

BrainCogs[®]

The Personal Interactive Coach
for Learning and Studying



Educator's Guide

* * * * *

Part of the BrainCogs[®] Cognitive Strategy System



Pathways to Success for all Learners



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This interactive CD-ROM was developed by
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and
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BrainCogs

EDUCATOR’S GUIDE

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Welcome: “Invitation to the Experience”

What would you say if you could have a team of Ph.D’s, psychologists, registered educational therapists, special educators, and other educational experts work with your individual students?

That’s exactly what you’re getting with BrainCogs.

This software, BrainCogs, from Emmy Award-Winning FableVision Studios and the Research Institute for Learning and Development, is the very best mix of great research, media, storytelling and technology. In this highly engaging, musical and animated software, students learn a range of customized techniques that support the cognitive processes (playfully referred to here as “brain cogs”) that are involved in learning, studying and test taking.

Both learning-challenged and mainstream students will find encouragement and hope that they already possess the “cogs” to succeed, as well as ways to “oil” these cogs. Not only will students be able to tackle tests in a new and more successful way, but they can use these techniques for life-long learning.



Awards for BrainCogs:

Winner, 2003 Distinguished Achievement Award
The Association of Educational Publishers

Finalist, 2003 Golden Lamp Award
The Association of Educational Publishers

Winner, 2002 District Choice Award, District Administration

Winner, 2002 Media and Methods Award Portfolio

A Message from the Publisher

“I wish I had that in school when I was growing up.”

That is what I hear again and again when people experience BrainCogs. What a terrific testimony. I wholeheartedly agree.

I am absolutely thrilled to be able to bring this wonderful collaborative effort into the lives of those who need help in achieving their personal best. Our commitment at FableVision is to help each and every learner reach their own goals... their dreams... their true potential.



BrainCogs is THE most creative approach I have seen yet to helping students with the learning skills that ultimately get called to task by testing. I am not a fan of high-stakes standardized testing, especially when used as the sole measurement of student success. We need to become more sensitive to the many ways we learn, the many ways of encouraging and inspiring learners to achieve their best. However, assessment through quizzes and testing is a reality. BrainCogs helps students tap into the cognitive processes they already possess. It taps into their learning styles and does so in humorous, animated, musical ways. The interactive nature of the experience allows students to regulate the pace of the experience as well as absorb it in a multi-sensory way.

When I was old enough to ride my bike out of our neighborhood to the special needs camp set up alongside a sleepy river, I happened upon one of my most important life lessons. As a volunteer camp counselor, I discovered that each of my campers was different. They needed to be understood and cared for in their own way. I could not expect Debbie to respond the same way Elvin did. A song could delight Heather but was lost on Lyndon. Each camper needed a tailored approach. That simple truth has been ringing in my ears ever since.

When I see students and educators treated as a homogenized mob, I get nervous.

When I see them being treated as individuals worthy of being listened to and adapted to, I get excited.

BrainCogs is a powerful step in that direction.



A handwritten signature in black ink that reads "Peter H. Reynolds". The signature is written in a cursive, flowing style.

Peter H. Reynolds,
Founder/CEO
FableVision, Inc.

A Note from the Research Institute for Learning And Development (ResearchILD)



Dear Educators,

We are delighted to share BrainCogs with you, a creative “cognitive coaching” approach to helping all learners. Our twenty-plus years of working one-on-one with clients has contributed to the success of our approach. As researchers, teachers and clinicians based in Lexington, Massachusetts, we’ve dreamed of ways of having our message “heard around the world.” Our work at Harvard University, Tufts University and our continual interaction and sharing with colleagues around the nation has given us a wealth of cutting-edge, best-practice tools to help not only challenged learners, but also learners of all types.

Our frustration was that we could only help a limited number of people. Five years ago, we were determined to share our work with a wider audience and it was clear to us that technology might be the answer. And so we looked for experts in media technology and a group that understood our mission to help under-served learners. That quest led us to FableVision.

The result of nearly ten years of teaching and research, BrainCogs is a research-based learning program for children to develop life-long strategies for learning, studying and successful test taking. This software bottles up an approach that we’ve been researching and using with our clients at the Institute for Learning & Development.

We’re eager to hear from you about your experiences. We have more to share and are excited about this innovative collaboration with FableVision and Mass Interaction.

With best regards,

Dr. Lynn Meltzer
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ResearchILD is located in historic Lexington, MA.
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VIEW FROM ABOVE:

WHY BRAINCogs?

BrainCogs is a research-based learning program for students to develop life-long strategies for successful learning, studying and test taking. This interactive application was created in ways that are sensitive to the special challenges faced in assessing students who find written evaluation either difficult or impossible.

In this innovative software, students learn to draw upon their own natural skills and thought processes. The strategies are taught in the context of real-life situations, and can be adapted to any subject or situation that a student may face.

These strategies are grouped according to cognitive processes, which we call brain “cogs”. Students are first introduced to the concepts, and can go through the detailed information at their own pace, reading text or having it read aloud to them. This is followed by activities that allow students to practice what they just learned, and to reinforce the concepts in a fun, engaging way. There are also short animated movies that help explain the concepts.

remembering



Students answer questions that test both their knowledge and their preference of the strategies. They can print out a certificate after completing the program that shows which strategies worked best for them and also which ones they said they liked the best.

An administration tool in the program allows teachers to access student log-in information and follow the progress of students, to see how well they performed on the activities.



Common *LEARNING CHALLENGES* addressed in BrainCogs:

- ➔ Test anxiety
- ➔ Difficulty getting started with assignments/tests
- ➔ Struggles with organizing information
- ➔ Difficulty remembering and prioritizing information
- ➔ Limited ability in managing time while working on assignment/test
- ➔ Inability to effectively manage stress during learning activities
- ➔ Uncertainty of how to review completed work to check for errors, make revisions
- ➔ Grades that don't accurately reflect student's true knowledge/mastery of the subject area
- ➔ Lack of awareness of one's preferred learning style — metacognition



STUDENT OBJECTIVES & OUTCOMES

Benefits

STUDENTS WILL:

- Develop strategies for learning, based on their own unique learning styles and strengths
- See which strategies best suit their own learning style
- Learn to read for meaning
- Get practice applying strategies to curricular areas
- Acquire skills of confidence to score better on tests, reflecting what they know
- See how these skills can be used for lifelong learning

BrainCogs is a program designed to bring ground-breaking perspective to the challenges of testing by providing critical tools with applications in all academic areas.

This approach helps learners identify and develop strategies based on their own learning styles and unique strengths, which become evident throughout the interactive application. The content is geared toward students in grades four through eight, but many of the concepts will be helpful to older users as well.

BrainCogs delivers learning strategies that reflect multiple learning styles and aid students in reading for meaning. Beyond the testing experience, these strategies will nurture powerful, life-long learning skills.

BrainCogs helps students prepare before a test, work smoothly during the test, and check their work after the test. And most importantly, it will strengthen students' overall learning strategies and help improve their performance in all academic areas – math, science, social studies, language arts, etc.

BrainCogs Seat Time

Depending on how the educator chooses to incorporate BrainCogs into the classroom, the time it takes to go through the program varies widely. We have found that the

educators who have had the most success with this program weave the program into the classroom on a continual basis. They may for example use it once a day or 3 times a week for 15 minutes. (In total, there's six to eight hours of concentrated seat time to go through the program once. But this program is not intended to be used just once.) Like with any effective learning program, the unique needs of the students determine the best way to regularly incorporate the program. The time it takes for students to truly internalize the learning strategies that are presented in this program will vary!



WHAT'S A ROTTEN GREEN PEPPER?

The Rotten Green Peppers are the “tourguides” through the program (along with a BrainCogs expert.) They are a slightly dysfunctional rock band, with the same problems standing in their way to success as the ones students face in school. They are disorganized, can’t prioritize things, and forget to check details, among other things.

As the band learns to apply BrainCog skills to their own lives, they experience career success in the way of better venues for their music. After completing each cog, the student will get an on-screen concert ticket, and will be able to view a short performance by the Rotten Green Peppers. The song the band sings at the end of each cog is related to the strategies and the lessons of that particular section.

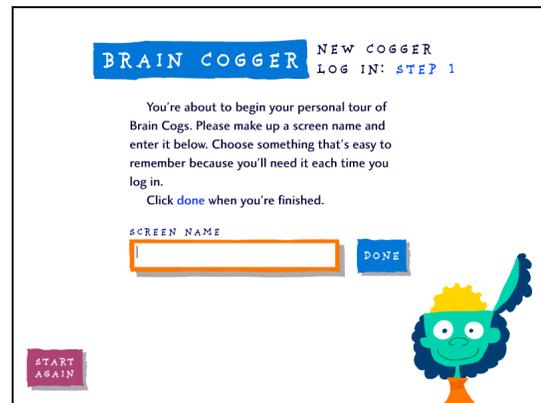
See the Extras section of the guide for the printed lyrics for all the songs presented in the software.



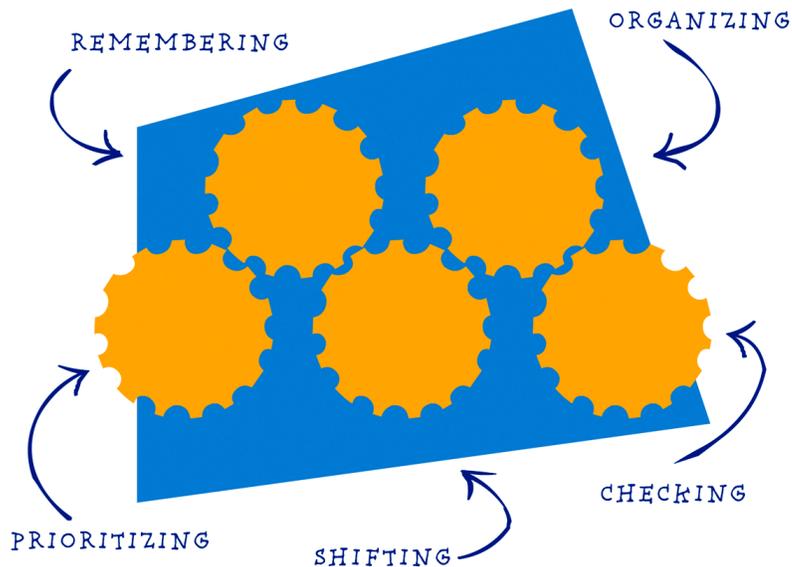
BrainCogs: A Short Walk Through

Okay, you'll need a cup of tea as you read this section, but it's a great walk through of the BrainCogs program, and will get you comfortable with all the experiences waiting for your students.

The program begins with a log-in screen. Students will need to create a screen name, a password, and enter their full name. Progress will be recorded and stored in the database on your server. If you are using the standalone version, progress is recorded on your local computer, so students must use the SAME computer each time they log in, so that all their progress will be recorded.



Immediately after logging in, students see an animated movie introducing the program. This movie provides an overview of how five of their own brain cogs will help them study and take tests. They'll learn how to navigate the program, and will also be introduced to a five-member band – The Rotten Green Peppers – who will guide them through the content.

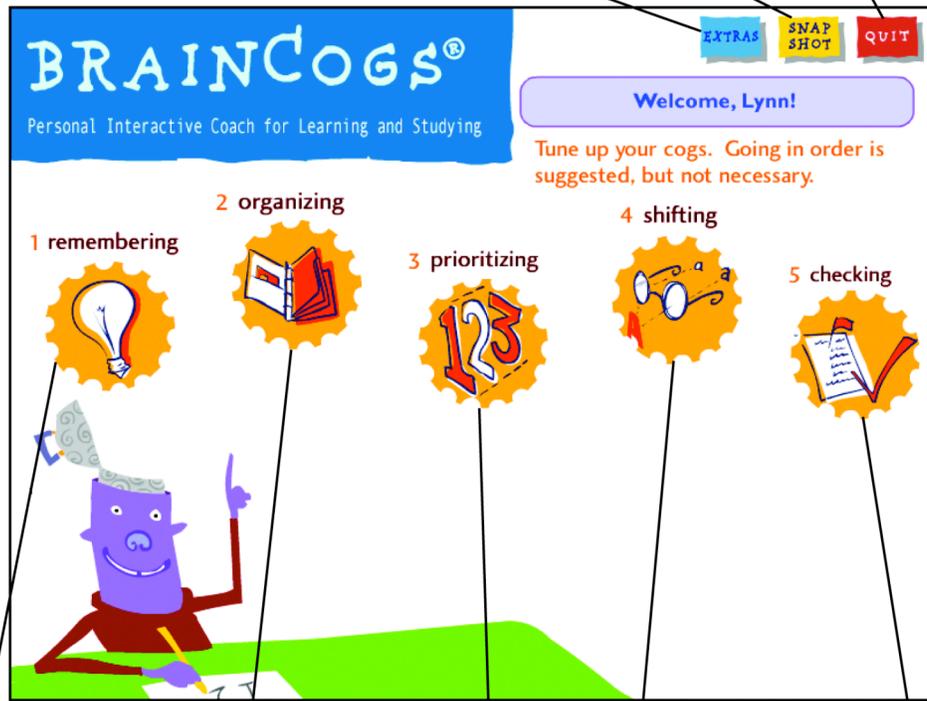


The main menu of selections includes:

- An exit button which exits the program and saves the progress.

- A snapshot view of the cogs and associated strategies.

- An extras menu leading to two additional animated movies and the RGP album. One movie presents ways to manage stress and the other shows students how to advocate for themselves.



- The Organizing cog. We define organizing as juggling and sorting information.

- The Shifting cog. We define shifting as looking again, in a brand new way.

- The Remembering cog. We define remembering as cementing information into your brain.

- The Prioritizing cog. We define prioritizing as figuring out what's more important.

- The Checking cog. We define checking as recognizing and fixing the kinds of mistakes YOU make.



The Five Cogs

The five cogs contain all the lessons and activities in the software. It is recommended that students go through the cogs in order, the first time through the program, because the content builds upon and references previously presented material.

Each cog begins with an animated movie and a menu of strategies which students can access in any order. There are 13 total strategies taught within the program, grouped according to the different cogs.

Here are the five cogs, and their associated strategies for studying and test-taking.

remembering



- Crazy phrases – make up a wacky sentence to help remember names, places, or events in a specific order.
- Acronyms - a real or nonsense word where each letter in the word is the first letter of something you're trying to remember.
- Cartoons – a picture you draw that helps you remember key information.

organizing



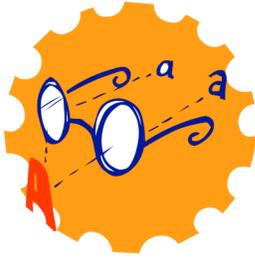
- Strategy cards – an index card with a question and a strategy for remembering the answer on one side, and the answer on the other.
- Triple Note Tote – a chart to use for taking notes from a textbook.
- Mapping & Webbing – a visual way to organize main ideas and supporting details.

prioritizing



- 1-2-3 Blastoff! – helps you relax, read carefully and begin a test.
- Red Flag – a mark to make on a test next to any question that's too hard to answer right away.
- ANN E. BOA – an acronym to help find seven tricky words on tests.

shifting



- Shifty Words – see more than one meaning in a word by shifting the accent or making nouns into verbs and vice versa.
- Shifty Images – find the meaning of a word by looking for clues in the surrounding words.

checking

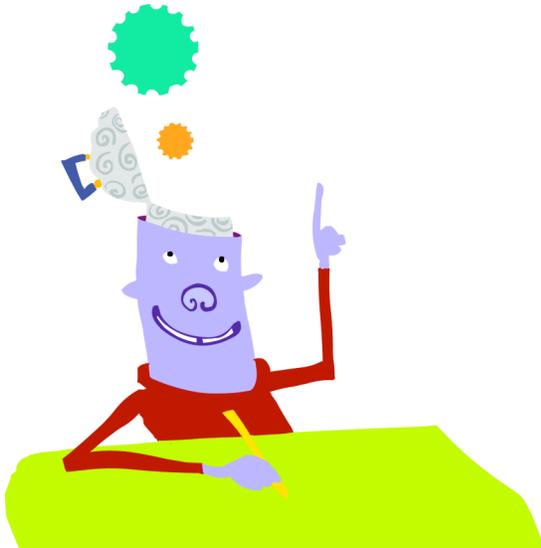


- Your Personal Checklist – make a list of the usual mistakes you tend to make on a test.
- RE-view – how to change your focus at the end of a test so checking your answers is more successful.

EXTRAS MENU

In addition to these powerful strategy tools, you'll find other features including short movie clips on:

- Self Advocacy: YOU are your own best advocate, learn to ask questions, go to a review center, ask for one-on-one time.
- Managing Stress: Understanding anxiety and its effects, anxiety relief techniques, positive reinforcement.
- Follow the Band: Watch all 5 concert videos from the Rotten Green Peppers (concerts play first as a reward at the end of each cog, but can be accessed here directly).



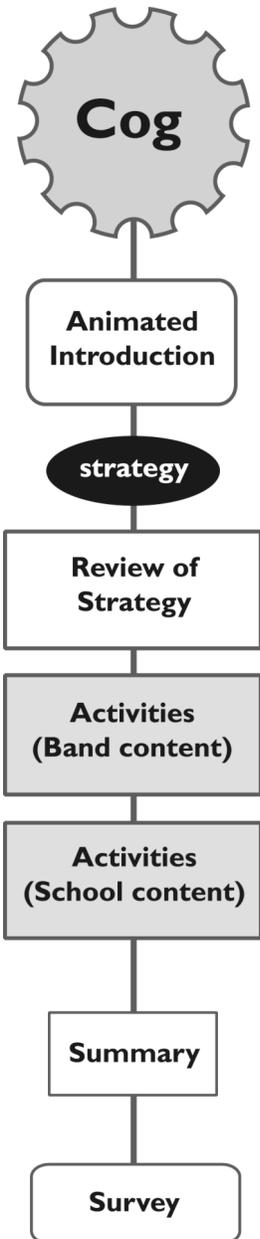
BrainCogs: Anatomy of a Cog

The Cogs

As you've just seen, within each cog there are strategies. The flow of the information, how your students will progress through the content, is similar from strategy to strategy.

Each cog begins with an animated movie based on the experience of real students.

These movies were written and created to engage and inspire students to click further and learn the strategies.



MAIN QUIT

BRAIN COG:

remembering

Try these remembering strategies.



Crazy Phrases

Making up silly sentences to help remember information.

Acronyms

Using words to trigger your memory.

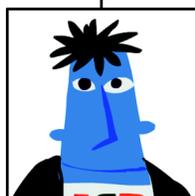
Cartoons

Creating a drawing to help you remember.

At the conclusion of each of these five movies, there is a menu of the strategies students can use to tune up that cog. They can go through these strategies in any order, but should go through them all to see which ones work best for them.

One band member is featured in each cog. That musician follows the student throughout the lessons and activities of that section, learning the same strategies at the same time.

remembering



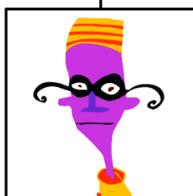
Samson

organizing



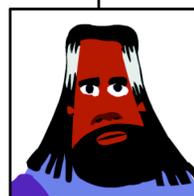
Keisha

prioritizing



Pax

shifting



Emale

checking



Inez

STRATEGY: crazy phrases

Challenge! Remember the RGP's songs in chronological order!

PEPPERS TOP HITS

- Trash
- Mash Mania
- Buffer Zone
- Save the World
- Dread

TIP
take the first letters...
and make a
CRAZY
PHRASE!

Too Many Bands Smell Dreadful

BACK NEXT

The Strategies

Each strategy begins with:

1. **WHAT** a definition of the strategy
2. **WHEN** a statement about when that strategy is most helpful
3. **HOW** an explanation of how to use the strategy

The explanation unfolds as a voice-only narrator leads a dialogue with a band member, that turns into a story about how useful this strategy could be. The band member represents a model for the student user and asks questions, slowly understanding the specific steps for using the strategy. Reading articles, letters, emails, or journals is important as the story unfolds.

These stories center around days in the life of the Rotten Green Peppers band. Students are then asked to answer questions based on these stories, through a series of interactive activities. BrainCogs provides help for every activity in the form of a character called “The Memory Jogger” for those students who want it. The program also provides verbal feedback for each activity.



STRATEGY: crazy phrases

MENU

QUIT

Challenge! Drag the name of the country next to its corresponding word.

Countries of South America:

| | |
|---------|----------------------|
| Brave | <input type="text"/> |
| French | <input type="text"/> |
| Sailors | <input type="text"/> |
| Got | <input type="text"/> |
| Very | <input type="text"/> |
| Cold | <input type="text"/> |
| Eggs | <input type="text"/> |

| | |
|---------------|-----------|
| SURINAM | EQUADOR |
| GUINEA | SUDAN |
| FRENCH GUYANA | VENEZUELA |
| GUYANA | BRAZIL |
| VIETNAM | COLOMBIA |



THE
MEMORY
JOGGER



BACK

DONE

After students have practiced using the strategy within the world of the band, the narrator walks students through an explanation of how this strategy can be used in the context of school work. Students are asked to read material — or have it read to them — to reveal the academic content. The subject matter includes geography, science, history, and vocabulary.

This school content is then reinforced with interactive activities, giving students a chance to practice using each strategy. These activities are a combination of fill-in-the-blank, multiple choice, true or false, and drag and drop questions. Help and feedback are available.

Each strategy ends with a review screen called “Use It or Lose It” where the band member reflects upon their use of the strategy, and provides a summary of how they intend to use that strategy in different content areas.



WHAT HAPPENS WHEN A STUDENT COMPLETES A COG?

After a student finishes all the strategies within a cog, we ask them a few survey-like questions about the strategies. These questions are intended to find out if the student preferred one strategy over another, and also check understanding.

Then the band plays an original song that was written to reinforce the strategies. Watch these concerts and notice how the popularity of the band grows throughout the program. The “venues” for these performances are a fun element of the band story.

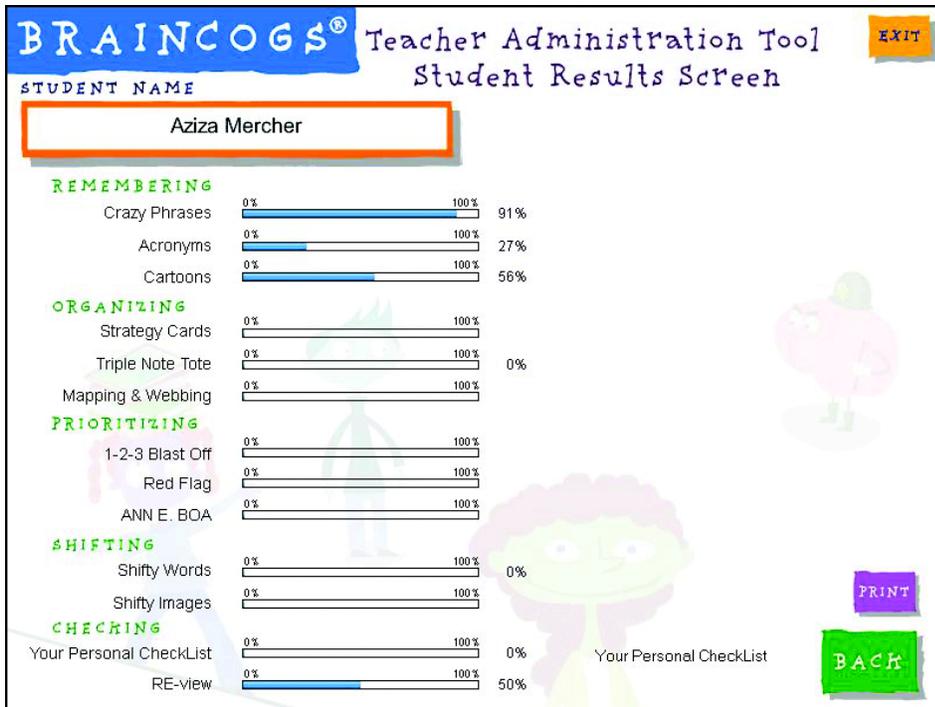


STUDENTS GET SCORED

Upon completion of the program, students get a personalized certificate. The certificate displays which strategy — within each cog — that individual student scored the highest in (performance). It also displays all the strategies that individual student indicated as useful or helpful (preference). Performance scoring appears on the certificate as a star symbol, and preference shows up as a heart symbol.

Student performance scoring is based on the activities that are related to school subjects, but not on the activities related to the band story. Performance is based on the answers a student enters the FIRST time through the program only. Scoring for the fill-in-the-blank questions accepts incorrect spellings that are close to correct.

Student preference is based on some of the answers to the survey questions about the strategies found at the end of each cog. These questions can only be viewed and answered by students the FIRST time through the program.



Administration Tool for Teachers

All the different tools are stored in a folder called “BrainCogs”. You can access this folder by clicking on the “FableVision” folder in Your Programs or Application folder. You’ll find the Installation Guide, The Educator’s Guide, a “Read me” file and the Administration Tool.

You can access the Administration Tool from your desktop by creating a shortcut. Then you can edit your class and see only your students’ information (See page 8 in the Installation Guide for details).

With the Administration Tool, you can see information such as password, progress, and scoring. This allows the teacher to work with the students one-on-one to discuss the strategies that work best for them and their inherent learning styles, and to use those strategies for learning both in school and at home.

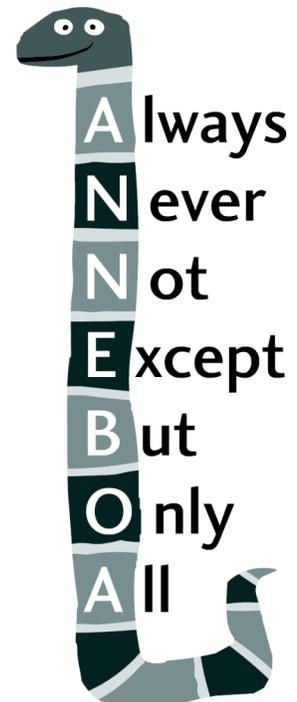




PRIORITIZING

ANN E. BOA

ANN E. BOA can get around
The tricky words not easily found.
BUT, NEVER, NOT, EXCEPT
Were in Ann's dream as she slept.
She ate all sentences that were true,
The false one left was the answer, she knew.
When a statement appears to be correct
"ANN E. BOA" knows what to inspect.
ALWAYS, ONLY, and ALL are signs
If there's no exception, the sentence is fine.



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TRIPLE NOTE TOTE

QUESTION/TERM

ANSWER/DEFINITION

STRATEGY

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Extras:

Original BrainCogs Songs

Here are extended lyrics for the songs performed on the software by the Rotten Green Peppers. You can use copy them for your students, and encourage them to create their own songs to help them remember different strategies for studying.

(All songs ©2001 Peter H. Reynolds and Tony Lechner)

REMEMBERING SONG

Lyrics by Peter Reynolds, music by Tony Lechner

Always Rememba Not to Forget,
My Brother not my sister, My sister's not my pet,
My brain's got cogs that get rusty when they're wet...

Gotta get creative when I wanna rememba,
I make up words like shalalashemba,
Try to rememba the times in Septemba
When life was slow and shalalashemba,

shalalashemba, shalalashemba,

It triggers my brain cog
to spin and to whirrr
it gives my brain the necessary jog...

Always Rememba: Not to Forget,
Never Forget, to Always Rememba

shalalashemba... shalalashemba.

remembering



ORGANIZING SONG

Lyrics by Peter Reynolds, music by Tony Lechner

It's a mess, It's a mess,
I don't know it so I guess,
It's a mess, I'm a mess,
I've got a bad case of stress,
I'm cluttered and flustered
like a bowl of burnt custard

Slow down, friend, let your troubles fade away,
Stop your agonizing... try some organizing... it'll be okay.
Open your eyes... see the big picture... and you'll be wiser than wise.
Slow down, friend, it'll be okay... it'll be okay.

Nothing's stickin' —
My brain's filled with lard
Trying to be organized,
shouldn't be so hard,
Can't keep it straight,
wish it was a breeze
Wish I could see the forest through the trees.

Slow down, friend,
sort it out in an orderly way,
Stop your agonizing... try some organizing... it'll be okay.
Slow down, friend,
Just break up the mountain, try to make it smaller
Like making change from a dollar,
Web it, map it, chart it, write it on a card,
Open your eyes... see the big picture... and you'll be wiser than wise.
Slow down, friend, it'll be okay... it'll be okay.

organizing



PRIORITIZING SONG

Lyrics by Peter Reynolds, music by Tony Lechner

What to do what to do, oh what to do —
brother, what WILL you do?

Gotta lot on my plate
I think I've filled my slate,
Got the world at my gate
Telling me I'm late

Ok.. all right... already...
first things first...
before you burst....
first things first....

What to do what to do, oh what to do —
brother, what WILL you do?

Gotta slow it down
Breathe deep, Relax
Then when you're set
Rev up the energy
You're in control
Time to rock and roll
Careful round the turns
But you're in - You're in
You're in control

Hadda lot on my plate
Thought I filled my slate,
Had the world at my gate
Then I said just wait

Oh yeah, he did, he did, he did, he did...
brother, you did what you did

Oh yeah.. right on... We're ready...
first things first... first things first



SHIFTING SONG

Lyrics by Peter Reynolds, music by Tony Lechner

Shifting for a Brand New Day
Could it be?
Can I see?
Can't you explain it to me?
I just don't get it
Got the brain of a flea!

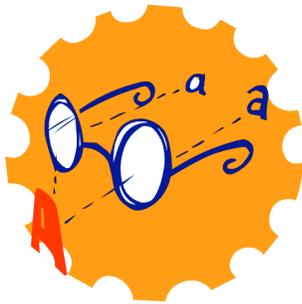
No, no . . .
Hold on - See it in a brand new way
Yeah, yeah, Hold on - You've gotta shift some things startin' today

I'm gonna Shift, I'm gonna Sift
One day soon the fog's gonna lift

Cause I'm Shifting my perspective
Look at things a brand new way

Yeah, yeah . . .
Go on - See it in a brand new way
Yeah, yeah, Go on - You've shifted things startin' today

shifting



CHECKING SONG

Lyrics by Peter Reynolds, music by Tony Lechner

Life... life... life's got a list a lifetime long...
Things to do, things to get right,
Things to do from morning 'til night

Life... life... you're bound to take a turn gone wrong
Things happen, things can take so long,
it's just human,
but that's what gives rhythm to our song.

The good news, brothers and sisters,
Is that we make the same mistakes over and over,
Just check out the way you mess it up today
And you'll see what might be comin' your way...

Before you say that your done,
just take a breath and just give the list just one,

Just one check over and see if you can see
The mistakes shout out, and that's the key
Its worth the time to check life's list
Discover the answer you might have missed

Life... life... bound to take a turn gone wrong
Things happen, things take can take so long,
its just human,
but that's what gives rhythm to our song.

checking



NOTES