Many of today’s teachers are taking strides toward effectively incorporating technology into the classroom curriculum. Although most are aware of the benefits technology use can have on reinforcing learned material and promoting understanding, the positive effect that carefully selected software can have on a student’s self-esteem—especially a student with special needs—often goes unnoticed and underused.

Although it is common practice for teachers to use software in the classroom to provide practice for the lessons presented, the other benefits of technology are not always considered. When presented with a student who demonstrates low self-esteem and poor self-confidence that affects academic success, carefully selected software can provide the student with an additional means for receiving positive feedback and encouragement. The software selections discussed are certainly not the only available titles that can be used in the classroom. Rather, they are a sampling of what is available to the educator for inspiring students to view themselves in a positive light.

Holly

Holly was a six-year-old student enrolled in my first grade inclusion class with two full-time teachers and a total of 19 students. During the language arts and math blocks of the school day, Holly received instruction from me in a small group of six or seven children within the classroom. She participated in the whole group instruction for content areas (social studies and science), group meetings, a literacy period, recess, lunch, and related arts. None of Holly’s services, with the exception of one of her two weekly speech and language sessions, took place out of the classroom.

Holly’s diagnosis has been multifaceted. She is labeled as developmentally delayed, has been receiving services since age three for communication disorders, and has been diagnosed as having AD/HD and Oppositional Defiance Disorder (for which she currently takes medication that appears to be effective). Holly’s Individualized Education Plan has recently been amended to include the language arts goals of increasing comprehension and receptive language skills and the mathematics goals of increasing her computation skills and promoting her ability to identify number combinations with a sum of ten or less in addition to the current communication goals.

Holly’s difficulties in the school setting transcend academics. Holly has endured many losses in her young life and, as a result, is hesitant to trust adults and has a fragile self image. She is quick to make attempts at avoiding work by acting out, particularly if it is challenging or if she feels she will not succeed. Steering Holly’s attitude in a more positive direction and providing her with the consistent, encouraging feedback that she requires to successfully make it through the day often became my primary focus. Holly’s desire for praise in the school environment and her need for continual feedback had me consistently trying to find new ways for Holly to learn to trust her own abilities. Knowing she had an interest in using the technology available in the classroom, I decided to search out ways to use software to provide Holly with some of the emotional support she needed. I was sure that integrating technology into the curriculum on a daily basis could serve not only to provide a variety of reinforcement activities for Holly, but also to supply her with another means of receiving the encouragement that her delicate emotional state required to be successful.

The teachers, specialists, and students who worked with Holly were keenly aware of her need for feedback and positive reinforcement. Without it, Holly began to feel as though she...
wasn’t capable of learning, and her behaviors would escalate in an attempt to avoid tasks. Holly needed several sessions throughout her day when she would receive undivided attention.

The dilemma arose: how could I possibly provide Holly with the feedback needed to teach her to be confident in her own abilities without sacrificing the needs of the other students.

What Could Be Done?
The academic focus was clear—Holly needed information presented in a variety of ways, including rewording and restating of directions and objectives to provide her with multiple opportunities to comprehend what was expected: a multisensory approach through which she is given the opportunity to gain understanding through seeing, hearing, and when appropriate, physically manipulating information presented, and the opportunity for repetition. But what about her emotional needs? Clearly, it was impractical for me to believe that I could always provide the feedback and encouragement at the time when Holly needed it. Waiting for a paper to be corrected or for me to visit with other children first was not always possible for Holly. She needed a careful balance of immediate feedback and delayed feedback while she learned to become confident in her own abilities. The following carefully selected pieces of software provided such feedback while addressing Holly’s academic goals and reinforcing learned concepts.

Intellitools Math Concepts 1
I preferred this software program over other programs that focus on beginning math skills for Holly for several reasons. (Editor’s note: Find URLs for these programs under Resources on p. 29.) Math Concepts 1 focuses on counting skills, single digit addition and subtraction with picture support, and the concepts of greater than and less than. Math concepts are introduced and reinforced using cute characters and lively animation that is sure to engage a first grader, particularly one who is having difficulty maintaining focus and mastering concepts. The student is able to practice and apply skills in a variety of contexts. There is the option for the student to supply the answers as well as to ask the questions and allow the program to demonstrate the focus skill.

The program allows for the teacher to track progress and tailor lessons. Students can sign in as they use the program so the teacher can monitor progress and determine areas of difficulty. Teachers may then customize the number range used, the level of assistance provided by the program, and the ability level to match student needs. The program also enables teachers to create a progress portfolio for students, letting them know in which areas there are gaining mastery and where a need exists. For students such as Holly, repetition is the key to mastering math skills, and this program allows for that while avoiding redundancy.

Math Concepts 1 provides continual feedback to the student. As a student completes a task, he or she is rewarded with words of encouragement or a visual reward (funny animations). The program can review lessons that have already been presented in the classroom to promote feelings of success and mastery as well as an “ask the question” option for students who are not yet confident enough in the focus skill to answer questions. The options available are sure to promote positive feelings in the user. For Holly, seeing and hearing Oshi the Otter cheer her on provided her with the confidence she needed to experience success with Math Concepts 1.

Phonics 3a
Phonics 3a uses animations and graphics that relate to an elementary student’s life. This program follows a basketball theme and a coach who provides encouragement and explains the goal to encourage students to explore syllables, synonyms, antonyms, sorting and classifying words, and reading comprehension skills to promote beginning reading skills.

Students are coached by Coach Jordan on how to build a knowledge base through encouragement to master the tasks in an order that promotes greater understanding and the ability to apply learned skills to conquer more difficult tasks, classify words, and make connections between known words and new words. There are a variety of skill-building games and a chance for the student to compete against him- or herself. For those who are not reading consistently alone, the program can read words aloud and allow the student to highlight words he or she would like re-
peated. Teachers are able to check students’ progress as they move through the levels. Students get the chance to make baskets and score points when they classify words correctly, again providing positive feedback and rewards. Although basketball is the only metaphor used, the animations are nonetheless engaging, allowing students to choose the basketball player of their choice to learn the skills. The consistent feedback offered at short intervals is sure to encourage them to continue using the program and to attempt the next skill level.

Holly enjoyed having the opportunity to choose her character and was thrilled when she had the opportunity to demonstrate the skills she learned using this software in her daily reading group. As the year progressed, Holly became a master in sorting and classifying words, using this skill to help her decode surrounding words, and looking for words within words. The confidence she gained enabled her to complete the school year independently reading above grade level.

**Balanced Literacy**

Balanced Literacy was an excellent choice for use with a student such as Holly to focus on reading and language arts goals. The software addresses all areas of literacy, from decoding, to phonemic awareness, to word families, to comprehension. It is lively and engaging with cute animations and catchy songs. Teachers are able not only to track individual student’s progress but to see specific errors or trouble spots as well. Writing activities are available, and students are provided an opportunity to practice decodable spelling words and gain practice with sight words. The program itself is designed to be universally accessible, with audio support, Intellikeys access, 46 compatible keyboard overlays, and low-vision mode, therefore avoiding some limitations for special needs students. Holly and I both preferred this program over the other language arts programs explored because of the wide range of delivery methods. Holly was able to practice skills through puzzle games, increase her sight word recognition, spell decodable consonant-vowel-consonant words, and demonstrate comprehension through review activities. The needed practice and repetition is provided while at the same time avoiding the “been there, done that” feeling of some other programs.

Perhaps the best feature of Balanced Literacy is the ability for students to gain confidence in their learned skills. A multitude of reinforcing activities that focus on learned onsets, rhymes, and story rhythms are designed to help students experience success at many different tasks, such as reading, sentence building, comprehension, and beginning spelling skills. Confidence in pre-reading and reading abilities is promoted through multiple opportunities to complete skill-building tasks similar to those completed as worksheets within the classroom, resulting in an increase in self-esteem as well as the courage to take on more difficult tasks. Holly was excited to tackle the crossword puzzles included in our phonics book once she learned to complete them in the friendly manner presented through Balanced Literacy. More than increasing Holly’s ability to complete classroom assignments, this program helped me to teach Holly that she did have the ability to successfully complete the first grade curriculum.

**Kid Pix**

Kid Pix is an excellent program to use with early elementary students to encourage creativity and writing skills. Students such as Holly seem to be reluctant to make sentences and to take part in creative writing activities. With the assistance of a teacher willing to design activities to be completed using Kid Pix, the software can help students transition from copying words and sentences to composing their own. Students can quickly be motivated to learn to use the creative tools and combine them with their beginning typing skills to complete writing activities. The resulting product and the slide show capability to showcase efforts will serve to promote self-esteem. Sharing their creative efforts as either an individual slide show or a group activity builds a
Using Kid Pix in combination with a carefully prepared lesson to complete literacy activities can provide each child in the classroom with the opportunity to participate in a lesson in cooperation. Holly was paired with a student to complete a learning activity in which the group was instructed to write an animal riddle. Although much care needed to be given to determining a partner who would be a compliment to Holly’s abilities, I was pleasantly surprised at the pair’s final product. The girls discussed which animal to write about, took turns working on the picture, and did their own rewriting until they were happy with the outcome. In many ways, Holly’s confidence and self-esteem benefited more from the peer interaction than any praise I could have given her for a job well done!

Conclusion
There is a seemingly endless supply of software available for use with children in the classroom. But how do we as educators know which will best address our concerns? When considering the self-esteem of young students both with and without special needs, there are several characteristics of a program that make the software appropriate. Programs that offer a child multiple opportunities to master a skill while giving praise through engaging graphics seem to promote a child’s confidence better than those that are not visually engaging. Many students benefit from the opportunity to gain mastery through a repetition of skills, but without the variety in graphics and presentation, the students who benefit most from repeated opportunities for practice turn away quickly. In my search for software to use with Holly, I found that programs of the greatest value in promoting her self-esteem:

- were visually engaging
- included a level of creativity and student choices
- provided a student with a clear goal and an opportunity to observe the procedure, and
- provided the option for the educator to customize the program for particular students

Employing technology in the classroom to assist a teacher in addressing students’ IEP goals and emotional needs can be invaluable. Students who are receiving differentiated education often are dealing with additional issues in combination with their diagnosed disability. Using carefully selected pieces of technology as a partner in education can serve to promote a child’s self-esteem, allow students to experience a feeling of control over their education, and provide them with the essential consistent feedback and encouragement that they need to feel successful.

Resources
Balanced Literacy (Intellitools):
http://www.intellitools.com/demo/
Kid Pix (Broderbund):
http://www.broderbund.com/
Math Concepts 1 (Intellitools):
http://www.intellitools.com/demo/
Phonics 3a (Help Me 2 Learn):
http://www.helpm2learn.com/games/Phonics3a/contents.html

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