



Your Data Is
POWERFUL!

Advancing Learning with Powerful Data!

Promoting Learning and Literacy with eCurriculum!

The first two parts of the Powerful Data series explained ways that rapid access to information on learning – your program’s quality outcome data – can be used to plan, evaluate, make decisions, and communicate accomplishments. The more you use the assessment, reporting, planning, and teaching tools in Galileo, the more options become available for advancing learning in your program, for furthering Head Start success nationwide, and for helping children to be “ready to learn” when they enter kindergarten.

One option programs have is to make the most of the link between curriculum and assessment made possible by advances in technology. Galileo’s Electronic Management of Learning fulfills the need for curriculums capable of adapting rapidly to diverse and continually changing circumstances affecting curriculum.

Changing social and economic environments coupled with state and federal standards augmenting local control have contributed to the ways that early childhood programs are able to achieve their goals. In

“Galileo eCurriculum for Preschool,”¹ the authors describe six trends influencing the nature of curriculum in the new century.

1. The movement from a static to a dynamic curriculum structure capable of accommodating the continuous change in curricular goals and methods.
2. The movement from a passive to an active goal-directed results-based approach to instruction.
3. The introduction of evidence-based practice, which includes mechanisms to evaluate the effectiveness of educational practices.
4. The movement from a laissez-faire to a managed approach to curriculum implementation.
5. The use of computer-based assessment and instruction to enhance learning and teaching.
6. The establishment of learning communities linking all of the stakeholders in the educational enterprise.

Programs moving forward with new approaches to curriculum are positioned to provide children the opportunity to participate in the global information age in accordance with their potential for such participation.

Computer-Based Curriculum

Galileo eCurriculum is designed to reflect what research tells us about children's learning and to accommodate the rapid changes in priorities and standards that shape curriculum. The empirically validated scope and sequence in eCurriculum is based on observations of thousands of children therefore making it very different from a curriculum based solely on a particular philosophy.

In addition, the dynamic nature of eCurriculum can help organize content from both core and supplemental curriculum in one place. This allows users to make changes in curriculum materials instantly available to appropriate users, thereby saving both time and money. In making the transition to a 21st century curriculum, a program might start by making new instructional activities instantly available to teachers using electronic technology. Galileo eCurriculum contains hundreds of activities linked directly to various sets of performance objectives and educational standards. These can be made instantly available to teachers. Moreover, they can be modified and teachers can create and store their own activities in a library along with activities available in the Galileo system.

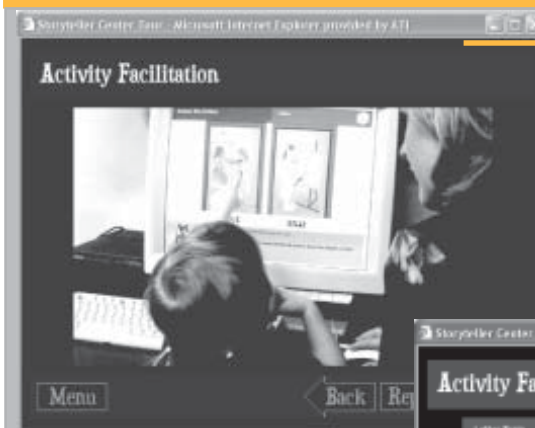
Exposure to activities of the sort included in Galileo eCurriculum sets the stage for introducing goal-directed, results-based instruction. All activities in the Galileo system are linked to instructional goals. A teacher using a Galileo activity is informed as to what the activity is intended to accomplish.

A key component of the management process is the monitoring of implementation. Galileo eCurriculum includes a number of management tools that may be used for monitoring. For example, the system includes eCurriculum maps, which map activities and lesson plans onto educational goals. The eCurriculum maps pro-

vide an indication of the extent to which valued goals are addressed during curriculum implementation.

Galileo eCurriculum includes a curriculum component called Storyteller Online Learning Collection which links computer-based assessment and instruction to the classroom curriculum. Unlike most stand-alone software for preschoolers, Storyteller's online activities are articulated directly to performance objectives and educational standards that guide assessment and instructional activities in the classroom. A unique benefit is the automatic relationship of the instructional activity to the goal. When a Storyteller assessment activity is implemented,

Taking a Look at **POWERFUL** eCurriculum



Guess The Action:

A child participates with a teacher in this Storyteller game show activity that measures how well she understands positional words and words that describe qualities of objects. Storyteller activities are independent and teacher-facilitated.

Letter Train:

Children are motivated to learn with the fun multi-media visual and auditory presentations in Storyteller. In this activity, a child names letters on train cars as they watch the cars pass by. This activity measures alphabetic recognition.



the assessment scale in Galileo used to assess the mastery of performance objectives reflecting instructional goals is automatically updated.

Storyteller assists teachers in providing research-based Literacy and Language development instruction. Storyteller is designed to easily integrate with regular classroom instruction as either the literacy portion of the regular teacher-created lesson plans or in conjunction with other Language and Literacy activities using multiple interest areas. Storyteller includes activities for parents to use with their children at home.

Storyteller eCurriculum includes:

- 28 weeks of Language and Literacy Lesson Plans,
- 126 Classroom Activities, and
- 23 Computer-based Instructional Activities.

Easy to follow instructions for Storyteller eCurriculum make it ideal for **supporting teachers with proven techniques they can use immediately to impact learning.**

The combination of assessment, online customizable lesson plans, online and offline activities, online and offline parent participation, and online management tools, makes Galileo eCurriculum and Storyteller an ideal resource for implementing research-based pre-reading initiatives within the current Head Start structure. This is an example of technology enhancing *learning communities* long devoted to helping children and families, by facilitating *eLearning Communities*, prepared

to help increase children's opportunities for success.

eLearning Communities


Using assessment and curriculum information that is easily interpreted and understood by audiences ranging from parents to policy-makers facilitates the kind of communication required for effective eLearning Communities. Galileo Online technology is uniquely able to facilitate the coordinated access to and rapid dissemination of information so important to this process. eLearning Communities have emerged from Galileo Technology Chapters, Head Start Associations, Research Committees, State Education Departments and other groups of early childhood programs with the common theme of progress. Among their accomplishments:

- Producing evidence that shows the success of Head Start and other early childhood programs.
- Providing timely stakeholder access to data for problem solving.
- Adapting instruction as required to accommodate local standards to promote learning.
- Sharing activities, lesson plans and other teaching resources efficiently online.
- Determining sources of variability in children's learning to better target resources.
- Conducting research and evaluation for continuous improvement.



PART III POWERFUL DATA CHECK LIST

- Run end-of-year reports to target areas for improvement and give insight on successes which can help in planning for the Fall. For instance, Progress Reports on children's accomplishments last year are useful in setting program goals for this year.
- Programs using Galileo can get ready for next year by enrolling new children and transferring returning children.
- Implement Professional Development activities such as:
 - Galileo Online Training Tutorials
 - ATI's Early Childhood Professional Development Series with video guide and hands-on projects
 - Teacher in-service on your program's learning goals, highlighting related assessment scales and eCurriculum content areas.
- Teachers can refer to eCurriculum Resources in Galileo for guidance on classroom organization and materials lists for setting up interest centers in the classroom.
- Get a first-hand look at computer assisted assessment and instruction by scheduling a demonstration. Call your **ATI Field Services Coordinator at 1-877-358-7611.**

Each of these activities demonstrates how Powerful Data and technology are being used to prevail over the challenge of promoting learning and literacy. 

Sample: Galileo eCurriculum Activity

While each Galileo Activity has a primary content area focus, it also contains goals from different curricular areas. This is in keeping with cross-curricular teaching where a single activity can promote development in multiple learning areas. In an activity with many goals, it is recommended that you review the activity to be sure it has the focus you desire before you include it in your lesson plan. For example, this activity's primary focus is the Language & Literacy knowledge area of alphabet knowledge. It also addresses goals in three other developmental areas. If your desire is an alphabet knowledge focus, this activity would be a good one. However, if your desire is a focus on independence in daily activities, this activity only deals with that goal peripherally, and another activity may be a more appropriate choice. The goals of each activity provide a reference to which goals you will be watching for the children to demonstrate during the activity. As you enter your own activities, you may also include goals from multiple developmental areas.

Step-by-step instructions for completing the activity and enrichment suggestions.

Fishing for Letters ← Title of Activity

DEVELOPMENTAL AREAS
 3-5: Galileo v2 Approaches to Learning
 3-5: Galileo v2 Language and Literacy
 3-5: Galileo v2 Social and Emotional Development
 3-5: Galileo v2 Fine and Gross Motor Development

KNOWLEDGE AREAS
 Goal Setting And Planning
 Early Reading
 Early Writing
 Alphabet Knowledge
 Independence In Daily Activities
 Fine Motor Dexterity And Control

GOALS
 Sets a goal prior to beginning of an activity or a project.
 Asks questions about the names of letters, words, signs, labels.
 Writes using her/his name, without assistance.
 Names 9 or fewer letters.
 While playing, says what s/he wants to accomplish, when asked.
 Gets materials needed for an activity, without prompts.
 Uses a variety of writing tools and materials to communicate with others.
 Copies her/his name from a sample.
 Correctly holds a pencil or crayon.
 Says, signs, or gestures whether or not a simple task has been completed.
 Names 10 or more letters.

MATERIALS:
 Fishing pole with metal end on string (large paperclip)
 Magnetic letters
 Pencils
 Paper

SETUP:
 1) Create a fishing pole using a yard stick or dowel and yarn.
 2) Attach something metal to the end and test it to make sure the metal will pick up the magnetic letters.
 3) You may also create a pond with blue butcher paper.
 **You can create the reverse with a large magnet on the end of the fishing pole. Use paper letters with metal paper clips.

STEPS:
 1) Invite the children to fish for the alphabet. Whatever they catch, they must record by copying (or tracing) the letter onto their papers. Children should identify the name of the letter or ask a peer/teacher if they don't know.
 2) Encourage the children to set a goal for how many fish (paper letters) they would like to catch today. Celebrate when a child reaches his/her goal with a sticker on his/her paper.
 3) Ask the children to copy their names onto their papers so they can take them home.

ENRICHMENT:
 -Use the same set-up for number recognition, name recognition (with magnets on namecards), shapes, etc.

NOTES:
 -This activity is suitable for small groups and can be child-directed during a free choice time. Your help may be needed to help a child identify letter names, but tracing the letter can be completed independently.
 -You can use a piece of yarn and a clothespin for a fishing pole as well. Fish for laminated letters, but a volunteer must put the letter on the clothespin.

Materials list that helps you prepare the activity.

Instructions for setting up the activity prior to children engaging in it.

Notes include helpful hints, book suggestions, song lyrics, alternative materials, suggested center and options for using the activity in different size groups.

Learn about eCurriculum and Storyteller in **ATI's new eCurriculum book available Fall 2004. For more information, call your ATI Field Services Coordinator at 1-877-358-7611.**

Reference: ¹ Bergan J.R., Bergan K.S., Feld J.K., Cunningham K.N., and Linne K.A. (2004) *Galileo eCurriculum for Preschool: An Early Childhood Curriculum for the 21st Century*. Assessment Technology, Inc.

