with stress	I feel a lot more confident than I did before taking the class

	$\Lambda$		AND LEARNING				
	Table 5. EXCELLENCE						
	Fall 2018 MATH 081/082 B Mindfulness Questionnaire (Modified)						
	1. Why do you		SCHOLARSHIP				
	believe we engaged in	journal to enhance the quality of con	imunity				
	these mindfulness	n through classroom research.					
	/contemplative at 2021 * Volum	o 1		4. How do you feel			
	practices (for			today about			
	example, deep	2. How do you think	3. How do you think	practicing			
	breathing or	these practices apply	this activity applies	mathematics			
	beholding)? IN THIS ISSUE:	to this class?	to you and your life?	exercises?			
Answer 1.	I personally believe	Class and school can	I have loads of	Amazing. I thank God			
	that it is a way of	be very stressing	homework each and	for having such an			
	relieving our stress.	already, and work	every day and I am	amazing and patient			
	We are able to take	after class can also. A	working 2 jobs –	teacher. I believe I			
	deep breaths and	moment just to simply	weekdays and	have learned so much			
	simply just relax and A	breathe and get	weekends. This	about my love for			
	forget all of the	ourselves together is	moment of	math even more			
	problems and anything	always a good thing	mindfulness really				
	that is bothering us out		helps me a lot even if				
	the door		it is for one minute.				
			It's one minute I get to				
		A = A	relax where I am not				
			stressing over	- A			
			something else				
Answer 2.	I think it's to relax the	There's a lot of	The activity helps to	I'm more confident in			
	student and get their	calculations in this	calm me down	my math skills now			
	minds growing	class and I think it	especially if I am	and I learned not to			
		helps students think	doing something that	second guess myself			
	(C) CCB	clearly	requires critical				
	cobound	di	thinking				
Answer 3.	To clear our minds	Because math is a	Take a step back and	I feel slightly more			
	before starting math	more challenging	relaxing for a bit could	confident in going into			
	work that some of us	subject and you must	help me get back on	them now because of			
	may find stressful	go into learning it with	step with tasks	the knowledge I have			
		an open clear mind		learned here			
Answer 4.	Helps go to focus on	I think it helps a lot of	I do have a lot of	It's ok. I enjoyed it			
	learning	people	stress on me at all				
			times, so some days it				
			helps me to take a				
			minute to think				
Answer 5.	Clear head before	Sure	Sure	Ehh still need some			
	class			work. Not Dr.			
				Walkins' fault			

Answer 6.	We do mindfulness to relax and regain focus	To help us focus and prepare for what we're about to learn	To help me relax and concentrate	It's not as hard as I thought it would be
Answer 7.	To let out any negative energy you had before you came to class	Keep your mind settled and very peaceful	When times get hard, take a couple deep breaths. Everything will be ok	A little nervous – just need more practicing
Answer 8.	To focus on learning and not be distracted	The practices apply to the class because we do it every class.  Taking 1 minute allows us to concentrate	This activity applies to my life because when you just take a second and breathe, you can clam yourself in stressful situations	I feel that it is both helpful and useful
Answer 9.	I believe we start class like that because it's a new day - fresh start. Leave anything negative behind from hours before or a day before	Helps us get started to a new math day. Concentrate on what we'll learn	Sometimes we need to stop and breathe. No negative circumstance or stressful day is forever. Taking a breather can relieve us in many ways	I feel great =)
Answer 10.	I believed that it and voter prepares us for the class and relaxes us	By allowing us to think/observe the problem before we actually attempt it	Before I do my homework I apply the beholding to every question before I do it	I feel good/confident
Answer 11.	We practice management mindfulness to help us relax and let go of any stress before class	Relaxes the body to think fast and to absorb what is being taught	Helps me forget my lingering thoughts	I think I have improved greatly as compared to a few months ago
Answer 12.	We engaged in these mindfulness practices to clear our mind from outside concerns and be focused during class	They apply to this class because we need to be focused in order to understand the math problem	Not really, but it is a new experience for me that I had to apply in my life to distress	I feel more confident today than I was on the first day of class. Practicing mathematics exercises contributed to my overall understanding of maths
Answer 13.	To bring our mind into class	Slowing thoughts help to concentrate better	My mind never stops, so it helps with trying to focus on one thing at a time.	I still feel that I'm shaky but feel that I understand the processes better and I'm able to remember the formulas

