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Educational Uses for Livescribe Smartpens - New additions as of 6-10-10

In an effort to help categorize the educational uses of the Livescribe Pulse Smartpen, we have placed the activities under the headings such as Student Use, Teacher Use, Parental Use and Administrative Use. It will become obvious that some activities will cross over between categories.

Student Uses:

1. **For Students Without Computer Access:** Level the playing field. Every child with a Livescribe smartpen and paper can hear their teacher's explanation over and over, anywhere and anytime. No computer needed.
2. **Testing Accommodations:** If the student's IEP requires that the test directions be read orally and/or the reading of the test direction is repeated as needed, the Livescribe pen can be used for these purposes. Also, if the student's learning disability is in written language and a scribe is writing the student response, the pen can be used to record the student response to assure accuracy. [Blog post 1 with video](#) [Blog post 2 with video](#)
3. **Pencast your homework to your teacher:** Students use their pens to do an assignment then pencast it and send the link to their teacher. Teacher can listen to a "math think aloud" from anywhere then discuss the student's process with them.
4. **Pencast your test to your teacher:** An innovative teacher in NY where every student has a smartpen, has his students take their tests at home with their pens. The must do the problems out loud while solving the problem and getting their answers. Students, at the completion of their test, upload the test and email it to the teacher who grades the test before the students come to class the next day. The teacher is then able to group his students by a common missed thread in instruction and review that with them in small group instruction.
5. **Center Based Instruction – Student Use:** The students record their activities at each center and the teacher can then listen to hear if each student fulfilled their role/obligation. This eliminates the need for a teacher to have their immediate presence at each activity to assure that the activities are done. This helps keep them on task and on time. The teacher can at any time check for understanding and adjust their instructional conversation with students in order to tap into higher levels of critical thinking.
6. **Augmentative Communication:** Augmentative Communication devices that provide a voice for those without speech are expensive and cumbersome. With the pen you have an inexpensive system that can combine letters, words and sentences to provide the best balance of efficiency and flexibility for communication. Instead of a 2.5 lb obvious device, the student carries pen and paper just like everyone else and caregivers can change their messages, thoughts, daily. The paper can take on personality while the \$2,000 device can't. [Blog post 1 with video](#) [Blog post 2 with video](#)
7. **Cornell Notetaking Plus:** The Cornell Notetaking system uses 6 basic steps: record, reduce or question, recite, review and recapitulate. Students that can't keep up with the pace of the lecture are not disadvantaged any longer. They have a complete audio recording of their teachers lecture. The "Record" step of the Cornell system is enhanced with the ability to play back the lecture at any place. Student can write questions in their Cue column without the fear of losing their place in the lecture. Handwritten notes may be studied selectively as the audio is attached to your notes. See Livescribe Teaching Strategy Guide (available with training)

8. **Search your handwritten notes:** Want to find where you have written a particular term to study or review. Type the word in the search portion of Livescribe Desktop and it will highlight every where you have written the term or word.
9. **Assistive Technology for Note Taking:** A student with an auditory processing problem may take few or unclear notes. Physical and hearing impairments may also limit speed and make note taking difficult. A note taking accommodation is intended to provide information that the student would have gotten on his own, if it were not for his disability. Livescribe should be the first line of support to provide note taking accommodations.
10. **For the Visually Impaired:** A talking address book or prescription book. In large letters the name of the pharmacy is written then the user touches a dot to get the auditory phone number, touch another and get the prescription number, what is the medication, when to take it, how much, etc. All can be recorded by the caregiver or the client.
11. **Articulation Practice for Speech Impaired:** Not only can the student take home the perfect model of the words produced by his SLP, but each time they practice the word they can document it. [Blog post with video](#)
12. **Personal Pronunciation Practice:** Teachers/SLP's can record the model, student can listen, record themselves, then compare the pronunciation to the model.
13. **Collaborative Oral Project:** Create a collaborative oral project showcasing the sights and sounds of the rainforest. Put each student in charge of researching one of the rainforest elements and recording the information as an oral report. Parents or other students can then listen to each recording. [Blog post with video](#)
14. **Basic Piano Skills:** Students can learn the basic piano chords both sharps and flats for keys c,d,e,f,g,a,b and c sharp, d sharp, f sharp, g sharp and a sharp. [Blog post](#)
15. **Learn the Sound of 8 different Musical Instruments:** Draw the piano and hear the different instruments.
16. **Create a Tactile Talking Test:** Using tactile markers or a "Tong" tool, bumps can be added to Livescribe paper, dots are drawn and the audio question is recorded. Students locate the bumps with their finger and tap next to them on the "talking dots" next to them pen and hear the audio of the question. [Blog post with video](#)
17. **Slow Down or Speed Up Audio:** Students can slow down or speed up their teachers lecture so comprehension is better.
18. **Paper Calculator:** Each pen comes with a fully functional scientific calculator. You can even do quick simple calculations without the paper calculator. Turn the pen on and within 5 seconds draw a "c", then write out your equation such as $72 \times 34 = ?$ The pen will give you the answer on the LED read out.
19. **Oral Book Report:** Print the dot paper pattern on to blank labels to create audio labels, which can be attached to virtually anything. Student can do an oral book review attach an audio label on books they have read with a review of the book, what they thought about it, what they liked/disliked about the book. [Blog post with video](#)
20. **Auditory Flashcards:** Each Flash card can talk to the student giving not only the words, but pronunciation hints, etc. [Blog post with video](#)
21. **Music Composition:** Student can compose their own songs and play for the class.
22. **Art Projects:** Students can do their preliminary art sketches on Livescribe paper, email to their teacher and get immediate feedback before putting it to canvas. Students can also add their thoughts, indicate colors, even add voice to caricatures.

[Student and Teacher Uses:](#)

23. **Sharing lessons with students who are not in class:** Teachers can email the pencast of the lesson that day to students that are absent, in alternative schools, hospital/homebound programs. These students can actually hear how the teacher taught the lesson. Teachers can embed the pencast into their website or blog. [Blog post with links to many pencasts](#)
24. **International Class Pen-pals:** We had a group in the Digital Natives Project we are doing in New York City who came up with this idea (and these were 4th and 5th graders...). They were doing a poetry unit of study. They are using the Pulse Smartpen and notebook to create their poem. But they are then going to record the poetry because as one little girl told us, "You know, the words in the poem can have different meanings by using your voice differently." So they are then going to take their written poem and their oral recitation of the poem and share it with their pen-pal class in Costa Rica via pencasting. It is their way to help their pen pals learn English.

25. **Make Up Work:** Teacher records their pop quiz or spelling test and students who are absent get the exact same quiz or instruction and the teacher's presence and undivided attention isn't necessary. [Blog post \(make up spelling test\) with video](#)
26. **Auditory Modeling for English as Second Language Students:** Instructor records words, phrases, sentences using Livescribe pen and paper. Audio is attached to each word so the student can practice one word at a time, the phrase or the sentence.
27. **Verifiable Articulation Practice for ESOL or Speech Impaired Students:** Students can hear the perfect model and each time they practice the new sound it can be recorded with a check mark and their practice verified by the parent or instructor.
28. **Talking Study Guide:** Print out a skeleton on Livescribe paper. Attach audio to a description of each bone. Slip that in a plastic protector sheet or laminate and have a Talking Study Guide. [Blog post 1 with video](#) [Blog post 2 with video](#)
29. **The Talking Word Wall:** Add your voice (or sounds) to any document or object by adding your voice (or sound) to small Livescribe dot paper shapes (rectangles, etc) and then taping/gluing them to your word wall document or other object. The Word Wall can even expand to include definitions, Latin root words, use the word in a sentence, etc. [Blog post with video](#)
30. **Read For 10 minutes Out Loud:** Write down the name of the book and the page you began reading on. Make a mark next to the name of the book and begin reading. Watch your pen and make a mark after 10 minutes so your teacher can check to see what you read for 10 minutes.

Teacher Uses:

31. **Formative Assessment:** Math teachers are having students take a test and record how they reached their answer. Teacher grades the test taken on the students Livescribe paper with their student pens. Student turns in his pen with the paper and when the teacher sees a wrong answer, he can touch the student pen to the problem and hear every step the student took to arrive at their answer. The teachers then can call the student up and hone in on where the problem went wrong. [Blog post with students' pencasts](#)
32. **Center Based Instruction – Teacher Use:** Teacher puts the instruction for the center based activity on the pen and students have a notebook at each center. Teacher can define the role of each person in the group assuring that each student knows their role. As the students rotate from center to center, the teacher does not have to repeat the instructions and each group hears the exact same instructions.
33. **Replacing the Overhead Projector:** Write out definitions and examples ahead of time, but have them show up "live" (animated) during the lesson, as if you were writing it yourself! Create one pencast over several pages, where introductions, definitions, and graphs would already be "recorded" but would appear only when the instructor is ready for them to (by hitting play, then pause again). Turn the sound on the computer off, so that you can speak through the lesson in person. This would free the instructor up to read the definitions and explain the examples while they were being written magically on the board behind you! Teachers will save time by being able to talk through everything that was already written, without having to stop and write it all out. [Blog post](#)
34. **Fluency - Repeated Reading with an Auditory Model:** The research is firm. Repeated reading with a good auditory model improves reading Fluency. Teacher reads the passage to the student, they record with their pen and then practice. Students can hear the model and touch each word to hear just that word. There are some excellent programs, albeit very expensive program out there that do this, but none that can do it on the "fly" like the pen can.
35. **Fluency Assessment:** Teacher records the student reading, scores the passage later and shares the results with student, parent and staff. [Blog post 1 with video](#) [Blog post 2 with video](#)
36. **Auditory Record of Student Participation:** For teachers that require classroom participation as part of their grade - use the Livescribe Smartpen to capture an audio recording of a classroom discussion and "tag" time-coded student comments to a seating chart. After class, evaluate each student's comments quickly and easily against his class-participation rubric, reviewing the quality of all of the students' comments. This also gives the teacher a record of what was said in case there is a question of how the participation grade was arrived at.
37. **Homework Help:** Teachers post interactive pencast video on a range of topics. Teacher's expert in their field post for student review.
38. **Create Talking Tests:** Teachers can turn any test into a talking test by printing it on Livescribe paper and then record the questions, answers, etc. [Blog post 1 with video](#) [Blog post 2 with video](#)

39. **Substitute Plans with Detail:** Add as much auditory detail as you want to your plans left for your sub. You can talk far faster than you can write and email it to the sub or individual in charge of getting the subs. [Blog post with video](#)
40. **Music Composer Lessons:** Teachers can record classical music pieces for the student to listen to and then identify the correct composer or the instruments they hear in the musical piece. [Blog post with video](#)
41. **Validate that Students have Read For 10 minutes Out Loud:** Have student write down the name of the book and the page they began reading on. Have them make a mark next to the name of the book and begin reading. Have them watch their pens timer and make a mark after 10 minutes.

Administrative and Teacher Uses:

42. **IEP Data Collection and Analysis:** By adding audio to data collection, it not only frees the observer up from tedious note taking but allows for a higher quality of information that can be truly be used to shape the child's program, to asses the efficiency of the chosen activities and teaching styles and to look for trends in the child's behaviors and learning.
43. **Date and Time Stamp:** Each time you use your pen you can take advantage of the date and time stamp. When doing IEP data collection sometimes it is important to document the duration of an observed behavior. With the pen, it's no longer a guess. _
44. **Auditory Progress Monitoring for Speech Services:** Never before has there been a tool that allows the SLP to record the speech production of the student, archive it to a computer, then retrieve at will. Record the child when they first receive services, compare as the student progresses.

Administrative Uses:

45. **Mentoring Programs:** Experienced teachers are explaining concepts, sharing ideas, and creating lesson formats and then sharing them via pencasts with novice teachers they are mentoring. Want the newbies to do self-discovery? Have the observer just leave the pen and paper behind and the newbie can go back and look and listen to the observer's notations. No confrontation – just self-discovery.
46. **Staff Development Archive:** The pens are a great way to archive all staff development notes so other teachers can benefit from seminars or teachers can start collaborating on similar topics.
47. **Low-key Observations:** Laptops and Netbooks when brought in for classroom observations can often seem intimidating and threatening but the Livescribe Pulse Smartpen does not have that same connotation. It's a low key observation device Don't turn the record function on but write notes with the pen on...all that was written can be loaded to a computer and can shared or even transcribed into text if appropriate. [Blog post](#)
48. **Administrator Walk Through:** Any evaluation format can be printed on Livescribe paper, administrators can make notes and record audio information in conjunction with the forms. [Blog post with video](#)
49. **Extended Assessment Feedback from Teachers:** Teachers who grade essays often want to give a student an extended response on elements in their paper. With a 100 papers to grade it is impossible for teachers to write out much feedback. If the students hand in their pens with their essay, the teacher can record his/her evaluation far quicker than they can write a response. The student also does not loose the tone and inflection of the teacher's voice, missing from the written word.
50. **Credit Recovery:** In Corsicana, TX, the assistant superintendent, is very concerned about the high rate of drop outs they have and especially for their minority kids. When some of these kids have difficulty and don't pass a class, they are sometimes assigned to a credit recovery class. In that class, the students are using a well known software program and workbooks and they have an assigned teacher. The issue in Corsicana is the software is not aligned to what is happening in the class, the student may have a learning difference and not be engaged on the computer or with the workbooks so he/she just zones out. So here is what they are doing with the pens: Pens are assigned to the very best teachers at the high school in core subject areas. They teach their lessons using the smartpen and notebook and then upload those lessons to the district website. They are indexing all of the lessons by subject, grade and state standard. Now when they have a child in credit recovery for say Algebra - he/she can now access instruction from a variety of teachers. Perhaps he needs to hear it explained differently - he will have access to the very best teachers and his credit recovery teacher now will serve as his facilitator. Corsicana intends to build a full repertoire of lessons in all subject areas and they will all be the best and brightest teachers from their district. They are completely redesigning their website to accommodate this new approach. They also will phase in a program whereby all teachers will upload their lessons each day to their blog site on the district

website so parents and students will have access to the lessons taught that day. This is exactly the same type of program that Johnson City, NY has implemented. [Blog post with video](#)

Parent and Teacher Uses:

51. **Sharing lessons with parents:** Wouldn't you like to have access to how your child's teacher introduced the math lesson in class today? If the teacher records on their pen how to "Simplify a Fraction", and sends it out as a pencast, students can access on line. No computer or internet access? No problem if the student has a LS pen and paper. They can record and re-listen repeatedly.

Administrative, Parent, Teacher, Student Uses:

52. **Penmail (voicemail created & shared via Smartpen):** is an effective and efficient way to improve school – home communications. It requires very little training and yet is very inexpensive and easily allows teachers and parents to exchange short messages without requiring interpreter or phone access. It can also help break down language & literacy barriers. Penmail (Smartpen + voicemail) can easily be recorded by a teacher with a Smartpen on a page in a student's Livescribe notebook and sent home with a student where a parent or parents can listen to it and potentially respond with their own penmail. If parents need to hear the penmail in a language other than one spoken by the teacher then the teacher can simply hand the notebook and Smartpen to someone who can translate the message. [Blog post with video](#)

ESOL/ELL

53. **Word Study with Translation** which can expand to an infinite number of words and to any language. The various types of Spanish such as Cuban Spanish, Columbian Spanish, Mexican Spanish can be accommodated as long as you have a community member who speaks the language.
54. **Auditory Practice and Verification** – "Now let's compare what you said to what I said". The perfect model is always available for practice.
55. **Modify the language of test questions** for the ELL students, for instance, avoid jargon on unnecessarily complex sentences in your auditory recording.
56. **Create a common visual language** for the students which would help them transfer their patterns of thinking from their native language to English.
57. **Note taking by the student can now be in both linguistic and nonlinguistic forms** such as sketches, a combination of words and schematics with the attached audio. This would not be possible with just a computer alone.
58. **Students can review and revise their notes** they have taken in class by going back and listening to the teacher again and again. When students review and revise their own notes, the notes become more meaningful and useful.
59. **Focused practice leads to mastery** over days or weeks. With the pen, practice can occur over a span of days, weeks or months if necessary and specific words/terms can be searched for in the notes.
60. **Memorization practice becomes rote.** Recording of basic rules, algorithms, or laws in both auditory, visual forms allows the skill can be practiced till it becomes rote.
61. **New Arrivals Enrolling their children.** Office staff that enrolls new arrivals from foreign countries have pens in their hands. They write out the standard questions that they ask and have those sentences translated into the various languages they need and include the probable answers. The parents can then indicate their response. Such as: Has your child been enrolled in a school here in the US before coming to our district? Yes or No. If yes, what was the name of the school? What grade level was your child enrolled in? 1,2,3,4,5,6 etc. The pen will do the talking recorded by community members who speak the language needed.
62. **Book Study.** Now you can pick any book in the library and the staff will either put strips under the words/letters or a dot of Livescribe paper at the end of the sentence so that it can be read by the pen. Levels the playing field for discussion by the group.