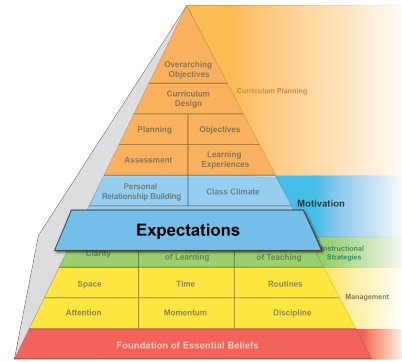


**Expectations  
Feedback and Building Student Confidence  
That Mistakes Are Normal  
“Learning is Messy”  
High School Mathematics  
WITHOUT RBT ANALYSIS**



**CLIP #1**

Script	Comments
<p><b>PG: I hope you guys realize that learning is messy, so...it’s gonna be...It is OK to make some mistakes so there is nothing wrong with that. So, let’s see what we have...Now, I do have one issue in here with number 12. What is the formula to find axis of symmetry?</b></p> <p>Student: Alright, see we have to fix that.</p> <p><b>PG: You have to use that always. Why don’t you write that down, Louie? If I was you before I start looking for the axis of symmetry write down the rule for that. How do we find the axis of symmetry? What’s the rule we have to use? It is right here—number one.</b></p> <p>Student: <math>X = -b</math></p> <p><b>PG: Right, write it down. And look at number 12 and tell me what’s wrong in number 12.</b></p> <p>Student: B is 8..., 8 divided by 2 is 4.</p> <p><b>PG: Look at the axis of symmetry again—read it out. <math>X = -b</math>, minus b, negative b.</b></p> <p>Student: Oh, it is supposed to be negative...</p> <p><b>PG: Alright, if I was you when I was doing it...because if you don’t have the right axis of symmetry most likely the graph will be wrong. So, use the axis...write it down. Do it as practice, before you start looking for it just always write it down...</b></p>	



## CLIP #2

Script	Comments
<p>Student: That's 13.</p> <p><b>PG: That's 13, opens down. Let me look at the example. OK guys, let's pick up the pace please.</b></p> <p>Student: It's y equals negative x to the second plus 4x plus 3.</p> <p><b>PG: Now we know it is going down, very good. So that would be 2 for the axis of symmetry. Do you have -2? I am looking at -2 here.</b></p> <p>Student: But it's 2.</p> <p><b>PG: Alright, so you need to change that on that, alright, so that's 2. Plug it in. Very good. Do you have -4 or 4?</b></p> <p>Student: -4.</p> <p><b>PG: Beautiful. But you need to show me...that is the perfect, I am impressed with that, but you need to show me how you get -4. Whenever you doing substitution you need to use parenthesis. That is the right answer but if I were in your shoes doing that, alright, I would do...you got the right answer, there is nothing wrong with that, but there is just something I would like to share with you. That is -1 times what is the value of x?</b></p> <p>Student: 2.</p> <p><b>PG: 2 to the second power plus 4 times 2 plus 3. So that would be 2 to the second power which is 4, 4 times -1 is -4. That's what. It is like when I am checking your work that is what I am looking for...even if you got it wrong or right it really doesn't matter to me, I need to see that step. Alright? And if there is any mistake if you do that step I am going to be able to help you out...OK, very good...so let's finish that up, that's -4. That's 4 plus 3 that's 7, why -7?</b></p> <p>Student: No, its 7. I erased something over it.</p> <p><b>PG: It's 7, OK. Alright, -1, plug it in. That will be -1, -4. -3 plus 2. Check that again when you do the substitution. Show the work for the -1 you are using.</b></p>	

