

VTS: *Visual Thinking Strategies*

Discussion with Dr. Carol Johnson, Superintendent of Boston Public Schools and Dr. Abigail Housen, co-founder Visual Thinking Strategies

Visual Thinking Strategies is the result of more than fifteen years of collaboration between cognitive psychologist Abigail Housen, veteran museum educator Philip Yenawine, and their colleagues. To date, VTS is implemented in over 200 schools nationwide, including 14 schools in Boston. Dr. Carol Johnson, superintendent of Boston Public Schools, has consistently championed the arts as vital to student learning and school innovation. Dr. Johnson has an abiding belief in excellence, in equity for every student and her mantra is, "every child, everyday college bounds the democracy thing again." She came to Boston in August 2007 and before that she was superintendent of Memphis City Schools in Tennessee and the Minneapolis Schools in Minnesota. In both places she won Superintendent of the Year Award.

This conversation between Dr. Carol Johnson and Dr. Abigail Housen took place on November 11, 2008 at a special event to discuss VTS in Boston Public Schools. Before the conversation, guests participated in a VTS discussion.

Abigail Housen: Our conversation (...) started (...) bubbling in my brain about four or five weeks ago when Dr. Johnson and I and my museum colleagues from the Boston VTS Consortium met with her to discuss this evening. She and I just started to talk and everyone else sort of disappeared. And we had an hour and a half wonderful discussion about education, about VTS, about learning. I (...) wondered whether we could, not repeat that, but continue that conversation with all of you here. I do not know if it is possible because it was so spontaneous, but we are going to try.

I am (...) going to start with a sort of throw away question because I know something about Dr. Johnson that you do not know, which is that she was first introduced to VTS when she was superintendent of schools in Minnesota, which was in the mid 90s, early 90s.

Dr. Johnson: Hmmm, yeah.

Abigail Housen: So maybe you can explain that introduction so we are all on the same page.

Dr. Johnson: Well, actually I am very excited to be here tonight (...). I just want to digress a little bit. One of my bosses, one of the school committee members is here this evening, Helen Dajer, and I just want Helen to raise her hand so you can see her over there. And then one of our assistant superintendents who is in charge of curriculum instruction, Marilyn Decker, is here too.



So I actually started learning more about Visual Thinking Strategies back in 1998. We had a grant from the Annenberg Foundation to integrate the arts into teaching. And most of the time when you think about the arts, especially around museums, people think of taking students on a field trip, they go to the field trip, they come back, and that is it. You know maybe they talk about it, they draw some pictures, they kind of wander around, sort of aimlessly, listen to the curator, or someone give them a tour, and really that is kind of the experience.

(...) At the same time we were trying to think through, at least in Minneapolis, how would you change the work if you really wanted to accelerate performance? And I think we concluded that one of the things you had to do was change teacher's practice and what teachers did. Very often what teachers would do is they would ask very direct questions that allowed students to give sort of one answer-- and there was one right answer and only one student would get it or get the chance to exhibit their expertise. So when we came upon Visual Thinking Strategies we saw a model for how teachers could be taught to ask different questions that were more open ended, which would invite more participation and engagement from students. (...) We started out thinking about it in the arena of the arts, but I have to say that it soon grew into thinking about it in terms of its impact on teachers' work. And as I was thinking about it in our conversation today, I was thinking about what evidence do I have and of course I did not realize that you (the guests) were going to have evidence here, and force you to be part of the conversation.

I think that what I learned from teachers was that they had absolutely no idea that they could get fourth graders to talk for an hour, endlessly about one picture. The other thing is that I had a first grade teacher tell me this, she said, "You know when I am teaching in first grade it usually takes me to the spring to get young children to speak in complete sentences." And you know (...) many of these children (...) are urban students who sometimes are speaking in nonstandard English, even if they know English, and then some are not. "But once I was trained in the Visual Thinking Strategies," she said, "I had my students speaking in complete sentences in October and that is because of two things—I affirmed what they said, I modeled what they said." (...) The teacher modeled language in complete sentences. That gave students samples of what the language would be like.

I think what we saw through this process, we saw improvements, particularly in third and fourth graders in reading and in mathematics on the test that we would give, the state test. So even though we did not start out thinking about Visual Thinking Strategies as a vehicle for improving teaching, and improving learning, and improving our performance on assessment, the outcomes for us were pretty profound in terms of the results that they would demonstrate.

Abigail Housen: Well, one of the things that it reminded me of, is that someone mentioned that this could be a science program. And the reason it's an art program is that works of art have more than one right answer. They have multiple answers. And they have answers that deepen and become more complex. The more you look, the more you see. What happens is that many kids can be right. And there can be two opposing points of view. And at no point does the teacher have to come in and say, "Actually, the ball does not fly up in the air. Things drop and that's gravity." You do not have to go there. There are aspects of science where you can use VTS, and there are aspects of history, and all your subject areas, but at a certain point there are barriers where there is a right answer to certain things.

With VTS, if you start VTS, there is this whole way of opening up people's minds to the possibility (of) multiple answers and how it is okay to change your mind and deepen it.

And how it is okay to also be wrong because as you are talking you can say 'first I thought it was this, now I think it's that'. And you have that basis for evidence reasoning without this sort of "no, no, no part, do not go there". As you can see, we choose these works of art that are so complex that kids can look at them over time.

One of the goals, and there are many that are much more developmentally based goals, but I also wanted kids to see images that they might see again in twenty years if they were in a museum, (...) they would say, "Uh-huh. I remember that." And the reason I know kids would remember (...) is that very early on in New York when we started a trial of VTS at the Met, one fourth grader was having her museum visit after the first year of VTS. She was walking down the corridor and she turns to the right and she looks at (a painting) in the corridor. And she says, "That is the same person that drew that other image" –an image that she had seen in class. So she understood the artist's fingerprint. She did not know the name, the date, you know, any of the facts, but she recognized the artist. Which you know to this day still brings chills for me. That's because (students) look so hard they get this ability to think in all sorts of ways that we do not allow kids to think often in schools, as we march through classes and materials very quickly.

Dr. Johnson: Let me just read this--here is a teacher's comment, "I did it today with my second grade class. And here is a little boy who has not spoken in this class since the beginning of the year. Because the playing field is level and every answer is okay, he said something for the first time. I could hardly understand him. He had to say it a couple of times, but he said something, so this was really like a 'Wow' for me."

So I think that is what it does is, particularly with special ed kids, special needs kids, students who are not as academically proficient yet. The fact that we are all looking at one common experience and every answer is okay, encourages a level of engagement and response that we do not often get when students think there is only one answer and only the smart kids know it. And so I think (...) what it does too is it changes the expectations teachers have for certain students because they have already sometimes formed an impression about who is smart and who is not based on the data of the test or some other evidence. And so this other evidentiary piece helps them to think about the student's capacity to perform at a higher level, I think than otherwise would be possible if there were no opportunities like this, for that kind of engagement. So I think it was really brilliant for Abigail to create such a program.

Audience: Laughter

Dr. Johnson: But really just quite profound. It has an impact on teachers' work and an impact on student outcomes, and in a very real way. The other thing is, I think that while testing is important, and we want to know student outcomes, we also want them to think. We want them to learn from other's perceptions of things. And even as you (the guests) looked at the picture as other people commented, you saw things that you never would have seen. So the other part of it is, is learning from other students and engaging in the conversation. And (on the DVD) you heard the two boys say, "What do you think? Do you think he came out of the sky? Where do you think he came from?" --- they are asking each other for ideas and thoughts. And it feels safe because one does not feel less than the other student.

Abigail Housen: And I hear that from teachers a lot. How they are hearing students speak up for the first time that never spoke up in class. And they are hearing kids who are afraid or who are not even certain of their English Language Abilities, and do not want to speak-up even though they have great thoughts, try to speak-up because they just have to. You (the guests) all had your hands up. You just have to say something. You want to be called on. You are seeing something and you have to say it.

And it actually is something we discovered in the late 80s, in a four year study we did, that we called the floor-effect. The most struggling kids move the fastest at first and they sort of start to catch-up (...). They just need interaction with their own minds, with their own words, with other people for it to just happen. And I still find, you know, all of a sudden these kids that were struggling are right up (there), (...) in terms of what I call aesthetic thought, which includes critical thinking. And in terms of critical thinking they just moved up because (they) are talking and speaking and sharing. It is one of my favorite findings, the floor-effect.

Dr. Johnson: Well, I think the affirmation piece is very important, affirming what the student has said. The questioning piece is a really important part, (too). You are asking really open-ended questions that invite participation. The paraphrasing (...) is important because for students who come from families where they have not developed extensive vocabulary, this modeling and paraphrasing allows the teacher to teach vocabulary in a nonthreatening way, and in a way that allows students to construct meaning. The other thing that I think that I want to say is, children are able then to critically think about an object and construct the meaning before they actually have language or the words to construct meaning, so they're getting that sort of pre-vocabulary preparation. The affirmation and paraphrasing gives the teacher a chance to teach words that may not be in (the students') typical home vocabulary.

Abigail Housen: And you get the ability also to develop all sorts of skills before they read. And almost always all those years are wasted in terms of the pre-reader, in terms of being able to articulate a thought, support it, and defend it, and put that into a sentence. And if you cannot read something like that, and if you cannot get information from something, it is hard to find the words to write about that thing that you are having difficulty understanding through a reading method. So it is using those years even though the curriculum goes up through adulthood.

Audience: Laughing

Abigail Housen: But it is using those early years of preschool, and kindergarten, and elementary school really effectively before the less strong readers become strong readers, which (...) again, changes the teacher's perceptions of them in that period when these kids are not readers yet.

Dr. Johnson: I think a lot of students, now because of T.V., because of videogames, are a lot more visual learners, so we see this need to connect visually more evident than we are used to. So I think what we want to (...) build on that visual is the capacity to really look at detail and to observe detail, and to ask questions, and to think more deeply about what is on the surface, and what could be underneath it. And I think these kinds of skills are truly transferable, particularly in the sciences and social studies. You really got students to think more deeply about the meaning of the history and apply language to it.

Abigail Housen: And we do have teachers now that will start with a normal VTS lesson and then apply them to science, or history, or writing, or other language arts, really successfully, but first you have to have that VTS background. Where you really are comfortable looking and looking hard and supporting what you say, and then looking again, and coming back with complex and contradictory points of view. Once that is there they just move right into other subject areas really fast.

Dr. Johnson: I think one (...) thing that Abigail mentioned too that I just want to go back to (...) is (...) this is not an activity like you do an activity and it is done. Students have to have multiple trips to the museum, and they have to have multiple opportunities to

practice the skills, and teachers have to have multiple opportunities to practice the skill. Because what you saw here I think at the end of the year (in the DVD) is because (the students) are now comfortable with going through the process in a way that they feel safe in doing it, (...) they really are focused and engaged. Part of the reason that I think a lot of students are not doing as well as they are, may drop out early, is really about engagement. How do you engage young people to put in the extra effort that is required to perform at a very high level? And I think sometimes we make the assumption that some students cannot perform at this level --when given the right kind of engagement activities, taught vocabulary, given experiences, they can actually perform at a high level despite the family barriers.

Abigail: And not only do they perform well, but teachers see them perform well, so their whole opinion of those students turns upside down and they now have new expectations of (them). And I hear it enough, (...) and I have seen it enough, where this little kid that has never spoken, raises their hand at the end of everyone (...) discussing something and just revises what everyone was looking at, having never spoken before. And that little person that raised their hand at the end is just as determined to get their voice heard... So they get engaged in a conversation with their other classmates. They know they are not going to be criticized. They know they are going to paraphrase the way everyone else is. It is (...) an even playing field. And when they put up their hand and say something that everyone else has not seen before all of a sudden the other kids in the class, as well as the teacher, has a whole new vision of that child (...). I mean we all know what expectations do for performance and that changes the teacher's expectations of every single child in the class because every single child in the class gives something surprising, and unique, and deep, and wonderful. It is not just one, it is just everyone. And it is often not the smartest one that gets it at first. (...)

Dr. Johnson: Abigail you have trained all over the country with teachers in other states, so what would you say you have seen as a result of that?

Abigail: I have not done as much of the training as maybe some of the people here, or my colleague (Philip Yenawine). (Philip and I) wrote the curriculum together and (choose) the images together. I do the research and he goes on the road more. But I have visited various places and...

Dr. Johnson: I remember when you came to New Hampshire.

Abigail: Yeah. I do visit places and I ask questions about every single school and teacher. And what happens, without a doubt, is when we go into a school, (...) there is teacher and school change, and student change. We only have one impediment to what we do and I guess you can figure out what that is. And so I am not the person who is going to go into that.

Audience: Laughter

Abigail: We have never had a school, that I know of, that ever wanted to stop the program or to change it... They want it. My computer is full of teachers, comments, principals' comments, and parents' comments. (...) They are just amazing. Each one of them will have tears in your eyes, in the sense that they are very excited about the program. They are excited about learning.

Speaker from the Audience: Can I just add something which is for those who have worked with a lot of teachers. What happens is this same conversation about learning and teaching happens in a very exciting way. And the same way that the kids are excited about talking about art, (...) the teachers are excited about talking about art, as

well. But this program gives them a structure and a place to really focus their energy, and their thinking about teaching, and about who the particular kids are in their class, and how they can reach them. And this again opens up a whole new way of thinking about the students, who they are as the teacher, how learning takes place, and it is a very exciting thing....And I think it is part of why people are going to want continue doing it.

Abigail: Teachers are hungry for this. They have been asked to do drill and drill and drill for tests. And they went into teaching to teach and in all different ways and...

Speaker from the Audience Two: And for all those faces.

Abigail: For the broad vision of teaching that gets kids to think, and to be engaged, and to feel their voice, and to discover who they are, and who the person next to them is, and what the world is about, and to have questions, and to feel they can go search out those questions, and to find answers to them. If they do not have those answers in front of them, part of VTS at some point is to (figure out) where you would go to find them. We never give answers. It is always a discovery process, whatever level it is, and teachers are hungry for this. Maybe some of you are teachers...I cannot imagine you disagree.

Audience: Laughter

Abigail: In the sense that you want to have these sorts of discussions with your kids, as well as, give them the basic skills they need.

Dr. Johnson: I think what I saw happen, particularly in Minneapolis, was that initially we had some funding for teachers to pay for the training and then when that funding ran out, teachers still came. And lots of them came from the same schools because as new teachers came on board, they wanted the training. I was fortunate because Kathy Halbrecht, who was at the Walker Institute in Minneapolis, and she chaired our academic excellence committee and she was able to help us raise local money. Kathy was really quite a supporter of the work of VTS and the work we were undertaking too, really. And some of you know her obviously if you have been in Boston for any time because she was over at the MFA. I hear she is in New York now at one of the museums there, but she did an extraordinary job of trying to help.

So I guess let me just say that I think that one of the messages that I hope you hear is that while we are very, very committed to our children passing tests and being able to graduate from high school and not dropping out, we are equally as committed to young people developing the appreciation of the arts. And we believe that the arts are really connected to a larger set of work about what it means to be a learned person in this country. Sometimes the things that we test miss the things that we believe are really important for students to know -- about working together as a team, about listening to others, about getting along with other people, but also being able to think outside of the box and create new ideas.

Because I think what America has really been extraordinary at is creating new ideas and being more innovative. Other countries have taken, sometimes, ideas that have come from this entrepreneurial spirit in America and what they have done is replicate it faster and cheaper. But it has been really America's capacity to create and to generate new ideas. And always my fear, and I think a lot of educators' fear, is that if we only make sure students pass the test, that at some level they will fall short of being able to keep America on the cutting edge of creativity. So we have to think through how we combine the dual goals of academic success and also really continue to enrich young people's lives so they are engaged, so they (...) think of new answers to questions, so that they see

things that we might not have seen, and then understand how they may create different answers to questions that we do not have answers to yet.

So I believe that the VTS model is one of the most powerful models for really engaging young people, changing our perceptions about who can learn and who cannot, and also really building a foundation where teachers work in a very real sense. So I was a fan before I came to Boston. But I am equally a fan of the arts and music. And I will just say this, we did a survey recently, with support from the Bauer Foundation, to (...) find out what is going on in our schools. And here were some of the key findings. So music is the most popular art discipline, pre-kindergarten to age eight. And then visual arts begin to pick-up more in the middle schools. But really the middle schools are places where teachers often do not know how to engage young people. And they (students) are very distracted. And so this notion of how do you build a group of teachers' skill sets so that they help students be engaged and they help students be more observant? Because those are clearly areas that they are going to need help in.

What schools reported in the report is interesting. Normally, when superintendents send surveys out to teachers and principals, which we did, we set out a survey in May to all the schools, typically we get a slow response because everyone is busy in May--no one wants to fill out a survey. But they thought when we sent it out-- it said this is a survey to find out about the arts and they heard me talking about it --and they thought if they filled it out right away it might mean money. So we got a 97% response. And researchers said, "I cannot believe the response rate. Why are they so responsive?" I said, "Because they think that I am going to build it into the budget and they are going to get more money." We did get a really good response rate. But I think the thing...Well, here is what they said, "Limitations..." Here are the reasons they said they are not doing more in the arts, "Limitations to the school budget was overwhelmingly noted, 91% , as the number one factor that prevented them from offering more arts education. And then the second most common response was a lack of public/private external funding. And again the third response was not enough time in the school day for arts education."

So I think that I recognize and I believe that the schools cannot do it alone. ...(T)he integration of the arts has to be both a powerful thing that we advocate for and we work into the school day and teach teachers. But we have to have partners like the Gardner (Museum) that help us to give teachers the skills to work. But most teacher education programs do not really focus on the arts as an important and integral part of learning and I do not think you would be here unless you understood that very deeply.

Moderator: Thank you very much. That was a fabulous discussion and I hope one you can continue upstairs in a couple of minutes. I want to close up this evening by saying that I have been Abigail's research assistant for 33 years. Believe it or not we have been working on VTS that long. It has been a long time and this is a very polished agate, let us put it that way. In the early 90s when the Soviet Union was coming apart, the then minister for education came to New York at the invitation of George Soros and went shopping for education innovations in New York. And he happened to come into a VTS class and he said, "I want that for Russia." And George Soros, unbelievably to us, funded the teaching of VTS in seven of the then countries that composed the Soviet Union, including Russia. When we went there in the mid 90s, I was really taken aback, stunned actually. We thought we had an arts education program and the Russians talked to us about this being, in their eyes, education about democracy. What they meant at that time was that this was a way to teach, allow kids to say what they actually thought, out loud, in a public school setting....