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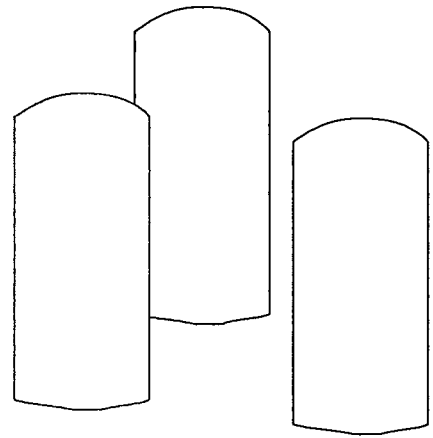
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ABSTRACT

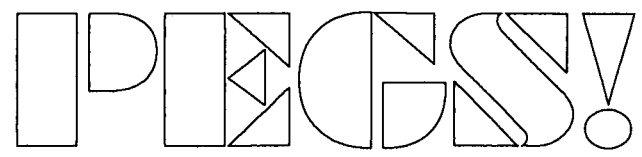
This final report describes the activities and outcomes of a federally funded project designed to produce and field-test two computer-based interactive CD-ROMs: "PEGS! for Preschool" and "PEGS! for Secondary School". These programs, in a game format, provide beginning general and special educators with independent practice in using basic behavior management strategies. The 43 teachers and assistant teachers who volunteered to evaluate the PEGS! CD-ROM programs gave high ratings of approval overall and also on each quality criterion (relevant content, a helpful learning experience, and easy to use). A follow-up study in 23 classrooms showed statistically significant increases in the skills of participants after using the programs independently during a 2-week period. Average skills in behavior management increased 41% for 12 early childhood educators and 42% for 11 middle and high school teachers. In addition, negative responses from children decreased by 64% for early childhood educators and 28% for secondary teachers. While the sample sizes for these preliminary field tests were small, the results hold promise that the PEGS! programs can be effective inservice training tools for independent adult learning and enhanced behavior management skills. Appended are: (1) Parents and Professional Advisory Councils; (2) Instructional Design Documents and Definitions of Strategies; (3) Text Vignette Summaries; (4) Formative Evaluation of "PEGS! for Preschool" by College Students; (5) Formative Evaluation of "PEGS! for Middle/High School" by College Students; (6) Georgia Distribution; (7) Rating Scales for the CD-ROMs; and (8) Rating Adult Strategies: Early Childhood Educators [and] Middle/High School Teachers. (Contains 33 references, 14 tables, 7 figures, and 5 charts.) (Author/SG)

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project



Interactive CDs to teach adults positive behavior management skills

Practices in
Effective
Guidance
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FINAL PERFORMANCE REPORT

Projects of National Significance, CFDA 84.325N
Grant Number H325N990015
October 1, 1999 - December 30, 2002

Developmental Therapy - Teaching Programs
College of Family and Consumer Sciences
The University of Georgia
Athens, Georgia

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Project PEGS! Practice in Effective Guidance Strategies

Interactive CD-ROM Series for Educators
to Practice Positive Behavior Management Skills

FINAL PERFORMANCE REPORT
Projects of National Significance, CFDA 84.325N
Grant No. H325N990015

Abstract

The purpose of this project was to design, produce, and field-test two computer-based interactive CD-ROMs: *PEGS! for PRESCHOOL* and *PEGS! for SECONDARY*. These programs, in a game format, provide beginning general and special educators with independent practice in using basic behavior management strategies. The 43 teachers and assistant teachers who volunteered to evaluate the *PEGS!* CD-ROM programs gave high ratings of approval overall and on each quality criterion: *relevant content, a helpful learning experience, and easy to use.*

A pre- to post-CDR follow-up study in 23 classrooms showed statistically significant increases in the skills of participants after using the programs independently during a 2-week period. Average skills in behavior management increased 41% for 12 early childhood educators and 42% for 11 middle and high school teachers. Mean gains were statistically significant for both groups ($p < .01$ for early childhood; $p < .04$ for secondary teachers). Additionally, negative responses from children decreased by 64% for early childhood educators and by 28% for secondary school teachers.

While the sample sizes for these preliminary field tests were small, the results hold promise that the *PEGS!* programs can be effective inservice training tools for independent adult learning and enhanced behavior management skills.

Table of Content

Executive Brief	i
INTRODUCTION	1
Table 1. Criteria Used to Rate and Evaluate the <i>PEGS!</i> Products	3
DESCRIPTION OF THE FINAL PRODUCTS	3
Figure 1. Menu Screen of <i>PEGS!</i> for <i>PRESCHOOL</i>	4
Figure 2. Menu Screen of <i>PEGS!</i> for <i>SECONDARY</i>	4
Figure 3. <i>PEGS!</i> Strategies You Can Use	5
PROJECT ACTIVITIES AND ACCOMPLISHMENTS	6
<i>Tasks 1 - 4</i>	6
The Parents and Professional Advisory Councils	6
Table 2. Project <i>PEGS!</i> Overview of Activities and Accomplishments	7
Table 3. Project <i>PEGS!</i> CD-ROM Content for PC or Mac Operating Systems	8
<i>Task 1. Design and Develop the Two Products</i>	9
Table 4. Simulated Behavior Problems of Child Characters in <i>PEGS!</i> CD-ROMs	11
Figure 4. Meet the <i>PEGS!</i> Students	12
Table 5. Management Strategies Included in <i>PEGS!</i> CD-ROMs	13
<i>Task 2. Formative Field Testing</i>	13
Table 6. Frequency of 11 Behavior Problems Identified in Vignettes for <i>PEGS!</i> for <i>PRESCHOOL</i> by Council Members and Expert Panel	15
Table 7. Frequency of 10 Behavior Problems Identified in Vignettes for <i>PEGS!</i> for <i>SECONDARY</i> by Council Members and Expert Panel	15
Table 8. Rankings in Severity of Problem Behaviors in Early Childhood Version	16
Table 9. Rankings in Severity of Problem Behaviors in Secondary Version	16
Table 10. Educators' Familiarity with Management Strategies Selected for Inclusion in the <i>PEGS!</i> CD-ROM for Secondary	18
Chart 1. Average Ratings of <i>PEGS!</i> for <i>PRESCHOOL</i> by 16 College Students for Formative Evaluations	19
Chart 2. Average Ratings of <i>PEGS!</i> for <i>SECONDARY</i> on Criterion Items by 41 College Students for Formative Evaluation	20
Chart 3. Average Ratings of <i>PEGS!</i> for <i>SECONDARY</i> on 10 Design Criteria by 2 Independent Instructional Design Experts	21
<i>Task 3. Planning for Information Dissemination and Product Distribution</i>	22
Figure 5. Dissemination and Distribution	24
Figure 6. <i>PEGS!</i> Informational Flyer	25

<i>Task 4. Project Evaluation</i>	28
Participants in the <i>PEGS! for PRESCHOOL</i> Field Tests	28
Figure 7. Field Test Design for Summative Evaluations	29
Table 11. Characteristics of 43 Educators Volunteering to Field Test <i>PEGS!</i> CD-ROMs	30
Participants in the <i>PEGS! for SECONDARY</i> Field Tests	32
Instruments and Procedures for the Field Tests	33
Results	36
Table 12. Average Ratings of <i>PEGS!</i> CDRs BY Early Childhood and Middle/High School Educators	37
Chart 4. Changes in Average Behavior Management Skill Scores of Educators in a Two-Week Interval	38
Chart 5. Decrease in Negative Responses From Students in a Two-Week Interval	39
Table 13. Classroom Performance of 12 Early Childhood and 11 Middle/High School Educators	40
SUPPLEMENTAL INFORMATION and UNANTICIPATED OUTCOMES	42
Table 14. Evaluation Reports from 62 Participants in Georgia GLRS Inservice Course Using <i>PEGS! for ELEMENTARY</i> CD-ROM	43
PROJECT BENEFITS	44
REFERENCES	45
APPENDICES	
Appendix A. Parents and Professional Advisory Councils	A-1
Appendix B. Instructional Design Documents and Definitions of Strategies	B-1
Appendix C. Text Vignette Summaries	C-1
Appendix D. Formative Evaluation of <i>PEGS! for PRESCHOOL</i> by College Students	D-1
Appendix E. Formative Evaluation of <i>PEGS! for MIDDLE/HIGH SCHOOL</i> by College Students	E-1
Appendix F. Georgia Distribution	F-1
Appendix G. Rating Scales for the CD-ROMs	G-1
Appendix H. Rating Adult Strategies: Early Childhood Educators Middle/High School Teachers	H-1

Project PEGS! Practice in Effective Guidance Strategies
Interactive CD-ROM Series for Educators
to Practice Positive Behavior Management Skills

FINAL PERFORMANCE REPORT
Projects of National Significance, CFDA 84.325N
Grant No. H325N990015

Executive Brief

The project purpose was to design, produce, and field-test two computer-based interactive CD-ROMs: *PEGS! for PRESCHOOL* and *PEGS! for SECONDARY*. These programs, in game format, provide beginning general and special educators with independent practice using basic behavior management strategies in simulations of typical school-related activities.

Each version contains animations of children behaving in familiar ways. The menus provide options for obtaining in-depth text information about each child character, the challenging behaviors they exhibit, and the intervention strategies. There are also three levels of difficulty or a practice session for warm-up.

As an activity begins, the player selects a particular child and then chooses among 12 basic positive management strategies with the goal of increasing or maintaining the child's participation in the activity. When the choice is a good match for that individual child, there will be an increase in participation and a decrease in problem behavior. When a choice is not a good match, problem behavior increases. While a player attends to one child, the other children continue to engage in a range of behaviors. If ignored for too long, the others may exhibit negative, non-participatory behavior, and the game is lost. Alternative responses can be explored by repeating the same activity but choosing different strategies. Each time the game is played, a randomly selected small group of children—each with a different configuration of behavior problems—is presented. The game is won when all of the children are participating with enthusiasm, and full participation by the group is maintained. At the end, the program provides feedback about each child's participation and an analysis of the management strategies used. This feedback has a print option.

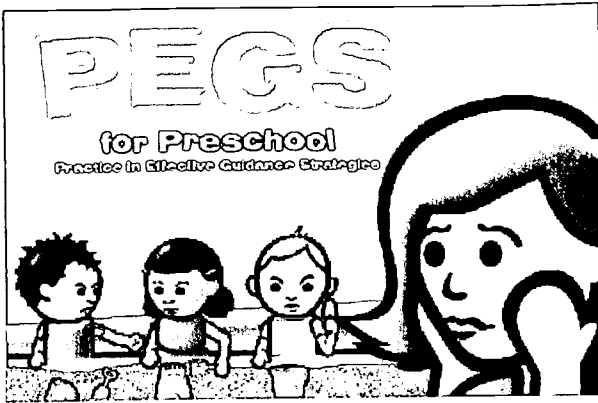
The 43 teachers and assistant teachers who volunteered to evaluate the *PEGS!* CD-ROM programs gave high ratings of approval overall and on each quality criterion: *relevant content, a helpful learning experience, and easy to use.*

A pre- to post-CDR follow-up study in 23 classrooms showed statistically significant increases in the skills of participants after using the program independently during a 2-week period. Average skills in behavior management increased 41% for 12 early childhood educators and 42% for 11 middle and high school teachers. Mean gains were statistically significant for both groups ($t = 2.53, p < .01$ for early childhood; $t = 1.91, p < .04$ for secondary teachers). Additionally, negative responses from children decreased by 64% for early childhood educators and by 28% for the middle and high school teachers.

Among the early childhood educators, there was also a 30% decrease in frequency of interventions used, and 90% reduction in the frequency of participants' ignoring. Although participants who were less skilled and less experienced had the greatest benefit, experienced and skilled educators also made gains in skills and reduced the frequency of their interventions.

In contrast, for middle and high school teachers, who also made statistically significant improvement in their overall skill scores, there was little change in the frequency of their interventions and instances of ignoring students. However, there was a statistically significant difference between female and male teachers in the mean number of negative student responses before using the CDR. Female teachers had a total of 5 negative responses from students, while male teachers had a total of 83 instances of negative responses. For post-CDR observations, the female teachers had a total of two negative responses while the male teachers had 61 negative student responses (a 26% decrease).

While the sample sizes for these preliminary field tests were small, the results hold promise that the *PEGS!* programs can be effective, inservice training tools for independent adult learning and enhanced classroom skills.



FINAL PERFORMANCE REPORT

Project PEGS! Practice in Effective Guidance Strategies

(CFDA No. 84.325 N)

October 1, 1999 — September 30, 2002
(no cost extension to December 30, 2002)

INTRODUCTION

The mission of Project *PEGS! Practice in Effective Guidance Strategies* (CFDA No. 84.325 N) was to design and produce two interactive computer-based CD-ROM (CDR) simulated programs for adult learning in game formats: (1) *PEGS! for PRESCHOOL* and (2) *PEGS! for SECONDARY*. The target users were beginning educators in general and special education—teachers and assistant teachers—and others seeking to improve their classroom behavior management skills. The preschool version was targeted for those teaching children ages 2-5 years; and the secondary version, for those teaching students ages 12-16 in middle or high school.¹

The need. The project was in response to the expressed need among both general and special educators for skill training to use positive, developmentally appropriate behavior management strategies proven effective in natural settings with all children—with or without disabilities. The inclusion policies advocated by IDEA legislation; the Council for Exceptional Children; Council for Children with Behavioral Disabilities, Division for Early Childhood; and the National Association for the Education of Young



¹ An earlier version, funded by the Georgia Department of Education State Improvement Grant (SIG) in 1998-99, was the original prototype—a version developed for educators teaching elementary school age children.

Children have intensified the necessity for training both groups of educators of children who have social, emotional, or behavioral disabilities. Yet hurdles to meaningful training in effective behavior management have made training difficult to accomplish. These realities include finding time for training, the need for applied practice and feedback, diverse levels of skill mastery, individual differences in teachers' background preparation, different rates of skill acquisition, and variations in prior exposure to a range of children's behavior problems. Many schools also have a significant attrition of qualified teachers and staff which results in a need for repeated training in the basics. Periodic up-dating of skills is often necessary. Reliance on substitute teachers, out-of-field assignments, and paraprofessional turnover further complicate scheduling and implementing staff training programs.

PEGS! CDRs address these obstacles to training. There is little prerequisite information needed to use them, and they require no group instructor and no meetings, thereby avoiding numerous problems associated with group training. They also offer guided skill practice, repeated practice, individualized feedback, and supplementary information about the strategies and children's behavior problems. This is a highly useful approach to adult learning—a cost-effective and time-efficient way to provide opportunities for skill building in using basic behavior management strategies successfully.

The standards. *PEGS!* products were expected to achieve standards of *relevant content*, *helpful independent learning experience*, and *ease of use* as judged by the potential user groups. **Table 1** lists these standards. The products were also expected to have a demonstrable carryover effect in actual classroom practices. Four outcome dimensions were established to reflect positive carryover into classroom application: (a) Educators' skill in using the selected strategies should increase, while there should be decreases in (b) the frequency with which they use intervention strategies, (c) students' negative responses to the strategies, and (d) ignoring of students' behavior. This report summarizes the steps taken to assure that the products met these standards. It also presents results of the formative and summative evaluation field tests.

Table 1. Criteria Used to Rate and Evaluate the PEGS! Products

About the Content

The PEGS! child characters have behaviors seen in real children.
Their difficult behaviors are real-life challenges.
The activities are typical of educational settings.
The strategies are known to most educators.
The child characters respond to the interventions in real-life ways.
The responses of the characters are appropriate for their ages and individual needs.

About the CDRs as Learning Opportunities

The simulations hold users' attention.
Some behaviors are easy to manage.
Other behaviors are difficult to manage.
The program choices allow users to select their preferences.
There is sufficient information about the characters to match strategies to their needs.
Information about the characters is presented in a professional way.
The strategies are practical for real-life situations.
Feedback at the end provides useful information.

About Using the CDRs with Ease

They can be used with very little computer experience.
Operating the program presents no problems.
The format is easy to follow.
Information about how to play is clear.
It is easy to change from one activity to another in the program.
Stopping and reentering later is not difficult.
Feedback is quick and to the point.
The program can be used without assistance.

DESCRIPTION OF THE FINAL PRODUCTS

The completed CDR games—*PEGS! for PRESCHOOL* and *PEGS! for SECONDARY*— are included in sleeves at the back of this report. Also included are the accompanying printed guides for users, distributed with each CDR. Each version contains animations of six child characters behaving in ways familiar to educators. The purpose of both games is to increase participation of the child characters in simulated learning activities. The player is asked to choose from four typical school-related activities. A practice session with one child character is available for a warm-up. There are options to play the game at three

levels of difficulty. At the easy level there is immediate feedback that flashes on the screen. At the most difficult level, the pacing of the children's responses increases, and feedback is delayed until the end of the game. The menu provides additional options for obtaining text information about each child character, in-depth information about the strategies, and descriptions of the behavior problems of the child characters. **Figure 1** illustrates the menu screen for the early childhood version and **Figure 2** shows the menu screen for the secondary version.

Figure 1. Menu Screen of PEGS! for PRESCHOOL

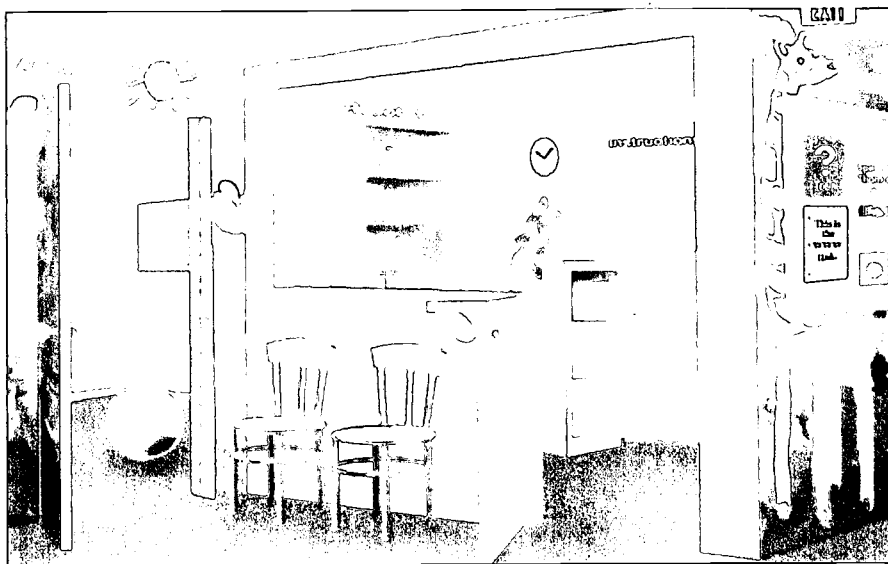
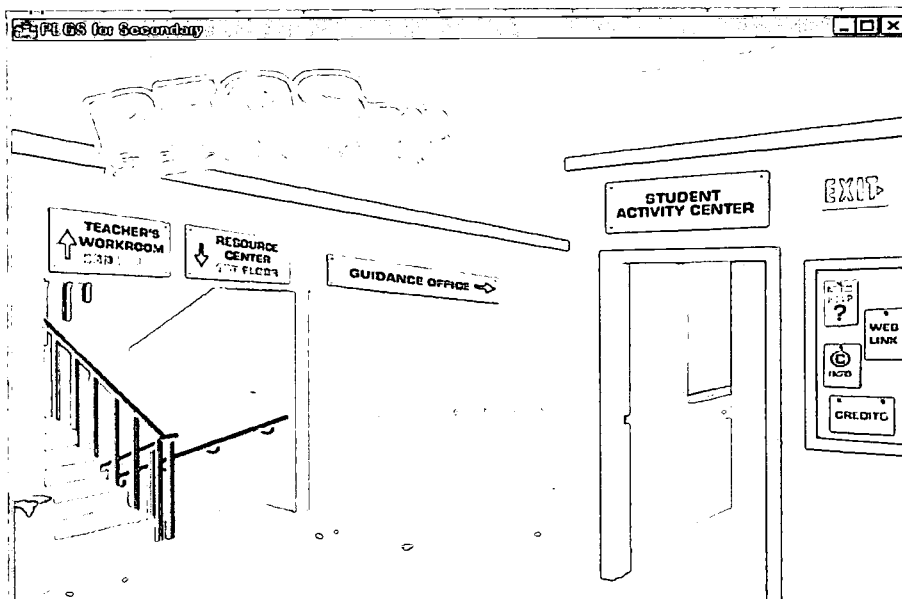
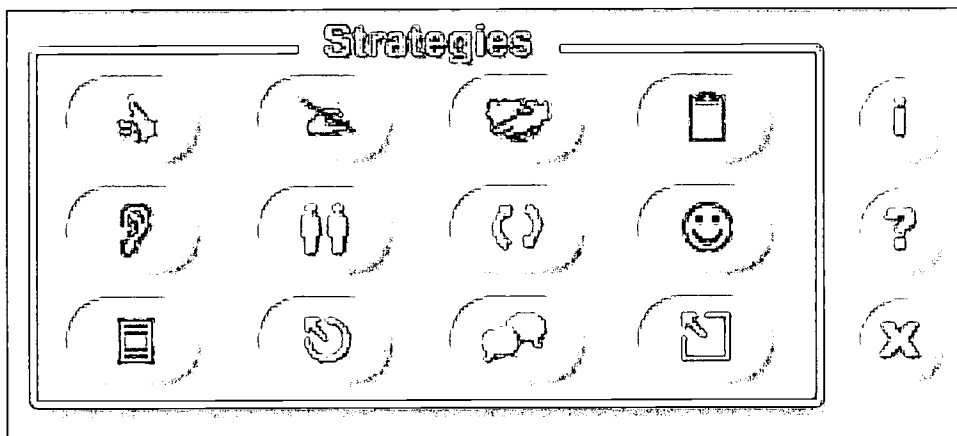


Figure 2. Menu Screen of PEGS! for SECONDARY



As an activity begins, the animated simulation shows children behaving in characteristic ways. The player selects a particular child by clicking the mouse on that child and then selecting among 12 basic positive management strategies with the goal of increasing or maintaining the child's participation in the activity. The child will then respond to the choice. If the choice meets the needs of that individual, there will be an increase in participation and a decrease in problem behavior. When a choice is not a good match, a child's participation will drop and problem behavior increases. While the player attends to one child, the other children continue to engage in a range of behaviors. If ignored for too long, the others may exhibit negative, non-participatory behavior, and the player may lose the game. **Figure 3** displays the strategy buttons and icons.

*Figure 3. PEGS! Strategies You Can Use**



*Strategies are modified for early childhood and secondary students.

A player can explore alternative responses by repeating the same activity but choosing different strategies. Each time the game is played, a randomly selected small group of children—each with a different configuration of behavior problems—is presented. The game is won when all of the children are participating with enthusiasm and the player has maintained full participation of the group. At the end, the program provides feedback about each child's participation and an analysis of the management strategies used. This feedback has a print option.

PROJECT ACTIVITIES and ACCOMPLISHMENTS

Table 2 summarizes project tasks, activities, and outcomes that were undertaken during the three-year grant period to achieve the final products described above. The specific project tasks were:

Task 1. Design and develop two CD-ROMs in game formats using advanced computer technology.

Task 2. Conduct formative evaluations during development of both CD-ROM programs.

Task 3. Develop a plan for disseminating information about the products.

Task 4. Conduct summative evaluation of project activities and products with specified users.

The project was conducted as described in the original proposal, on time and within budget. The series is now complete. The products are unique instructional technology—fully interactive CD-ROM games for adults providing simulated practice using positive behavior management strategies. Table 3 summarizes the content contained in the preschool and secondary (middle/high school) versions.

Information about the completed *PEGS!* series is available on the Internet at:

<http://www.downloadlearning.com/teachers/pegs.html>

The Parents and Professional Advisory Councils

A diverse, volunteer Advisory Council comprised of about ten members was actively involved in all four project tasks each project year. The Council was reconfigured somewhat every year to represent various stakeholder groups, adding members as the project emphasis changed from a focus on early childhood to young teens. The Council members were diverse in ages, gender, ethnicity, professions, and parenting children with and without disabilities. Meetings were held twice a year and the members independently reviewed each CDR version in the development process. Council members gave valuable feedback to the staff about design, content, and usability features. They participated in the sequences of formative evaluations and tested the prototype individually for both content and technical concerns, i.e., ease of use, readability, and relevance. They also reviewed the final summative evaluation design and

Table 2. Project PEGS! Overview of Activities and Accomplishments

	Year 1 1999-2000	Year 2 2000-2001	Year 3 2001-2002	Outcomes
Task 1. Design and Development	Prototype program content & technology designed in planning with Parent and Professional Advisory Councils.	Early childhood & middle/high school program content and feedback technology developed.	Revisions as needed.	Two behavior management skill- building CD-ROMs produced for inservice training for early childhood and middle/high school teachers and assistant teachers.
Task 2. Field Testing	Performance standards set; internal formative evaluation planned; instruments developed.	Internal & external formative evaluations conducted for prototype assessment of early childhood version by targeted user groups.	Internal & external formative evaluations conducted for prototype assessment of secondary version by targeted user groups and evaluation by instructional technology group.	Both Beta versions revised to meet standards for user groups.
Task 3. Dissemination and Distribution Plan	Initial design & future planning for dissemination & distribution.	Preliminary distribution plan tested in Georgia.	National product dissemination through professional organizations, and distribution by web site.	Available nationally to early childhood & middle/high school educators.
Task 4. Project Evaluation	Review & critiques of content & CD-ROM prototypes by Advisory Councils and by expert panels.	Summative evaluation field tests; conducted for impact with early childhood educators.	Summative evaluation field tests; conducted for impact with middle/high school version.	Shown to be relevant, helpful, & easy to use by 43 educators; significant improvement in actual classroom behavior management in follow-up of 23 educators.

Table 3. Project PEGS! CD-ROM Content for PC or Mac Operating Systems

-
- Menu for navigating the CD-ROM options
 - Learning goals and objectives for user
 - Three difficulty levels for playing the game and practice option
 - Additional supportive information
 - Help in using the program
 - Tips for winning the game
 - Links to other resources
 - Twelve child characters animated in color graphics with audio responses
 - Six children, ages 2-5, and six teens, ages 15-17
 - Children with challenging behaviors in each CDR
 - Children with typical behavior problems in each CDR
 - Gender, ethnic, cultural, and age balance
 - Sufficient realism for authenticity
 - Introductory text vignettes
 - Text files of school history and educational recommendations for each child
 - Text files of psychological and developmental histories for special needs children
 - Simulated behavioral responses by children to all strategy options in all activities
 - Behavioral continuum from participation to highly disruptive behavior
 - Text descriptions of behavioral responses for each child
 - Twelve positive management strategies known to increase participation in activities
 - Text descriptions, expanded examples, misuses
 - Four learning activity options for early childhood version
 - Circle Time
 - Sand Box Activity
 - Centers
 - Outside Group Play Activity
 - Four learning activity options for secondary version
 - Individual Academic Time
 - Group Discussion
 - Hallway Action
 - Science Lab
 - Feedback to user
 - On-going "Participation Index" to alert user to children's levels of participation
 - Clock to alert user about time remaining for an activity
 - Summary feedback showing frequency of each strategy used with each child
 - Feedback about general management style with print option
-

instruments prior to field testing. **Appendix A** contains information about the Council members, agendas for the meetings, and summaries of their evaluative reviews.

Task 1. Design and Develop the Two Products

The first project activity was to prepare instructional design documents and establish learning objectives for users. Early childhood and secondary program design documents are contained in **Appendix B**. The resulting learning objectives for potential users shaped the content and instructional design of the CDRs.

These objectives are:

- Identify children whose behavior needs improving.
- Select strategies that help children participate in learning—and keep them participating.
- Experiment with using a range of core strategies in typical educational activities.
- Learn to apply the strategies to children with different problem behaviors.

Content development, technical development, graphical design, and formative evaluations proceeded on schedule. Opinions and advice of Council members, external professional consultants, teachers and assistant teachers, parents of children with and without disabilities, and other stakeholders were taken very seriously at each stage of the project and have contributed to the quality of the final products both in content and in technical design.

Technical development. Project staff co-partnered with an experienced private firm, LetterPress Software, Inc. in Logan, Utah for development of the CD-ROMs. Using its proprietary computer simulation engine, the *PEGS!* software applications were developed with an instructional component technology called *iComponents* (LetterPress Software, 2002). The *iComponent* used in the project series encapsulates a knowledge base of rules (children's behavior) with an instructional strategy that allows learners to act upon objects (animations based on children's profiles) and see the consequences of their actions (changes in the children's behaviors) within a simulation-learning environment. The design is a practical application of Merrill's instructional design theory (1994; IDT₂, in press). The simulation activities are additionally supported by embedded textual resources with information on the children's

profiles, descriptions of the potential behaviors and intervention strategies, and tips for using the program and a detailed user feedback mechanism.

Behavior problems portrayed in the PEGS! simulations. Selection of typical behavior problems for inclusion in the CDR simulations required a review of research and existing research findings to identify a broad range of behavioral challenges that can interfere with children's learning and development. At one end of this continuum are children who have not yet been identified but are emotionally vulnerable and at-risk for learning or behavioral problems. Effective preventative interventions are needed for them (Kilgo et al, 1999; Serna, Lamros, Nielsen, & Forness, 2002). At the other end of the continuum are children who have passed the screening threshold for serious problems and require carefully selected interventions (Feil, Walker, Severson, & Ball, 2000; Sugai & Horner, 2002; Walker, et al., 1996). Many of these children have internalized problems that may be overlooked. Some hesitate to participate or are fearful and anxious, withdrawn, dependent, or overly demanding of adults' attention. (Achenbach, 1992; Developmental Therapy Institute, 1996; Kaiser, Hancock, Cai, Foster, & Hester, 2000; Kaiser et al., 2002). In contrast, other behavior problems which may be externalized are anti-social, aggressive, self-control problems (Blair, Umbreit, & Bos, 1999; Epsteain, Cullinan, Ryser, & Pearson, 2002; Kupersmidt, Bryant, & Willoughby, 2000; Sprague & Walker, 2000; Stormont, 2001). Anticipating that users of the CDR would face this broad range of problem behaviors in their actual classrooms—from no manifest problems to highly disruptive or severely withdrawn behavior—a pool of problem behaviors was compiled for possible inclusion in the CDRs.

The lists were then reviewed by the project Advisory Council composed of general and special education practitioners and parents of children with and without disabilities in the respective targeted age groups. Each final list contained the typical problem behaviors identified unanimously by Council members as representative of the behavioral challenges faced on a daily basis by early childhood educators and secondary school teachers (**Table 4**).

Table 4. Simulated Behavior Problems of Child Characters in PEGS! CD-ROMs

<i>PEGS! for EARLY CHILDHOOD</i>	<i>PEGS! for SECONDARY</i>
Destructive to materials or toys	Destructive to materials
Hurtful to self or others	Hurtful to self or others
Hyperactive	
Fails to listen	Listening difficulties/daydreaming
Frequently unhappy, sensitive, or sad	Unhappy/overly sensitive
Irritable/physical complaints	Physical complaints
Short attention span, restless	Short attention span/restless
Talks or behaves like a younger child	Talks or behaves like a younger child
Temper tantrums	Uncontrolled anger/rage
Upset by others	Agitated around others
Withdrawn	Withdrawn/detached

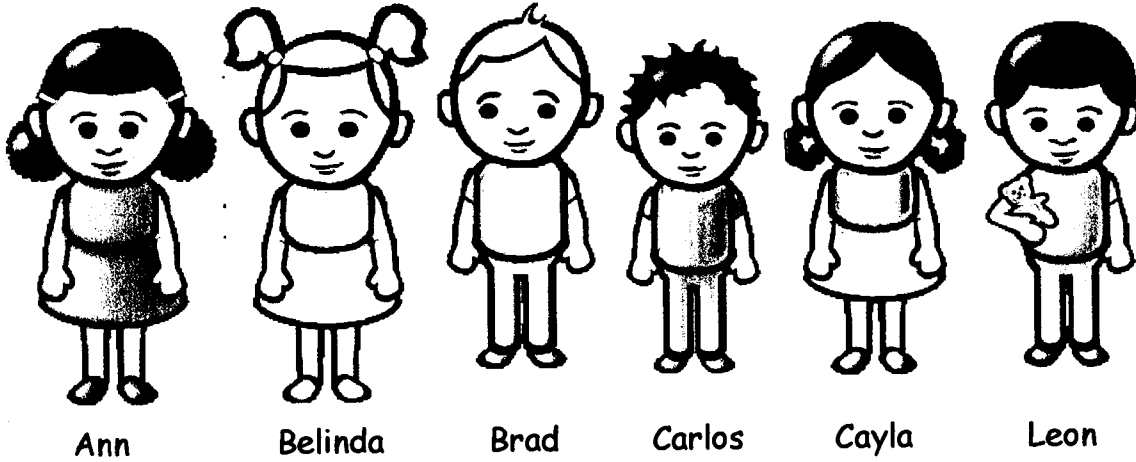
The child characters. As the project progressed, staff members, professional consultants, and the project Advisory Council together designed child characters and their troubling behavior problems to be included in the CDRs. The individual characters were designed with simulated personalities and behavioral patterns that would offer users the widest possible practice in a range of behavior management challenges—from mild to severe (**Figure 4**). **Appendix C** contains the text vignette summaries of the child characters that were the basis for designing the graphics and supporting text case material.

The Council then reviewed preliminary animations portraying these behaviors to assure that they were culturally sensitive, with multi-ethnic representations among the child characters. Finally, each council member and other stakeholders ranked the portrayed behaviors from mild to severely challenging to confirm that the content included the range of real-life problems evident among children. (See Task 2.)

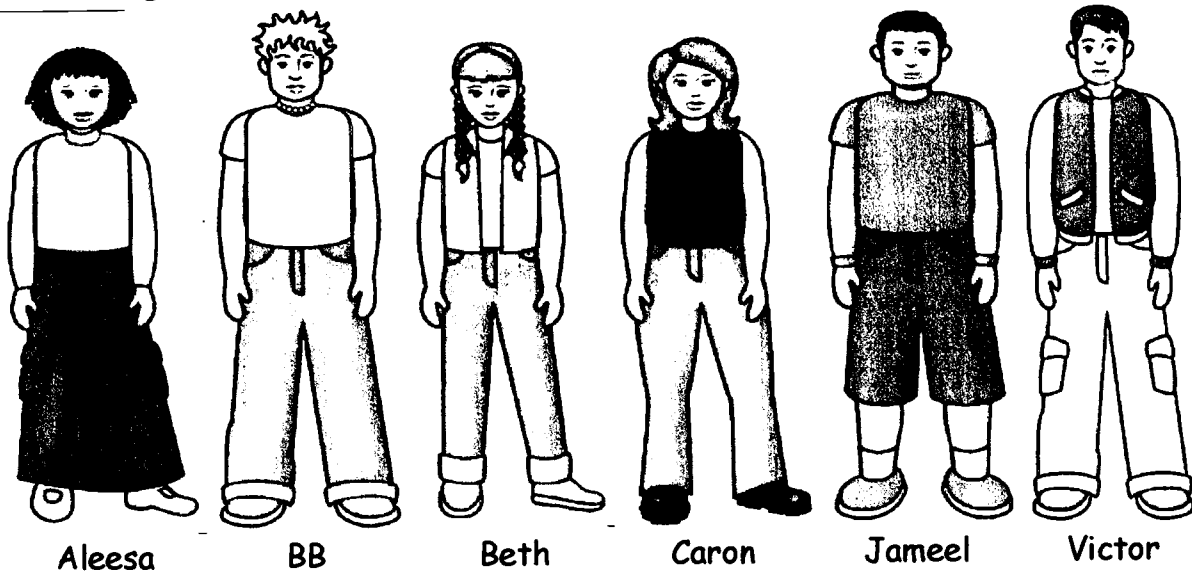
The strategies. The 12 behavior management strategies included in the PEGS! program are fundamental practices familiar to educators and compatible with most educational programs—in both public and private settings. The strategies are divided into three groups—those that anticipate and avoid behavior problems, those that are recommended to keep behavior from escalating, and those to be used when behavior becomes highly disruptive.

Figure 4. Meet the PEGS! Students

Preschool Children



Middle/High School Students



These core strategies were adapted to the targeted age groups for each CDR (Table 5).

Table 5. Management Strategies Included in PEGS! CD-ROMs

PEGS! for PRESCHOOL	PEGS! for SECONDARY
Strategies to Anticipate and Avoid Problems	
Encourage and Praise	Encourage and Praise
Motivate with Materials and Activities	Motivate with Lessons and Content
Organize Materials for Child	-----
Describe Procedures	Explain Procedures
Model Expected Actions	Model Positive Relationships
Strategies to Keep Behavior Problems from Escalating	
Move Closer to Child	Signal Awareness
Redirect to Activity	Redirect/Refocus on Task
Reflect Positive Words and Actions	Reflect Confidence in Student
Remind Child of Rules	Remind Student of Rules
-----	Interpret Student's Words and Actions
Strategies to Control Highly Disruptive Behavior	
Time-Out in Room	Suggest Student Take Time-Out in Room
Hold Firmly	Confront/Reprimand
Remove from Room	Remove Student from Room

Note: Definitions of these strategies were specified during the design phase and are included in Appendix B.

These strategies have been used effectively in fully inclusive, partially inclusive (pull-out), self-contained, and home-based programs with the intended age groups of children (Wood, Davis, & Swindle, 1998). The strategies were originally selected after an extensive review of theories and research about effective management strategies that promote responsible behavior in children and youth (Beyda, Zentall, & Ferko, 2002; Blair, Unbreit, & Bos, 1999; Bredekamp, & Copple, 1997; Dwyer, Osher, & Hoffman, 2000; Kamps, Tankersley, & Ellis, 2000; Martens, Peterson, Witt, & Cirone, 1986; Quirk, 1993; Wolery & Bredekamp, 1994; Wolery & Sainato, 1996; Wood, 1996).

Task 2. Formative Field Testing

Formative evaluation activities were concerned with issues of content validity, user friendly format, market need, instructional effectiveness, practicality, technical quality, and potential usefulness. Because

it was essential that the product be educationally sound, instructionally effective, and relevant to the specified stakeholder groups, formative evaluation was essential in all three project years. Representatives of the identified stakeholder groups included: Novice teachers; paraprofessionals; student teachers; school administrators and supervisors; school support staff including psychologists, social workers, and counselors; parents of children with and without disabilities; teacher educators; community service providers; and state level educators. Formative evaluation activities and outcomes are summarized below.

Formative evaluation question 1. *Are all of the troubling behaviors specified in the original proposal included among the behavioral descriptions of the child characters in the simulations, including those children with and without special needs?*

To answer this question, Council members and program staff with expertise in behavior disorders and early childhood development were asked to read the descriptive vignettes of the child characters designed for each CDR. They independently matched the vignettes with the list of targeted problem behaviors identified in the original proposal. The results verified that all 11 targeted behaviors for preschool (**Table 6**) and the 10 behavior problems included in the secondary version were portrayed in the descriptions of the child characters for the respective versions (**Table 7**).

Formative evaluation question 2. *Do the child characters portray a range of children's problem behaviors from most severe to least severe?*

Staff experts and Council members were then asked to rank the severity of the children's behavior problems from *most severe* (ranked 1) to *least severe* (ranked 6) to verify the authenticity in range of behavioral severity conveyed by individual child characters who had been designed to represent those with and without social, emotional, or behavioral problems. The experts and Council members were unanimous in correctly identifying those with special needs in both versions—those with the most severe behavior problems and those with the least severe problems. Among the early childhood characters (**Table 8**), expert rankings only differed from Council rankings for a shy child without externalized behavior problems (Carlos, with English as a second language). Council members saw him as a greater potential problem than a child with externalized, immature behaviors (Belinda).

Table 6. Frequency of 11 Behavior Problems Identified in Vignettes for PEGS! for PRESCHOOL by Council Members and Expert Panel

Behavior Problem	Council (n = 7)	Experts (n = 7)
Withdrawn from peers or adults	20	21
Short attention span	15	11
Talking or behaving like a younger child	14	12
Frequently unhappy, overly sensitive, or sad	13	7
Uncontrollable temper or tantrums	11	11
Agitated around others	11	6
Impertinent, defiant, resentful, or negative	10	9
Irritable	9	8
Hurtful or destructive to self or others	9	7
Hyperactive	8	6
Listening difficulties	5	1

Table 7. Frequency of 10 Behavior Problems Identified in Vignettes for PEGS! for SECONDARY by Council Members and Expert Panel

Behavior Problem	Council (n = 11)	Experts (n = 10)
Withdrawn from peers or adults	25	30
Frequently unhappy, overly sensitive	25	29
Hurtful or destructive to self or others	25	21
Agitated around others	17	13
Physical complaints	17	10
Impertinent, defiant, negative	16	12
Listening difficulties/daydreaming	16	18
Short attention span	16	19
Uncontrollable anger/rage	13	10
Talking or behaving like a younger child	11	11

Among the students in the secondary version (**Table 9**), the rankings again varied slightly for children with internalized (Jameel and Victor) and externalized behaviors (BB and Beth). While these findings indicate that Council members and experts differed slightly on their views of relative severity of externalized versus internalized behavior problems, it is evident that both CDRs offer practice in a range

behavior problems. The rankings also suggest that there are clear differences in the severity of children's problems that can be detected by professionals and other stakeholders alike.

Table 8. Rankings in Severity of Problem Behaviors in Early Childhood Version

<i>Early Childhood Characters</i>	<i>Council Average Rank Order n = 7</i>	<i>Expert Average Rank Order n = 6</i>
Brad ^a	1.0	1.2
Leon ^a	2.5	2.0
Cayla ^a	2.5	2.8
Belinda	4.0	4.8
Carlos	5.0	4.2
Ann	6.0	6.0

Note: Most severe = 1, least severe = 6

^aChildren with the most challenging behaviors

Table 9. Rankings in Severity of Problem Behaviors in Secondary Version

<i>Secondary School Characters</i>	<i>Council Average Rank Order n = 11</i>	<i>Expert Average Rank Order n = 10</i>
BB ^a	1.5	2.0
Jameel ^a	1.8	1.2
Caron ^a	2.7	2.8
Beth	4.1	4.8
Victor	4.8	4.2
Aleesa	6.0	6.0

Note: Most severe = 1, least severe = 6

^aChildren with the most challenging behaviors

Formative evaluation question 3. *Are the strategies included in the PEGS! series known to potential users and viewed as effective ways to deal with behavior problems?*

Before beginning field tests for the *PEGS! for SECONDARY* version, 27 teachers and assistant teachers in local middle and high school programs were asked to rate how frequently they used each of the 12 strategies that had been selected for inclusion in the program (Table 10). All strategies were rated as used at least "sometimes" (>3.0), with Provide Encouragement most frequently identified by high school educators (average 4.4); and Model Positive Relationships (average 4.7), by middle school educators. However, those teaching middle school students reported a generally higher frequency in using the strategies than those teaching high school students. There were also differences in their reports of least frequently used strategies, with high school educators identifying Ask Group/Individual to Review Rules (average 3.1), while the middle school educators identified Suggest Voluntary Time-Out (average 3.1).

A question concerning their use of ignoring was also included. This was consistently identified by both groups of educators as used least often and "seldom effective." This finding was consistent with the approach taken in the CDRs to encourage educators to respond to students with troubling behaviors using positive management and instructional interventions rather than ignoring.

This information confirmed that the 12 basic strategies selected for inclusion in the PEGS content were known and used by both middle school and high school educators. While both groups consistently viewed the strategies as "sometimes" effective, strategies that they reported as using most frequently were not the ones that they rated as most effective. It was anticipated that improvement in skills with which they used the strategies would also increase effectiveness.

Formative evaluation question 4. *Are the child characters' behavior simulations authentic true-to-life responses?*

To verify the authenticity of the simulated behavioral responses to every possible strategy that might be selected by a user, an expert panel was established for each version. The experts each had 20 to 35 years experience in classrooms for troubled children as teacher trainers, program supervisors, and direct service providers. They independently reviewed the text vignettes, behavior descriptions, and program

Table 10. Educators' Familiarity with Management Strategies Selected for Inclusion in the PEGS! CD-ROM for Secondary

CD-ROM Content	How frequently do you use this strategy? ^a		How effective is this with the students you teach? ^b	
	High School ^c	Middle School ^d	High School	Middle School
<u>Strategies to Anticipate and Avoid Problems</u>				
Provide Encouragement	4.4	4.6	3.3	3.8
Motivate with Content/Lessons	3.8	3.8	3.6	3.2
Explain Procedures	4.3	4.4	3.7	3.7
Model Positive Relationships	4.2	4.7	3.6	3.5
<u>Strategies to Keep Behavior Problems from Escalating</u>				
Signal Awareness	3.7	3.9	3.2	3.2
Redirect/Refocus on Task	4.3	4.5	3.2	3.6
Reflect Confidence in Student	4.3	4.5	3.4	4.1
Ask Group/Individual to Review Rules	3.1	3.6	2.8	3.2
Connect Actions to Feelings (Interpretation)	3.6	3.9	3.4	3.2
<u>Strategies to Control Highly Disruptive Behavior</u>				
Suggest Voluntary Time-Out in the Room	3.8	3.3	3.2	3.0
Confront Unacceptable Behavior	4.2	4.4	3.7	3.7
Remove From the Room	3.4	3.6	3.5	3.5
<u>Ignore Students' Behavior</u>	2.8	3.1	3.0	2.4

^a 1 = never, 2 = seldom, 3 = occasionally, 4 = often, 5 = consistently.

^b 2 = never, 2 = hardly ever, 3 = sometimes, 4 = usually, 5 = always.

^c High school educators n = 10.

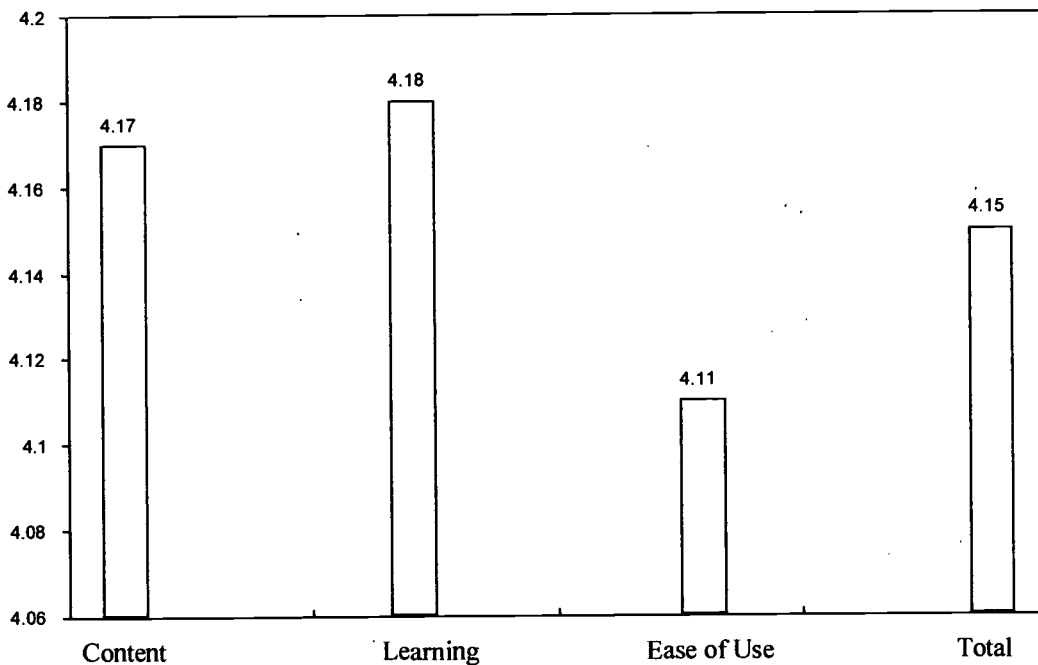
^d Middle school educators n = 17.

specifications (computer rules) governing the behavioral response(s) that each child character would mostly likely make to every possible strategy. Panel members then met and compiled the selections. The standard for authenticity was consensus. This process resulted in a total of 6,336 individualized computer rules developed by consensus agreement among the experts (11 behavioral responses to each of 12 strategy options for each of the 12 children in the 4 different activities). The results of this process provided assurance that the portrayed responses by the child characters to the strategies in the simulations are valid and authentic to real-life situations for young children and teens.

Formative evaluation question 5. *In the preliminary (Beta) versions are content, instructional design, and technical attributes interesting, user friendly, and perceived as valuable by potential users?*

With completion of the *Beta* version of *PEGS! for PRESCHOOL*, a group of 16 college students taking a behavior management course at Georgia College and State University was asked to use and evaluate the program over a 10-day period. They then rated the *content, value as a learning experience, and technical attributes* on a 26-item checklist (1 = highly satisfactory to 5 = not satisfactory). They also participated in a focus group discussion. Results indicate that they were generally approving of the *PEGS!* program as a learning tool, found it reasonably user friendly, and valuable for student teachers. **Chart 1** contains a summary of their ratings. **Appendix D** contains characteristics of the group, a copy of the rating checklist, the focus group questions, and a summary of the focus group discussion.

Chart 1. Average Ratings of PEGS! for PRESCHOOL by 16 College Students for Formative Evaluations

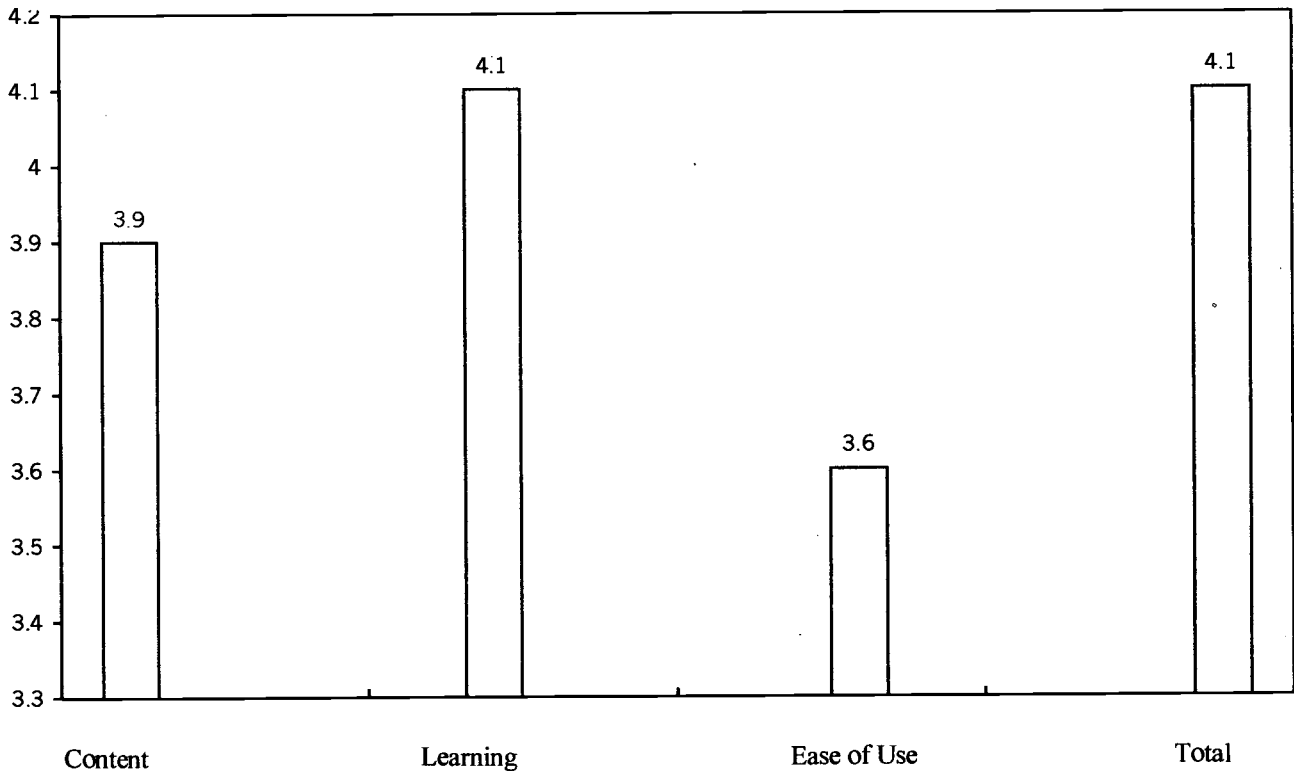


Note: Scale of 5 = agree strongly to 1 = disagree strongly

When the *Beta* version of the *PEGS! for SECONDARY* was completed, a group of 41 college junior and senior students from the Department of Occupational Studies in the College of Education at the

University of Georgia were asked by their instructor to use and evaluate the program. All of the students are planning to work in educational settings where they will interact with middle and high school students. The study was conducted by Ernise S. Singleton (2002), a doctoral student in the Department of Instructional Technology in the College of Education. **Chart 2** illustrates that the majority of the students agreed that the CDR has *realistic content* (average rating =3.9), *provides ample learning opportunities* (average = 4.1), *is easy to use* (average = 3.6), and could be *useful for middle and high school teachers* (average = 4.1). **Appendix E** contains their ratings for each item.

Chart 2. Average Ratings of PEGS! for SECONDARY on 21 Criterion Items by 41 College Students for Formative Evaluation



Note: Scale of 5 = agree strongly to 1 = disagree strongly

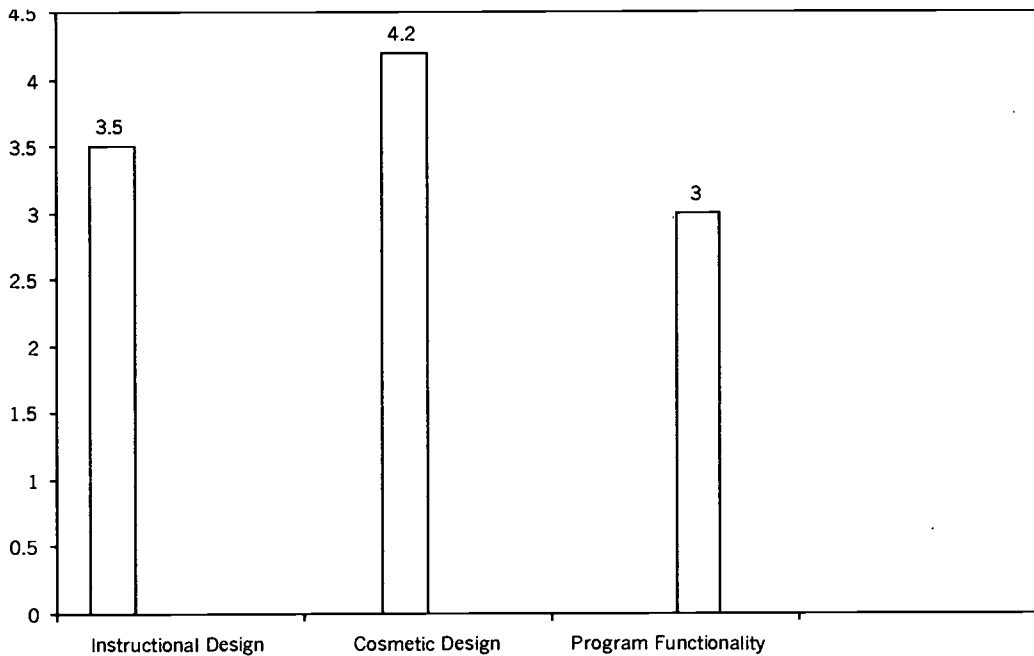
As a follow-up with the *PEGS! for SECONDARY* version, two Master's degree students in the Department of Instructional Technology were asked to participate in user interviews after evaluating the program for two weeks. They provided their perspectives on *instructional design and clarity, cosmetic*

design, and program functionality. **Chart 3** illustrates their average levels of satisfaction in these three areas. According to these reviewers, the program interactions met the goals of the program. They reported that the overall design was effective and the objectives were clear and easily achieved by interacting with the CD-ROM. One of the reviewers made the following comment:

The interactions do seem appropriate for the objectives, but the design needs a little work on the details of the presentation. I found the strategy icons difficult to remember and when I selected one, the delay between selection and hearing the response it represented was significant and made it difficult that while I was waiting to see if that worked or not, that another student would present a problem and there was nothing I could do about that one while I was working on the first one.

[Note: This was an intended consequence of ignoring children by a user.]

Chart 3. Average Ratings of PEGS! for SECONDARY on 10 Design Criteria by 2 Independent Instructional Design Experts



Note: Scale of 5 = strongly agree to 1 = strongly disagree

Reviewers rated cosmetic design the highest. They reported that graphical designs were easy to understand and the colors enhanced the visual quality of the program. The one recommendation for improvement was to include directions on how to begin the program:

It took me a little while to understand what I was supposed to do. It might be good to have some kind of splash page or something that gave a brief description of what the purpose of the [activity] was and how to use it.

[Note: This recommendation resulted in enhanced entry in the final product designs. Comprehensive reports of these interviews are in Appendix E.]

Findings and recommendations from each of these formative evaluation activities were reviewed by project staff and LetterPress Software designers. Revisions were made when changes would clearly enhance the final product and were possible within the scope of the budget. Overall, the results of these numerous formative evaluation activities contributed immeasurably to the quality of the final products in meeting the standards set for content validity, interest, relevance, usefulness, and user friendly design.

Task 3. Planning for Information Dissemination and Product Distribution

The foundation for planning dissemination activities of this *PEGS!* project was set by the encouraging field test results with the prototype version for elementary school teachers, developed during 1999 by the Georgia Department of Education. The Georgia results indicated that the product was effective in increasing behavior management skills of elementary school teachers in their own classrooms and reducing the instances of students' problem behavior by 58% (Georgia Department of Education, 2000). Subsequently, a series of meetings was held with the Georgia State Improvement Grant (SIG) project team and steering committee to plan for a statewide distribution system of the *PEGS!* elementary school version. Starting in January 2001, the project staff and John O'Connor with the Georgia Department of Education met with coordinators of the Georgia Learning Resource Systems (GLRS) who are responsible for staff development in each of the 17 educational regions of the state. They were provided an

introduction to the CDR and a brief opportunity to use it independently. They were then asked to advise project staff as to the potential usefulness of *PEGS!* as a tool for inservice education. The responses were highly positive.

The next step was to ask each regional coordinator to sponsor a local meeting and invite principals and special education coordinators to use the CDR in a computer lab. Three such sessions were held in different geographic areas of the state, with a total of about 90 leadership individuals participating. From this group, a statewide information and training system was developed in conjunction with the Georgia Department of Education GLRS system. (See Supplemental Information at the end of this report.)

A statewide Georgia distribution arrangement was established with LetterPress Software, Inc. in May 2001 and there were steady requests for *PEGS! for ELEMENTARY* through their Internet subsidiary www.downloadlearning.com. Two versions were available: (1) an individual license for single computer use which included the CD-ROM and a brief study guide as an introduction about how to use the program; and (2) a school/institution site license that permits downloading the software to a single building for an unlimited number of users. Multiple copies of the printed study guide were included. The site license was specifically designed to meet the needs of colleges, universities, technical schools and other institutions where computer labs are available for adult learning. A letter describing the Georgia phase of distribution is included in **Appendix F**.

National marketing plan: From this Georgia pilot testing, a national Information Dissemination and Distribution Plan was designed for the entire *PEGS!* series (**Figure 5**), and an informational flyer was designed for professional conferences, mailings, and as advertisements for professional journals (**Figure 6**). Six potential user groups were identified: Individuals, personnel in public education programs, personnel in private schools, prospective educators in community colleges and technical schools, those enrolled in teacher education programs in colleges and universities, and mental health service providers. To make both information and the products available to this broad market, an array of vehicles for dissemination and distribution was selected.

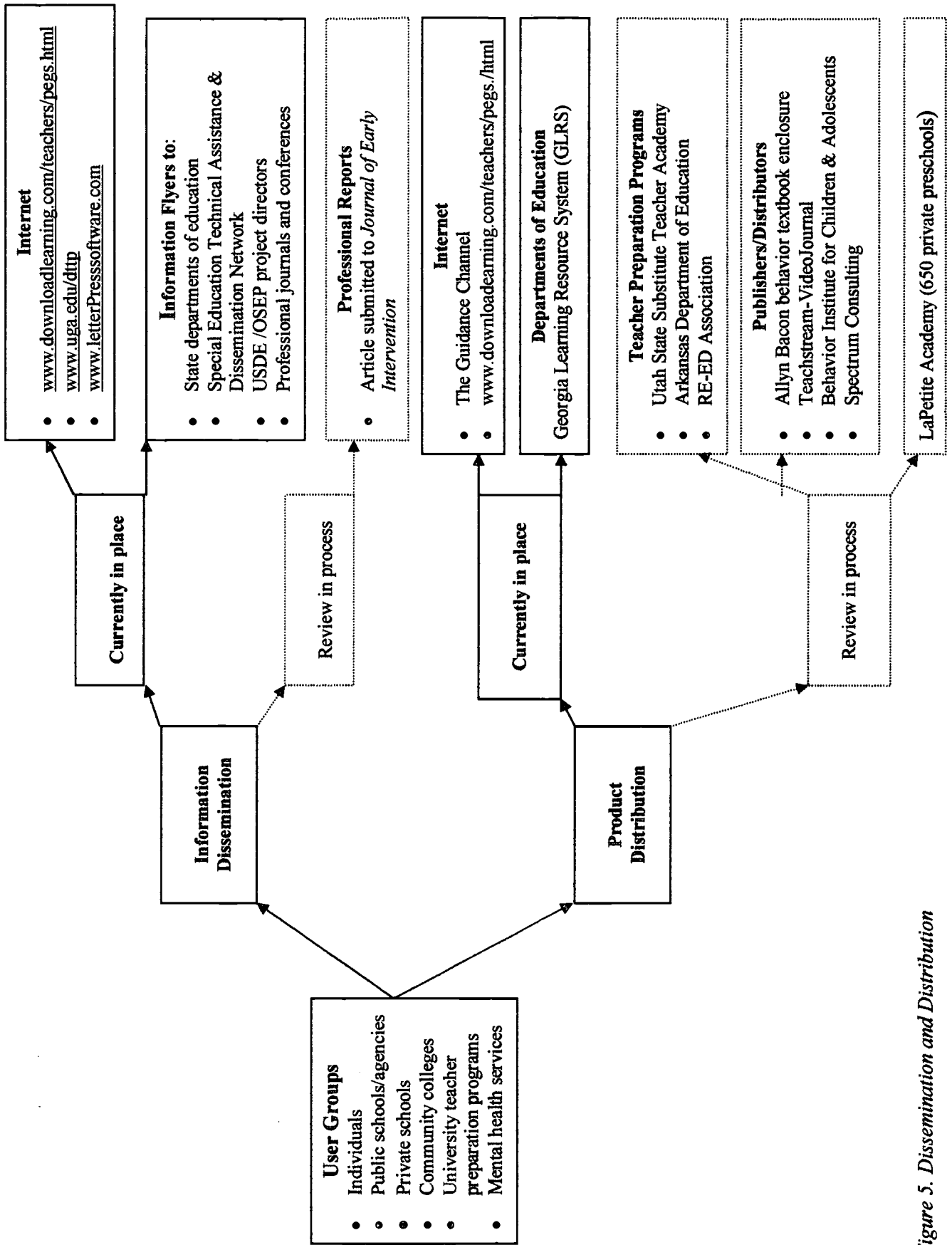


Figure 5. Dissemination and Distribution

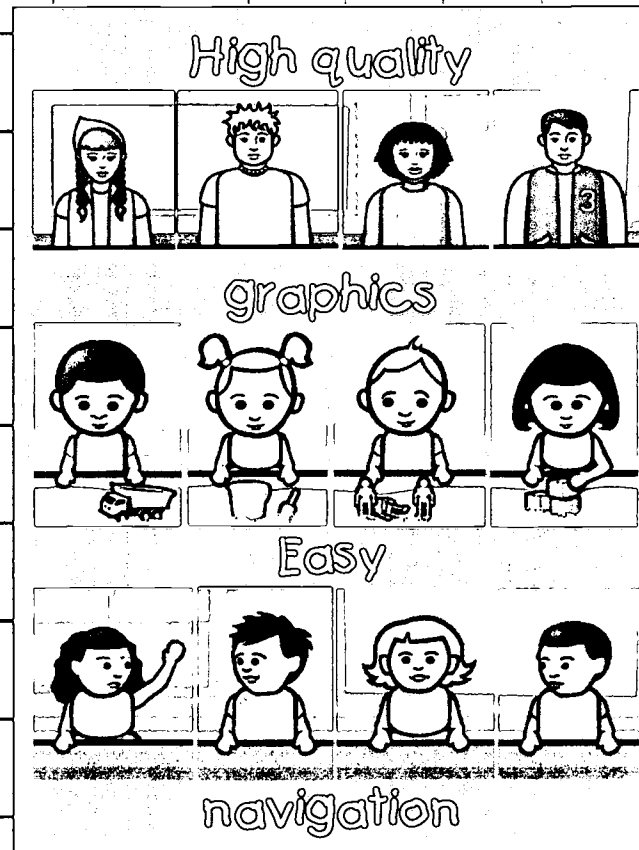
PEGS! CDs

Proven to Bring Success!

Practice Effective Guidance Strategies

Interact with the PEGS! kids
... and get them to participate in acceptable ways!

- Select preschool, elementary, or high school
- Choose among various activities
- View simulations of problem behaviors
- Analyze what's needed
- Experiment with 12 practical intervention strategies
- See animated reactions of students to your choices
- Receive feedback
- Increase your own skills and decrease problem behaviors



Various levels of difficulty
Supplementary information

For information on PEGS! inservice training,
contact the Developmental Therapy-Teaching Programs,
The University of Georgia, at 706-369-5689 or www.uga.edu/dttp



1770 N. Research Park Way—Suite 166
North Logan, UT 84341
(435) 787-4375



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These included:

Dissemination Activities

- The Internet
- State departments of education
- Research institutes
- Publishers and distributors of educational materials
- Private foundations interested in education
- US Department of Education grant funded programs
- Head Start staff development and training programs
- The Special Education Technical Assistance and Dissemination Network

Sources for Dissemination

- Professional associations and sponsored conferences
- Professional journal publications and advertisements
- University colleges of education
- The Developmental Therapy Institute newsletter
- The Developmental Therapy Regional Trainers Network
- ERIC

Dissemination activities accomplished to date. Major sources for information dissemination have been through four sources: the Developmental Therapy-Teaching Programs (DTTP) website at the University of Georgia: www.uga.edu/dttp; the LetterPress website: www.downloadLearning.com; the DTTP newsletters with a mailing list of 500 educators, administrators, and teacher educators; and the DTTP Trainers Network with 18 certified regional trainers and 9 certified national instructors providing technical assistance and staff development activities to schools and other child serving agencies nationwide.

In 2001, the *Beta* version of *PEGS! for PRESCHOOL* was presented at the Georgia Association for the Education of Young Children. That same year, 500 preliminary information flyers were distributed, and *PEGS!* was demonstrated at two annual international conferences: The CCBD conference strand, Integrating Technology in Program Development for Children and Youth with E/BD, and the National Association for the Education of Young Children. *PEGS!* was also presented at the annual Georgia Psychoeducational Network Conference at St. Simons, Georgia.

In 2002, 517 information flyers were distributed, and *PEGS!* was introduced at five national conferences: The Future of Learning for all Students (national technology demonstration event); the annual research project directors meeting sponsored by the U.S. Office of Special Education Programs;

the annual conference of CCBD; the bi-annual International Child and Adolescent Conference sponsored by the Behavioral Institute for Children and Adolescents; and the 15th annual research conference sponsored by the Research and Training Center for Children's Mental Health, University of South Florida, in Tampa. The *PEGS!* products were well received at these demonstrations, and requests were received to obtain copies. Additional demonstrations of the programs were provided to schools and direct service agencies that were receiving technical assistance and staff training through the Developmental Therapy-Teaching Programs, including training childcare workers in Washington State, and to administrators at family mental health centers in Florida.

The first series of direct mailings and journal advertisements are planned for release in March 2003, to coincide with completion of the final revisions to the series. Advertising has been arranged for *Teaching Exceptional Children*. Informational flyers and program advertisements will also be distributed at the annual international conference of the Council for Exceptional Children in April 2003 (500 copies), and the annual conferences for Council for Children with Behavioral Disabilities and the Division for Early Childhood in October 2003 (500 copies).

Product distribution activities. Because of the broad range of potential users—preservice student teachers, general and special educators, direct service providers in many related child-serving programs—a decision was made to avoid a single source distribution agreement. By using multiple suppliers, a broad distribution market is anticipated. Each distributor will negotiate directly with LetterPress Software to establish a distribution agreement. To date, 95 individual licenses and 13 site licenses have been distributed through <www.downloadlearning.com>, in addition to the complimentary copies provided in Georgia. Complimentary copies are being offered to State Department of Special Education Directors. The final, revised versions for all three CDRs in the series will be available at the same website on March 1, 2003. The products are currently also available by catalog and Internet through The Guidance Channel. Marketing possibilities were also discussed with five other distributors, requiring many weeks or months with in-house reviews. While all had praise for the products, they finally declined distribution either because *PEGS!* did not fit their current marketing focus or because they did not have the dollars in their

budget to promote the products at this time. In addition, five publishers and distributors are currently interested in the products and have them under review, as indicated above in Figure 5.

Task 4. Project Evaluation

The ultimate value of the *PEGS!* CDRs is in their potential to actually help teachers and assistant teachers who are having problems with disruptive, negative children in their classrooms. With this in mind, plans for field tests were developed, and standards for effectiveness were established (Figure 7). For both products, the standards were the following: First, potential users should find the CDR to have *relevant content*, provide a *helpful learning experience*, and be *used with ease*. Second, there should be evidence of positive carryover from using the CDR into actual classroom practices.

The field tests were conducted in May-July 2001 for the preschool version and in October-December 2002 for the secondary school version. The same instruments and data collection procedures were used in both sets of field tests, with the exception of modifications in the skill rating instrument adapted to the variations in behavior management strategies recommended for the two age groups. The field test sites also differed in the way they provided services to children with challenging behaviors. The early childhood programs were fully inclusive, and the secondary sites were fully self-contained special education. Table 11 contains characteristics of participants in the field tests for each version. They are described in greater detail below.

Participants in PEGS! for PRESCHOOL Field Tests

Early childhood program directors were contacted about the proposed field testing at three locations—a demonstration school at the University of Georgia, a private childcare facility, and a Head Start program. All three programs included children in the 2- to 5-year-old age range. At these sites, 24 early childhood educators volunteered to use and evaluate the CDR. The group included 11 teachers and 13 assistant teachers. Their average experience working with children was 8 years (range = 1 - 25 years). Each participant had access to a computer with printer, sound, and CDR capability.

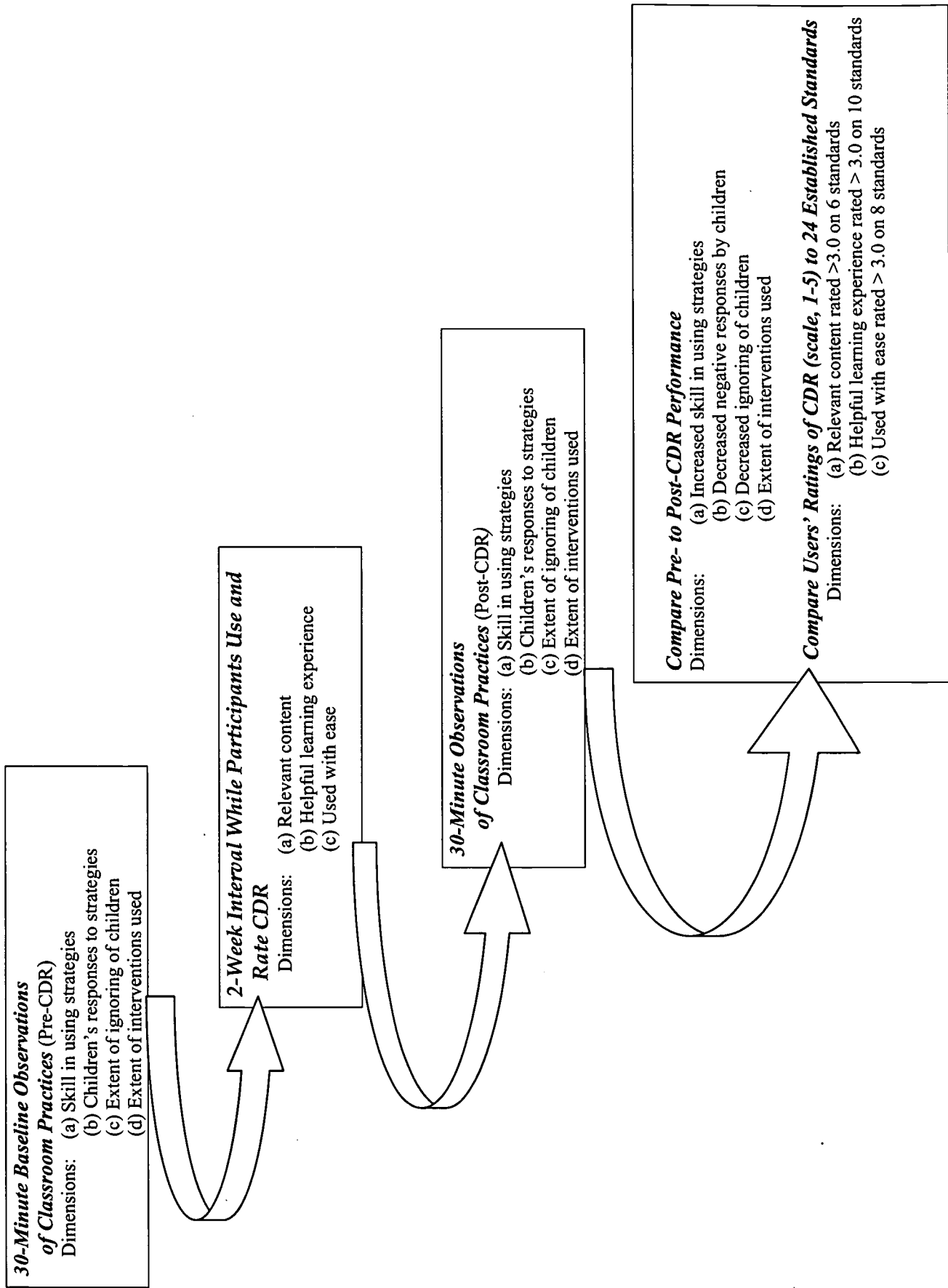


Figure 7. Field Test Design for Summative Evaluations

Table 11. Characteristics of 43 Educators Volunteering to Field Test PEGS! CD-ROMs

	Early Childhood Educators (n = 24)	Middle/ High School Educators (n = 19)
GENDER		
Female	21	8
Male	2	11
Unreported	1	0
RACE		
European American	10	12
African American	13	5
Asian	1	0
Multiracial	0	1
Unreported	0	1
AGE		
Under 20 Years	1	0
20 – 29 Years	9	5
30 – 39 Years	6	8
40 – 49 Years	5	3
50 – 59 Years	2	2
60 – 69 Years	0	1
Not reported	1	0
CURRENT POSITION		
Teacher	11	12
Teaching Assistant	13	7
EXPERIENCE WITH CHILDREN		
Average in Years	8.5	6.9
Range	1 - 25	1 – 35
COMPUTER SKILL		
Highly Skilled	3	3
Moderately Skilled	16	14
Not Very Skilled	5	2
HIGHEST DEGREE^a		
High School	2	4
Associate Degree	2	2
Bachelor Degree	5	3
Graduate Level	3	10
CHILDREN TAUGHT		
Average Class Size	22	7
Range	12 – 40 ^b	3 – 8
Total Children	393	118

^a Incomplete data from early childhood participants.

^b One participant reported separate morning and afternoon programs of 20 children in each group.

In the demonstration school, enrollment for each class was balanced for children's age, gender, ethnicity, and socioeconomic status. The private childcare facility took children on a space-available basis, and the Head Start program used national eligibility standards for enrollment. The programs were licensed by the state and maintained state standards for materials, schedules, activities, safety, nutrition, and adult-child ratios. The average number of children in a classroom was 20 with two adults. The programs were well regarded in the community among parents of young children, and the personnel in each program were knowledgeable about developmentally appropriate early childhood practices. Administrators encouraged staff to participate in the field test. An incentive for participation was a complimentary copy of the CDR for each school.

All three early childhood sites had policies of inclusion of children with disabilities. In the demonstration program, seven participants reported teaching children with identified disabilities. The private childcare program had one child identified with special needs, and no children were reported as having an identified disability at the Head Start program. At the time of the study, none had children specifically identified with an emotional or behavioral disability; however, the staff at each program indicated informally that they had children with challenging behaviors.

Early childhood educators in the classroom carryover study. To explore possible carryover from CDR to actual classroom practice, 14 of the 24 early childhood volunteers agreed to participate in further field testing. While slightly less experienced on average than the larger group of 24, these participants were otherwise representative: 8 European Americans, 5 African Americans, and 1 Asian American; 12 females and 2 males; 9 teachers and 5 assistant teachers. They averaged 6.2 years experience (range = 1-12 years). They understood that they would be observed for 30 minutes while working with children before and again after using the CDR at a time and day they selected, with activities of their own choosing. The only stipulation was that they select the same activity(ies) if possible for both observations. They were also assured that neither they nor the children would be identified in the observations.

Participants in the PEGS! for SECONDARY Field Tests

Principals were contacted in local area middle and high schools providing special education services to young teenage students with emotional and behavioral disabilities. Administrators encouraged teachers and assistant teachers to volunteer to field test the CDR. An incentive for participation was a complimentary copy of the CDR for the school. Volunteers were obtained at two locations—a rural middle school for grades 6, 7, and 8, and a psychoeducational center serving middle and high school students with severe social, emotional, or behavioral disabilities. The middle school provided both inclusion and resource room (pullout) special education for students with mild to moderate learning or behavioral disabilities. The psychoeducational program provided part-day, self-contained special education.

There were 19 volunteers, all working in their respective special education programs; one also taught physical education with all students in the middle school. Of these, 13 taught middle school-aged students (grade 6 - 8) and 6 taught those in high school (grades 9 - 12). The group included 12 teachers and 7 assistant teachers. Their average teaching experience was 6.9 years (range = 1 - 35 years). Five had experience teaching in general education, and one had taught in an alternative school. Each participant had access to a computer with printer, sound, and CDR capability.

Each participant reported teaching general education content areas with an average of 7 students in each of their daily classes. All of their students had been identified with emotional or behavioral disabilities, learning disabilities, attention deficit disorders, or attention deficit hyperactive disorders.

Middle and high school educators in the classroom carryover study. To explore carryover from using the PEGS! for SECONDARY into actual classroom practice, 11 of the 19 participants volunteered for the follow-up evaluation in their classrooms. Of these, 8 were middle school teachers and 3 were high school teachers; 5 males and 6 females. Unlike the larger samples of participants, there were no assistant teachers and no African Americans who volunteered for this follow-up. All had completed a bachelor's degree, 6 had achieved the Master's degree, and 4 were currently completing an advanced degree. They averaged 6 years teaching experience (range = 2 - 35 years). They received the same procedural directions

for using the CDR, keeping logs, and selecting the classes and times to be observed. They were also assured that neither they nor the students would be identified in the observations.

Instruments and Procedures for the Field Tests

Instrument for rating the CDR. A revised version of the 24-item rating scale developed for the formative evaluations was again used to assess the extent to which the program met the specified standards for *relevant content*, *helpful learning experience*, and *ease of use*. For the secondary program evaluations, one additional item was added, *Would you recommend this program to others working in a similar position?* (Appendix G). Items were rated on a scale of 1 to 5, where 5 = agree strongly, 4 = agree, 3 = neutral, 2 = disagree somewhat, and 1 = disagree strongly. Ratings were summed to obtain average scores for each item, the three categories, and an overall rating. Criteria for effectiveness ratings were set at >3.0 for each category.

Procedure for rating the CDR. Participants were given individual copies of the CDR and a logbook. They were asked to use the CDR independently as frequently as their free time allowed during a 2-week period and were advised that they would need at least several times alone to play and re-play the game. They were also asked to keep a record of activities they selected, the names of the child characters in the groups presented, levels of program difficulty chosen, and any text material used. The logbook pages contained a format for recording the date of each entry and time spent on the program. Participants were encouraged to make suggestions or comments reflecting their experience with the program. At the end of the two weeks, they rated the CDR using the rating form described above to evaluate its potential usefulness and effectiveness.

Procedures for classroom follow-up evaluations. Two pairs of independent observers were used to obtain pre-CDR classroom performance data during a 30-minute observation in each participant's classroom. One observer used a time sampling procedure to record the frequency of strategies observed and the responses of students to the adult's strategies (or to ignoring by the adult), in 1-minute intervals. At the same time, the second observer used the *Adult Rating Scale*, described below, to rate the skill with

which the participant applied the strategies selected. The participants were then given the CDR and logbook for independent practice. The same two observers repeated the process two weeks later for post-CDR observations. Details are provided below.

Time sampling procedure. To obtain evidence of carryover into classroom practice, time-samples were collected both before and after participants used the CDR. This provided information about how frequently they used the strategies contained in the program and how the students responded to the participant's strategies. Every strategy and corresponding response by a student was recorded, minute-by-minute, during the 30-minute observation. A student's positive response was defined as any increase or maintenance of participation in the activity specified explicitly or implicitly by the adult. A response was coded as negative when a student's actions or words were (a) disruptive to participation by self or others, or (b) indicative of nonparticipation. Passive participation, such as watching an adult or peer to determine how an activity should be done or simply waiting for a turn, was coded as positive participation. But if a student then became disengaged because of a long wait for adult guidance, the response would be recorded as a negative response. If a student was sitting quietly but clearly not involved, or if a student chose an activity not authorized by an adult, the response was recorded as negative.

In addition to information about the use of strategies, the procedure included a count of instances of participants' ignoring of students and the students' responses, either positive or negative. If a student's words or actions indicated a need for interaction with the adult and the adult did not respond (in the judgment of the observer) the student's response was coded as negative. When the student's participation increased, ignoring was recorded as positive. Although ignoring can be a deliberate choice by an adult or an unintended oversight, no attempt was made to differentiate between intended and unintended ignoring in the time sampling procedure. By definition, planned ignoring that was effective would result in a positive response from a student, and therefore would not affect the total frequency of negative student responses. If neither a strategy nor ignoring was observed during a minute, no entry was made. The frequency of strategies used, instances of ignoring, and negative student responses were then totaled for each participant.

Assessing participants' skills. An observation rating scale, *Rating Adult Strategies*, was used to measure participants' skills in applying the strategies in their classrooms. The items were qualitative descriptions of the 12 basic strategies contained in the CDR. Two forms were developed—one to use when observing early childhood educators and one for those in middle or high school programs (Appendix H).

Each item was scored to indicate if the adult demonstrated the practice in a generally positive (p) or negative (n) manner. The coding then paired students' responses to that practice, coded as maintained or increased positive participation (P) or as a negative response without participation (N). Thus, each item had a dual rating that paired the adult's manner when applying the strategy with the student's response. Each item was rated and received a weighted score that focused on positive participation as the priority, as follows:

- 5 = positive manner/positive student participation
- 4 = negative manner /positive student participation
- 3 = positive manner/negative student participation
- 2 = item observed but unnecessary to increase student participation
- 1 = item used inconsistently
- 0 = item not observed
- 5 = negative manner/negative student participation

For example, a strategy used in a positive manner by the adult resulting in a student's positive response would be coded p/P and receive a score of +5, while a practice demonstrated in a negative manner resulting in a student's negative response would be coded n/N with a resulting score of -5.

A participant's total skill score was the sum of the weighted rating options for all items divided by the frequency of strategies observed from the time sampling, to obtain an average skill score for the strategies actually demonstrated by the individual. This adjusted score was necessary for pre- to post-comparisons because all of the strategies were not always observed or needed during the repeated 30-minute observations.

Reliability of procedure. The observers were not involved in the project to develop the PEGS! CDR. They had extensive experience in educating children with emotional and behavioral disabilities and each had more than 25 years experience in general and special education as program supervisors or as

early childhood program specialists. Prior to the field tests, each observer had achieved interrater agreement of greater than 90%, item-by-item, on the instrument from which the *Adult Rating Scale* was abbreviated (See Appendix H). Because observation and data collection require reliable rater judgments, operational terms were defined and rating protocols were reviewed in detail before the observers visited the classrooms. The observers also received a 2-hour training together, where they viewed videotapes of other typical early childhood classrooms and practiced using the coding protocols for accuracy.

During the studies, split half reliability data were collected for estimating internal consistency in time sampling. Mean frequency of pre-CDR strategies used by early childhood educators recorded during the first 15 minutes of observation were compared with the mean frequency recorded during the second 15 minutes ($M_1 = 24.36$, $SD = 17.74$; $M_2 = 21.64$, $SD = 6.72$; $t = .55$, $p = .59$, two-tailed). This lack of a statistically significant difference between the means suggests that the time sampling procedure had measurement stability during the 30-minute observations. The procedure was repeated for the field tests of the secondary version with similar results, increasing confidence that the measurements had internal consistency.

Results

Summative evaluation question 1: *Do educators find the CDRs to have relevant content, provide a helpful learning experience, and be used with ease?*

Table 12 contains a summary of participants' ratings of the PEGS! CDRs. The 24 early childhood teachers and assistant teachers who volunteered to *evaluate PEGS! for PRESCHOOL* gave it high ratings of approval overall (average 4.4, where 4 = meets standard very well). Similarly high ratings were given for each category: *relevant content* (4.1), *a helpful learning experience* (4.4), and *easy to use* (4.7). Similarly, the middle and high school educators gave PEGS! for *SECONDARY* generally high ratings of approval overall (average 4.1), for *relevant content* (4.1), and for *easy to use* (4.1). However, they gave somewhat lower ratings for *a helpful learning experience* (3.9) although this rating also exceeded the acceptable minimum standard. It is interesting to note that the range of ratings by the middle and high

school teachers was considerably greater than those of the early childhood educators. They appeared to either *strongly agree* or to *disagree somewhat*, as evidenced by the ratings as low as 2.1 and as high as 5.0. This finding may be a result of the small sample size; or it may reflect the generally higher educational levels of this sample of secondary teachers. It is also possible that the highly specialized field in which they were working influenced their ratings. However, these field tests indicate that overall, the *PEGS!* products have achieved the standards established in the original project proposal for user satisfaction.

Table 12. Average Ratings of PEGS! CDRs by Early Childhood and Middle/ High School Educators

	User Satisfaction ^a			
	Relevant Content	Helpful Learning	Easy to Use	Total ^b
Early Childhood Educators (n = 24)				
Average Rating	4.1	4.2	4.7	4.4
Range	3.5-4.8	3.7-4.7	4.0-4.7	4.0-4.7
Middle School Educators (n = 13)				
Average Rating	4.1	3.9	4.3	4.1
Range	2.5 – 5.0	2.7 – 4.9	2.9 – 5.0	3.3 – 4.9
High School Educators (n = 6)				
Average Rating	4.1	3.9	3.9	3.9
Range	3.8 – 4.5	3.2 – 4.2	2.1 – 4.6	3.0 – 4.4
Total (N = 19)				
Average Rating	4.1	3.9	4.1	4.1
Range	2.5 – 5.0	2.7 – 4.9	2.1 – 5.0	—

^a 5 = Agree strongly, 4 = agree, 3 = neutral, 2 = disagree somewhat, 1 = disagree strongly.

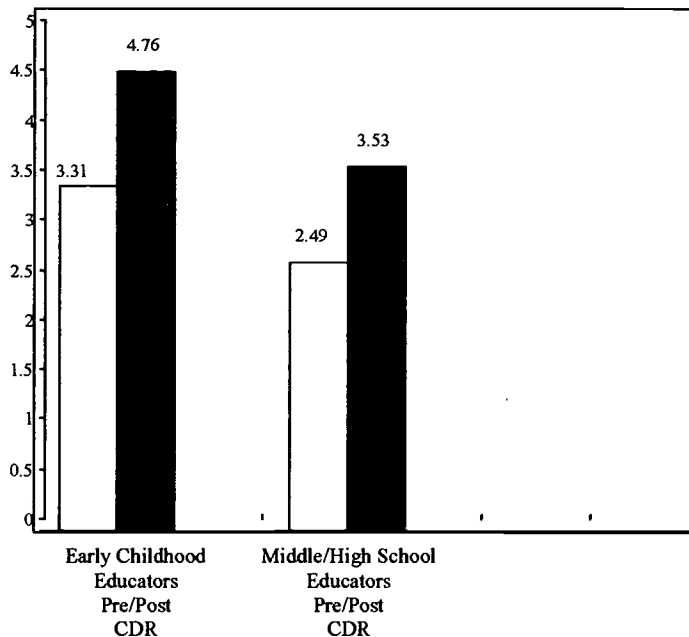
Minimum acceptable standard was >3.0 for each category and for total.

^b Total of 24 criterion statements.

Summative evaluation question 2: Is there evidence of positive carryover from using the CDRs into actual classroom practices?

Results of the field tests indicate that there was significant improvement in the skill with which both groups of educators applied the CDR intervention strategies in their classroom. After using the PEGS! CDRs for about 2 to 3 hours over a two-week period, 83% (10) of the 12 early childhood educators improved their skill scores, and 82% (9) of the 11 teachers in middle and high school improved their skill scores. There were comparable gains in mean skill scores for both groups. The early childhood participants increased their skills in applying the CDR intervention strategies by 41%, from a mean of 3.31 to 4.76. Middle and high school educators also increased their skills by 42%, from a mean skill score of 2.49 to 3.53 (Chart 4).

Chart 4. Changes in Average Behavior Management Skill Scores of Educators in a Two-Week Interval

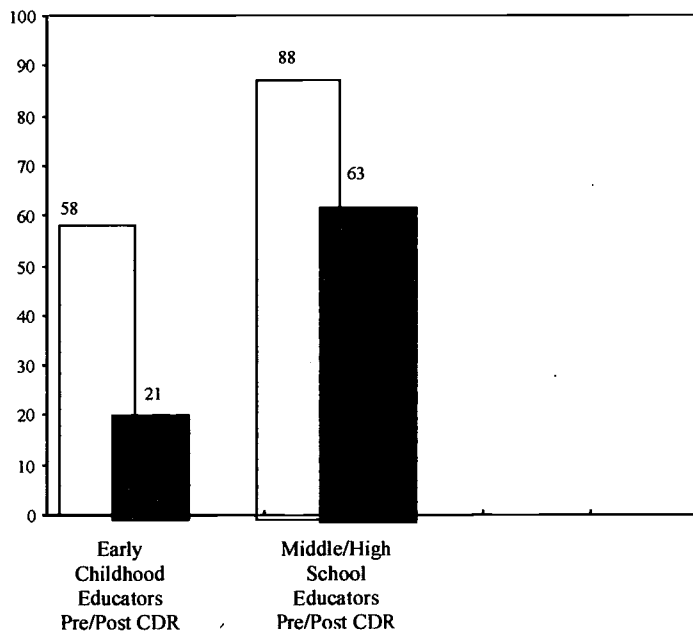


Among the early childhood participants, the frequency of their intervention decreased 30%, from a total of 644 to 454 interventions. Total negative responses by children to the participants' strategies decreased by 64%, from 58 to 21 negative responses. Instances of participants' ignoring children declined

by 90%, from 48 to 5 total instances. In contrast, among the middle and high school teachers, there was little change in the frequency of their interventions (2% decrease), a 28% decrease in negative responses from students (from 88 to 63 total negative responses), and instances of ignoring of students increased by 5% (from 133 to 140 total instances) (**Chart 5**).

For statistical analysis of these follow-up results, one-tailed dependent *t* tests were calculated using an *alpha* level of .05. For the early childhood participants, the results indicate statistically significant gains in mean skill scores from pre- to post-CDR, and statistically significant decreases in frequency of interventions, negative child responses, and ignoring of children. Among the middle and high school teachers, mean differences in skill scores from pre- to post-CDR were also statistically significant, while changes in frequency of interventions, negative student responses, and ignoring of students were negligible (**Table 13**).

Chart 5. Decrease in Negative Responses From Students in a Two-Week Interval



Magnitude-of-effect measures taking sample size into account were obtained with Friedman's (1968, p. 245) point-biserial correlations (r_m) and Cohen's (1988, p. 86) power tables. Effect size criteria were $r = .10$ for small, $r = .30$ for medium, and $r = .50$ for large effects. The r_m values provide

Table 13. Classroom Performance of 12 Early Childhood and 11 Middle/High School Educators

	Pre-CDR	Post-CDR	%Change	<i>t</i>	<i>p</i>	<i>rm</i> ^a
SKILL SCORES						
Early Childhood Educators						
M	3.31	4.67	+41%	2.53	.01	.57
SD	1.26	1.81				
SE	.48	.34				
Range	1.9-6.0	2.4-8.1				
Middle/High School Educators						
M	2.49	3.53	+42%	1.91	.04	.52
SD	1.73	2.86				
SE	.52	.86				
Range	0-5.54	.96-8.53				
INTERVENTION FREQUENCY^b						
Early Childhood Educators						
M	46.00	32.43				
SD	19.48	13.50	-29%	3.00	.005	.64
SE	5.20	3.61				
Range	15-76	12-61				
Total Interventions	644	454				
Middle/High School Educators						
M	78.64	76.64	-2%	.32	.38	.10
SD	43.20	45.53				
SE	13.02	13.73				
Range	8-152	19-147				
Total Interventions	865	843				
NEGATIVE CHILD RESPONSE^b						
Early Childhood Educators						
M	4.14	1.50				
SD	5.64	1.95	-64%	1.76	.05	.44
SE	1.51	.52				
Range	0-19	0-6				
Total Negative Responses	58	21				
Middle/High School Educators						
M	8.00	5.73	-28%	.71	.25	.22
SD	18.09	10.96				
SE	5.45	3.31				
Range	0-61	0-30				
Total Negative Responses	88	63				
IGNORING OF CHILDREN^b						
Early Childhood Educators						
M	3.43	.36				
SD	6.08	.84	-89%	2.00	.03	.48
SE	1.63	.22				
Range	0-17	0-3				
Total Ignoring	48	5				
Middle/High School Educators						
M	12.09	12.73	+5%	.15	.40	.05
SD	10.67	9.25				
SE	3.22	2.79				
Range	0-39	0-29				
Total Ignoring	133	140				

^a Friedman (1968) formula for magnitude of effect estimates.^b Decrease is desired.

confidence that the early childhood participants' gains in skill scores and decrease in frequency of interventions are large ($r = >.50$), whereas declines in negative child responses and ignoring are moderate ($r = >.30$). The t value for negative child response occurs at the critical point for the sample size and .05 probability level. From a statistical viewpoint, this raises the possibility that an increase in sample size to about 18 participants might be needed for greater confidence in the finding regarding reduction of children's negative responses to the early childhood educators (Friedman, 1968, p. 247; Snyder, 2000; Snyder & Lawson, 1993). However, the practical significance of an actual 64% decrease in negative responses to the strategies during the 30-minute observations in this sample improves confidence in the finding.

A similar procedure was used to estimate possible effect of the small sample size on the results for the middle and high school teachers. An increase of that sample size to about 14 participants might increase confidence in the finding that their 42% increase in skills was both practically and statistically significant.

Noting that the skill scores of female middle and high school teachers increased by 71% while the skill scores of the male teachers increased by 17%, dependent t -tests were again used to examine statistical differences in their mean skill scores. No statistically significant gender differences were found between the group means at either the pre- or post-CDR observations, possibly a function of the very small sample sizes (female $df = 5$; male $df = 4$). However, when mean negative responses from students were compared there was a statistically significant gender difference. Female teachers had a total of 5 instances of negative student responses (mean = .8) in pre-CDR observations and 2 total instances (mean = .3) post-CDR, a 60% decrease. In contrast, male teachers had a total of 83 instances of negative student responses (mean = 16.6) in pre-CDR observations and 61 instances (mean = 12.2) for post-CDR, a 26% decrease. While the mean differences between the teachers in number of negative student responses were not at a statistically significant level ($t = 1.53$, $p = .08$) in the pre-CDR observations, a statistically significant difference in the mean number of negative student responses for male and female teachers occurred post-CDR ($t = 2.05$; $p = .03$). This finding suggests that the male teachers in this sample either

had students with notably more severe behavior problems, who were less responsive to immediate changes in teachers' strategies. It is also possible that the strategies, designed as the basic core needed by all educators, were not specific to the needs of that student population with severe problems. It is possible also that the male teachers did not obtain full benefits from the CDR practice, even though their skills increased by 17% and the instances of negative responses from students to their strategies decreased by 26%.

Logbook records indicated that the 14 early childhood participants spent about 2 hours on average using the program (mean = 122.57 minutes, range = 15 - 327 minutes). There was no significant correlation between time they spent on the CDR and their post-CDR skill scores ($r = .33$). The 11 middle and high school participants spent on average 2.5 hours with the CDR (mean = 148.27 minutes; SD = 107.48; range = 60 - 430 minutes). Time spent with the CDR did not correlate with their post-CDR skill scores.

SUPPLEMENTAL INFORMATION and UNANTICIPATED OUTCOMES

The Georgia Department of Education indicated a high degree of interest in the PEGS! series and, in 2001 as part of the Georgia State Improvement Grant (SIG), developed a parallel inservice course in collaboration with the Developmental Therapy Institute (Georgia Department of Education, 2002, Subactivity #10). The course, *Improving Classroom Management of Students' Disruptive Behavior*, is a five session training program that uses the *PEGS! for ELEMENTARY* CD-ROM as the central content for 10 contact hours of inservice continuing education credit (CEU). The course includes a participant's workbook and an instructor's guide with overheads, discussion questions, and independent assignments. Activities for participants to conduct in their own classrooms are also included. The course has been included in paraprofessional and substitute teacher training and to assist general and special education teachers when they team for inclusion of special needs children in regular classrooms.

During 2002 the course was offered through the statewide Georgia Learning Resource System (GLRS). Copies of the course instructor's guide and the *PEGS!* CD-ROM series have been distributed to each GLRS director in the state. The *PEGS!* course was taught in 7 locations by 5 GLRS projects for 73 Georgia educators. Ratings of the *PEGS!* for *ELEMENTARY* CDR, the course, and the instructor were reported for 62 of these participants (Table 14). They also completed self-ratings on three dimensions of their own classroom behavior management, reporting (a) increased use of strategies that anticipate and avoid behavior problems, (b) decreased ignoring of students, and (c) increase in students' participation in learning activities. Additional courses are being schedule by the GLRS during 2003 and requests have been received for designing additional inservice courses to allow for inservice credits with the early childhood and secondary *PEGS!* programs.

Table 14. Evaluation Reports from 62 Participants in Georgia GLRS Inservice Course Using *PEGS!* for *ELEMENTARY* CD-ROM

	Locations Reporting Evaluation Data		
	Middle Georgia GLRS (n = 22)	Southeast Georgia GLRS (n = 27)	MetroWest GLRS (n = 13)
Rating <i>PEGS!</i> CDR ^a	4.4	NA	3.6
Rating the Course ^a	4.3	NA	4.1
Rating the Instructor ^a	4.5	NA	4.7
Self-Ratings of Classroom Carryover:			
Use of Prevention Strategies ^b	+14%	+21%	+5%
Student Participation ^b	+20%	+63% to +72%	+7%
Ignoring of Students ^c	-27%	-20%	NA

^a Scale of 1 to 5, where 5 = highly effective to 1 = not effective.

^b Increase desired.

^c Decrease desired.

This strong evidence of response and utilization of the *PEGS! for ELEMENTARY* is most encouraging. It is anticipated that similar trainings for the *PEGS! for PRESCHOOL* and *PEGS! for SECONDARY* may occur in Georgia and other states as well to maximize the benefits of this project.

PROJECT BENEFITS

With completion of this project, the original plan for the *PEGS!* three CD-ROM series has been achieved. The series contributes to the improvement of instruction for all ages and grade levels. With a focus on promoting active student participation in learning, the series has many potential benefits. It can:

- Meet the needs of educators to use positive behavior management strategies skillfully.
- Provide teachers and assistant teachers with virtual learning experiences for independently practicing intervention strategies shown to be effective in reducing negative behavior of children.
- Offer individualized feedback about the learner's behavior management style, thereby assisting adults in independently self-monitoring and learning at their own rates.
- Foster shared knowledge of developmentally and emotionally appropriate management strategies between general and special educators through mutual training experiences.
- Facilitate coherent program coordination between educators and other child serving agencies, thereby implementing IEPs in collaborative ways.
- Enable administrators to offer timely inservice training when new personnel or substitute teachers are employed, thereby addressing a need for repeated basic training in programs with high staff turnover.
- Provide administrators a way to provide inservice training on an individualized basis, thereby efficiently using the time of supervisors and faculty.
- Meet the needs of children with and without challenging behaviors for supportive learning environments in which they are willing participants.

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APPENDICES

Appendix A
Parents and Professional
Advisory Councils

Advisory Council

Name	Administrator	Teacher	Paraeducator	Other support professional	Parent (*child with disabilities)
Geraldine Clark	Public Housing Services				
Carolyn Combs	Team Supervisor	Special Education			Yes*
Mike Hendrick		College			Yes
Mary Hensien	Middle School Principal	++Special Education			Yes
Vicki Hunnicutt	++Curriculum Director	Teacher Educator			Yes*
Maggie Napoli		Preschool		++Counselor	Yes
Jerry Pope		Media Specialist		Instructional Technologist	Yes*
Janice Pulliam					Yes
Marsha Tate			Preschool		Yes*
Kwang Yu					Yes

Consultants

Emily Collins		College		Consulting Psychologist	
Anna Morgan				Consulting Psychologist	
John O'Connor	Ga Department of Education	++Special Education			
Frank Smith	Ga Department of Education			Consulting Psychologist	Yes

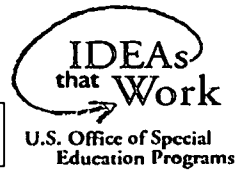
Focus Group

Shawn Barnett			Special Education		Yes
Dottie Bero			Special Education		Yes
Windy Dalton		+Elementary			Yes
Carol Douglas	Elementary Principal	++Special Education			Yes
Rob Kelleher		Special Education			Yes
Margo Monroe			Special Education		Yes
Hazeline Samuel			Middle School		Yes
Sara Williams		+Reading, Gifted			Yes*

+ First Year ++Previous Experience



Help for troubled or troubling children
Developmental Therapy - Teaching Programs



AGENDA
Organizational Meeting of Project PEGS!
Advisory Council

Thursday, August 26, 1999, 4:30 p.m.
Developmental Therapy – Teaching Programs
Jennings Mill
1751 Meriweather Drive, Building B, Suite 3

Welcome and Introductions

The Advisory Council Mission, Mary M. (Peg) Wood
Council Chairman

Overview of Project PEGS! Diane Wahlers,
Project Manager

Discussion of Ways the Council Can Respond to
the Tasks

Scheduling the Next Meeting

MINUTES OF THE ADVISORY COUNCIL MEETING

August 26, 1999

4:00 – 5:30 p.m.

INTRODUCTIONS

All members of the newly formed Advisory Council were present except Kwang Yu and Janice Pulliam.

DISCUSSION OF THE WAYS THE COUNCIL CAN CONTRIBUTE

The first task is to develop a convincing prototype for simulating problem behavior of elementary school age children.

Question 1: Do you think we have identified the major categories of children's problem behaviors?

The Council review Figure 1, "Difficult or Troubling Behaviors." A discussion followed, indicating that the 9 types included in Figure 1 were comprehensive, except for 3 fairly prevalent problems: (1) health complaints about stomach aches and head aches; and (2) bullying (a big issue in Georgia); and (3) blaming someone else – "It's someone else's fault." These suggestions will be sent to the LetterPress designers.

The discussion then centered on the role of adults in children's behavior. It was pointed out that parents have few ways of getting feedback when they are doing a good job. There was also agreement that "95% of our problems [with children] are adults problems."

A second discussion focused on the pervasive blame shifting by many adults. Children have copied the idea that others are to blame for the consequences of one's own behavior. It was suggested that some children and parents are in denial. The label "Parent Deficit Disorder" (PDD) was suggested as appropriate for this type of behavior in adults. It was suggested that some parents have a difficult time learning when to be tough ("how to be comfortable being uncomfortable"). This led to the idea that some parents need to learn when to be tough and when to be gentle. It was also suggested that many parents are doing double duty as a single parent. This burden is overwhelming – with a job requiring so much time and energy that it leaves little time for anything beyond basic survival skills with children at home.

This discussion concluded that there might be a need for a different CD-ROM designed specifically for use by parents, rather than attempting to include parents as part of the user group for the first CD-ROM.

Question 2: Have we left out behavior management strategies that should be included in Figure 2?

The time was running out for a full discussion of this question. It will be added to the agenda for the next meeting.

VIEWING THE PRELIMINARY CHARACTER DESIGNS ON THE COMPUTER

Council members viewed 7 different character styles to provide feedback to LetterPress about how the visual should look. There was a recommendation to avoid clothing and hairstyles that could soon look out of date. There was also concern that the characters portray children in empathetic ways to avoid caricatures that are disparaging. There was discussion about whether it would be effective to actually include an adult character in the simulation. This topic will be brought up to the design people, and will be discussed again at the next Council meeting.

The next meeting was scheduled for September 23 at 4:00 p.m. and the meeting was adjourned.

Project PEGS! Prototype B Advisory Council Survey Summary, January 2000
Project Year One, October 1, 1999 - May 2, 2000

Features I would like to have included ...

		<i>Like</i>	<i>Dislike</i>
1. Additional supportive information in the introduction screen:			
<i>Meet the children</i>	<i>Descriptive vignettes of all the children, typical and special</i>	100%	0%
<i>Learn the interventions</i>	<i>Descriptions, text and audio examples and non-examples of the interventions. Explanations of Buttons</i>	100%	0%
<i>Tips for playing the game successfully</i>	<i>How to "win"</i>	80%	20%
<i>General Program Help</i>	<i>What the game includes</i>	100%	0%
<i>Additional background information about the children</i>	<i>a. Family and Social History</i>	100%	0%
	<i>b. Educational History</i>	100%	0%
	<i>c. Clinical Assessment</i>	100%	0%
	<i>d. Profile of Social - Emotional Development</i>	100%	0%
<i>Trial run</i>	<i>Might be a down-loadable demo for marketing</i>	100%	0%
<i>Additional resources</i>	<i>Link to web page for more information about Developmental Therapy - Teaching and related materials</i>	100%	0%
		<i>Like</i>	<i>Dislike</i>
2. Content			
<i>Clarification of difference between spontaneous (active) participation and passive participation</i>	<i>Slow down rate of movement for compliance and increase animation for active participation</i>	100%	0%
<i>Children should represent relevant age group</i>	<i>All ages 9 - 11; size will vary slightly</i>	100%	0%
		<i>Like</i>	<i>Dislike</i>
3. Expanded Feedback			
<i>Additional specific feedback about interventions chosen for a special child</i>	<i>Why they did/didn't work</i>	100%	0%
<i>Management styles used by learner during game</i>	<i>Anticipatory or Preventive, Troubleshooting, First Aid</i>	80%	20%

Developmental Therapy-Teaching Programs
MINUTES OF THE ADVISORY COUNCIL MEETING
SEPTEMBER 23, 1999
4:00 to 5:30 p.m.

Members present. Mike Hendrick, Vicki Hunnicutt, Maggie Napoli, Janice Pulliam, Marsha Tate-Allen

1. **Update on project activities.** Time lines and meetings with our new state project officer John O'Conner and LetterPress designers were reviewed. All projected activities are on time. LetterPress has delivered the revisions on schedule, and the design document for the Elementary School product has been revised, reviewed, and accepted.
2. **Review of first prototype reactions by Council members.** These ideas were raised and will be brought to the attention of the LetterPress designers:

****In regard to the strategy buttons –**

- ◆ How can we respond when we think two strategies should be combined?
- ◆ Are the strategies arranged in the order of preference?
- ◆ Would it be easier to learn what the strategy buttons mean if they were arranged in order from easy to harder? Or would mixing them up make it a more challenging game?
- ◆ Are there “good” and “not good” buttons?
- ◆ The symbols were difficult to remember. Could wording be added? Or possible a practice section before beginning the simulation.

****In regard to possible missing strategies –**

- ◆ When rules are set up and there is an infraction, I don't see consequences.
- ◆ Is there going to be a way for the adult to model respect?
- ◆ Is ignoring a strategy when you make a conscious effort to ignore? Could there be an “ignore” button?

****In regard to the visual format –**

- ◆ Can all of these strategies be shown by an adult actually doing them?
- ◆ Can the adult be included on the screen?
- ◆ What actually ends participation?
- ◆ How do you know when you won the game or did well? A “success meter” would be a good idea. Then when you make a good choice the child responds appropriately and the meter goes up.
- ◆ Is this too stressful, to try to learn all of these strategies and use them with all the children? It's probably realistic to learn to be comfortable being uncomfortable. A juggling act is realistic.

****In regard to overall reaction to this first prototype –**

- ◆ The children are appealing and avoid stereotypes related to age, clothes, race, gender, culture.
- ◆ Sound effects were good and help give it authentic reactions.
- ◆ You could picture yourself as the teacher.

Next meeting. The next meeting will be scheduled after the second prototype with revisions is delivered by LetterPress in January. There was some concern that an afternoon meeting was not possible for some working members of the Council. It was suggested that we have an evening meeting.

Developmental Therapy-Teaching Programs
PROJECT PEGS! Advisory Council

January 20, 2000 at 4:30 to 6:00 pm

AGENDA

Review minutes of the previous meeting

Summary of problems addressed and solutions achieved at our recent 2-day work session with LetterPress designers

Recommendations from Advisory Council Members

Advisory Council members are asked to make recommendations about five current tasks:

1. Review descriptions of problem behaviors and rank them from most severe to least severe. This information will help us determine if we have provided a sufficient range in behavior problems among the seven children described in "Meet the Kids."
2. Review the original "Difficult or Troubling Behaviors" list to determine if each has been included in the descriptions of the children with special needs.
3. Review ethnic, racial, and gender balance among the children to be included, for both those with and without "special needs."
4. Review names for the selected children both with and without "special needs."
5. Recommend a title for the product.

Individual follow-up at our office

Review the revised prototype at your leisure and give us candid feedback about your reactions and suggestions.

Review management strategies and re-word them if needed to make them easier to understand.

Schedule next meeting near the end of March

	Very Effective	Somewhat Effective	Not Very Effective
Animation of troubled and regular children:	<ul style="list-style-type: none"> Liked shift from smile to frown, and agitated shifting Maybe close-ups of children when things aren't going well 		<ul style="list-style-type: none"> When child is removed from room child doesn't disappear
"Success Meter" to show level of the children's participation in response to user's strategies:	<ul style="list-style-type: none"> Like to see the changes in children This is helpful 	<ul style="list-style-type: none"> Needs to be clearer 	<ul style="list-style-type: none"> Seems too easy to be perfect. When I tried to do everything wrong it still read 50%. Should it have been 0%? Only needed two buttons for consistent success.
Negative effect of ignoring child, i.e., causes the child's behavior to deteriorate:	<ul style="list-style-type: none"> Reminder of need to continually interact with child Reminds to make frequent contact Very realistic - one of the highlights 		
Addition of Oops or Good to immediate feedback (after each intervention) to indicate direction of change in a child's behavior:	<ul style="list-style-type: none"> Oops, etc. nice touches I like this. Are there sound effects? You want to know how well you did Possibly more variety of Oops, Good 		
Clock that indicates the time remaining for the scenario:		<ul style="list-style-type: none"> Clock is necessary, but scenario is too long. Learned early I could keep kids well behaved with only 3 buttons 	<ul style="list-style-type: none"> Did not notice because of the enormous amount of stimuli I was forced to endure Not clear that if all children are enthusiastically participating game ends
Exit conditions: (1) all kids full participation, (2) time runs out, (3) user quits:	<ul style="list-style-type: none"> Kids full participation 	<ul style="list-style-type: none"> How about a timeout for the teacher? Time is too long - 12 min 	
Other reactions or suggestions:	<ul style="list-style-type: none"> Excellent animations I am very pleased The thermometer - wanted to get it red to the end 	<ul style="list-style-type: none"> Change name of Jonathan to Bill and the name of Diego to Juan for political reasons 	<ul style="list-style-type: none"> Print function not enabled Arrange buttons more logically? Responses became predictable quickly Success Meter, need some introduction at beginning. No label.

PEGS! Project Advisory Council 2000-2001, Project Year 2

Name	Position
Marsha Tate Allen	Preschool Teacher, East Athens Community Center
Geraldine Clark	Director of Residential Services, Rockspring Homes Athens Housing Authority
Carolyn Combs	Special Education Teacher, retired
Donna Ford	Director, Childcare Resource and Referral Program
Mary Hensien	Assistant Principal, Hilsman Middle School
Adam Kurtz	Industrial Arts Teacher, Oglethorpe High School
Danny McFay	Special Education Teacher, Carson Middle School
Drew McNeely	Math Teacher, Clarke Central High School
Rebecca Olson	Director, McPhaul Child and Family Development Center, The University of Georgia
Maggie Napoli	Preschool Teacher, Emmanuel Day School and Parent of a teen with disabilities
Jerry Pope	Media Specialist, Timothy Road Elementary School
Janice Pulliam	Parent of teen with disabilities

PEGS! Project Advisory Council, 2001 - 2002, Project Year 3

<i>Advisory Council</i>				
Marsha Tate Allen	285 Norwood Circle Athens, GA 30605			
Anne Brightwell	180 Pointer's Ridge Dr. Athens, GA 30606	706-543-4326 (h) 706-357-5200 (w)		brightwella@clarke.k12.ga.us
Geraldine Clark	284 Rockspring Homes Athens, GA 30606	706-549-3385 (w)		
Carolyn Combs	130 Fairlane Drive Athens, GA 30607	706-353-2976 (h)		garbo131@aol.com
Donna Ford	Community Connection 425 Prince Ave. Athens, GA 30601	706-353-1313 (w)		dmarshaf@yahoo.com
Mary Hensien	Creekland Middle School 170 Russell Rd. Lawrenceville, GA 30043	770-338-4700 (w)		
Duncan Krause	132 Buckeye Branch Athens, GA 30605	706-354-0555 (h)		
Adam Kurtz	895 Hill St. Athens, GA 30606	706-546-8654 (h)		atsum@yahoo.com
Danny McFay	8 Cloverhurst Ct., #1 Athens, GA 30605	706-613-8492 (h) 706-453-3308 (w)		dannmcfay@hotmail.com
Drew McNeely	568 Castalia Ave. Athens, GA 30606	706-549-0823 (h)		drewmcneely@charter.net
Rebecca Olson	McPhaul Center 220 Carlton St. Athens, GA 30602	706-542-4929 or 4921 (w)		bolson@fcs.uga.edu
Maggie Napoli	495 Belmont Rd. Athens, GA 30605	706-546-0023 (h)		

Advisory Council (cont)				
erry Pope	2290 Cherokee Rd. Winterville, GA 30683	706-543-1116 (h) 706-549-0107 (w)		popej@clarke.k12.ga.us
Janice Pulliam	385 Morton Farm Lane Athens, GA 30605	706-548-9394 (h)		jlpulliam@aol.com
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Help for troubled or troubling children
Developmental Therapy - Teaching Programs



Project PEGS (Practice in Effective Guidance Strategies)
Advisory Council Meeting
Monday, February 11, 2002 4:30 - 6:00 p.m.

Introduction of Advisory Council Members

PEGS orientation and review of progress

PEGS for Early Childhood

Informal demonstration
Plan for field testing

PEGS for Middle/High School

Introduction to teen characters
Ranking the Problem Behaviors
Identification of Behavior Problems which interfere with participation in learning

Plans for future meetings

Appendix B.
Instructional Design Documents
and
Definitions of Strategies

What to Do When...? Project PECCSS!

Charge

To create three animated, interactive CD ROMs for personnel and parent training in effective behavior management practices with children in preschool (ages 2 - 5), elementary school (ages 6 - 12) and middle/high school (ages 13 - 16).

Goals of these Projects

- ◆ *Develop animations of children's troubling conduct to which adults must learn to interact in positive ways*
- ◆ *Include instant feedback and summary of management styles*
- ◇ *Field test, revise product; evaluate impact of product*
- ◆ *Disseminate product to Georgia public school districts and psychoeducational centers; develop national distribution plan*

Scope of the Project Tasks

Design/Development	Field Testing	Dissemination	Evaluation
<i>Content Development Artistic & Technical Design Workbook Design (SIG) CD-ROM Manufacture Workbook Printing</i>	<i>In-house Testing & Revisions Field site selection/testing Observation, interview of selected participants Ongoing feedback, revisions</i>	<i>Advertisement of product Distribution to Georgia public school districts and psychoeducational centers Design national distribution plan</i>	<i>Formative evaluation Summative evaluation Statistical analysis of usefulness and effectiveness</i>

User Groups

- *Teachers* • *Support Personnel* • *School Administrators* • *Parents*

Funding

Elementary School Children (SIG)

- ◆ *U.S. Dept. of Education, Office of Special Education*
- ◇ *Georgia Department of Education, State Education Improvement Grant*
- ◇ *University of Georgia, College of Family and Consumer Sciences/Developmental Therapy-Teaching Programs Public Service Unit*
- ◆ *Developmental Therapy Institute, Inc.*

Preschool Children and Teens (PECCSS!)

- ◆ *U.S. Dept. of Education, Office of Special Education*
- ◆ *University of Georgia, College of Family and Consumer Sciences/Developmental Therapy-Teaching Programs Public Service Unit*
- ◆ *Developmental Therapy Institute, Inc.*

Project PEGS! Design Meeting Agenda
LetterPress Software/Developmental Therapy-Teaching Programs

Tuesday, September 21, 1999

Present Version I Prototype

- Discuss and refine basic product interactions
- Discuss and refine simulation look and feel, artistic styles
- Discuss feedback rules and requirements
- Discuss and refine core simulation behaviors and activities
- Discuss and refine database rule requirements (data template)
- Discuss and refine secondary media resources (audio, video)
- LetterPress: overview of advisory group guidelines
- Discuss and refine product scope (number and variety of cases) and components (Presentation strategies, exploration strategies, practice strategies, instructional feedback options) - SIG

Wednesday, September 22, 1999

Discuss PEGS! design additions

- Discuss and finalize prospective target learner audience
- Discuss and determine critical instructional objectives
- Discuss and draft product scope (number and variety of cases) and components (Presentation strategies, exploration strategies, practice strategies, instructional feedback options) - PEGS!
- Discuss and review project communications
- Discuss and review project responsibilities and roles
- Discuss and review project schedule and milestones
- Review PEGS! contract

Figure 3. Design Issues and Solutions for Project PEGS!

Project Year One, Oct. 1, 1999 - May 2, 2000

Solutions proposed during design meetings

Concern

Instructional Goals: All elements of program must be focused appropriately to achieve goals.

- Restated goals: increase learner's ability to
- Recognize negative behaviors and need for adult intervention
 - Choose strategies appropriate for individual children which increases their participation
 - Maintain high participation level of all children
 - Generalize learning to real-life situations

Audience: Target audience must be kept in mind.

- * Educational background
- * Level of experience
- * Expectations of game-players

- * Three levels of difficulty offered: beginner, intermediate, advanced
- * Adequate feedback
- * Text accessible for all readers
- * "Winning" must be defined carefully

Supportive Information: Enough help must be provided for learners to play program in an informed manner.

- Introduction and Help Screen will include:
- * Meet the children, typical and special
 - * How to play the game and be successful
 - * Additional resources, e.g., link to web page

- * Learn the interventions
- * General program help
- * Trial run

Interventions: Learners must agree on meaning of interventions.

- * Introduce with button symbols and audio examples
- * Give simple definitions linked to expanded definitions
- * Provide examples and non-examples
- * Give tips about use and misuse
- * Give links to additional resources

Content: Difference between child compliance and spontaneous participation must be conveyed; problem behaviors presented must be representative of real-life.

- * Slow down rate of movement for compliance and increase animation for participation
- * Include examples in introductory material
- * Descriptive vignettes for typical and special children

Settings: Generic tasks must be appropriate and adaptable for all age groups.

- * Individual task within group, e.g., seat work
- * Group hands-on activity
- * Group discussion
- * Group physical activity (not organized game)

Graphic Design: Visual material in the program must strike learners as relevant to real-life situations.

- * Cartoon children must be timeless style
- * Slightly different sizes will help convey age differences
- * Small groups may be set against background of larger group to infer classroom situation

Feedback: Feedback must be timely and tied to instructional goals.

- * Immediate feedback on efficacy of strategy in beginner level
- * Delayed feedback in intermediate and advanced levels
- * Comprehensive feedback will be provided at the end of each activity:
 1. Quantitative information: how often each strategy used
 2. Additional specific feedback about intervention chosen for special child
 3. Management styles: definition will help with application of learning

Agenda

January 11, morning

1. ***Review Advisory Council suggestions for final SIG simulation prototype***
 - *feedback and scoring*
 - *management strategy summaries*
2. ***Finalize additional and supporting information features***
 - *help file: how to use the product*
 - *data regarding children*
 - *tips for being successful in both simulation and real world*
 - *information about Developmental Therapy -Teaching Programs*
 - *other useful supplemental information*
3. ***Review required data for State Improvement Grant***
4. ***Instruction on data entry and formatting***

January 11, afternoon

1. ***Review PEGS! Design documents***
2. ***Review adjusted simulation prototype (preschool level) PEGS!***
 - *graphical characters*
 - *graphical look and interface*
 - *feature review*
3. ***Discuss modifications required for teen level PEGS!***
 - *removing interventions*
 - *differences in interface*

January 12, morning

1. *Discuss PEGS! additional and supporting information features*
 - *help file: how to use the product*
 - *data regarding children*
 - *tips for being successful in both simulation and real world*
 - *information about Developmental Therapy - Teaching Programs*
 - *other useful supplemental information*
2. *Review required data for PEGS! preschool and teen versions*
3. *Instruction on data entry and formatting for PEGS!*

January 12, afternoon

1. *Review all grant requirements*
2. *Review schedule for deliverables*
 - *LetterPress tasks*
 - *UGA tasks*

Tuesday, September 26, 2000

9:00 AM: Review PEGS! for Elementary School (SIG Project)

Up front help and documents
Behavior meters
Overall operation of each of the 4 scenarios
Learner feedback
Teacher audio for interventions / funding 15K?
Web supporting documents
Final steps to completion

(10:15 - 10:30 Break for refreshments)

Noon: Lunch

1:00 PM: Review progress of PEGS! for Preschool

Up front menu look
Discuss up front help and documents
Overall operation of each of the 4 scenarios
Learner feedback

3:00 PM: Discuss marketing ideas for PEGS!

4:30 PM: Dismiss

Evening: Dinner with those available

Wednesday, September 27, 2000

8:30 AM: Discuss PEGS! for High School

Interface differences?
Graphical look of kids
Required help and documents
Define each of the 4 scenarios
Learner feedback
Time-lines for data

Noon/1 PM: Approximate departure time

Definitions of Behavior Management Strategies for the *PEGS!* CD-ROM Series

Strategies That Anticipate and Avoid Problems

POSITIVE ENCOURAGEMENT AND PRAISE. Give encouragement on positive elements in children's participation, not just on results. Let them know you notice something of real value in what they say and do.

MOTIVATE WITH MATERIALS OR LESSONS. Engage children's attention and interest with attractive materials or academic content that has high appeal. This will create enthusiasm for getting involved and staying on task.

ORGANIZE MATERIALS FOR CHILD (early childhood version only). Encourage independence but limit access to materials so that they are used in acceptable ways. Organize material for each activity so that unnecessary items are not distracting to participation.

EXPLAIN PROCEDURES AND EXPECTATIONS (STRUCTURE). Provide clear expectations and then review what the activity or learning task involves, step-by-step.

MODEL EXPECTED ACTIONS. Demonstrate how a task or activity will be done. Set standards for conduct towards others by using the same words and actions that children are expected to use.

Strategies That Keep Behavior Problems from Escalating

PHYSICAL PROXIMITY/ SIGNAL AWARENESS. Communicate awareness of what a child is doing by moving closer, giving eye contact, or signaling with a look or smile.

REDIRECT BEHAVIOR/REFOCUS ON TASK. Give additional guidance or re-motivate a child who shows lagging interest or attention.

REFLECT POSITIVE WORDS AND ACTIONS. Comment on positive aspect of a child's words or actions (past or present) in nonjudgmental ways, even when problem behavior is evident.

RULES REMINDER. Ask or remind an individual or group about the rule for expected behavior in a particular activity.

INTERPRETATION (secondary version only). Connect actions to feelings by commenting on what a child may be feeling, based on what is seen or heard.

Strategies That Control Highly Disruptive Behavior

TIME-OUT IN THE ROOM. Direct child to a time-out area, with a specific objective for returning to participate. (For secondary student, suggest voluntary time-out in room.)

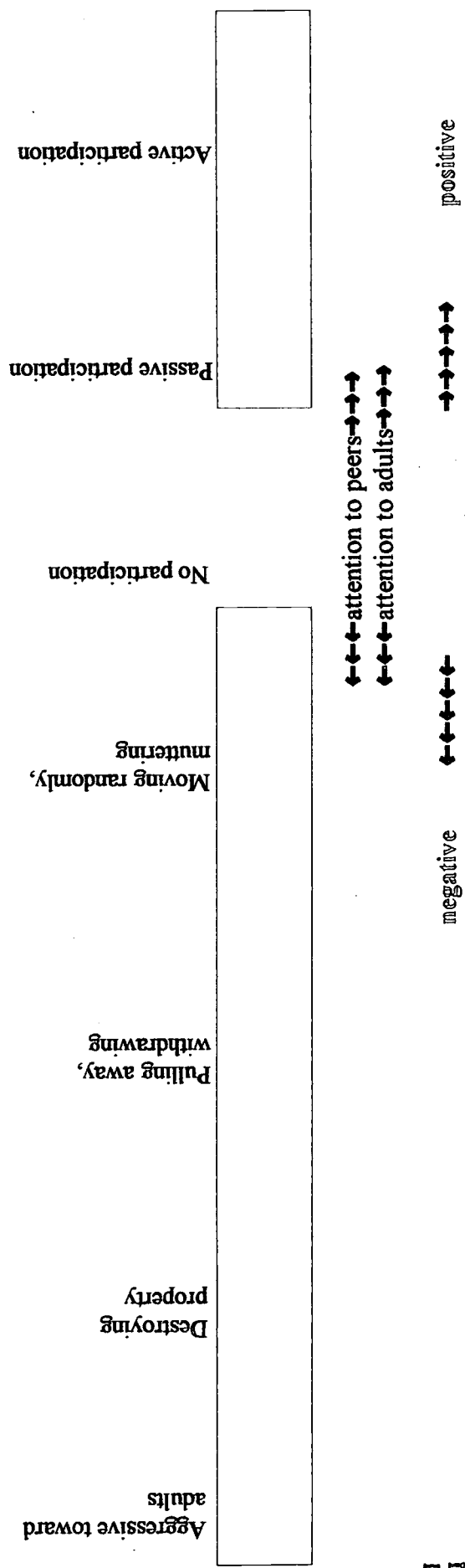
HOLD FIRMLY (early childhood version only). Use physical means to stop a young child's highly disruptive behavior, by holding with firmness while communicating adult protection from losing further control.

CONFRONT UNACCEPTABLE ACTIONS (secondary version only). Use authority to stop highly disruptive behavior.

REMOVE FROM THE ROOM. Take a young child out of the room to talk about a disruptive incident and alternative behaviors. (For secondary student suggest voluntary decision to talk about issue).

Appendix C.
Text Vignette Summaries

Continuum of Behavioral Responses Designed for Each Child Character



Summary of Student Characteristics for Early Childhood Version

<i>Child</i>	<i>Age</i>	<i>Gender</i>	<i>Intelligence Level</i>	<i>Behavior/ Personality Style</i>	<i>Attitude Toward Adults</i>	<i>Play Attitudes Toward Peers</i>	<i>Major Defense Mechanism</i>	<i>Basic Anxiety</i>
Leon	3	M	below average	withdrawn/sad	afraid	isolated	withdrawal	separation/ abandonment
Ann	4	F	above average	outgoing	independent	interactive	identification	success/ approval
Brad	5	M	gifted	aggressive	defiant/ manipulative	cruel/bully	displacement/ projection	guilt
Belinda	3	F	average	shy/cautious	dependent	parallel play	compensation	attachment
Cayla	4	F	average	temper tantrums/restless	dependent	baby	regression	inadequacy
Carlos	5	M	low average	reserved	distant	follower	repression	adequacy

Those in bold type are the children with special needs.

Summary of Characteristics for Secondary Students

Teen	Age	Gender	Intelligence	Behavior/ personality style	Attitude toward adults	Role/ attitudes toward peers	Major defense mechanism	Social Power (Type / Level)
Jameel	17	M	below average	withdrawn	afraid	isolate	withdrawal	likeability/low
Aleesa	15	F	above average	outgoing	independent	leader	identification	likeability/high
BB	15	M	gifted	aggressive	defiant, hostile	isolate/bully	displacement, projection	coercion, manipulation /medium
Beth	17	F	average	shy/dependent	cautious	follower	compensation	likeability/low
Caron	17	F	average	temper, restless	dependent	baby	regression, compensation	manipulation/high
Victor	16	M	low average	reserved	distant	instigator/ follower	identification	expertness/medium

Those in bold type are the teens with special needs.

Vignettes of Child Characters in *PEGS! for PRESCHOOL* CD-ROM

LEON

Acey is a very thin three-year-old African-American boy who lives with his single mother and several of her friends in a trailer at the edge of town. There are four other preschool children living there also. Acey is dropped off at a childcare program several days a week. He has a favorite toy bear he looks for when he arrives. While there, he fidgets constantly. Sometimes he wanders around the room, clutching the bear. Other times he stares into space. The adults at the center have never heard him speak. When they come close to him, he twitches, hugs the bear, and looks away. When distressed, he makes strange sounds that no one understands. He does the same thing when other children come close, so they ignore him. The teachers are very concerned. He is not interested in any activity, and does not appear to be developing like a typical three-year old.

ANN

Four-year-old Ann is a bright, outgoing African-American child who participates in group activities with enthusiasm and follows directions carefully. On the playground she sets the pace for the games and tells the others what to do. Sometimes they complain about her being "bossy". However, when another child is upset, Ann responds with sympathy and concern. She is among the first children to finish a task and wants to show her work to everyone else. If the other children do not seem interested in her work or fail to admire what she has done, Ann turns to the teachers for reassurance. Her favorite activity at school is Storytelling Time.

BRAD

Four-year-old Brad is a handful for his parents and teachers at the kindergarten. He tries to be the center of attention in every activity. Teachers report that he talks constantly and cannot sit still or stick to any activity for long. Impulsive and unpredictable, Brad uses obscene language and is abusive to the other children. Many of them are afraid of what he does and try to stay away from him. He argues with his teachers constantly, telling them what to do. His mother claims he inherited his "rough ways" from his Irish ancestors. But she is worried about his frequent attempts to strangle their cat at home. Once he tried to set fire to the cat. Recently his teacher found him attempting to poke a pencil down the throat of a pet rabbit in their classroom. The "Time Out" chair does not seem to be effective with him. When he was sent there for smearing paint across another child's work, he exploded violently. He knocked everything off of the teacher's desk, threw the "Time Out" chair, and stormed out of the room shouting that she was a witch. Brad shows the most self-control and focus when he is allowed to read by himself.

BELINDA

Three-year old- Brenda is a shy, cautious girl who spends much of her time watching other children in her group. When she sees them doing something of interest to her, she will come closer to their activities and play by herself nearby. She prefers to play with puzzles and the toys in the homemaking area, especially the baby dolls and stuffed animals. Her play is imaginative and she often pretends to read to the dolls. In group activities, she seldom volunteers or answers adults' questions. But when she is by herself with an adult she speaks quietly and spontaneously about her dolls at home. She also talks about her Grandmother's cats and the good things "Grandma" cooks for her.

CAYLA

Cayla is a five-year-old whose severe temper tantrums upset her teachers and the other children. When she cannot have her way, she screams or cries for long periods of time. Nothing seems to make her stop until an adult takes her outside the door where she can still see what she is missing in the room. Her mother travels out of town on business every week, and Cayla often says she is waiting for her mother to call her. She seeks approval and assistance in every activity and constantly gets up to find an adult who will admire her work. Any criticism upsets her and she responds by complaining that her stomach hurts or that she has a fever and needs to go home. When group activities begin, she insists on sitting by an adult and being first to have a turn. She seldom listens to directions and then pouts when the adults remind her about how she must do a task. On the playground she stays by herself or stands close to the adults. She refuses to eat the food at lunch and brings snacks from home. Cayla is most attentive and easiest to manage during Storytelling Time.

CARLOS

Carlos is a quiet five-year-old boy from a Hispanic community where English is a second language. The kindergarten teachers find him to be attentive but shy and unwilling to volunteer his ideas. He follows the rules, and responds carefully to directions from adults. His teachers are having a hard time identifying his real interests. They are also concerned that he often seems to be daydreaming. He hesitates to participate spontaneously in class but on the playground he shows leadership skills and is earning the respect of the other boys. His teachers hope that he will begin to make friends among the other children. At a recent parent-teacher conference, his teachers noticed that his ways of speaking and relating to others is quite like that of his father. His parents want Carlos to do well in school and are concerned that his recent readiness test scores show that he is behind the other children in his group — especially in reading and writing.

Vignettes of Child Characters in *PEGS! for SECONDARY CD-ROM*

CARON

Age 16

Homeroom Teacher:

Caron has average ability for academic work but isn't living up to her potential. This year she is passing most of her classes, as compared with less than half of them last year. Her grades could be better, but she doesn't want to work at it. Her attendance has improved, but she continues to be upset by the actions of others. She is always asking to use the restroom during class discussions. She wants teachers to do things for her, or to grant her special privileges. She doesn't seem to have any close friends, probably because she's so manipulative. She participates in class projects but quits if she can't get her way. She usually ends up having her way, because she annoys everyone so much with her whining and complaining.

Guidance Counselor:

Caron is an only child who has lived with her grandparents for the past twelve years. Her mother killed herself when Caron was four years old. To my knowledge, she never sees her father. Nobody likes this girl. She borrows others' personal things, doesn't seem to bathe often, and eats all the time. She is constantly whining and trying to get other students to feel sorry for her. She talks about her mother's suicide to anyone who will listen. She sees a therapist weekly after school.

Caron received a psychoeducational evaluation two years ago for a possible learning disability when she appeared to be having problems listening, paying attention, and problem solving. However, the results indicated that she was not eligible for special education services at that time. The evaluation also indicated that while she has intellectual ability in the Low Average to Average range, her achievement in math calculations, math reasoning, and spelling are about three years behind that of her peers. After hearing these results, her grandparents got a tutor for her.

Caron is now taking medication for depression and tells me this is why she feels so bad and has such erratic behavior. Last year during spring break, she overdosed on the medications, "to get high" and "forget my problems." I see her frequently because she drops in at my office and always seems to have some health concern. She complains about headaches, cramps, cold sweats, difficulty breathing, and numerous possible diseases.

A Peer:

Caron uses her background to get attention and to get teachers to help her. She told them her Dad tried to kill her mother. But I heard that her mother killed herself. Caron tries to get people to believe she's been abused and discriminated against. I think she's just a pathological liar. She tells crazy stories. Once she told me, "I had surgery. One of my kidneys had to be removed. I gave it to a popular cheerleader last year." Another time she said, she was "part royalty and related to the Duchess of Germany."

Caron [describing her own life to the guidance counselor]:

It's hard being me! I think I may have early diabetes. I can't sleep and when I lie awake, I think of why my mother killed herself. I try to make friends but no one is nice to me. I don't know why. I do everything I can to be friendly. Maybe it's because I have to live with my grandparents, and they're too old fashioned. They won't even let me stay home when I'm sick. And they won't let me watch my favorite TV shows very often. I'm thinking of going to acting school. I'd like to be on television, but they laugh at me. When I ask them for spending money they don't give it to me. They don't know how much clothes and make-up cost now. So the clothes I have to wear are gross. And the food is so terrible at school that I have to buy stuff at the store to eat at school. Sometimes I think I'll be just like my mother.

BETH
Age 17

Homeroom Teacher:

Beth is hard to describe. She is so quiet you hardly know she is there. She is an average student, is never a discipline problem, and tries hard to do what is asked of her. She has trouble in Basic Algebra and Biology but is doing much better in American Lit. She actually gets enthusiastic about some of the reading assignments. She does fairly acceptable book reviews, but is still having a hard time with spelling and grammar — especially punctuation. She and I had a talk recently, and she opened up a bit about how concerned she is about graduating. Schoolwork seems to be really hard for her. We talked about spending more time on assignments, but she said she stays up until after midnight every night trying to get it all done. She seems chronically tired to me.

Guidance Counselor:

Beth has an after school job that seems to be interfering with her studies. She doesn't get off work until nine o'clock. Then she comes home too tired to put much effort into her assignments. She says she uses her study hall at school to start the work, but that isn't nearly enough time. We talked about dropping the job, but she says she has to work. Her single Mom doesn't earn enough to support the two of them. Beth and I met with her Mom to talk about how to help. Her mother expressed concern but said, "Beth is how we keep food on the table." She talked about getting a better paying job herself, but says she has to go back to school to do this. We discussed reducing Beth's course load, recognizing that it will take Beth longer to finish high school. Apparently Beth's mother wants her to graduate but thinks it is unlikely, "It's hopeless. There's nothing we can do about it."

Other Girls:

I don't think I've ever seen Beth enjoying herself. She's okay to be around but not very interesting. She hangs around our group. I guess she needs friends. But she doesn't have much to talk about. Except once she told us about how there was a robbery where she worked. She almost got shot. Everyone was impressed. She wears clothes that are a put-off. No wonder she doesn't have any boy friends.

The Boys:

Beth? Beth who? Oh, that one who always has her nose in her books. Yeah, her locker is near mine, but she never speaks or even looks over my way. You might say she has looks, but not with those old clothes she wears. I don't know who she hangs out with.

Beth [describing her own life]:

I never have any fun. All I do is work. It would be nice to have a close friend — someone I could talk to. I don't know why I have all the bad luck. I guess I'm lucky to have a job. But the guys there make crude remarks to me. I'd like to slap them but I know better. I had a boyfriend there for awhile, but he started pushing me about sex and smokes, and that sort of thing. No thanks!

BB
Age 15

Math Teacher:

I can't figure out BB. Last week he was in a rage and screamed at me for giving him a D. The next minute he apologized and calmly asked if he could discuss it with me. He wanted to do something to raise the grade to a C. When I told him there was no extra credit offered, he snapped into a rage again. I had to call in a hall monitor to escort him to the principal's office. He threatened things like, "You'll be sorry..." and "Just wait!" These incidents happen every week. He just can't seem to settle down. I talked with him about getting some help managing his anger. He smiled, thanked me, and said he was seeing a counselor and was trying to get his life in order. I found out two weeks later that he hadn't received or tried to find help anywhere.

Principal:

It seems every day BB is in my office with a referral from a teacher. He's always in trouble for fighting kids and cursing teachers. I've been trying to talk with him about this problem he has with a hot temper. He apologizes and says he'll change, but after he started a school-wide fight this week, I think he needs professional help. BB came up to one guy and started it. He said, "I think you're ____ ugly!" The other guy said something back like, "You're a jerk!" Then friends on both sides started shoving and everyone else got into it.

Guidance Counselor:

BB can't sit still when he comes into my office. He paces the floor and has a hard time staying on one subject. One minute he's all smooth smiles and agreeable. Then he jumps up when he doesn't like the way the conversation is heading. A few times he opened up to me. He told me that his parents fought all the time and divorced when he was seven. He chose to live with his father because his father told him that if he lived with his mother "she'll make you a sissy boy." His father thinks he is doing a good job as BB's parent. He says he "roughs him up to make a man of him." His father buys beer for him to teach him how to "drink like a man," and his friends tell BB he has "a cool Dad." But BB doesn't ever cross his Dad because if he did his Dad would beat him. He's learned to lie to stay out of trouble with his Dad and still get his way.

Friend:

He was a star on the baseball team, a great player and very popular. But one day at a game the umpire made a call he didn't like, and BB threw the bat, walked over to the guy and started to scream at him. The guy yelled back, and BB picked up the bat and hit him across the face. It broke his jaw. BB was kicked off the team, and our team has been losing ever since. But BB's a cool guy to hang out with. He's one of my best friends, but I don't cross his path! Most people are terrified of him, especially 'cause he's smart.

Peer [a friend of BB's girl friend, Celeste]:

BB is very popular — with lots of friends. I guess that's why Celeste falls for him. She's always telling me about the romantic things he gave her when they first started seeing each other. I was jealous, but that faded when Celeste came over to my house with black and green bruises on her face, saying that she and BB had gotten into a little fight. He's real persuasive with her until she gives in to him. Now he thinks he owns her, but Celeste doesn't see it, "He can be so sweet!"

BB [describing his own life to the principal]:

I visit my mother every now and then, but I don't stay long. She has a boy friend that's a jerk. He likes to pick fights with me. He makes sarcastic remarks like, "Did you beat up anybody today?" So, I have to let him know he's going to get it, too, if he doesn't watch his mouth. Then he badmouths my Dad with dumb remarks like, "You're just like your old man — not worth much except to fight." I'm not letting him get away with that!

ALEESA
Age 15

Homeroom Teacher:

Aleesa is a very good, straight A student and a great one to have in class. She's always willing to help. If there is a group project, she's reliable to see that everyone gets involved, and the job gets done. She was selected to be a JV cheerleader. This is a big honor. The school has a service club which she is in. They visit the elderly two Saturday's a month. She's also in student government and secretary of her class. Aleesa has lots of friends from diverse backgrounds. That's one reason she's a leader here.

Guidance Counselor:

I don't see Aleesa often, except when we have student government meetings. She knows how to be a good member. She doesn't have a lot to say, but when she speaks up, she usually gets the attention of the other Council members. I think she is a very positive influence for the standards of conduct we try to maintain in this school. I remember one time when she was quite outspoken about some of the bullying that was going on. I think our student government had a lot to do with turning that problem around. Now there are very few problem kids still around trying to dump their own feelings on others.

A Close Friend:

When I first met Aleesa I just wanted to hang out with her because she always had a lot of guys hanging around her. But then I found out that she is a really nice person, and we've been friends ever since. It doesn't matter how pretty she is; it's her personality. She never says anything mean about anybody, and she's nice to people of every race.

Other Girls:

Aleesa's a lot of fun. We go to the movies together and spend-the-night at each others' houses on the weekends. She is there for you if you get stressed out, and she can always see a good side to things, no matter how awful.

The Boys:

Some girls act like they can't stand you. Aleesa's not one of them. She always seems interested and she's easy to talk to. Sometimes she is too straight, but mostly, she keeps her ideas to herself. But if she doesn't like what someone is doing, or disagrees with what they've said, she lets you know it — without making you feel stupid.

Aleesa [describing her own life]:

My parents divorced when I was in fourth grade, but they are on friendly terms. I see my Dad on weekends, but that sometimes gets unpleasant. He has his own ideas about dress code and curfew hours. He doesn't understand that there has to be some give and take in high school. He has a lady friend who he wants me to like. She's not the type I would choose, but he's the one who has to live with her. My Mom seems to understand me better. She gives good advice and encourages me. Mom also sticks to her rules, which I don't mind. When we have arguments, she'll listen, but she also tells it like she sees it. She's sort of like a sister. I wish I had a brother and sister. I think both of my parents are proud of me, and expect me to go to college. I don't know how they can afford it. Maybe I can get a scholarship.

JAMEEL
Age 17

Homeroom Teacher:

Jameel has never been a problem in class but his lack of interest in his schoolwork and his lack of friends has started to worry me. When he comes to school, which is infrequently, he just sits and daydreams. Or maybe he's just asleep with his eyes open. He's failing all his classes this quarter and says he just doesn't care. He also talks about feeling useless and has mentioned suicide. He has shown his classmates scars on his wrist and says, "Nobody would care if I'm dead anyway." I suggested that he see the guidance counselor to sort through his problems.

Guidance Counselor:

Jameel has a history of low achievement and absenteeism from school. Last year a psychoeducational evaluation concluded that Jameel met eligibility criteria for special education services through the emotional/behavioral disordered program. The evaluation summary also indicated that he should be referred for mental health and psychiatric services. However, his mother never agreed to these recommendations. When I try to talk with Jameel, he is somewhat secretive, but he seems to want others to know how bad things are for him. Jameel is aware of the difficulties he is having at school and describes the classes as "boring, too crowded, and noisy." He also feels that students are talking about him in the cafeteria and halls. Jameel has told other students that he has a police record. And he talks to me about his two arrests last year for buying drugs from a dealer who hangs out in his neighborhood. Apparently he is trying to escape from his situation by solitary drinking and drug use. I've tried to contact his mother but can't reach her.

A Peer:

Jameel has drifted down to the hard core drug users at school. Everyone else is scared off by his weirdness. He's really weird. He never mentions doing anything like school parties, or sports, or friends. He always talks about being worthless, and he has shown me scars he says he did to himself. Once you come up along side him and start talking he's very responsive. I told him once, "I'm on your side. You've been through hell." He told me then that the only way he has fun is to cut himself. He probably does it for attention.

Jameel [describing his own life to the guidance counselor]:

Yeah, I know I'm not going to graduate. I have bad dreams. Sometimes my hands sweat a lot. My Dad's in jail. My Mom's at work all the time. I just do my own thing and nobody bothers with me. If I'm not home when she gets back from work, she doesn't worry. She figures I'll get back sometime ... She's so burned out. Once I got hired to help make hamburgers part-time. I got some spare cash, but it didn't work out."

VICTOR

Age 16

Homeroom Teacher:

Sometimes I worry about Victor. He is a new student and so reserved that I can't tell whether he is really understanding the material or not. I don't think his low grades reflect what he really knows. He certainly tries in class. He completes assignments, although not always correctly, is attentive, and is always polite. He seems to hang back from getting involved with the others, but responds to the students when they initiate exchanges with him. I noticed that in P. E., the boys seem to have accepted him and seem eager to have him on their team. I am concerned that Victor is falling behind in his studies. When I talked with the guidance counselor about him, she suggested that we have a parent conference to review the files from his previous school and plan ways to help Victor stay up with the class.

Guidance Counselor:

The standardized achievement test scores from Victor's previous schools indicate that he has steadily fallen behind a little each year since third grade. His test scores show that he has low-average ability and should be able to do the academic work. But it may take some additional tutoring. Our school has a mentoring program that might be able to provide this help. It may be that Victor also has some problems with English, because Spanish is the only language spoken at home. His parents have agreed to Victor's meeting with the teacher who has classes in English as a Second Language. We will know more about how to help Victor after that session with her.

A Peer:

Victor's okay. He doesn't say much but that's not all bad. There are plenty of other guys who have too much to say. He knows how to stay out of trouble. Maybe girls like quiet types like Victor. He may be lucky that way.

Victor [to the guidance counselor]:

School's okay. There are some great guys here. The girls are pretty nice, too — most of them. Home? Well, they don't speak much English. They want me to be a good student. My mother and my father, they neither one went to school much. But they can read good in Spanish. They want me to go to college. That's a dream! I want to get a job.

Appendix D.
Formative Evaluation of
PEGS! for Preschool
by College Students

PEGS! Field Testing: Focus Group Questions

- General Content* 1. What is the purpose of **PEGS!** for Elementary School Children?
- Technical Difficulty* 2. What are your comments about using this program?
- Instructional Effectiveness* 3. What did you learn from your experience with the program?
- Instructional Difficulty* 4. a. What starting level did you choose? Was it right for your?
b. What is the most appropriate, beneficial practice level for you now?
c. What activities did you select?
- Instructional Relevance* 5. a. How relevant are the child characters to real-life children?
b. How typical are the activities which are presented?
- Identifying problem behaviors/applying effective strategies* 6. a. Did you read/use the children's files?
b. Were the files helpful in understanding the needs of the children?
c. How did you learn to match the needs of the children with effective strategies.
- Feedback* 7. a. How beneficial was the feedback you got during the simulations?
b. What did you learn about yourself from management style feedback at the end?
- General* 8. Who might benefit from this CD?
- Supplementary Information* 9. a. What background, supplementary, or follow-up material would be helpful to you (or others)?
b. What changes would you recommend?

Project PEGS! Focus Group Characteristics
 Project Year Two, May 3, 2000 - February 7, 2001

Focus Group Characteristics

Total Participants	n = 16	
Age	88% 20 - 30 Years	12% 30 - 40 Years
Gender	12% Male	88% Female
Ethnic Background	69% European American 6% African American 6% Hispanic American 6% Native American 12% No Response	
Occupation	88% Students	12% No Response
Years of Professional Experience With Children	12% ≤ 1 Year 12 % 2-3 Years 25% ≥ 5 Years	44% None 6% No Response
Ages of Children Worked With	25% 5 Years and Younger 44% 6 - 12 Years 12% >12 Years 31% No Response	
Number of Children Worked With Daily	25% 6 - 10 Children 25% 11 - 20 Children	19% > 20 Children 31% No Response
Number of Children Worked With In A Typical Small Group	63% ≤ 5 Children 31% 6-12 Children	31% No Response
Family Experience	25% Are Parents (3 of 4 parents have children age 5 and older)	75% Are Not Parents
Computer Experience	6% Not Very Experienced 69% Moderately Experienced	19% Very Experienced 6% No Response

1. The Purpose of the Project **PEGS! CD**

	Very Effective	Moderately Effective	Not Very Effective
Teach new strategies	<ul style="list-style-type: none"> · Variety of situations and timing requires anticipation · Offers new ideas to use · Would have been very useful before year started (beginning teacher) 		
Identify problem behaviors	<ul style="list-style-type: none"> · Provides cues when child's attention needs to be redirected back to activity · Relates to a real classroom 		
Manage groups	<ul style="list-style-type: none"> · Requires attention to all children - kept me on my toes · Similar to real classroom with range of behaviors · Good management tool to practice balancing the techniques I use 		<ul style="list-style-type: none"> · Not sensitive to daily needs/moods of children with behavior disorders · Doesn't show spectrum of behaviors seen in inclusive classroom
Application to real life	<ul style="list-style-type: none"> · Feedback at end was helpful · Feedback showed me what strategies used most · Liked seeing the feedback 		

2. Mastering the "Game." Interacting with the Program

	Not Difficult	Somewhat Difficult	Difficult
Introductory Material	<ul style="list-style-type: none"> · I figured it out pretty fast 	<ul style="list-style-type: none"> · The written material was a lot to read · I would like to see a little quick summary of each child at the beginning of the game 	<ul style="list-style-type: none"> · Need written or audio instructions for people with no computer background. · No directions given, so I did not know what I was doing · At bottom of the screen - I did not have time to read [text] before it was gone
Playing the Game	<ul style="list-style-type: none"> · No problem: I reviewed all the interventions before playing. · I knew what [interventions] to use and what not to use. · If I had all the children's attention, I knew I was doing okay. · The [box] showed "Good Decision" if played correctly. · Children's behavior showed when they were enthusiastically participating. 	<ul style="list-style-type: none"> · I wasn't really sure if I was playing the game correctly. · I got an "occasionally participating" - was that good? 	<ul style="list-style-type: none"> · There were a few [interventions] that I did not use because I did not understand what they were. · I did not know what I was doing until it was over.

3. Visual and audio features: the technical elements of the program

	Very Effective	Somewhat Effective	Not Very Effective	
Visual	Clock		<ul style="list-style-type: none"> · I did not notice the clock until you pointed it out (2) · What was the purpose of it? · Things like that are just peripheral. · It did not mean anything to us. · It was just there. · Does the game need to be timed 	
	Participation Meter	<ul style="list-style-type: none"> · I noticed it only at the beginning, but didn't have time to look [after that.] · I read about it, but the children took my attention during the game. · I might have used it if I were more experienced with the game elements. 	<ul style="list-style-type: none"> · I never looked at it. · I thought it was a game time · I thought it indicated the classroom temperature 	
	Three little buttons (i, ?, x)	<ul style="list-style-type: none"> · I had questions - it explained what I was doing. · I clicked on all three - they were helpful. 	<ul style="list-style-type: none"> · I clicked on one but I wasn't doing it right. 	<ul style="list-style-type: none"> · I would have liked a "time-out" button.
	Scroll arrows (Introduction)	<ul style="list-style-type: none"> · They didn't work for me - I thought there wasn't more information. 	<ul style="list-style-type: none"> · I found it was hard to follow - it seemed like the screen jumped. · It would be easier if it scrolled. 	
	Adult's comments	<ul style="list-style-type: none"> · The audio is very positive. · I noticed that every time I would click on the positive I could hear the teacher talking to the students. 		
Audio	Children's verbalizations	<ul style="list-style-type: none"> · They were like sounds you would hear in the classroom. 	<ul style="list-style-type: none"> · I did not notice if the children had verbalizations. 	
		<ul style="list-style-type: none"> · I guess the children's verbalizations add some realism to it. 		

4. Introductory Content: Menu Screen

	Very Useful	Somewhat Useful	Not Very Useful
Counseling Office (children's profiles)	<ul style="list-style-type: none"> · Used child's history to select interventions. · I thought I could understand what behavior modification to use on children by reading about them. · If I read about a child, I was able to respond better. · The counselor's office was useful to me. · You would not walk into any classroom without seeing children's files first. 		
Teacher Prep (intervention strategies, behavior definitions)	<ul style="list-style-type: none"> · I went back to the Teacher Prep at the end. 		
Mailboxes/helpful information: (program objectives, how to play, strategies)			
Other (link to www, credits)			<ul style="list-style-type: none"> · Was that the sign on the bulletin board with the question mark? · I noticed it but I never clicked on it.

5. Potential Benefits

Learners	Great Potential	Some Potential	Little Potential
Preservice Students	<ul style="list-style-type: none"> · I think it would be wonderful for student teachers. · People from the University would definitely benefit. 		
Substitute Teachers	<ul style="list-style-type: none"> · It is a good tool for subs - a good orientation for subs. · This CD makes me think of substitute teachers - this is what they need. · I think 30 minutes with this software would be helpful for a substitute teacher. · This could be part of the substitute teacher training for Clarke County School System. 		
Beginning Teachers	<ul style="list-style-type: none"> · I could have used it last fall with behavior problem kids. · It is a good tool for behavior management. 		
Special Education Teachers & Paraprofessionals; Teachers in Inclusive Classrooms	<ul style="list-style-type: none"> · Any teacher working with BD kids. 	<ul style="list-style-type: none"> · You would need to represent more severe behavior problems to make it relate to a real classroom. 	<ul style="list-style-type: none"> · I don't think it relates well to a BD class.
General Education Teachers	<ul style="list-style-type: none"> · It is a good tool for teachers to learn the basics. · All teachers, regardless of their level of experience, would benefit. 	<ul style="list-style-type: none"> · If it was realistic, it would give regular classroom teachers new strategies. · It would give regular education teachers something they could relate to. 	

Appendix E.
Formative Evaluation of *PEGS!* for Middle/High School
by College Students
An Evaluation Report by
Ernise S. Singleton

***PEGS! for Middle/High School
Practice in Effective Guidance Strategies***

**An Evaluation Report
Prepared by**

**Ernise S. Singleton
Doctoral Student
University of Georgia**

November 25, 2002

Executive Summary

Introduction

This evaluation was conducted to determine the usefulness of *PEGS! for Educators in Middle/High Schools-(Practice in Effective Guidance Strategies)*. *PEGS!* is an interactive CD-ROM for adults who work with students in middle and high schools. The interactions that occur on *PEGS!* allow the user to learn strategies to use in the real life classrooms when faced with various behavior management challenges.

PEGS! was evaluated using during October of 2002 using three methods:

1. Checklist-completed by a sample of students who will work in the educational setting in the future
2. User interview-completed by instructional design students
3. Expert review-completed by instructional design students

Overview of Results

Overall the participants felt that the content of *PEGS!* was practical and effective. The behaviors, actions, and cultural diversity are representative of a typical middle/high school setting. The results also indicate that the CD-ROM could be a valuable learning tool for educators. Most of the participants in this evaluation agreed that using the CD-ROM was not difficult; however, some of them were unsure of where to begin upon entering the program.

Overview of Recommendations

By and large the participants in the study were impressed with *PEGS!* The participants found that the CD-ROM would be useful for teachers in middle/high school with a few changes. The recommended changes are mainly cosmetic and will afford the user the opportunity to work through the CD-ROM with more ease.

- The CD-ROM should provide explicit directions upon beginning the program. A splash screen or directions written in bold print at the bottom of the opening screen would help in guiding the user.
- Users would be aided by the addition of names to the icons in the activity center. When users place the mouse over the icon a box would appear indicating the name of the strategy.
- The icons used in the student activity center (the strategies) should more clearly match what they appear to mean. For example, the "ear icon" means "connect actions to feelings". Most users would associate an "ear" with listening.

Once the above recommendations are implemented, *PEGS!* will serve as an effective tool for the beginning teacher, paraprofessional or parent.

PEGS! for Teachers in Middle/High Schools Student Questionnaire
These questions are focused on your reactions to the PEGS! CD-ROM.
Circle the number that most closely corresponds to your opinion about each statement
1 = Disagree strongly; 2 = Disagree somewhat; 3 = Neutral; 4 = Agree; 5 = Agree Strongly

About The Content

The graphics represent a typical middle/highschool.	1	2	3	4	5
Activities portray typical classroom situations.	1	2	3	4	5
The students represent different personalities that might be found in a typical school.	1	2	3	4	5
The students are culturally diverse.	1	2	3	4	5
Behavior problems presented are typical for middle/high school students.	1	2	3	4	5
Audio adds to the authenticity of the situations.	1	2	3	4	5
Students' remarks are sufficiently typical for the presented situations.	1	2	3	4	5
Teachers' remarks are sufficiently typical for the presented situations.	1	2	3	4	5

About the CD-ROM as a Learning Opportunity

Information about the students is presented in a culturally sensitive, professional matter.	1	2	3	4	5
The menu offers easy access into the simulations.	1	2	3	4	5
The presentation format engages me.	1	2	3	4	5
The program held my attention.	1	2	3	4	5
This is a useful way to practice managing behavior problems of middle/high school students.	1	2	3	4	5

About Using the CD-ROM

Operating the program is not difficult.	1	2	3	4	5
It can be used with very little computer experience.	1	2	3	4	5
It is easy to change from one activity to another in the program.	1	2	3	4	5
Stopping and reentering is not difficult.	1	2	3	4	5
Feedback is quick and to the point.	1	2	3	4	5
I used this program without assistance.	1	2	3	4	5
<u>I think this CD-ROM could be useful for teachers in middle/high schools.</u>	1	2	3	4	5

Care to Comment Further? (Use the back if needed)

How many times did you play or replay this CD-ROM? _____ In total, how many minutes did you spend with this CD-ROM?

	Disagree strongly	Disagree somewhat	Neutral	Agree	Agree strongly	Average score
About the Content						
The graphics represent a typical middle/high school.			3	24	11	3.9
Activities portray typical classroom situations.		1	7	25	8	4.0
The students represent different personalities that might be found in a typical school			3	21	16	4.2
The students are culturally diverse.			1	17	23	4.5
Behavior problems presented are typical for middle/high school students			1	27	13	4.3
Audio adds to the authenticity of the simulations.		1	10	14	10	3.4
Students' remarks are sufficiently typical for the presented situations.		1	12	18	6	3.4
Teachers' remarks are sufficiently typical for the presented situations.	1	1	14	16	5	3.9
About the Content						
About the CD-ROM as a Learning Opportunity						
Information about the students is presented in a culturally sensitive, professional manner.		2	4	18	16	4.1
The menu offers easy access into the simulations.		2	8	18	13	4.0
The presentation format engages me.			10	12	20	4.3
The program held my attention.		3	6	15	18	4.2
This is a useful way to practice managing behavior problems of middle/high school students.		5	8	19	9	3.8
About the CD-ROM as a Learning Opportunity						
About Using the CD-ROM						
Operating the program is not difficult.		2	6	21	13	4.2
It can be used with very little computer experience.		2	5	19	16	4.3
Information about how to play is clear.	1	6	9	15	11	3.8
It is easy to change from one activity to another in the program.		1	5	21	15	4.3
Stopping and reentering is not difficult.		3	7	21	12	4.2
Feedback is quick and to the point.	1	3	4	21	11	3.9
I used this program without assistance.			2	16	24	4.6
About Using the CD-ROM						
I think this CD-ROM could be useful for teachers in middle/high schools?		2	8	16	15	4.1

Average Time Spent

Age range	18 - 20 years	21 - 23 years	24 - 26 years	27 - 29 years	30 + years
	45	45	30	15	30
	20	30	20	40	20
	20	20	30	20	25
	30	45	20		25
	20	60	30		20
	20	20	20		25
	20	45			45
	30	20			
	30	20			
	30	30			
	25	15			
	20	30			
	20	90			
	20	15			
		30			
Avg. minutes for each age range	25	34	25	25	27
Total avg. for entire sample	27				

User Interview Protocol

Reviewer: _____

Due Date: _____

The following questions are based on your reactions to the *PEGS! CD-ROM*. *PEGS!* is an interactive CD-ROM for adults who work in the middle/high school setting. The objective of *PEGS!* is to provide adults with positive training in effective behavior management techniques.

1. Please describe your use of *PEGS!*

I went to each of the different activity places and explored each one.

2. Please describe your first reactions to *PEGS!*

Kind of cool. I never thought that this kind of training, to train teachers to react to students, the counseling training could be made on a CE-ROM. I think this is a good idea.

3. Please describe your present opinions of *PEGS!*

Mmmmmm...sometimes I'm not real patient to read the words so I would like it too be more active, more animation.

4. Do you need additional training in order to utilize *PEGS!*

No, I don't think so, I think you need very little guidance in order to do the program.

5. To what degree did you accomplish the performance objectives established for *PEGS!*

I'm not a teacher so I'm not sure if I achieved what I was supposed to. I found that the students behaviors occurred extremely fast and I couldn't always react to them.

6. What would you tell another person about to use *PEGS!* for the first time?

Be patient, a lot of stuff on the CD you have to be patient to run through it.

7. What kinds of successes have you experienced with *PEGS!!*

8. What kinds of problems have you experienced with *PEGS!*

I can't react to the students reaction so quickly. I need it to slow down.

9. Please describe the areas in which you feel most competent concerning use of the *PEGS!*

10. Please describe the areas in which you feel least competent concerning use of the *PEGS!*

Reacting to the student's behaviors. It was too fast for me.

11. What improvements would you recommend for *PEGS!*

- ▶ *add labels to the icons*
- ▶ *more animation*
- ▶ *more difference between the three levels*
- ▶ *some hints after I practice*
- ▶ *I think the CD should run automatically when you place it in the CD drive*
- ▶ *too many words, not enough visuals...like in the resource center*
- ▶ *the icons under the strategies should be clickable, I may only want read about one of the strategies, currently I have to select the major category and then read down, I should be able to only select the strategy I want to know more about.*

User Interview Protocol

Reviewer: _____

Due Date: _____

The following questions are based on your reactions to the *PEGS!* CD-ROM. *PEGS!* is an interactive CD-ROM for adults who work in the middle/high school setting. The objective of *PEGS!* is to provide adults with positive training in effective behavior management techniques.

1. Please describe your use of *PEGS!*

Initially I had some problems not know how to go about clicking on the icons because there was in introduction as much as I would like it to have. The beginning has a small pop-up dialog box and I would like for it to explain more so what to do. I realize that it would be good if you go from left to right. I went to the guidance office first and wasn't sure what to do. Once I went back to the main screen and went to the teacher's workroom it will give you the objectives and how to play. So I was thinking that "How to Play" should be first, that maybe this "Memorandum" should be the first thing to come up when the program opens. It has all of the explanations, how to use.

2. Please describe your first reactions to *PEGS!*

I really like it. It gives you scenarios of how to react, manage students behavior. Maybe there should be slightly more behavior characteristics because after a while you just click the same thing for the same type of behavior.

3. Please describe your present opinions of *PEGS!*

I think this program will not be as effective for teachers in the classroom. I think it will be very helpful for the preservice teachers because they have not had that experience yet. It will prepare them to manage those various behaviors.

4. Do you need additional training in order to utilize *PEGS!*

No, I don't think you need any additional training if the "memorandum" appeared when you first start the CD. Maybe a recommendation telling them to go to Teachers' Workroom, Resource Center, followed by the Guidance...I would like the sequence to be presented. The Activity Center will be last because you practice classroom management there.

5. To what degree did you accomplish the performance objectives established for *PEGS!*

Most of the time I used positive reinforcement kind of comments. The thumbs up, smiley face, most of that time and that pretty much worked. I didn't play the advanced mode, I played beginner and intermediate, maybe in the advanced mode you would have outburst, violent outburst. I didn't play that one but I should have.

6. What would you tell another person about to use *PEGS!* for the first time?

It is an interesting and helpful CD especially if you are a newcomer to classroom management. It is something I would like to have if I am a beginner, a newbie to teaching. I would appreciate such software.

7. What kinds of successes have you experienced with *PEGS*!

I am was able to manage a class and I think their mood of the class improved and teaching is more effective.

8. What kinds of problems have you experienced with *PEGS*!

Using it initially, knowing what to do at the beginning.

9. Please describe the areas in which you feel most competent concerning use of the *PEGS*!

The static part, because it is not, you don't have the time constraints, you can take your own time browsing and looking at it. When I came to the student activity center if you don't do anything you know the class starts to act up.

10. Please describe the areas in which you feel least competent concerning use of the *PEGS*!

The student activity center because there isn't a set solution. I think that is the most interesting part.

11. What improvements would you recommend for *PEGS*!

On the opening screen the instructions at the bottom could be more prominent, brighter...bolder. Other than moving the directions to the first screen that is it. The guidance office jumps out at me so I went there so I clicked and the student activity center stands out so I went there because it is more prominent. So I went there and I tried to tinker around and I realize I should have come here first.

Expert Review Form

Reviewer: _____

Due Date: _____

The following questions are based on your reactions to the *PEGS!* CD-ROM. *PEGS!* is an interactive CD-ROM for adults who work in the middle/high school setting. The objective of *PEGS!* is to provide adults with positive training in effective behavior management techniques.

Please circle your rating and write comments on each aspect of the interactive multimedia package. 1 represents the lowest and most negative impression on the scale, 3 represents an adequate impression, and 5 represents the highest and most positive impression. Choose N/A if the item is not appropriate or not applicable to this CD-ROM. Use back of this paper or additional paper for additional comments.

NA=Not applicable 1=Strongly disagree 2=Disagree 3=Neither agree/nor disagree 4=Agree 5=Strongly agree

AREA 1 - INSTRUCTIONAL DESIGN REVIEW

								AVG. Score
1. <i>PEGS!</i> provides learners with a clear knowledge of the program objectives.	N/A	1	2	3	4	5		5
2. The instructional interactions in <i>PEGS!</i> are appropriate for the objectives.	N/A	1	2	3	4	5		3.5
3. The instructional design of <i>PEGS!</i> is based on sound learning theory and principals.	N/A	1	2	3	4	5		3
4. The feedback of <i>PEGS!</i> is clear.	N/A	1	2	3	4	5		3
5. The pace of <i>PEGS!</i> is appropriate.	N/A	1	2	3	4	5		3
6. The difficulty level of <i>PEGS!</i> is appropriate.	N/A	1	2	3	4	5		3.5

COMMENTS

- "Memorandum" is misspelled, should be "Memorandum"
- on the *Tips* screen it refers to "these 5 tools" when only 4 are listed
- I'm not sure if the final product will run automatically when placed in the CD-ROM drive, if not, include instructions
- When the program first loads, it would be better to add an element that
 1. explains what is about to happen
 2. allows the user to skip the intro music. I can actually skip the intro by clicking anywhere on the screen, but there is no indication of this. Two buttons "Overview" & "Click to Enter" would be appropriate.
- The interactions do seem appropriate for the objectives, but the design needs a little work on the details of the presentation. I found the strategy icons difficult to remember and when I selected one, the delay between selection and hearing the response it represented was significant and made it difficult that while I was waiting to see if that worked or not, that another student would present a problem and there was nothing I could do about that one while I was working on the first one.
- I found immediate feedback from strategy icons slow and confusing. It was repetitive and didn't allow me to keep track of what had worked. It would be useful to get some kind of running tally and to have suggestions of why or why not a strategy succeeded or failed with a particular type of student and have suggestions about how to improve something in the future.

AREA 2 - COSMETIC DESIGN REVIEW

								AVG. Score
7. The screen design of <i>PEGS!</i> follows sound principles	N/A	1	2	3	4	5		4
8. Color is appropriately used in <i>PEGS!</i>	N/A	1	2	3	4	5		5
9. The screen displays are easy to understand.	N/A	1	2	3	4	5		3.5

COMMENTS

- **The Sound made when the menus are closed is a little jarring.**
- **The scrolling of the credits takes a long time, if I were looking for something at the end I'd rather navigate through a few credits pages.**
- **It took me a little while to understand what I was supposed to do. It might be good to have some kind of splash page or something that gave a brief description of what the purpose of the site was and how to use it.**
- **I liked the colors and the graphics and fonts were appealing.**
- **The screed displays could use some improvement, in particular the strategy icons. I couldn't figure out why an ear stood for "connect actions to feelings" for example. It seemed like it should be something to do with listening to the student.**

AREA 3 - PROGRAM FUNCTIONALITY REVIEW

								AVG. Score
10. <i>PEGS!</i> operated flawlessly.	N/A	1	2	3	4	5		5

COMMENTS

- **Levels – only mention of the beginning, intermediate, & advanced levels that I could find was in the *How to play* section, which really only mentioned the first two. I would suggest describing the two levels better. How do I know which level I am, and what.**

Appendix F.
Georgia Plan Concerning
Parallel Distribution of the Prototype Version
for Educators in Elementary School



Georgia Department of Education
Office of the State Superintendent of Schools
Twin Towers East
Atlanta, Georgia 30334-5001
Web Page: <http://www.doe.k12.ga.us>

Linda C. Schrenko
State Superintendent of Schools

(404) 656-3963 – FAX (404)-651-6457

February 15, 2001

Mary M. Wood, Ed. D.
Developmental Therapy - Teaching Programs
P.O. Box 5153
Athens, Georgia 30604-5153

Dear Dr. Wood:

The PEGS! in Elementary School CD-ROM from Developmental Therapy - Teaching Programs is a valuable teacher training tool to improve appropriate behaviors in students. You and your staff have worked tirelessly to develop a valid, comprehensive tool that will increase student outcomes.

Over the last month, we have introduced the CD-ROM to educational leaders across Georgia. They found the CD-ROM to be an engaging and promising way to build teachers' skills. They were especially impressed by the results of the pilot study of CD-ROM users that showed that teachers increased their use of appropriate strategies by over 20% which resulted in a reduction of negative student behaviors by 58%. In March 2001, we will distribute the CD-ROMs to the 17 Georgia Learning Resources System centers to use with service providers across the state. The CD-ROM will be available to service providers in two contexts: as a stand alone instructional tool and embedded in a course that you are currently developing.

Many inquiries have been made about your forthcoming programs, PEGS! in Preschool, Middle School, and High School. This innovative series of three CD-ROMs promises to have a positive impact on teachers and students in school environments.

Sincerely,

John O'Connor
Grant Program Consultant
Georgia Department of Education

JO:lah

109

Appendix G.
Rating Scales
for the
CD-ROMS

PEGS! FOR TEACHERS IN PRESCHOOL: FIELD TRIAL EVALUATION
Circle the number that most closely corresponds to your opinion about each statement.
(5=Agree strongly; 4=Agree; 3=Neutral; 2=Disagree somewhat; 1=Disagree strongly.)

About the Content

The PEGS! children have behaviors that I have seen in real children.	5	4	3	2	1
Their difficult behaviors are real-life challenges.	5	4	3	2	1
The activities are typical of early childhood settings.	5	4	3	2	1
The strategies are ones I have heard of.	5	4	3	2	1
The child characters responded to the interventions in real-life ways.	5	4	3	2	1
The responses of the child characters were appropriate for ages and individual needs.	5	4	3	2	1

About the CD as a Learning Opportunity

The child characters held my attention.	5	4	3	2	1
Some behaviors were easy to guide to participation.	5	4	3	2	1
Other behaviors were challenging to guide to participation.	5	4	3	2	1
The program choices allowed for my preferences.	5	4	3	2	1
There was enough information about the children.	5	4	3	2	1
Information about the children was presented in a professional way.	5	4	3	2	1
The information about the strategies was helpful to me.	5	4	3	2	1
The strategies are practical in real-life situations.	5	4	3	2	1
Feedback at the end provided me with useful information.	5	4	3	2	1
The suggestions for improving my management style were helpful.	5	4	3	2	1

About Using the CD

It can be used with very little computer experience.	5	4	3	2	1
Operating the program presents no problems.	5	4	3	2	1
The format is easy to follow.	5	4	3	2	1
Information about how to play was clear.	5	4	3	2	1
It is easy to change from one activity to another in the program.	5	4	3	2	1
Stopping and reentering later is not difficult.	5	4	3	2	1
Feedback is quick and to the point.	5	4	3	2	1
I used this program without assistance.	5	4	3	2	1

Please write any comments you may have on the back of this sheet. THANKS FOR HELPING!

PEGS! FOR TEACHERS IN MIDDLE/HIGH SCHOOL: FIELD TRIAL EVALUATION

Circle the number that most closely corresponds to your opinion about each statement.

(5=Agree strongly; 4=Agree; 3=Neutral; 2=Disagree somewhat; 1=Disagree strongly.)

About Using the PEGS! CD-ROM

Operating the program is not difficult.	5	4	3	2	1
It can be used with very little computer experience.	5	4	3	2	1
The format is easy to follow.	5	4	3	2	1
Information about how to play is clear.	5	4	3	2	1
It is easy to change from one activity to another in the program.	5	4	3	2	1
Stopping and reentering later is not difficult.	5	4	3	2	1
Feedback is quick and to the point.	5	4	3	2	1
I used this program without assistance.	5	4	3	2	1

About the PEGS! CD-ROM

The purpose of the program is to practice guiding students to participate.	5	4	3	2	1
The game format makes the practice fun.	5	4	3	2	1
The program choices allow for preferences among difficulty levels.	5	4	3	2	1
There is sufficient information about the students.	5	4	3	2	1
Information about the students is presented in a culturally sensitive, professional way.	5	4	3	2	1
Some student behaviors are easy to guide to participation.	5	4	3	2	1
Other behaviors are challenging to guide to participation.	5	4	3	2	1
The information about the students' problem behaviors is useful.	5	4	3	2	1
The strategies are practical in multicultural, real-life situations.	5	4	3	2	1
Feedback about each student provides needed information.	5	4	3	2	1
At the end of the program, suggestions for improving management styles are helpful.	5	4	3	2	1

About the Content of the PEGS! CD-ROM

The students have behaviors that I have seen in real students.	5	4	3	2	1
Their difficult behaviors are similar to real-life challenges teachers may face.	5	4	3	2	1
The activities are typical of those in real school settings.	5	4	3	2	1
The strategies are ones middle/high school teachers should know about.	5	4	3	2	1
The students' responses to the strategies are typical of real-life students.	5	4	3	2	1

About the Usefulness of the CD-ROM

I recommend this PEGS! CD-ROM to others working in positions similar to my own.	5	4	3	2	1
---	---	---	---	---	---

Please write any comments you may have on the back of this sheet. THANKS FOR HELPING!

Appendix H.
Rating Adult Strategies:
Early Childhood Educators
Middle/High School Teachers

These instruments are abbreviated versions of the Developmental Therapy - Teaching Inventory of Teacher Skills (DTRITS), (Wood, 1996, Appendix 2, pp. 328-332).

RATING ADULT STRATEGIES: EARLY CHILDHOOD EDUCATORS

Directions: This list of basic adult strategies includes descriptors proven effective in increasing student participation in planned educational activities. As you observe, keep a tally of the number of occurrences of each strategy during the specified time period. Then, review the descriptors within each strategy category and rate the quality of use of each item. Keep in mind that "effectiveness" is defined as positive participation by the students in the activity.

- Circle **PP** if an item was used in a positive way by the teacher and effectively improved child participation.
- Circle **NP** if the strategy was used in a negative way by the teacher, but effectively improved child participation.
- Circle **PN** if the strategy was used in a positive way by the teacher, but did NOT effectively improve child participation.
- Circle **NN** if the strategy was used in a negative way by the teacher and did NOT effectively improved child participation.
- Circle **NO** if the strategy was not observed.
- Circle **UN** if the strategy was observed but unnecessary to improve child participation.
- Circle **IN** if the strategy was used inconsistently.

Ignore Child's Behavior

	PP	NP	PN	NN	NO	UN	IN
Adult appropriately ignores a child when the child is participating in the task.							
Adult appropriately ignores a child's behavior when the child is merely "testing" adult to elicit a reaction.							
Adult does not ignore a child's behavior when child is in crisis or in need of adult assistance.							

Encourage and Praise

	PP	NP	PN	NN	NO	UN	IN
Interpersonal forms of praise and encouragement are used frequently with all children.							
Adult uses praise and positive statements rather than negative statements.							
Adult conveys personal recognition of every child.							
Each child is frequently contacted by the adult in supportive ways.							
Small accomplishments are recognized.							
Adult conveys personal recognition of child as important individuals.							

Use Motivating Materials and Activities

	PP	NP	PN	NN	NO	UN	IN
Activities promote pleasure and participation from each child.							
Activities are used to stimulate individual skills.							
Activities do not extend beyond peak of motivation. (Circle PP if task does not extend beyond peak.)							
Activities provide opportunities for using newly learned skills independently.							
Materials are used for specific purposes which encourage participation in the learning task.							

Circle **PP** if an item was used in a positive way by the teacher and effectively improved child participation.
 Circle **NP** if the strategy was used in a negative way by the teacher, but effectively improved child participation.
 Circle **PN** if the strategy was used in a positive way by the teacher, but did NOT effectively improve child participation.
 Circle **NN** if the strategy was used in a negative way by the teacher and did NOT effectively improve child participation.
 Circle **NO** if the strategy was not observed.
 Circle **UN** if the strategy was observed but unnecessary to improve child participation.
 Circle **IN** if the strategy was used inconsistently.

Organize Materials for Child

Adult assists child in control of materials	PP	NP	PN	NN	NO	UN	IN
Materials provide for successful participation.	PP	NP	PN	NN	NO	UN	IN
Adult encourages child to use materials independently.	PP	NP	PN	NN	NO	UN	IN
Specific areas of the room are designated for certain activities	PP	NP	PN	NN	NO	UN	IN

Describe Procedures and Provide Clear Expectations (Structure)

Activities requiring physical movement are interspersed with those which are less active.	PP	NP	PN	NN	NO	UN	IN
Before activity begins, adult "talks through"/demonstrates the activity, when necessary.	PP	NP	PN	NN	NO	UN	IN
Children know the behaviors expected in each activity.	PP	NP	PN	NN	NO	UN	IN
Schedule of activities is posted in room.	PP	NP	PN	NN	NO	UN	IN
Expectations are clear and meaningful to children.	PP	NP	PN	NN	NO	UN	IN

Model Expected Actions

Adult demonstrates or "talks through" activity to provide model for participation.	PP	NP	PN	NN	NO	UN	IN
Adult demonstrates expected responses.	PP	NP	PN	NN	NO	UN	IN
Adult provides positive interpersonal model.	PP	NP	PN	NN	NO	UN	IN

Move Closer to Child (Proximity)

Adult moves near child as needed.	PP	NP	PN	NN	NO	UN	IN
Adult uses touch to convey guidance or support.	PP	NP	PN	NN	NO	UN	IN

Redirect Child to Activity

Adult uses verbal redirection, statements, or questions to help children participate.	PP	NP	PN	NN	NO	UN	IN
Adult responds to a child's inappropriate comments with a question or refocuses child on task.	PP	NP	PN	NN	NO	UN	IN
Adult uses physical touch to redirect a child to participate.	PP	NP	PN	NN	NO	UN	IN

Reflect Child's Positive Words or Actions

Adult puts children's experiences into words.	PP	NP	PN	NN	NO	UN	IN
Adult finds some positive aspect in a child who is misbehaving.	PP	NP	PN	NN	NO	UN	IN
Adult reflects what children are feeling, to convey understanding.	PP	NP	PN	NN	NO	UN	IN

Circle **PP** if an item was used in a positive way by the teacher and effectively improved child participation.
 Circle **NP** if the strategy was used in a negative way by the teacher, but effectively improved child participation.
 Circle **PN** if the strategy was used in a positive way by the teacher, but did NOT effectively improve child participation.
 Circle **NN** if the strategy was used in a negative way by the teacher and did NOT effectively improve child participation.
 Circle **NO** if the strategy was not observed.
 Circle **UN** if the strategy was observed but unnecessary to improve child participation.
 Circle **IN** if the strategy was used inconsistently.

Remind Child of Rules

Rules are "meaningful" and developmentally appropriate.	PP	NP	PN	NN	NO	UN	IN
Classroom rules are few and stated positively.	PP	NP	PN	NN	NO	UN	IN
Classroom rules focus on helping child be successful.	PP	NP	PN	NN	NO	UN	IN
Consequences for breaking rules are stated constructively.	PP	NP	PN	NN	NO	UN	IN

Remove from the Group (Time-out)

Time-out from the group, in room, is used if needed.	PP	NP	PN	NN	NO	UN	IN
Child understands why he/she was sent to time-out.	PP	NP	PN	NN	NO	UN	IN
The interpersonal exchange between child and adult is positive.	PP	NP	PN	NN	NO	UN	IN
Time-out is brief and results in child's participation.	PP	NP	PN	NN	NO	UN	IN
Time-out does not cause distraction of others.	PP	NP	PN	NN	NO	UN	IN

Hold Firmly

Adult speaks firmly and calmly, without emotion.	PP	NP	PN	NN	NO	UN	IN
Child is help only when necessary to prevent child from hurting self or others.	PP	NP	PN	NN	NO	UN	IN
Child is assisted in participating by adult holding.	PP	NP	PN	NN	NO	UN	IN
Adult provides minimal expectations for participation.	PP	NP	PN	NN	NO	UN	IN
Holding ends on a positive note.	PP	NP	PN	NN	NO	UN	IN
Holding is brief and ends as soon as child indicates ability to participate.	PP	NP	PN	NN	NO	UN	IN

Remove from the Room

Removal from the room is used when needed. (Child is removed because he/she is out of control and may harm self or others; or topic is so private that it cannot be discussed in from on the group. Circle PP if the adult removes the child for appropriate reasons.)	PP	NP	PN	NN	NO	UN	IN
The child understands why he/she was removed.	PP	NP	PN	NN	NO	UN	IN
The interpersonal exchange between the child and the adult is positive.	PP	NP	PN	NN	NO	UN	IN
Someone is with the child when removed.	PP	NP	PN	NN	NO	UN	IN
Child returns to group and participation.	PP	NP	PN	NN	NO	UN	IN
Time away is as brief as possible.	PP	NP	PN	NN	NO	UN	IN

RATING ADULT STRATEGIES: MIDDLE/HIGH SCHOOL TEACHERS

Directions: This list of basic adult strategies includes descriptors proven effective in increasing student participation in planned educational activities. As you observe, keep a tally of the number of occurrences of each strategy during the specified time period. Then, review the descriptors within each strategy category and rate the quality of use of each item. Keep in mind that "effectiveness" is defined as positive participation by the students in the activity.

- Circle **PP** if an item was used in a positive way by the teacher and effectively improved student participation.
- Circle **PN** if the strategy was used in a positive way by the teacher, but did NOT effectively improve student participation.
- Circle **NP** if the strategy was used in a negative way by the teacher, but effectively improved student participation.
- Circle **NN** if the strategy was used in a negative way by the teacher and did NOT effectively improved student participation.
- Circle **NO** if the strategy was not observed.
- Circle **UN** if the strategy was observed but unnecessary to improve student participation.
- Circle **IN** if the strategy was used inconsistently.

Ignore Students' Behavior

Adult appropriately ignores (does not interrupt) a student who is involved in the task.	PP	PN	NP	NN	NO	UN	IN
Adult appropriately ignores a student's behavior when the student is merely "testing" adult to elicit a reaction.	PP	PN	NP	NN	NO	UN	IN
Adult does not ignore a student who is disturbing others.	PP	PN	NP	NN	NO	UN	IN
Adult does not ignore a student when the student is in crisis or in need of adult assistance.	PP	PN	NP	NN	NO	UN	IN

Use Motivating Curriculum/Content (Tasks)

Tasks have high interest and cultural relevance.	PP	PN	NP	NN	NO	UN	IN
Tasks elicit interest and participation of students.	PP	PN	NP	NN	NO	UN	IN
Tasks are used to stimulate individual skills for success.	PP	PN	NP	NN	NO	UN	IN
Tasks emphasize group processes.	PP	PN	NP	NN	NO	UN	IN
Tasks appear to have real-life relevance for students.	PP	PN	NP	NN	NO	UN	IN
Students are encouraged to talk about ideas, feelings, values.	PP	PN	NP	NN	NO	UN	IN

Encourage and Praise

Praise and encouragement are used with group & individuals.	PP	PN	NP	NN	NO	UN	IN
Feedback focuses on positive elements of student's participation.	PP	PN	NP	NN	NO	UN	IN
Adult encourages positive peer feedback.	PP	PN	NP	NN	NO	UN	IN
Praise and recognition of individual/group are authentic in quality.	PP	PN	NP	NN	NO	UN	IN

Explain Procedures & Expectations (Structure)

Before task begins, adult talks through/demonstrates.	PP	PN	NP	NN	NO	UN	IN
Students understand the task & behavior expected.	PP	PN	NP	NN	NO	UN	IN
Adult describes procedures to students.	PP	PN	NP	NN	NO	UN	IN
Students are expected to successfully handle assignment independently.	PP	PN	NP	NN	NO	UN	IN
Materials are organized for independent success with the task.	PP	PN	NP	NN	NO	UN	IN
Organization/structure contribute to positive learning environment.	PP	PN	NP	NN	NO	UN	IN

Circle **PP** if an item was used in a positive way by the teacher and effectively improved student participation.
 Circle **PN** if the strategy was used in a positive way by the teacher, but did NOT effectively improve student participation.
 Circle **NP** if the strategy was used in a negative way by the teacher, but effectively improved student participation.
 Circle **NN** if the strategy was used in a negative way by the teacher and did NOT effectively improved student participation.
 Circle **NO** if the strategy was not observed.
 Circle **UN** if the strategy was observed but unnecessary to improve student participation.
 Circle **IN** if the strategy was used inconsistently.

Model Positive Relationships

Adult is positive model for expected behavior.	PP	PN	NP	NN	NO	UN	IN
Adult conveys fairness toward each student.	PP	PN	NP	NN	NO	UN	IN
Adult listens and responds with consideration/respect.	PP	PN	NP	NN	NO	UN	IN
Adult-student relationships depict genuine respect.	PP	PN	NP	NN	NO	UN	IN
Individual & group interactions are constructive in quality.	PP	PN	NP	NN	NO	UN	IN
Adult uses positive humor to neutralize a situation.	PP	PN	NP	NN	NO	UN	IN
Adult clarifies situation rather than giving commands.	PP	PN	NP	NN	NO	UN	IN

Signal/Convey Awareness

Adult moves near student as needed.	PP	PN	NP	NN	NO	UN	IN
Adult uses a glance or comment to signal awareness of actions.	PP	PN	NP	NN	NO	UN	IN
Adult shows interest and support without interrupting task.	PP	PN	NP	NN	NO	UN	IN

Redirect/Refocus Student to Task

Adult uses redirection, statements, or questions to refocus student on the task.	PP	PN	NP	NN	NO	UN	IN
Students with lagging attention are re-motivated.	PP	PN	NP	NN	NO	UN	IN
Adult simplifies procedure or reviews steps to clarify.	PP	PN	NP	NN	NO	UN	IN

Reflect Confidence in Student (when student is in difficulty)

Small accomplishments are recognized.	PP	PN	NP	NN	NO	UN	IN
Adult reflects on the positive qualities in student.	PP	PN	NP	NN	NO	UN	IN
Adult offers supportive comments to convey confidence in student.	PP	PN	NP	NN	NO	UN	IN

Ask Student/Group to Review Rules

Rules are concise and realistic.	PP	PN	NP	NN	NO	UN	IN
Rules are built on positive values.	PP	PN	NP	NN	NO	UN	IN
Rules focus on positive outcomes.	PP	PN	NP	NN	NO	UN	IN
Student /group are asked to review rules.	PP	PN	NP	NN	NO	UN	IN
Classroom rules focus on helping students be successful.	PP	PN	NP	NN	NO	UN	IN
Rules are meaningful to students	PP	PN	NP	NN	NO	UN	IN
Extramural rules are discussed when appropriate.	PP	PN	NP	NN	NO	UN	IN
Consequences for breaking rules are stated constructively.	PP	PN	NP	NN	NO	UN	IN
Students are encouraged to modify rules as needed.	PP	PN	NP	NN	NO	UN	IN

- Circle **PP** if an item was used in a positive way by the teacher and effectively improved student participation.
 Circle **PN** if the strategy was used in a positive way by the teacher, but did NOT effectively improve student participation.
 Circle **NP** if the strategy was used in a negative way by the teacher, but effectively improved student participation.
 Circle **NN** if the strategy was used in a negative way by the teacher and did NOT effectively improved student participation.
 Circle **NO** if the strategy was not observed.
 Circle **UN** if the strategy was observed but unnecessary to improve student participation.
 Circle **IN** if the strategy was used inconsistently.

Connect Students' Words and Actions to Feelings (Interpretation)

Interpretation is used when appropriate and does not require a response from the student.	PP	PN	NP	NN	NO	UN	IN
Adult recognizes feelings behind student's behavior.	PP	PN	NP	NN	NO	UN	IN
Adult acknowledges student's issue.	PP	PN	NP	NN	NO	UN	IN
Adult is not judgmental.	PP	PN	NP	NN	NO	UN	IN
Adult conveys understanding of student's feelings.	PP	PN	NP	NN	NO	UN	IN
Adult puts issue in reality context (e.g., a natural consequence)	PP	PN	NP	NN	NO	UN	IN

Suggest Voluntary Time-out in Room

Time-out from the group is suggested if needed.	PP	PN	NP	NN	NO	UN	IN
Student understands why he/she should take time-out.	PP	PN	NP	NN	NO	UN	IN
The interpersonal exchange between student and adult is positive.	PP	PN	NP	NN	NO	UN	IN
Time-out is brief and results in student's participation.	PP	PN	NP	NN	NO	UN	IN

Confront Unacceptable Behavior

Adult speaks firmly and without emotion.	PP	PN	NP	NN	NO	UN	IN
Adult conveys specific expectation for alternative behavior.	PP	PN	NP	NN	NO	UN	IN
Confrontation is used only when necessary to control disruptive behavior.	PP	PN	NP	NN	NO	UN	IN
Adult ignores student's anger/hostility and uses alternative strategies to stop unacceptable behavior.	PP	PN	NP	NN	NO	UN	IN
Confrontation ends on positive note with student participation.	PP	PN	NP	NN	NO	UN	IN

Remove from the Room

Removal from the room is used when needed.	PP	PN	NP	NN	NO	UN	IN
Student is removed because he/she is out of control and may harm self or others, or topic is so private that student cannot discuss it in front of the group.	PP	PN	NP	NN	NO	UN	IN
The student understands why he/she was sent from the room.	PP	PN	NP	NN	NO	UN	IN
Student knows acceptable alternative behavior.	PP	PN	NP	NN	NO	UN	IN
The interpersonal exchange between the student and the adult is positive and ends on a positive note. (Student returns to group and participates.)	PP	PN	NP	NN	NO	UN	IN

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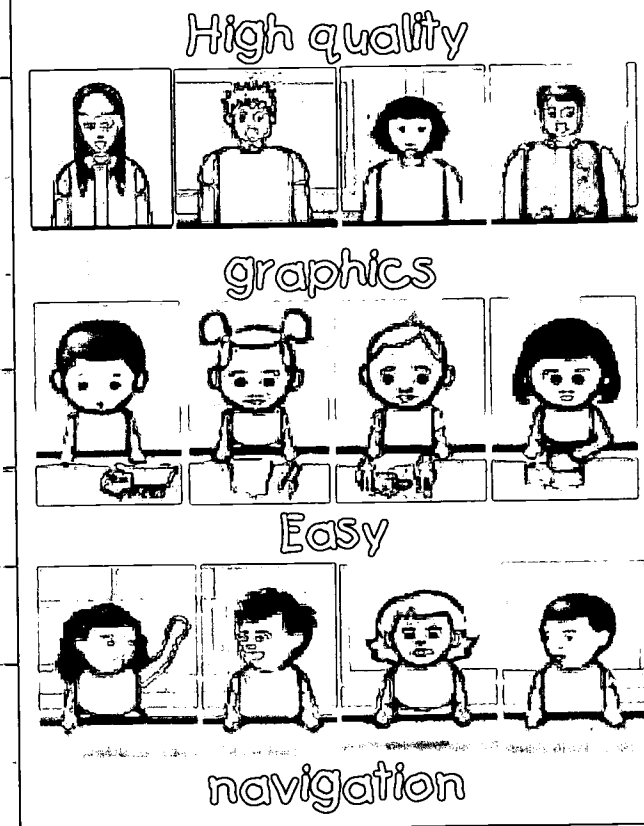
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Interact with the PEGS! kids

... and get them to participate in acceptable ways!

- Select preschool, elementary, or high school
- Choose among various learning activities
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- Analyze what's needed
- Experiment with 12 practical intervention strategies
- See animated reactions of students to your choices
- Receive feedback
- Increase your skills and decrease problem behaviors

Various levels of difficulty
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Instruction booklet



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