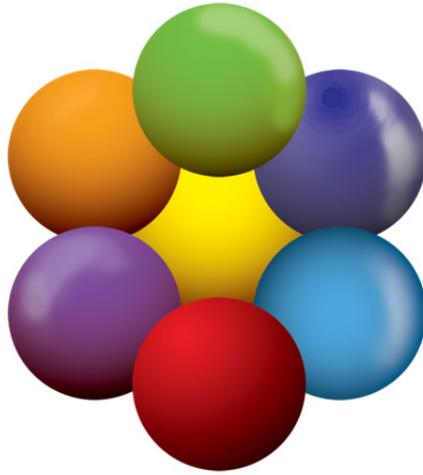


Just ASK's

**Review Strategies in Action
Elementary**

**Applications by Participants in
Just ASK Workshops**



About Just ASK

The Essential Question of Just ASK's Work

What do schools and classrooms look like when they are organized around a commitment to the achievement of high standards by all students?

Just ASK Publications & Professional Development (Just ASK) is based in Alexandria, Virginia, USA. Established in 1989, Just ASK provides products and services for educators in formats that facilitate a shared understanding and the use of best practice in teaching, learning, and leading in 21st century classrooms, schools, and districts.

Driven by the essential question displayed above, the publications and products developed and distributed by Just ASK are used by Just ASK consultants in their long-term multifaceted work with schools and districts, stand alone for use in professional development initiatives led by district personnel, and are often used as texts for college courses. These comprehensive resources use a common language and concept system that makes the **Common Core** come alive. Because they are cross-referenced, administrators, teacher leaders, veteran teachers, mentors, coaches, and new teachers can all be on the same page!

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Review Strategies in Action - Elementary

This collection of ways participants in Just ASK workshops have used strategies from *Active Learning and Engagement Strategies*, *Why Didn't I Learn This in College?*, and *Instruction for All Students* provides new teachers (in fact, all teachers) innovative content-specific ways to have students actively engage with, apply, and/or review important knowledge and skills.

Science: My students were continuing to learn about diseases and microorganisms. In the textbook there was a section on antibiotics. I knew that just reading from the text would not be too interesting to the students, so I decided to incorporate an active reading strategy. I used **ABC to XYZ**. I had the students write the letters in the word “antibiotic” down the left side of the sheet of paper. I gave the students time to fill in words or phrases that described antibiotics using the letters ANTIBIOTIC. I had the students do this individually at first then when everyone in their group was finished, they shared their ideas and made up a group sheet of the best answers from everyone. The students did an excellent job writing words and phrases that described or talked about antibiotics. I was impressed. Most of the students did a great job on their own and had a hard time in the group deciding which word or phrase went best with each letter. Some of the groups had to use two words or phrases for some of the letters. It really seemed to help the students get a better understanding of the concepts and important ideas. In our next class session I asked them to review what they remembered from the previous class. The students actually thought of the letters A N T I B I O T I C and said that this strategy helped them remember that they learned.

Kirstin O'Connell, St. Vrain Valley School District, CO

Reading: I chose to use the **Graffiti** strategy in my 6th grade reading class for the novel **Hatchet** by Gary Paulsen. Throughout the year, ongoing topics that we study in class are literary devices, such as flashbacks, foreshadowing, figurative language, and irony. We also continually discuss what makes the books we are reading “good” books, or books that win awards. For this activity, students were separated into their prearranged groups, within which they usually hold small group discussions on these topics.

First, I created four stations with pieces of large chart paper with a different title at each. Titles included “examples of flashbacks,” “examples of foreshadowing,” “examples of figurative language,” and “examples of how the author’s style is unique/interesting to the reader.” Giving each group six to eight minutes, they



would start at one chart and write down one example from the book along with the page number. When the groups rotated to the next chart, they could not list the same example of any of the prior groups. Not only did each group successfully come up with a unique example for each chart, they asked if they could go around again because they had more that had not yet been written! This activity proved that the students were truly understanding the difficult concepts that we had been discussing all year!

Amy Chiasson and Rich Paolino, Waltham Public Schools, MA

Social Studies: When I introduce a country to my 6th graders, I realize they come to me with many misconceptions of that region. For the most part, they have never visited the area, met people from that culture, or studied the history or geography. So it is very important to list their misconceptions from the start so that at the end of the unit, they can see how their learning has impacted their ability to make solid opinions that are supported with facts. I had all the students complete a **Frame of Reference** by placing a huge circle in the middle of the board that listed “Africa.” I asked the students to tell me what they knew or pictured in their mind about this continent when they saw this word. Some of the ideas we listed were poor children, no water, dry/desert, men carrying spears with grass skirts, huts, etc. I placed these words in the matted area. In the circle frame around the word Africa, I had students write how they came to know these ideas. Some of the words written were commercials, magazines, newspaper pictures, parents telling them not to waste because someone in Africa would love to have that, etc.

Later, after the three week unit, I pulled a new **Frame of Reference** out. With “Africa” in the middle, some of the new ideas included many rivers like the Nile, cities in Africa, AIDS as an epidemic, resources like oil, copper, and diamonds, the many languages, newly independent African countries, etc. The students got a real kick out of pulling out the old **Frame of Reference** and comparing their first ideas to their newly educated opinions. This was definitely a perfect way to connect ideas and show students their learning.

Sheila Labriola, Westborough School District, MA

Language Arts: I decided to experiment with the **Cake Walk** strategy. I knew this was going to be a challenging activity with a room full of 1st graders, but I knew they could learn a lot from this activity. There are 26 wonderful little learners in my class and I can already see big improvements in their learning since the first day of school. I used the strategy **Cake Walk** as a comprehension exercise after reading the students “Halloween Party” from **The Black Lagoon**. This activity addressed Standard 1.9: The student will read and demonstrate comprehension of a variety of fiction and nonfiction. Once we completed the book, I had the



students get into two groups (by the numbers I was calling). I then placed each group into a circle with the second circle around the first. As I was doing this, I was explaining the activity to the students. I started playing music and when the music stopped, so did the students. I asked them questions, such as, “What was your favorite part of the book?”, and “What happened to the main character in the story?” and, “How could you write a new ending to the story?”

This went very well, but they still were confused at times on what they were supposed to be doing. At that time, I would stop the activity and walk the students through the instructions again. I did this because I wanted the students to understand and enjoy this activity as I would like to use it often with more complex material. The students had a great time while reviewing the story.

The students learned a lot from this activity and got to work on many other skills beside comprehension. They used listening, verbal, and directional skills as well as learning how to use their prior knowledge. I feel this activity impacted my students giving them a fun activity to do while working on comprehension questions. Instead of the usual sitting on the rug and one person answering the question, and moving on, all students had to think and answer every question.

Another application for this strategy in my classroom is to use it as a review for a test. This will help the students use higher levels of thinking to answer the questions in their own words instead of a multiple choice, true-false, or fill-in-the-blank test. I am looking forward to using this valuable activity this year to help my students creatively learn new information.

Dea Simpson, Prince William County Schools, VA

Social Studies: I prepared **Signal Cards** with the names of the civilizations we were reviewing: Greece, Mali, and Rome. I had my small group of 3rd grade ESOL students answer questions about different topics related to what we had studied during class. They had to answer the questions by holding up the correct card. I also used **Signal Cards** to review past and present tenses. I would say sentences related to different situations, and they would have to show me the card for the tense of each verb. This is a quick and effective way to check their understanding. It was also good for restless students as they were able to move.

Luz Rossi, Prince William County Schools, VA

Math: I wanted to give students something to do while they answer questions in math so I made ‘yes’ and ‘no’ sticks to use as **signal cards**. When I put a problem on the board or go over homework from the night before, they can hold up the ‘yes’ side of the stick if they think that answer is correct, and they can hold up the ‘no’ side of the stick if they think the answer is incorrect. I can also monitor who knows the content and who doesn’t. Since they all have to hold up their answer at



the same time, no one can just look at someone else's answer. I think they like this because it's something fun to do besides just answer the questions.

Lindsey Fisher, Prince William County Schools, VA

Math: One of the ways I check for understanding with my students is with a strategy I call **Spatula Math**. I purchased a set of wild melamine spatulas at the Dollar Store. Students used dry erase markers to write on the spatulas and felt squares to wipe them off. In 2nd grade, students are expected to be able to tell time in five-minute intervals using analog and digital clocks, to estimate time, and also to calculate elapsed time. One of the ways students used the spatulas during our time unit was to write the digital time that matched the time on the analog clock. Students did this during the active instruction portion of our lessons, raising their spatulas once they had the time written. After all students had responded, I wrote the correct time on the board and quickly set the clock to a new time.

I liked using the spatulas because I could tell at a glance who was able to read the time and who wasn't. It was quickly evident which students were confusing the hour hand the minute hand. Sometimes, when that happened, I stopped and wrote the two different times on the board (i.e. 6:00 and 12:30). I asked for help in clarifying which time was correct and why it was correct. Using the spatulas to check for understanding provided immediate feedback for students. It allowed me to learn which small group of students needed to be pulled for a review of the hour and minute hand. Through repeated practice, the students were able to master reading an analog clock.

One concern about the use of spatulas involved those students who really struggled to tell time. I didn't want to embarrass students who confused the hour and minute hands. For that reason, I sometimes positioned myself near those students. The students had mini-gear clocks at their seats, and I could provide additional assistance. Another way I used the spatulas was in small group instruction with a group of students with similar needs. They partnered with another student and both had to agree on the answer before writing.

Jean Terry, Northborough/Southborough, MA

Inclusion Language Arts: I teach grade special education to fully included students and I frequently create vocabulary and concept reviews for students. Many of these students struggle with attention and participation in activities, but need frequent opportunities to reinforce their knowledge of grade level concepts. I combined partner and large group discussion using **Take a Stand** to engage the students in a way that improves their study skills through critical thinking.

My students recently completed a novel. As a review, I had the students use their chapter mark-ups and section notes to create discussion questions relating to the main components of the novel. I then had the students pair off and ask each other



the questions orally. I gave the students a couple minutes to answer each other's questions, and then they switched. To keep track of each student's progress, I had them make a score card tallying the questions they got right and which they got wrong. The next day, we briefly reviewed the discussion questions the students had created. Before the period, I had taken the questions and modified them into correct or incorrect statements. I displayed the questions one by one and asked the students to answer by restating the question, agreeing or disagreeing with the statement, and then stating an example to reinforce their position.

I thought this was a very successful exercise as it met its objective to review main content and themes in the novel. Students were able to verbalize their ideas and discuss their points of view. This is a good activity for many of my students who struggle with organizing their ideas and demonstrating what they know in writing. The only problem I encountered was frequently redirecting some students back to task and helping students who struggled forming their open response questions. I will be using these strategies again in the future! It was especially nice to see the students use each other as resources and talk through their answers. I think they were more invested in this activity compared to similar reviews I have done, because the students used their own knowledge and tools to create the questions.

Matt Cassell, Northborough/Southborough, MA

Math: I used **Five-Card Draw** in the study of 1st grade math facts. I placed students in groups whose task was to look for sums of 10, 9, 8, 7, and 6. Once formed, each group had one purple, one orange, one green, one pink and one brown card, each with one of the five sums. The groups made a list of as many combinations as possible to make their "sum." This was very successful for math facts review. The students eagerly brainstormed and checked the lists they generated.

Sharon Bellomo, Greece Central School District, NY

Preschool Special Education: Using **Ticket to Leave** when transitioning students from one area to another has not only provided us with an opportunity to assess student comprehension regarding a topic, but has also assisted with the classroom management challenge of getting everyone from one place to another in an efficient way. A few examples are:

- Telling their name, age or gender before lining up to leave the room
- Finding a requested shape, vehicle, animal etc...before going to wash hands
- Choosing a nursery rhyme to recite before transitioning to the play area.

We like this strategy because we can use the same "ticket" strategy with all the children, while being able to change the task depending on the skill of the child. Information can be garnered through both verbal and non-verbal means.

Susan Evers and Karen Smith, Prince William County Schools, VA



All Subjects: I do some variation of **Ticket to Leave** everyday as the students leave the classroom. I value the time I have to check in with each of them individually as they exit the classroom and quickly assess some new learning from that day. I also think it is important to let the children know that we are learning and thinking up until the last minute of the day. I sometimes let them fill out an actual ticket, for example, solve a math problem, write a vocabulary word and ask a question they still have. I may also do a verbal check, which allows me to differentiate based on the reading or math level the student is on. I ask them the new word they learned that day from guided reading and it is a good indicator of whether or not they know it and will let me know if I need to re-teach it tomorrow.

Julie Inch, Prince William County Schools, VA

Language Arts: After reading the book *Why Lapin's Ears Are So Long* to my students, I used the **Ticket to Leave** strategy to **assess** whether students were able to identify types of folk literature. I gave each of my students a sticky note and had them write what type of folk literature they thought the book was and why. This helped me see what misconceptions the students had about folk literature. I found that they were not paying attention to all of the characteristics of the book. In the book, animals were talking, so some students said that it was a fable; however, these students did not take into consideration that the book also explained how something came to be. This made it a porquoi tale. By using the **Ticket to Leave** at the end of a lesson, I got immediate feedback about my students' understanding of the characteristics of folk literature and used the feedback to guide my instruction for the following day. Next time I might use a ticket to enter instead of to leave, or in the middle of a lesson. I think that this could also be a great way to assess my students' understanding throughout a lesson or to assess their prior knowledge before a lesson. I liked using this instructional tool because of the immediate feedback that it gave me on my students' understanding; I did not need to go home and correct anything. I could just quickly glance at the sticky notes over lunch and know what my students understood and if certain students needed any clarification. **Ticket to Leave** worked very well as a quick assessment tool.

Patricia Kreseski, Prince William County Schools, VA

Language Arts: As an ESOL teacher, part of my daily schedule includes co-teaching writing/grammar in a 2nd grade classroom. The general education teacher, Jenny Loach, and I used **Stir the Class** to assess students' learning for our lesson on action verbs from the day before. I provided each child with a small blank piece of paper as they entered the classroom and instructed them to number their papers from 1 to 5. We then had a discussion about what it means to "stir" something up, and I then explained to them that we were going to **Stir the Class**. We set the timer for five minutes. Before the timer went off, each student



needed to ask and record five action verbs from five different people. After the timer went off, each one had the opportunity to share at least one verb they recorded. The students became very excited over the idea of “stirring themselves up” and everyone actively participated.

We were pleasantly surprised to watch children who do not normally interact with each other share verbs. Those students who finished the task earlier were encouraged to record more than five verbs. We adapted the activity for the student with learning disabilities and the level 1 and 2 ESOL students, so that they only needed to collect three verbs. Through informal observation and class sharing at the end, we were able to assess who did and did not have a solid understanding of verbs. At the end, we asked for students’ feedback on **Stir the Class**, and the strategy received an overwhelming thumbs-up. Since our first experimentation with this strategy, Jenny has used it in social studies, asking the students to collect three facts from others on Ancient China. We are also planning to use it for a follow-up lesson on adjectives. Because we took the time to explain the activity in detail the first time around, the class easily transitions into the activity by simply exclaiming: “It is time to stir the class!”

Kari Wilson, Prince William County Schools, VA

Math: I used the **Stir the Class** activity as a warm-up to our review day on measurement. I found this to be a really effective tool to get my 5th graders in my inclusive class ready to study. They seemed to really work together and help each other remember the items that were to be reviewed. I gave the students lots of time to carry out the activity and I think it helped to enhance our discussions and review of the topic. I feel it helped my students for two reasons: the concepts were fresh in their minds and they were able to self-assess their own knowledge by seeing what they remembered and then teaching it others, as well as uncovering what others in the class know. It also served as an informal assessment of which students seemed to need more help so that I could target them later in the breakout review sessions.

Katey Kuhns, Prince William County Schools, VA

Special Education: I am a teacher of children with autism in 2nd through 4th grades, who range from one end of the spectrum to the other. I had to adapt the **Ticket to Leave** slightly to have it be a success for the students in my classroom. At the end of circle time and group time, I have been asking students to earn their **Ticket to Check Their Schedule**, which is currently just getting the cue from me that they can go check their schedules. In order for a student to earn this cue, I ask each individual student a question, and to move on to the next activity, they must answer my question correctly. I must vary the question greatly based on each of the children’s abilities. Sometimes, the question is a simple command, such as “touch head,” or it can be as detailed question, such as “Where was the



capital of Virginia moved to after Jamestown?” I try my best to tailor the question to each student’s strengths and weaknesses and the skills on which they are working. I try to choose questions that are something the child has learned previously and use the **Ticket to Check Their Schedule** for more of a review or maintenance of a particular skill or piece of knowledge.

I feel this is a good way for me to see if a student is retaining a learned skill or piece of knowledge across setting and not just during our small group sessions. Also, I feel that for some of my students, this helps build their self-confidence and allows them to feel good when they get an answer correct. They feel pride in knowing that their correct answer is what is allowing them to go to the next activity. I love to see my students when they get a huge grin on their faces and beam with excitement from getting a correct answer. For me, this strategy, with my modifications, has been a great new tool for use in the classroom. It is a fun way to change the routine a little bit by asking all different types of questions for each student. I plan to continue to use this strategy and may actually make a paper card to serve as a ticket for them to check their schedules. Also, I hope to be able to make some more adaptations to this strategy and incorporate it in other areas of the day as well. This strategy helped remind me that, with some slight modifications, strategies can still be successfully implemented in my classroom, even though the setting is very different from the typical elementary classroom. Also, I know I have a new tactic in place that continues to help make my classroom an even more fun and positive learning environment.

Elizabeth Hinman, Prince William County Schools, VA

Science: I used **I Have the Question, Who Has the Answer** as an informal assessment of the content we have been studying in our astronomy unit. I typed questions and answers that corresponded with the benchmarks for what students should know and be able to do in the unit. Students drew the answers individually but when I asked a question, each table was encouraged to talk together to find the corresponding answer. Questions included: “What patterns occur because the Earth rotates?” “What are the phases of the moon in order?” and “How do we get seasons?” In the case of these questions, multiple students had the answers and had to work together to answer the question. It was helpful to keep the pace quick and encourage students to talk together. However, this activity worked well as an informal assessment because I found that the students had minimal discussion because most knew the divulged answers immediately, without hesitation! This worked well for my class of learners because it gave them a focus/target during the activity and a sense of accountability for listening to one another. This activity was also effective because I had many learners who have nonverbal learning disorders who need opportunities to talk about what they know versus writing about what they know.

Laura Cork, Waltham Public Schools, MA



ELL Social Studies: I used the **3-2-1** strategy to review with my students a book about George Washington and to address famous Americans and their contributions. They had a great time and I felt it was very successful. Coming up with three important events was a little difficult for my 1st grade ESOL students, but with my guidance and prompting, they pulled it off well. They had fun finding two questions to ask their famous American. It was difficult for them to write down all of their ideas, but orally they had little trouble. I got a great understanding of how much they learned by using this strategy.

Charlotte Leonard, Prince William County Schools, VA

Language Arts: While deciding what strategy to try, I came across the **Consensogram**. I tweaked it a little bit and the **I-get-it-ohmmeter** was born. The **IGlohhmmeter** (don't you know my students have already given it a nickname) is hanging on the wall and at the end of class every day the students are asked to go by and put a small sticky on the meter that corresponds with where they are in their understanding of what we have been working on. This has been a really fun way for me to quickly ascertain how confident my students feel about what we are learning. In just a glance I can get an idea on how many kids are "getting it", how many kids are "still a bit fuzzy", and how many kids are... well... "Huh?" This strategy has been very helpful this week as we are preparing for a big test. Our goal is to have every sticky in the "I get it" category before test time! In looking at our **I-get-it-ohmmeter** I see that I have a few "fuzzy bunnies" out there but fortunately no one is falling into the "huh?" category!

Ashleigh Burnette, Prince William County Schools, VA

Middle School: We used the **Corners** (Kagan, 1997) strategy in our co-taught class to help students review for their first common assessment. It is important to incorporate movement into the lesson as often as possible. With this in mind, we felt that **Corners** was a perfect fit for our 5th grade class. We moved all the desks to the center of the room and explained the process to the students. Then we read the practice question aloud and each student moved to a different corner of the room (A, B, C, D) depending on what they thought was the correct answer. Once they were grouped together in their respective **Corners**, we gave them a couple minutes to discuss why they thought their answer was correct. After they had decided on a good explanation, we called on a member of the group to deliver it. After all groups had given their rationale, we announced the correct answer and moved on to the next question. I was very excited by the students' reaction to the **Corners** exercise. All the students were actively engaged in the process. Even if the students were unsure of what the correct answer was, they had the chance to discuss the question with classmates and hear the correct responses as well as why other responses were not correct. I feel that students are more apt to retain



information if they are engaged in dialogue, and for this reason, I think the exercise was very successful.

Jeremy Scott, Prince William County Schools, VA

Art: I created a quick closure activity with **Sort Cards** involving different art movements and reproductions that we have been studying. Given various art related vocabulary on strips, students were able to group these clippings and images into different categories as teams. This was great for not only review and assessment, but it also built on teamwork skills and social interactions with peers.

Beth Oustrich, Solvay Union Free School District, NY

Social Studies: I used the **Frame of Reference** strategy with my 2nd graders to introduce our Australia unit. We did this whole group as it was the first time the students had seen this exercise. (I drew a picture of the frame on the board). The students told me things they already knew about Australia and I wrote them in the mat area. We then discussed where they got their information. It was fun to see the kids try to remember and connect their knowledge to where they learned it. It is amazing how much of their information came from TV!

Now that we are almost finished with the unit, it would be great to go back and look at where we started but, of course, I had to erase my board! The next time I would again do it whole group but definitely put it on chart paper to revisit.

Nancy Dudley, St. Vrain Valley School District, CO

Math: I used **I Have the Question, Who Has the Answer?** to help my 4th grade students recall basic math facts. I gave students cards that contained equations. My role as the teacher was to hold up a card with an answer. The students had the responsibility to hold up an equation that matched my answer. At first I gave them some of the easier cards, but after a while, all students knew if they got the card with 81 they were waiting to hear “I have 9 x 9.” This also showed me they really were beginning to have automatic recall. After the first few times, we began to time ourselves and now the students always want to use the strategy as a math warm-up to beat our time. I am going to give them a new one with different equations so they will begin to learn others, too.

Wendy Sparrow, St. Vrain Valley School District, CO

Math: The standard I was focused on was number theory, factors and multiples. I chose **I Have the Question, Who Has the Answer** because it lends itself well to math. It is also a great way to review prior content. This was the first time I had tried this with my 6th graders so I wasn't sure how it would go over. I think the fast-paced nature was the selling point for the kids. Students seem to be really



engaged in learning experiences that are quick-paced like their Game Boys and PlayStations. One issue that came up for me was the level of personal responsibility. Students were very eager and therefore told other slower students when it was their turn. Just in that respect, I was able to tell which students needed more help. What I would like to do in the future is to try this during academic intervention time. I think in that setting it would be better to have students follow up by making their own set of cards and questions.

Beth Rothberg, Greece Central School District, NY

Language Arts: I used the **Inside-Outside Circles** in a study of words we have studied over the year. Some of the words were high frequency and some of them were spelling words. My goal was to reinforce words they need in their writing so they could automatically write and not worry about spelling as much. I thought it went well after I gave the directions and we practiced a couple of times. The initial set up of the circles was a little hectic, but I hope after doing the set up a few times it will become easier. The students enjoyed the interaction with lots of classmates instead of just one partner. I think some students were surprised by what they had forgotten.

When I use this strategy again, I would like to try two smaller circles instead of one big one. In one circle I would like to put real challenging words. In the other circle I would like to put “need to know” basic words. I think my students for whom spelling is easier could have used more of a challenge. The two circles could let me challenge some without overwhelming other students who need work on basic words.

Nancy Harris, Greece Central School District, NY

Math: Initially, I began **Inside-Outside Circles** using only twelve students. I modeled what we were going to do and then I let the other students have a turn. After about 15 minutes, the entire 1st grade class was involved and we had a great time. The students were excited and couldn’t wait to see the next problem and if they could get the correct answer. This was a very good method to review subtraction facts. I noticed that the students focused more on the problem and were able to answer quickly. After several days, they were able to tell the answer without using their fingers even though I changed the problems. When I gave the final assessment, I had a 100% pass rate with few students needing to use their fingers or scratch paper. Both the students and I enjoyed using the **Inside-Outside Circles**. I am now ready to add music and let the students continue practicing basic mathematics facts such as skip counting, adding, and subtracting.

Andrea Phillip, Prince William County Schools, VA



Math: I used **Inside-Outside Circles** with my 3rd grade class on two occasions. The first time I used the strategy it was to review multiplication facts. The second time I used the strategy it was to review an economics unit, which is part of the social studies curriculum. When I used the strategy as a multiplication review it was more successful. One of the reasons for this is that there are fewer students in my classroom during math. I had the children think of their favorite multiplication problem up through the 12s. The students then went around in the two circles and shared their multiplication facts with each other. I thought this went pretty well and the kids really seemed to like it. The second time I used this strategy, we were reviewing for an economics test and I wrote the questions out on cards for the students ahead of time. The students were then instructed to write the answer on the back of the card. I then had the students get into the circles and ask the questions to each other. This went well but when I use this strategy in the future, I would like to be able to better monitor how the students are doing with the questions.

Tim Krueger, Prince William County Public Schools, VA

Math: I have been coaching a 5th grade teacher who is new to our school during her mathematics lessons. She wanted to revise some of her end-of-unit activities for review with the students. I suggested that we use **Inside-Outside Circles**. We began by creating a set of open-ended questions to use on the cards. We both felt that these types of questions would highlight more in-depth understanding than just simple calculations or basic recall of procedures in forming and ordering fractions. It would require higher order thinking skills and focus on the big ideas of mathematics. At the beginning of the class period, we gave each student a card that contained a question/problem. Each student had about 10-15 minutes to work on forming and writing their response. We encouraged students to include in their answer a drawing, diagram, or example of their thinking as this reflects how they respond during regular instruction. Most of the students were finished at the end of 15 minutes. Once we described the purpose of the activity, they formed the inside and outside circles. They knew that this was going to be a fun way to summarize and review for the test, which was being given the following day. They did not have any trouble understanding the sequence of the activity; Student A asked the question, Student B responded, and then they reversed roles. After both were finished, they switched cards and used the new card with the new circle partner on the next rotation. Overall, the students enjoyed the activity, remained engaged, and were successful with this type of review strategy. The 5th grade teacher and I took informal notes as the students worked so that we could share together after the lesson. After the strategy was finished, we held a group meeting to reflect on the knowledge gained from the activity. Many of the students said that they had to think hard and fast. They also liked having the cards switched in each rotation so that they didn't get bored. They liked the anticipation of getting a new question on each rotation. After class, the 5th grade teacher and I



reflected upon the strategy. We both felt that it benefited most of the students. We also felt that the strategy should be done more often rather than at the end of a unit. We let the students keep the cards, but in the future, we want to make a photocopy of all of the cards so that these could be used at the end of year review.

Karen Mirkovich, Prince William County Schools, VA

All Subjects: My students and I really enjoy using the **Graffiti** strategy. It has proved to be an invaluable strategy in my classroom. I try to get my students moving at every opportunity and **Graffiti** allows movement in a structured way. I have found it useful to use this as a review strategy. Even 5th graders will fight for writing rights so I have found it important to give every student in the group a number. When the group arrives to a question, the student with that number is the one who gets to record the information on the sheet. This simple adjustment to the strategy has saved me lots of time in the classroom.

Kathryn Astley, Prince William County Schools, VA

Literature: I used **Inside-Outside Circles** (Kagan, 1997) for reviewing for a test at the end of a literature unit about dreams. This strategy is good for summarizing and review, so it fit well with the purpose of the lesson: have students answer different kinds of questions about the literature and identify key vocabulary words. The **Inside-Outside Circles** seemed to work well because all of the students were answering questions simultaneously, and each student got to review a lot of material and get immediate feedback. Having each student initially answer the questions on the index card before the activity gave each the opportunity to share their knowledge with the rest of the class. Furthermore, the activity seemed especially suitable for 6th graders since they got to move around while learning, so their attention was more focused as they found the activity to be fun and engaging.

Dora Horvath, Waltham Public Schools, MA

Language Arts: I used **Numbered Heads Together** in my 3rd grade classroom. We have used this strategy twice and we will use it again this week. The first time we used it, we reviewed for our folktales quiz. I gave students a type of folktale and they had to discuss and list within their group all of the characteristics and examples they recall. I absolutely enjoyed the discussion and enthusiasm my students had when participating. The other thing was that they all participated. I asked them at the end of the lesson what helped them learn or how this exercise helped them learn, and they said things like, "Talking to each other helped me review," and "Working in groups helps me learn," and "I liked it because it was like trivia."

Julie Svendsen, Prince William County Schools, VA



Math: I used **Numbered Heads Together** as a review for an upcoming quiz on fraction or decimal conversions, and adding and subtracting fractions and mixed numbers. My 7th grade class was broken into five groups, each with four students. Groups were predetermined by me prior to the activity to insure that the students were heterogeneously grouped. Each group member had a number between one and four. I then asked a question aloud. The groups were given a minute or so to process, and then I called a number between one and four. One student was called to give a response. This technique is very well suited to my diverse class. Students who may be having difficulty have another opportunity to review the concepts prior to testing with students of all skill levels.

Nancy Pojani, Northborough/Southborough, MA

ELL Social Studies: I used the **3-2-1** strategy to review a book about George Washington and to address the Virginia Standard of Learning (SOL) about famous Americans and their contributions. They had a great time and I felt it was very successful. Coming up with three important events was a little difficult for my 1st grade ESOL students, but with my guidance and prompting, they pulled it off well. They had fun finding two questions to ask their famous American. It was difficult for them to write down all of their ideas, but orally they had little trouble. I got a great understanding of how much they learned by using this strategy.

Charlotte Leonard, Prince William County Schools, VA

Physical Education: I used **3-2-1** at the end of volleyball unit with 3rd, 4th, and 5th graders. I asked them to write: three things they learned; two things they liked; one thing they want to know more about. I enjoy looking back to see how much information they gained. In the pre-assessment, I got answers like “you play with a ball.” In the **3-2-1** they used many more volleyball terms.

Carolyn Magner, Greece Central School District, NY

English Language Arts: After using **3-2-1**, I learned a few things. First, it is wonderful to have such flexibility with an activity. Being able to use three, two, and one of something is really liberating and applicable for all course topics. The other benefit is the freedom it gives the students. They are able to pick from their brain what is familiar to them as well as question what they do not know, without fear of being embarrassed since they are using written communication rather than verbal.

Mary Anne Prevosti, Greece Central School District, NY

All Subjects: I use the **Ticket to Leave** in my room, but I have altered it so it is also a ticket to enter in the morning or the ticket to line-up if we are going somewhere. I do not do it every time we come, go, or line-up, but I do it several



times a week. This strategy is one that I like to use with my students because it really motivates them to think.

I have seen such a positive impact on my students' learning by doing this. They never know when I am going to do it or what kind of questions I will ask, so they are trying to soak up the information and be ready. The area where I see the quickest and most noticeable change is their listening. They know if someone gets the question wrong, it will come back around, as will the questions I have already asked; therefore, so they are always listening to see what others say. As my students improve in this I will give more of the control to them and let them ask the questions to the person following them as we line-up or get ready to leave.

Kate Gardner, Prince William County Schools, VA

Language Arts: I use the **Ticket to Leave** daily in my 2nd grade classroom. We have our specials right before Language Arts. I have a few students who finish things early and turn it in without checking. At the end of the lesson for the day, I pick something that we went over during the hour and a half block: phonics patterns, spelling word, daily editing, preparing a "first" sentence for our writing prompt, etc. I have the students take out a sheet and either respond to the stem or answer the question of the day. Once they have correctly completed the ticket, they take a spot in line. That paper is their **Ticket to Leave**. I was surprised by this because I did not think I would be able to modify it for 2nd grade. The students, as it turns out, love it.

My excitement from this is because I have finally found something that is very simple, something that all of my students can do, and that is quick enough for me to check understanding and correct misconceptions right then and there. Normally, if you do an assessment you have to wait until the students leave to check the papers, then you realize that something went wrong with their understanding and it is not something that you can fix until they come back. This is quick and easy and has already changed some of the attitudes of the students. They do not rush as much with this because they do not want to be sent back to their seat to fix it, they want to get their place in line, so they do it right the first time.

For my next step I am going to try and integrate this into other subjects. I am not sure how yet. I really like the review and check for understanding that is involved with this because it helps to guide the next day's lessons.

Karissa Gorman, Prince William County Schools, VA

Math: I have used **Ticket to Leave** before, but I have not implemented it consistently. As I used it again within the last month, I realized how effective it is in providing me feedback upon the student learning. It is a quick way to monitor and can guide the next day's lesson. For example, even if the majority of the class



does not understand the content of the lesson, they often will not volunteer that they are confused. The **Ticket to Leave** ensures that I get comments from all students, not just the few who always are engaged in the classroom discussion. Usually, these students are the ones that do understand and are frequently verbalizing their knowledge throughout the entire lesson.

I taught a lesson on division with 4th grade students; this lesson was towards the beginning of the computation unit. At the beginning of the class, I showed students the ticket which I had put on yellow paper and used graphics to make it look like a real movie ticket. It was important that they understood they would be providing this information at the end of the class. At that time I also told them the question they would be asked at the end of class. It was, “What have you learned today about division that you think you will use in the future?” Often, students are not asked this question because it goes beyond the procedures of division and makes the student think about the use of it as a computation strategy. I chose this prompt because the mathematical connections into real life are very important. I left it as an open-ended question so that I could get a range of responses. I was not looking for a few brief, isolated facts. I wanted to know if they could apply their knowledge. It would also clarify if they really understood what division was about. I allowed for time to complete the ticket during the last several minutes of class. They needed time to process and reflect before they could write. I choose not to hurry their thinking and writing within the last two minutes. If I did, the products would be less informative.

The responses were not surprising. Some students wrote general statements:

- “Division can help me at the store when I buy things.”
- “Division means splitting into groups.”
- “Division is like subtraction of a group of things.”

Some of the responses were more indicative of their future applications:

- “I can use division when I am working with money. Like how many things I can buy for a certain amount or price.”
- “Division is just as important as adding, subtracting and multiplying. The difference is that I can find out how many of a group I need to form a total amount.”
- “I will need division when I am timing my running. I can think of how many minutes it took and then how far I ran for each minute.”
- “Division will help me use my allowance. I can take the total I have and divide it into days for how much I can use each day.”

I shared the responses the next day at the beginning of the class. This let students know that I valued their thoughts and it also provided exemplars of significant comments.

Karen Mirkovich, Prince William County Schools, VA



Language Arts and Math: I used this strategy with a language arts lesson that addressed Reading Standard 4.4f (identify sensory words). Before I used **Ticket to Leave** in my classroom, I had noticed that many students were struggling with vocabulary on their end-of-the week story tests. I knew that something had to be done, so I decided to incorporate **Ticket to Leave**. Each day, I put the definition of one of the vocabulary words on my door. Before going to lunch, my students had to tell me the vocabulary word that went with that definition. The next time we had tests, almost all of the students got all of the vocabulary correct! I have been using that strategy ever since, and the students have been doing really well on their vocabulary. I plan to continue using this strategy and will probably incorporate it with other subject areas as well. For example, I could give them a math problem, and they would have to give me the answer before lunch. I think this is a really good strategy to use, and I'm looking forward to seeing how well it goes with other subjects.

Tiffanie Eddington, Prince William County Schools, VA

Language Arts and Math: When I originally began using **Ticket to Leave** with my 6th graders, they didn't spend much time on their tickets. But when they found out that the question or comment was different each time, their interest peaked. They really enjoy making connections to real-life situations. For example, I asked the students to explain why it was important for a carpenter to use mixed numbers in his work. Their responses on their **Ticket to Leave** demonstrated their thinking skills as well as their creativity, much needed skills for all the children. In my more heterogeneous classes, I have found the strategy to be an excellent tool for closure. I often ask them to summarize a lesson, tell me the missing step or what they liked the best or least about a lesson. Since our focus this year is on literacy, I use their responses as a way to study, review, and make flash cards for our vocabulary test. I go over the cards and add important information to them. That way, they can use them to study for the test. This has also opened up a communication channel for the quieter student to voice concerns to me. They let me know what they don't understand and I begin the next lesson with that as a review. Students are more accountable because they need to pay close attention so they can respond at the end of the period. I want to expand it in all the classes to help make connections to real life.

Jane Dodge, Prince William County Schools, VA

Science: I used **I Have the Question, Who Has the Answer** to remediate after teaching and assessing a science unit about the seasons. The 1st graders needed to know how the changes in season affect what plants look like, what people do and wear, animals, the temperature, length of day, etc. I created one deck of note cards with a name of the season on it and another deck with pictures and words (for example, a picture of a thermometer and the words "hot temperature"). The



students received two cards and had to walk around the room to match the picture cards with the season. We posted the matches on the chalkboard and then checked as a whole class if the pairs of cards were correct. I can bring these cards out anytime for a fun review game.

Julie Inch, Prince William County Schools, VA

Science: We used **Sort Cards** to reinforce science vocabulary. Students were placed in groups of four. Each group was given vocabulary cards with the task of sorting the words into three categories: words pertaining to the earth's layers, volcanoes, and earthquakes. When the sorting was completed, the students in each group identified the words they were not sure about. They then used readily available resources, such as textbooks, dictionaries, and the Smart Board, to clarify the meanings of those words. They added definitions and pictures on the cards of the words that needed further study.

We followed-up the group work with a round-table discussion of the words each group identified. It was interesting to note that most groups identified the same terms as needing further explanation and reinforcement. This large group discussion also surfaced some misconceptions which we were able to clarify.

The **Sort Card** activity was meaningful because students learned from each other and it appealed to both visual and auditory learners because they had to read, listen, write, and draw. Future extensions of this lesson might be to have the students share the pictures they drew so that all would see multiple ways words can be represented and as a review, have the students play charades representing some of the words kinesthetically.

Ilinca Voinea, Archdiocese of Los Angeles, CA

