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The Effects of Live Music Groups versus an Educational Children's Television Program on the Emergent Literacy of Young Children

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THE FLORIDA STATE UNIVERSITY

SCHOOL OF MUSIC

THE EFFECTS OF LIVE MUSIC GROUPS VERSUS AN EDUCATIONAL CHILDREN'S
TELEVISION PROGRAM ON THE EMERGENT LITERACY OF YOUNG CHILDREN

By

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ABSTRACT

Research suggests that music is beneficial in teaching both social and academic skills to young children. The purpose of this study was to examine the effects of a music therapy program designed to teach reading skills versus the “Between the Lions” television program on the early literacy behaviors of Kindergarten children from a low socio-economic background. Subjects (n=86) were children, aged 5-7 years, enrolled in one of four different Kindergarten classes at a public elementary school in Northwest Florida. Each class was assigned one of four treatment conditions: Music/Video (sequential presentation of each condition), Music-Only, Video-Only and no contact Control group.

Growth in early literacy skills was measured using the Dynamic Indicator’s of Basic Early Literacy Skills (DIBELS) and three sub-tests of the Test of Early reading Ability-3rd edition (TERA-3). Teachers’ perceptions of classroom literacy behaviors were measured using a pre- and post-study survey. This study also compared on- and off-task behavior of students during video versus music conditions.

Results of the seven sub-tests measuring early literacy were varied. The Music/Video and Music-Only groups achieved the highest increases in mean scores from pre-to post-test on four of the seven sub-tests. Students in the Video-Only group scored significantly better on the phonemic segmentation portion of the DIBELS than peers in the Music/Video condition. Furthermore, strong correlations were found between the Letter Naming, Initial Sounds Fluency tests and total raw score of the TERA-3 tests for both pre- and post-testing.

Additionally, graphic analysis of mean off-task behavior per session indicated that students were more off-task during both video conditions (video alone and video portion of Music/Video condition) than during the music conditions. Off-task behavior was consistently lower during music sessions for the duration of the study.

This study confirmed that music increases the on-task behavior of students. Additionally, the combination of music and video enrichment showed gains in four of the eight tests used to measure students’ progress. This pattern supports the need for further investigation regarding benefits of enrichment programs specifically designed to enhance curricula for students from low socio-economic backgrounds, particularly programs that incorporate music activities.

INTRODUCTION

Reading is the key to all learning and providing children with effective literacy instruction is a primary goal of our educational system. The National Research Council (1998) pinpointed several factors that contribute to continual reading difficulties among children. Child-based risk factors, instructional inconsistencies and socio-economic factors all contribute to the large number of children who experience reading difficulties. Furthermore, children who fail to read on grade-level by the fourth grade are less likely to ever read on grade-level and have a greater chance of dropping out of school before graduation.

Several themes emerge when examining factors that contribute to reading difficulty and failure. Family literacy history and home environment, socio-economic status, verbal and print interaction, use of another language or of a non-standard English dialect are all factors for consideration in the prediction of students' success. Research indicates that 31 to 62 percent of children with reading difficulties have parents with reading difficulties. These problems are often compounded by attendance at a chronically low-achieving school and a lack of educational resources (National Research Council, 1998).

School resources and teacher training for effectively teaching literacy vary greatly among educational settings. With such a wide-range of perspectives on how literacy should be taught, there is little consistency from one educational setting or one teacher to the next. In the early part of the twentieth century it was believed that children could only learn to read after reaching a maturational mental age. Formal skills-based instruction was implemented and students completed repetitive drills and exercises to acquire the necessary skills. Parents were believed to have little influence on a child's ability to read.

Eventually the acceptance of a developmental model included both the biological maturation and the influences of a child's environment in their ability to acquire literacy

skills. “Reading readiness” included direct instruction and workbook activities prior to a child’s entrance into elementary school. Reading and writing were taught independent of one another and parental involvement was limited to programs that were provided by a child’s teacher.

As literacy research evolved, results indicated that literacy did not comprise one set of isolated skills but rather an ongoing process that begins at birth. The family and community contribute to a child’s literacy by providing both written and oral language as well as story reading. Participation in “real” literacy activities--mock reading and writing in classroom and home situations--allow children to experience literacy in their environment. This methodology was termed the “whole language” approach to literacy. (Barrat-Pugh & Rohl, 2000).

The culmination of these ideologies and methods is evidenced in the variety of programs implemented across the country. Such diverse teaching methods and programs produce various results in reading achievement. In an effort to create an education system designed to provide all children with appropriate instruction the *No Child Left Behind Act of 2001* was signed into Federal law in January of 2002. Included in this act and designed “to improve American education,” the READING FIRST program provided \$900 million dollars to ensure that schools use only “scientifically based instruction and teaching methods” in reading instruction. An emphasis on teacher training, testing and monitoring state scores in reading achievement is highlighted in this legislation. This legislation is based on a comprehensive examination of a myriad of research that highlights phonemic awareness, phonics, fluency, vocabulary and comprehension as the major components to early reading. Additionally, this change was in response to studies that indicated only one in three fourth-graders are considered “proficient” in reading at grade level as measured by various standardized tests (U.S. Department of Education, 2002).

This nationally funded program is put into effect at the state level, as each state deems necessary. Implementation of READING FIRST in the state of Florida is outlined in the *Just Read, Florida!* program. Program elements currently include a variety of

professional development and training opportunities for teachers, parent resources and activity kits and several community partnerships to support both early literacy and remedial reading programs. This influx of programs and funds is accompanied by an emphasis on measuring outcomes via standardized testing in order to determine efficacy (State of Florida, 2002).

Additional changes in Florida's education system during the 2002 legislative session complicate the issue of providing adequate early literacy programs. Governor Jeb Bush removed all Pre-Kindergarten programs and initiatives from the Florida Department of Education and placed them under the jurisdiction of the Agency for Workforce Innovation. The "Partnership for School Readiness" is funded under an entirely different budget than those students receiving K-12 reading instruction (State of Florida, 2002).

Finding developmentally appropriate, cost-effective measures to provide young children with the early literacy experiences they need is more challenging than ever before. Teacher training, provision of resources and evaluation are paramount in ensuring the success of young children. Understanding and working within the young child's developmental means is the first step in this process.

The inclusive nature of music experiences for young children provides learning opportunities for children with varying academic and developmental levels. Because of its inherent communicative qualities, children are able to listen and respond regardless of the extent of their previous communicative interactions or lack thereof. In essence, music facilitates a common ground from which all children may grow individually.

CHAPTER 1

EMERGENT LITERACY

Teale (1995) outlines and describes the history of two basic questions: (1) should young children be taught to read, and (2) how is beginning reading best accomplished in the education system? Historically speaking, literacy research and instruction have evolved to the holistic approach to reading and writing that is embedded in the whole language approach. While it is agreed that decoding and comprehension are necessary for children to learn to read the means by which literacy is acquired and at what age are subjects of much debate. Though Marie Clay coined the term emergent literacy (EL) in her doctoral dissertation in 1966 it has taken nearly three decades for the idea of EL to become more widely accepted as best practice in educating young children. As with all learning, emergent literacy follows a developmental sequence and is supported by engaging children in activities that teach phoneme awareness, letter and sound recognition and promoting reading within the broader context of functionality bridges the gap between emergent and conventional reading.

Developmental Sequence

Emergent literacy (EL) places the onset of literacy shortly after birth and continues through the various experiences that occur over the course of childhood (Lancy 1994; Teale and Sulzby, 1986; Whitehead, 1999). Teale and Sulzby (1986) discuss, at length, the process of teaching children to integrate literacy and the effects that a child's home life and school culture have on the acquisition of literacy skills. A child's road to literacy begins with the reception, organization and manipulation of sound. In infancy, babies are able to practice and repeat movements and sounds that they find pleasurable. By mimicking sounds and interactions to which they are exposed, babies develop a communicative

repertoire. Parents and caregivers respond to this communication by meeting the needs of the infant. In short, crying is met with a response of holding, feeding, or diaper changing (Whitehead, 1999).

Oral language begins in much the same way. The baby produces sounds, the parent or caregiver responds and the baby responds in kind. This simple exchange lays the foundation for the child to acquire and practice sounds. A child's oral language is accumulated through exposure and practice. Chomsky (1999, p.41) notes "language learning is not really something that the child does; it is something that happens to the child placed in an appropriate environment. [Furthermore] the difference between rich and stimulating environment and an impoverished environment may be substantial. Capacities that are part of our common human endowment can flourish or can be restricted and suppressed, depending on the conditions provided for their growth."

When children are provided opportunities for interactions and discovery the information that they learn becomes part of their personal experience and with "practice", is more likely to become entrenched in the child's knowledge base. Therefore, children that are not regularly engaged in verbal interaction prior to formal (grade school) educational experiences tend to be categorized as speech and language delayed. Adequate opportunities for developing both expressive and receptive oral language are imperative to a child's reading and writing acquisition (Clay, 1998).

In a longitudinal study conducted by Roth, Speece and Cooper (2002), outcomes indicated that oral language ability "contributes to early reading skill in ways other than through the influence of phonological awareness." Both the oral vocabulary and word retrieval of participants accounted for variance in second-grade reading comprehension scores. These findings further emphasize the importance of early interactions and experiences that expose children to print and language exploration.

As with language development, children begin an awareness of print and "writing" very early on. Children have the ability to recognize that printed words have a different visual pattern than other pictures and symbols to which they are exposed and that it is

used in a variety of ways. Also, “print” (letter, symbol or picture) can be produced by anyone (Adams, 1990; McGee and Richgels, 2000). Through a process of trial and error, children use art materials to experiment with motor coordination and cause-effect in order to express themselves. Children begin to attach meaning and representation to symbols and pictures based on the oral language they have acquired and the pictures and symbols to which they are exposed. “Writing” then can be defined as any symbol that is representative of an idea or expression. For example, directionality (up/down or left/right) of scribbling or mock letters indicates a developmental level that occurs before a child is able to begin writing the alphabet. Likewise, complexity of children’s pictorial drawings indicates a more advanced level of written expression (Whitehead, 1999).

As children develop and acquire increasingly more complex oral and written language skills they move towards the ability to read. Letter knowledge, phonemic awareness and understanding and concepts of print are directly related to a child’s ability to read. By pinpointing these three areas, it is easy to see how a child’s exposure to print and oral language at an early age gives them more comprehensive experiences and an advantage in taking the next developmental step (Adams, 1990; Clay, 1998; McGee and Richgels, 2000).

Justice (2000) investigated the extent to which preschoolers from low socio-economic backgrounds demonstrated emergent literacy skills and whether participation in book reading sessions included print awareness, focus of attention, and written language. Thirty Head Start children were pre-tested on print concepts and recognition, words in print, letter orientation/discrimination, alphabet knowledge and literacy terms and randomly assigned to an experiment or control group. All children completed 24 book reading sessions over 8 weeks. Children in the experimental group focused on print and children in the control group focused on pictures. Post-test results indicated that children demonstrated low performance levels on 5 of the 6 skill tests. The highest levels of performance were reached on the letter orientation/discrimination task. However, children in the experimental group did show greater gains from pre- to post-test as compared to

the control group on four of the skill tests: print recognition, words in print, alphabet knowledge, and emergent literacy composite. In summary, the students that participated in book reading with a focus on print concepts appear to have a greater awareness of written language than those who focus on pictures.

In a study investigating the extent to which Kindergarten curriculum supports language and emergent literacy for children from low socio-economic backgrounds, Payne (1996) found that programs that emphasized skill acquisition and developmentally appropriate practice produced significantly better results than classrooms that focused on other areas. Additionally, a correlation was found between the parental verbal IQ and the Kindergarten child's language skills.

Galentine (1996) found that children as young as 2 years old had already developed observable knowledge of literacy and its uses and tools. At this early juncture children are able to open books and turn pages, use writing utensils to make dots, lines and scribbles and are able to demonstrate grasping techniques while manipulating the writing utensils. Book handling, grasping and marking techniques are all part of the developmental process inherent in all children as they learn to read. This study demonstrated the intentionality of very young subjects as well as a fairly rapid increase in understanding, creation and function of print.

Finally, in an effort to examine effects of age and schooling on emergent literacy and early reading, Crone and Whitehurst (1999) followed the progress of 337 children from low socio-economic backgrounds when they began a Head Start program through the first grade. Children that began school a year earlier than same-age peers outperformed those same peers on both emergent literacy and early reading skill tasks. Impact on early literacy was almost 2 times greater and early reading was over 4 times greater than the effect on age.

The findings summarized here support a developmental sequence that begins with oral language and communicative interactions between children and people in their environment. This continues with a child's awareness and recognition of symbols and print

as having meaning and the acquisition and practice of skills (such as letter naming and letter-sound correspondence) to decipher the “code” to read words. Each of the behaviors in this sequence comprises a vital part of early literacy learning.

Process of Achievement

Like many educators, Bobys (2000) believes that literacy in children emerges in an environment that incorporates literacy-based play activities that present opportunities for children to practice oral and written language in a way that is meaningful for the child. A classroom that is designed appropriately will yield children that are immersed in activities that model a love of reading and writing. Activities that contribute to this type of environment include shared book experiences (teachers read "big books"--over-sized children's picture books--to groups of students and include activities that involve listening, reading, speaking and writing), and huddle groups (children work individually within a group on a common project or task). Other activities include library checkout, book bragging (children share a favorite book with the class), Be Excited About Reading (BEAR) time (children "read" favorite books by themselves and share information about a selected topic). Activities to promote writing might include the tracking of language samples by classroom teachers. Teachers write verbatim words and sentences that students use which indicate language growth and keep a portfolio of the child's progress over the school year. Writing centers are made available to students and regular journaling is encouraged. Each teacher helps the students create their own dictionary by going on "word walks" around the classroom and copying down words and writing their classmates names in their dictionary. Individual chalkboards are used for shared writing experiences and writing practice. Self-directed learning time is provided for students to choose an activity that they would like to spend time working on and fourth-grade reading buddies spend time reading with children and modeling appropriate literacy skills.

Many educators employ these strategies, at least in part, in an effort to create an environment that promotes literacy. Teachers develop their own models of teaching

literacy based on the knowledge and experience that they bring to the classroom, trial and error analysis and activities or approaches that seem to work best with individual students. Issues raised by these practical applications are identical to questions posed in the research literature regarding literacy acquisition.

The activities that foster emergent literacy are consistent with activities found in children's play. The concept of play as the young child's primary method of learning, developmentally appropriate practice, and child-centered learning are becoming more readily adopted among child care professionals. Educating parents and policy makers has proven to be much more difficult. Gillam and Zigler, (2000) conducted a meta-analysis of all evaluations of state-funded preschools from 1977-1998. Of the 33 state preschool programs only 13 had completed formal evaluations that tracked child outcomes. Of the states that made evaluations, assessments and results varied greatly. This article emphasizes the need for evaluations that are related to program goals and that each of these goals has realistic expectations outlined for growth potential. There is also a need for process evaluations (as opposed to pre-post only) in order to assess the appropriateness of programs and procedures based on the varying needs of the community. Being able to compare programs and outcomes across time and type provides more comprehensive measurements and more proactive reasons for change. Lasting impact and accountability would help to focus state resources and create effective, comprehensive programs for young children.

Closing such gaps in early childhood education, particularly when a child is making the transition from the preschool environment into elementary school, can be key in facilitating learning. Hoyt (2000) outlines a cooperative program between Head Start and the local elementary schools to create a smooth, child-centered transition. Local Title I schools brought Head Start programs on to the elementary school campus and incorporated collaboration on curriculum and activities for students. "The First Steps" curriculum, developed and researched in Australia, was implemented successfully and provided a seamless transition for children moving from pre-K into Kindergarten.

In order to make such an important transition as comfortable as possible, familiarity is crucial. Play is, without a doubt, the most comfortable medium for a child. How then can we create a link from their prior knowledge and experience into new experiences that will build on what they already know? Wilford (2000) discusses the importance of classroom structure in literacy learning. Vital components of “literacy-friendly” classrooms include a flexible schedule and an engaging, child-centered environment. The room itself should be arranged to foster literacy-based activities (*i.e.* print-rich environment, quiet spaces to read alone, large space to read as a group, classroom “library”) and there should be sufficient materials to support the number of students in the class. A curriculum that supports critical thinking and problem solving and is child-centered fosters independence and processing skills that are fundamental in reading. Additionally, creating a “climate of persistence” develops a child’s intrinsic motivation. Finally, understanding and modeling that all individuals regardless of race, color, creed, religion or culture have a right to speak, listen, read, and write in order to communicate.

Klenk (2001) also discusses play processes that support emergent literacy in the early childhood classroom, providing suggestions for specific classroom alterations. Data collected following the changes in room set-up yielded increased levels of pre-literacy activities initiated by the children. For example, writing samples produced in the socio-dramatic play area include pre- and early phonemic samples, as well as conventional (copied, known) writing. Children would role-play “grocery store” with some children writing and following “grocery lists” and others acting as the storekeeper, writing purchase receipts and making signs advertising store items.

Dunn, Beach and Kontos (2000) found that children’s language development was related to the quality of the classroom literacy environment. While the overall quality of the literacy environment provided in the classroom predicted children’s verbal intelligence ratings, the number of literacy activities available during free-play time was not associated with measures of child development. Teacher-child interactions that stimulate cognitive

processing and provision of materials that promote literacy are key components in effective literacy environments. Noticeably absent from the environments surveyed in this study were letter cards, functional print in the classroom such as labeled items and crayons, pencils and paper outside the art area, computers, chalk and chalkboards and book making materials.

In 1994, Reitsma surveyed twelve Kindergarten programs and found that only one of those programs was designed to foster emergent literacy in children. The other eleven classrooms were classified as “reading readiness” (or developmental model) programs that focused on isolated skill assignments. Benefits of the emergent literacy program included an environment which allowed students to “experiment with literacy” in ways that were familiar to them and activities that build upon that familiarity using fundamental book and reading concepts.

Roskos (2000) addresses the fears of parents, politicians and teachers that literacy must be at the forefront of early childhood education while maintaining the need for developmentally appropriate practice, or play, in order to reach that goal. These goals are achieved by ensuring the widespread "presence of print" throughout the environment. Print should be at eye level and make the setting attractive and appealing for the child. Secondly, the literacy environment must be "within reach", both physically and mentally, of the child. This is the concept of proximity. Finally, the environment must be productive and lead children to new ideas. This may be conceptualized as offering students many opportunities to talk about and create print-related materials while utilizing problem solving and expressive skills.

As previously mentioned, the presence of quality children’s literature is important in children’s exposure to print. Yopp (1995) outlined three criteria for selecting read-aloud books that support phonemic awareness. Books that employ playful language (rhyming, silly words, song-like meter), simple story lines and vocabulary and that lend themselves to further language play (with patterns that can be reproduced) are most beneficial in engaging children in literature. Reading the story several times, examining and

commenting on language use, encouraging predictions and writing additional verses to the story allow children to explore language use and become vested in the story.

The implementation of previously mentioned environmental necessities then lead to research questions regarding what specific activities and experiences children need in order to become proficient readers later in life. Hiebert, Cioffi, and Antonak, (1984) suggest that letter naming, auditory discrimination and visual discrimination must be mastered before young children can grasp the process or purpose of reading outlined in print awareness concepts. The researchers offer several possible explanations including a theory of coincidental learning, possible prerequisite skill development and hypothesis of shared constructs. Coincidental learning suggests that auditory and visual discrimination and letter name knowledge may occur concurrently as children become more proficient in concepts of reading. Prerequisite skill development may indicate that children must actually master letter naming and auditory, visual discrimination before understanding print awareness concepts. Lastly, mastering print-related skills may lead to attention-related behaviors or conceptual knowledge that leads to further knowledge.

Lomax and McGee (1987) used 18 print-related and word-reading measures, broken into 5 components (concepts of print, graphic awareness, phonemic awareness, grapheme-phoneme correspondence knowledge and word reading) that underlay word-reading acquisition. This model was then compared with a two-component model (print concepts and word reading). Results of this study indicate that the five-component model is the best fit for measuring young children's progress in literacy skills. Moreover, results of this study support the findings of Hiebert, Cioffi, and Antonak, (1984).

In a longitudinal study that followed children from preschool through Kindergarten and first grade, Burgess and Anthony (2000) found that phonological sensitivity and letter knowledge have "predictive relations with later reading abilities." A relationship was found between phonological sensitivity in the later preschool years into Kindergarten, with children scoring in precisely the same order from one year to the next. It is possible that children with greater phonological sensitivity and letter knowledge may benefit from

exposure to print. Results also indicate a relationship between children's oral language and their phonological processing. Each of these findings contributes to the idea that phonological sensitivity is a strong predictor of children's decoding skills.

Even in programs that model literacy ideals, children must have some motivation to explore and develop reading and writing skills. Nolen (2001) investigated children's motivation, collaboration and task structure in Kindergarten classrooms. Participants were screened at the beginning of the year for phonemic and orthographic awareness. Those identified as at-risk for reading and writing activities were grouped together for activities related to this study. Data were collected during student and teacher interviews as well as classroom observations. Results of this study indicated that children became more motivated to spend time reading and writing in order to share something that was important to them. This also manifested greater social interaction and excitement about class activities among participants. Nolen's findings summarize the importance of reading and writing--in essence, communication--for students to function, not only in the academic realm, but also to function socially with their peers.

The importance of providing children with a solid foundation in literacy skills is emphasized in Juel's (1988) findings. Results of a longitudinal study of first through fourth graders indicated that "the probability that a child would remain a poor reader at the end of fourth grade if the child was a poor reader at the end of first grade was .88." The children that were poor readers at the beginning of first grade had poor phonemic awareness.

Stanovich (1986) talked at length about the difficulties that poor readers have, citing these difficulties and their ramifications as the *Matthew effect*: The reciprocal relationship between reading ability and other cognitive processes cause ongoing, compounded problems for students that have difficulty reading. In other words, students that never reach a proficient level of reading are unable to excel in other academic areas and academic failure is made worse through the "organism-environment correlation", or the fact that we are not all provided with the same opportunities.

The research represented here advocates for the provision of a print-rich, play based environment that fosters both verbal and written communication. Quality materials and experiences yield measurable differences in what children learn. Classrooms that incorporate literacy behaviors as an integral part of many activities throughout the day build a foundation on which the child may base later literacy learning. Finally, research indicates that it is essential for children to master these skills at an early age in order to achieve reading success.

CHAPTER 2

LITERATURE REVIEW: TEACHING LITERACY

Curricular Issues

Phonics and Whole Language

Literacy instruction typically falls into one of two categories: Phonics-based or whole language programs. There is a long history of controversy regarding which methodology is most effective in helping children learn to read. The "whole language versus phonics" or "The Great Debate" (as it is frequently referred to in the literature) issue continues to be a politically charged debate that seems to shift in accordance with the political climate. In an effort to gain greater understanding of the controversy surrounding phonics and whole language ideologies, it is important to define the nature of each method.

Phonics is the study of sounds in speech, focusing on the relationships of letters within words. The phonics method of teaching reading stresses the spelling patterns as opposed to individual letters. Because the sounds of letters, particularly vowels change, depending on where they are in the word, children are taught to identify "markers" and "rules of thumb" that help them sound out words. Typically this method of instruction requires systematic, direct instruction in order to enable students to reach a level of proficiency (Shefelbine, 1998).

In contrast, whole language instruction is an inclusive model of exposure to print and literacy skills throughout the day without emphasizing phonetic alphabetic elements of words. Throughout the day children talk with each other and with their teachers about experiences and ideas, describing processes and events. The whole language approach is

child centered and literacy emerges in stages. Children "read" aloud and "write" or document experiences. While they may not literally be reading the exact words printed on a page or writing a correctly-spelled, legible document, the act of role playing begins to foster the love of reading and/or writing and encourages the child in further exploration of print.

Whole language environments are also print-rich in nature. Word labels cover classroom items ("door", "window", "sink") and books are read aloud frequently to children as a group and individually. Books are also made available for students to explore and "read" on their own. In short, communication and literacy skills (via shared conversation, "writing" and print exposure) permeate all activities throughout the day (Barron, 1990).

Moustafa (1993) reviews literature that supports the whole language method of reading instruction versus one-to-one direct instruction in phonics. Findings that support whole language include the ideas that children are able to make more analogies between words with analogous rimes (*beak and peak*) than between words with analogous phonemes (*beak and bean*). The summary of the works in this article indicates that asking a young child to re-code print using phonemes is a developmentally inappropriate task since the knowledge of onsets and rimes (not phonemes) is necessary to re-code print. In other words, children in this study did not sound out words using the individual phoneme sounds.

While traditional whole language instruction does not include any phonetic instruction, Manning and Kamil (2000) conducted a longitudinal study that supported the use of whole language with embedded phonics instruction to teach reading and writing tasks to Kindergarten children. Thirty-eight students were administered reading and writing tasks individually on five occasions over the course of a school year. Half of the students received "isolated phonics instruction" while the other half received phonics instruction in context of other learning experiences. Results indicated the students that received embedded phonics instruction made more progress with "more developmental

coherence, as evidenced by the absence of regression and confusion" than their peers who received phonics instruction only.

When asked what their beliefs were regarding practices that involved whole language and phonics instruction, teachers (pre-K through 5th grade) indicated that they supported a balanced (89%) or eclectic (76%) approach which was defined as "combining skills with literature and language-rich activities" and/or "drawing from multiple perspectives and materials". Additionally, 94% of teachers surveyed indicated that one of their goals was to develop readers that were independent and motivated to choose, appreciate, and enjoy literature. Teachers also reported that phonics were an important part of reading instruction, along with contextual and structural analysis, sight words and meaning.

When asked to report instructional practice preK through 2nd grade teachers indicated that they read aloud, accepted invented spellings, engaged children in oral language, journal writing and reading response activities, all of which are supported in a whole language environment. Sixty-six percent of these teachers also indicated that they systematically taught phonics through word families/phonograms, in the context of children's literature and through various spelling and writing activities (Baumann, Hoffman, Moon & Duffy-Hester, 1998).

Stahl and Miller (1989) conducted a meta-analysis that included fifty-one studies in an effort to assess whole language and language experience (versus the basal reader) approaches on beginning reading achievement. Their analyses indicated that the whole language/language experience approaches appear to be "most effective for teaching functional aspects of reading, such as print concepts and expectations about reading." Further findings of this study indicated that these methods "produced stronger effects on word recognition than on measures of reading comprehension" and yielded greater results in Kindergarten versus first grade students. This lends support to the argument that whole language/language experience may be an effective as well as developmentally appropriate method for teaching young learners.

Despite the support of some educators and advocates, whole language is highly controversial and implementation is not beyond reproach. Lack of resources for professional development and inadequate time and resources for collaboration are partly to blame for the limited success of whole language programs in the state of California and around the country. The controlled vocabulary present in phonics and decoding strategies should be a cueing system within the framework of a whole language curriculum (versus intense, systematic phonics instruction) in order to effect lasting change within education systems. Providing adequate information, resources and guidance to both teachers and parents is another key to the success of whole language environments (Routman, 1997).

The seven strategies used in the Whole Language (WL) approach were analyzed in contrast to some of the principles utilized in Direct Instruction (DI) by Chuck Baxter, a school psychologist in Ithaca, New York (V. Fueyo, personal communication, June 25, 2002). In his analysis, immersion employment, responsibility, approximation, demonstration, feedback and correction are present in each of the previously mentioned ideologies. For example, immersion (whereby the classroom is inundated with "a synthesis of language") is considered one of the visible techniques used in the WL approach. Baxter argues that immersion is present in DI and "happens as a result of the initiative of the teacher." Baxter goes on to say that he has never known an effective DI teacher "who underrated immersion in teaching applications of skills, nor neglected to make it a very visible part of their integrated classroom operation."

In an effort to meet the many, varying needs of children learning to read, it is essential to utilize effective components from both Whole Language and Phonics instruction. Whole language techniques work well in the early intervention classroom, providing increased exposure to print for children who do not live in an environment that provides plentiful and varied print sources. Exposure and value of print in the classroom fosters interest that facilitates phonics instruction to help children learn letter names and sound correspondence. Utilizing both strategies also allow teachers to provide services that are child-centered and that encourage success.

Phonological and phonemic awareness. According to Torgeson and Mathes (1998) phonological awareness is "one's sensitivity to, or explicit awareness of, the phonological structure of words in one's language" and includes the "ability to notice, think about, or manipulate individual sounds in words." Research on emergent literacy has established that phonological awareness is of primary importance in a child's acquisition of literacy skills and is one of the best predictors of how well children will learn to read.

The "individual sounds in words" to which Torgeson and Mathes refer are called phonemes. Phonemes are combined to form syllables and words and phonemic awareness is the ability to recognize and manipulate phonemes within words (Ehri et al, 2001). The term phonemic awareness implies a more specific recognition of isolated sounds than does phonological awareness or sensitivity.

Phonological awareness is assessed through a variety of tasks including phoneme isolation and identification, sound-to-word matching, isolating single sounds from words, blending, and deleting phonemes (individual sounds). The hierarchy of phonemic awareness tasks in sequential order from least difficult to most difficult includes: first sound comparison (same or different), blending onset (initial consonant sound) and rime (sounds that follow the consonant), blending phonemes to real words, deleting a phoneme from the word, segmenting words into phonemes, and blending phonemes into non-words (Stahl & Murray, 1994; Ehri et al, 2001).

Phonological awareness helps children understand how oral language is represented in print as well as how those printed representations relate to their corresponding sounds. These skills lead to the ability to sound out unknown words when encountered by the child. These strategies are the result of systematic, explicit instruction. Additionally, the child must synthesize both aural and visual learning experiences in order to employ strategies that lead to success in beginning word reading (Torgeson & Mathes, 1998; Mathes and Torgeson, 1998).

The studies of Wagner, Torgeson, Laughon, Simmons and Rashotte (as cited in Torgeson & Hecht, 1996) summarize findings that indicate strong correlation between

three separate phonological abilities measures. A child's ability to match words that begin with the same phoneme, word identification upon removal of a phoneme and the ability to blend distinct phonemes into a word seem to have "significant causal relationships that are redundant to one another." Torgeson and Hecht (1996) arrive at the conclusion that phonological awareness and "rapid automatic naming" of letters and phonemes are the most important skills for a child to master in order to achieve success in early word reading.

In 1995, Yopp investigated the validity and reliability of ten different phonemic awareness tests and assessment tools. Of those tested, the Roswell-Chall Phoneme Blending test had the greatest reliability at .96. Other tests with moderate to high reliability included the Yopp-Singer phoneme segmentation, Rosner's phoneme deletion test, and the Yopp rhyme test.

As mentioned above, Yopp (1995) developed the Yopp-Singer Test of Phoneme Segmentation, a 22-item test that can be administered orally. Subjects are asked to listen to the word spoken by the test administrator and then respond by saying each sound in the word. Students that obtain a high score are considered phonemically aware. This test has reliability of .95 indicating that this tool is a highly accurate assessment tool.

In order to develop phonemic awareness, Yopp (1992) suggests activities that utilize spoken or sung language so that children can hear examples of sound matching, sound isolation, blending, and sound addition or subtraction. When presenting these activities to groups of children it is important to realize that there is typically a wide variation of phonemic recognition and abilities among children. Activities should be structured so that all children develop positive feelings towards learning. All curiosity about language should be encouraged and children need space to experiment with language. Yopp cautions against using print materials with younger children as this may distract from aural learning.

Yopp and Yopp (2000) wrote about supporting phonemic awareness development in the classroom. A sequence of activities for children Kindergarten aged or older includes

activities that focus on rhyme, syllable units, onset and rime and focus on phonemes. In teaching phonemic awareness to older children it is important to provide a variety of activities that include oral participation, cueing, letter knowledge and onset-rime manipulation.

Wasik (2001) moves beyond specific activity selections and outlines four primary research findings that apply to phonemic awareness and implications for early childhood curricula. As previously discussed, there is a relationship between young children's phonemic awareness and their reading achievement. Secondly, children as young as 3 and 4 years old can demonstrate phonemic awareness. Additionally, by creating opportunities in the classroom and giving children the time and space to play with language we teach phonemic awareness. Lastly, though these skills are taught through play, it is important to provide children with an explanation of phonemic awareness, or what it means for words to have similar sounds. Providing children with words and meaning allows them to create a vocabulary from which to communicate.

The idea of explicit (direct instruction or drilling) versus implicit instruction (emphasizing the value and procedural knowledge of phonemic awareness as previously discussed) was investigated by Cunningham (1990). Kindergarten and first grade students in each condition received training twice a week for ten weeks. Results supported implicit instruction as students in that treatment group performed significantly better on a transfer measure of reading achievement.

Stahl and Murray (1994) examined phonological awareness tasks of 113 kindergarten and first grade children in an effort to separate task difficulty from linguistic complexity. Tasks were compared to measures of early literacy and revealed a series of sequential learning experiences necessary for word reading and complex levels of phonemic analysis. Further analysis of results indicated that children must have knowledge of the alphabet (letter naming) before they can separate onsets and rimes. Furthermore, knowledge of onsets and rimes is essential for word reading.

Letter knowledge, phonological skills, and memory processes effect early literacy. Naslund & Schneider (1996) studied one hundred thirty-four children from the southern region of former West Germany, and gave them various literacy tasks over the course of four and a half years (beginning at age 4). The task at age four consisted solely of word span. At age six, word span, letter knowledge, rhyme detection, syllable count, sound-in-word detect, syllable segment, pseudo-word repeat, syllable blend, onset/rime blend, and phoneme oddity were measured. Verbal IQ and word discrimination were measured in the first grade. And finally, word span, phoneme recoding, word and non-word decoding speed, reading comprehension, and spelling were measured in the second grade. Results suggest that phonological tasks "vary in their prediction of later literacy performance. Additionally, high letter knowledge by Kindergartners may also predict later literacy skills."

Byrne and Fielding-Barnsley (1991) evaluated a program to teach phonemic awareness to preschoolers through phonemic identity across words. Sixty-four children participated in the program for 12 weeks after completing a pretest and were post-tested following treatment. Results of the post-test indicated that the children in the experimental group showed statistically significant improvement, not only in the phonemes that the program trained, but in the untrained sounds as well. Scores on a forced-choice-word test indicated that children who are phonemically aware use their knowledge to try and decode unfamiliar words.

A one-year follow up of this study tested children at the end of Kindergarten on phonemic awareness, word identification, decoding and spelling. Results indicated that the children who entered Kindergarten with advanced levels of phonemic awareness scored significantly higher on each of the measures. Knowledge of the alphabet predicted literacy development in this study (Byrne & Fielding-Barnsley, 1993).

As indicated in the literature regarding classroom practice of literacy instruction, shared reading and writing experiences not only foster a love of reading, but socialization as well. Ukrainetz et al (2000) investigated the effect of small group shared reading and

writing experiences on five and six-year-old children's phonemic awareness. Thirty-six children, 12 with lower level literacy and 24 with higher, were randomly assigned to one of two treatment groups. Measures included teacher interviews, letter name knowledge, phonemic awareness and parent report. Phonemic awareness was taught for thirty minutes 3 times a week for seven weeks to the experimental group using meaningful text (children's books) and writing activities. Results indicated gains in first and last sound identification and sound segmentation for the experimental group in both lower and higher literacy level students as compared to a no-treatment control group.

Perfeti, Beck, Bell and Hughes (1987) also support a reciprocal relationship between phonemic knowledge and reading ability in their longitudinal study of first grade students. Eighty-two first graders were divided into three groups. One group was given direct code instruction and the other two groups were basal series groups that did not receive direct phonics instruction. Four tests were administered over the course of the school year. Tasks of the tests included synthesis, tapping, deleting and pseudo-word reading. Although causal direction could not be determined by the data, results of this study indicate that students that had greater success on an earlier phonemic task ultimately performed higher on the latter task. Therefore, this study indicates that the role of phonemic knowledge (and thus, implicit phonics instruction) is vital to reading success.

Likewise, Velluntino and Scanlon (1987) found that deficiencies in phonological coding and phonological awareness are a direct cause of deficiencies in reading ability. This longitudinal and experimental study investigated normal and poor readers, matched for reading ability, and found that these students demonstrated comparable performance levels on tasks that were presumed to be dependent on phonological coding.

Lundberg, Frost and Peterson (1988) conducted a longitudinal study that presented 235 Danish preschoolers with meta-linguistic games and exercises but no formal reading instruction prior to or during school. The program had no statistically significant effects on children's functional linguistic skills or their informal learning of letter names. There were, however, gains in the rhyming tasks and word/syllable manipulation tasks.

This study, in contrast to other research reported here, indicates a need for explicit instruction in order to insure growth.

Using his master word list, Cheek (1980) created a hierarchy for teaching phoneme-grapheme correspondence. In other words, children in the first through fifth grade and beyond are capable of learning the phoneme (letter sound) and its appropriate grapheme (visual representation of the sound) in order to decode words. A hierarchy of 46 phonemes is arranged according to reading level.

Rayner (1988) looked at word recognition cues in children including how they use graphemic cues, orthographic cues and grapheme-phoneme correspondence rules to help decode words. When asked to choose the response that was "most like" or that "sounded like" or "looked like" the word initially presented, this study found that children use different strategies and/or clues for recognizing words depending on their reading level. Skilled readers utilize grapheme-phoneme correspondence to recognize words and are much more flexible in their response patterns.

Rhyming. Rhyming words can be inviting and silly and are widely used in children's literature and songs. DeMoulin (2001) reports that the value of personalization and rhyme in reading is not properly emphasized when providing activities for children. Typically, children are more attentive to reading material that directly addresses them and is "inviting to the ear". Familiarity is reflected through personalization and the child is more likely to focus their attention on the stimulus as well as on the task at hand. Additionally, rhyming words set up a tempo and flow which helps children identify word families.

Danielson (2000) discusses the importance of nursery rhymes in children's literacy learning. Nursery rhymes are part of our cultural history that has been passed through hundreds of years in both oral and written tradition. Teaching these rhymes helps children learn new words and concepts, as well as teaching intonation patterns of the English language and an appreciation of poetry. Nursery rhymes also lend themselves beautifully to developmentally appropriate literacy play.

Maclean, Bryant and Bradley (1987) looked at the role that rhyming words and nursery rhymes play in phonemic awareness and reading in early childhood by conducting a 15-month longitudinal study. Subjects were, on average, 3 years, 4 months at the beginning of the study and their knowledge of nursery rhymes and phonological skills were assessed. Results over time indicated a strong relationship between children's knowledge of nursery rhymes and the development of phonological skills. These skills related to early reading but not to early arithmetic skills.

In a follow up study 2 years later, findings were still supported. Exposure to nursery rhymes at a young age seems to feed children's sensitivity to rhyme and phonemes. Researchers state, "it is familiarity with nursery rhymes [that] enhance children's sensitivity to the component sounds in their language and this in turn affects their progress in reading and writing (Bryant, Bradley, MacLean & Crossland, 1989)."

Additionally, a study was conducted with 40 students in a Head Start program. Nine, five-minute treatments were conducted each day at circle time, where twenty students received a rhyming detection strategy and the other twenty students received training with a "semantic emphasis." The group receiving explicit instruction in rhyming words scored better on the post-test than those in the control group (Majsterek, Shorr, & Erion, 2000).

Memory. Working memory plays a role in knowledge gain. Dixon, LeFevre and Twilley (1988) took three measures of word knowledge and three measures of working memory in order to predict reading skill in children. The readers' vocabulary and their ability to use that vocabulary do not directly effect reading comprehension, speed, or text inference. Results also indicated that working memory was related to comprehension while a more passive working memory related to reading speed. In other words, reading speed is achieved through practice thus passive working memory refers to the reader's ability to recall (on sight) the word and it's meaning.

Additionally, Morrongiello and Roes (1990) tested children's memory for new songs in order to find out if there is integration or independent storage of words and

tunes. Twenty children and twenty adults were presented with three novel tunes containing rhyming and a second condition of three novel tunes with non-rhyming text. On subsequent trials subjects were asked to determine if the new song they heard was exactly the same, somewhat the same, or not at all the same as one from the original group. In each group subjects were more likely to remember the exact pairing of text and tune rather than to retain the components independently. There were no significant effects of rhyme on either of the groups

Speed. Berninger et al (2002) compared faster and slower responders to early intervention in reading from first through fourth grade. This longitudinal study indicated that slower responders tended to be much further behind the mean (in reading skills) than faster-responding peers. They concluded that phonological awareness and decoding might be helpful strategies for increasing the gains of the slow responders.

McClure, Ferreira, and Bisanz (1996) studied children's ability to segment words by syllable depending on what grade they were in and the speed of presentation. Children in Kindergarten, first and second grades were asked to blend words comprised of 2 consonants, followed by a vowel, and finishing with a consonant (C-C-V-C). Children performed increasingly better on the task with each grade level and all children performed best with words that were broken into onset-rimes, as opposed to the those that were broken down into individual phonemes. Children also performed better when the words were presented at a fast rate. Based on these findings, the researchers suggest that focusing on onset-rime combinations in early literacy instruction will assist children in becoming more efficient decoders.

Knowledge and Transfer. Generalization or transfer of learning from one task to the next or across domains is discussed frequently in the literature. Meacham (2001) discusses principles of learning as they are related to the theories of Vygotsky, the socio-cultural theorist. According to Meacham, students reach a "consciousness" when they start to see one concept among many. This applies directly to the progression of skills and knowledge that are required when children learn to read.

In their discussion of transfer, Alexander & Murphy (1998) outline subject-matter knowledge, general cognitive and meta-cognitive strategies, individual motivation and interest as the "seeds of transfer". Referring in abstract to a topic versus teaching and instructional enabling (not providing sufficient challenge to students) are cited as instructional barriers. While this article focuses on these aspects as they are related to higher education, it is important to recognize the relevance that these findings have to educating young children.

Benson, Lovett and Kroeber (1997) conducted a study that investigated training and transfer of learning effects in disabled and normal readers. Results are summarized for two experiments conducted on remedial readers, age 7 to 9. Students participated in reading and non-reading (music) acquisition paradigms. Normal readers of the same age, having received the same instruction, were able to transfer their "rule" knowledge across both paradigms, while deficient readers were only able to apply rules across the music paradigm. Disabled readers had deficits in their ability to transfer information to learning printed language after learning symbol-note correlations in the non-reading paradigm.

Neuman (2001) spoke specifically about the role of knowledge in early literacy. Knowledge, in this case, is defined as the role that information, beliefs, and rules in specific domains play in learning and retaining literacy skills. Neuman maintains that teachers do not teach enough knowledge in early literacy instruction. The case for a holistic approach that incorporates process and comprehensive content is supported in order to ensure knowledge acquisition in early literacy. The whole language learning environment is the perfect example of the comprehensive nature of teaching children to value and appreciate literacy.

Research literature on transfer learning in children indicates that students who are exposed to learning environments that include "guided discovery", as opposed to direct instruction only, have a more positive sense of learning goals and values with less emphasis on extrinsic goals. Additionally, students are more effective at communicating the strategies and information that they have learned and applying it to other situations. By

providing clear instruction and practice in relating various concepts students become more proficient in making cross-curricular connections (Basile, 2000; Crowley & Siegler, 1999; Muthukrishna & Borkowski, 1995).

Screening, assessment and intervention. Screening and assessment of early literacy behaviors is often controversial and difficult. Likewise, providing interventions for at-risk learners can be hit-or-miss. Documenting both success and breakdown in instruments and programs helps to forge a path of developmentally appropriate services that benefit children and focus efforts in helping them to acquire the skills they need to read successfully.

Assessment of phonemic awareness skills in school-age children is currently being used to help identify students that may be at-risk for reading failure as well as to try and establish specific phonological difficulties of children that are reading disabled. While this is currently an area of research interest, previous studies have yielded a high instance of false-positive results. Proper prediction (for example: of an at-risk group) should include data that indicates true positive/negative results. In order to provide students with the help they need, screening instruments must be both accurate and norm-referenced. Screening tools are typically deficient in the practicality of their use or in the accuracy of their assessment. Because of poor screening tools and an overall lack of efficacy most educational models support some sort of "testing" when a student enters a program in order to create a baseline for measuring future progress (Torgeson, 1998; Singleton, 1997).

Another problem that is frequently encountered in the effort to teach literacy skills is the gap between research findings and classroom practice. Lasting change is based on several factors: teacher satisfaction and comfortability, the establishment of a relationship between the teachers and researchers, and increased participation and "investment" in the project by personnel. The provision of professional development resources, consultation, collaboration and partnerships yielded successful implementation of teachers research-

validated practices as well as promoting additional research in the Juniper Gardens Children's Project (Abbott, Walton, Tapia & Greenwood, 1999).

Positive implementation experiences for teachers result in innovative practices and enriched students experiences. This type of positive learning environment is not only supportive for typically developing students but may be the key to keeping the struggling student interested and invested in working towards remediating learning deficiencies. One example includes the use of "word boxes" (a series of boxes lined up next to one another so that each phoneme is placed in its own box and words are "built" by sequencing boxes in the correct order) to help students learn to identify and spell words. Joseph (1999) found that the use of word boxes gave students a method of decoding words that improved and maintained student word identification and spelling over time and transferred to reading words in the context of a paragraph or story.

While most of the research literature reflects cases where students respond favorably to interventions, Al Otaiba (2001) investigated what happens when children do not respond to early literacy instruction. This longitudinal study followed students across Kindergarten and first grade and found that about 7% of students were unresponsive. This rate was low compared to previous findings and was attributed in this study to peer-mediated approaches. Characteristics of unresponsive students included slow letter naming, poor verbal ability and phonological memory and poor attention span. Additionally, 92% of students that were unresponsive in Kindergarten remained so in the first grade. Therefore, students who do not respond in Kindergarten may need more intensive, individualized instruction in subsequent years.

Kaderavek and Justice (2000) reiterate the efficacy of techniques used in fostering emergent literacy that are typically implemented with young children by making them age-appropriate in order to help older learning disabled students. Techniques included facilitating oral narratives, using art and music to support literacy experiences, providing classroom reading and writing centers and increasing print exposure. Providing positive, engaging literacy experiences that focus on other strengths that the struggling student may

possess (creativity in story telling, art or music) entices them to pursue literacy through another medium, and promotes their success.

In one study, a partnership linking University School Personnel with classroom teachers was developed to improve reading outcomes for at-risk English learners. Students (N=335) and 17 first and second grade teachers participated in the study. Both quantitative and qualitative measures were taken over the course of the school year. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) was used to assess student reading in phonological awareness, alphabetic principle, and fluency with connected text. Data sources from teachers included monthly logs, focus group interviews and field notes from observations. Generally students' scores reflected upward growth on all measures. However, many students were still performing below established expectations. Therefore, intervention for at-risk early literacy learning students should be a top priority (not a peripheral service). Teachers reported widespread changes in how they thought about at-risk students. Teacher logs did not depict widespread implementation of activities yet teachers reported perceived intervention success at the year-end focus groups. Teachers found hands-on practice to be the most beneficial in implementing change (Haager & Windmueller, 2001).

The Basic Reading Inventory (Johns, 1988) is used to assess a student's independent and instructional reading levels, as well as their frustration level. Additionally, an individual's strengths and weaknesses in word identification and comprehension are measured. A final component of this tool can be used as a post-test to assess overall growth as well as an assessment of a child's "listening level" or receptive comprehension. This tool is designed to further assess potential areas of difficulty or areas of excellence for students who have very high or low scores on standardized tests.

In looking at various means of assessment to track the progress and the needs of young children Salinger and Chittenden (1994) suggest the creation of an early literacy portfolio. This portfolio should contain a child's writing samples, story telling or oral representation of ideas, and invented spelling activity, self-portraits, other relevant

drawings with writing, and parent or student interviews. This documentation helps to track student progress within instructional components and provides a comprehensive look at a child's emergent literacy. Keeping a portfolio can be time consuming and records must be well kept in order for this assessment to function.

Time and detail seem to be common issues when looking at the efficacy of programs and assessment. Everyone brings unique perspective to the classroom so finding uniformity can be difficult. Roe and Vukelich (2001) outline the challenges in implementing an *AmericaReads* program. There is often a discrepancy between what is planned for tutoring sessions and what is actually accomplished. Variations across the program are inevitable due to a broad age range of the children. Lack of tutor reliability is a continuous struggle because of various ages and experiences of the tutors and differences in program training. Additionally, appropriate materials are not always available and tutors are not always equipped with a broad enough repertoire of strategies to help students overcome challenges. Difficulties described here are certainly not unique to this program. Classroom teachers face similar challenges on a daily basis. Utilizing creative strategies and professional resources may help remediate some of these problems while also facilitating personal and professional growth for tutors or teachers.

Furthermore, providing adequate assessment resources will help streamline the process of identifying children that are most in need of help. Elliot, Lee and Tollefson (2001) investigated the reliability and validity of the modified dynamic indicators of basic early literacy skills (DIBELS-M). The various sub-scales of the DIBELS-M measure letter naming fluency, initial sound fluency, initial phoneme ability and phonemic segmentation ability. Results of this study indicated that the DIBELS-M is an appropriate measure for identifying Kindergarten students that are at-risk for reading failure and would benefit from progress monitoring.

In addition to early literacy support provided in educational settings, research indicates that a child's home environment contributes to early reading achievement and later school success. Project EASE provided parent coaching and modeled effective

language interaction between the parent and the child. Measures of efficacy for this study included a parent survey, child outcomes, Peabody Picture Vocabulary Test-Revised, and Comprehensive Assessment Program sub-tests. Increased scores on the CAP vocabulary test and increased language scores resulted from the intervention. Parents reported that they enjoyed participating in the program. Limitations of this study included the vast number of monetary and staff resources required to implement the program (Jordan, Snow & Porche, 2000).

In a five-year longitudinal study that investigated parental involvement in the development of children's reading skill, Senechal and Lefevre's (2002) results indicated exposure to books was related to children's development of vocabulary and listening comprehension skills. Early literacy skills directly predicted word reading at the end of first grade and predicted reading comprehension in third grade. Early experiences in literacy that are reinforced at home have far reaching benefits for young children.

Many different techniques have been discussed that may be effective in helping develop children's literacy skills. Other considerations are the roles that teachers, parents and other caregivers play in supporting the child's learning environment. Moreover, the way that we screen and assess children can impact educational choices and ultimately, the child's development.

Despite various findings in the literature available a few common themes emerge. Phonemic awareness and letter recognition are vital pieces in literacy development of young children (Torgeson & Mathes; 1998). Other factors that contribute or predict a child's early reading successes are speed and memory. Early screening is not always possible or effective but continuing assessment of a child's progress ensures that intervention can occur as needed. Literacy education is arguably the most important task to be carried out by classroom teachers. By providing supplemental instructional support (via materials and reading specialists) when necessary, we ensure the success of all students (Mathes & Torgeson, 1998).

Teacher Issues

Knowledge, Training and Perception

In order to gain greater understanding of how to reach students, researchers have investigated the perceptions and knowledge of both pre-service and in-service teachers about early literacy instruction. Cantrell (1999) investigated the efficacy of teachers in Kentucky in the wake of educational reform. Teachers implemented comprehensive literacy programs that were meaning-centered (as opposed to traditional instruction). Through reading aloud, independent reading time, journal writing and response to critical thinking questions students excelled in literacy testing. These strategies, combined with specific skill instruction and practice (memorizing spelling lists and practicing grammar outside of writing exercises), created a balanced learning environment for students to master skills.

Marley (1995) investigated the beliefs, knowledge bases and early literacy assessment practices of early childhood educators. Educators fell into one of two philosophical categories, reading readiness or whole language. In comparing teachers' theoretical orientation, Marley found that there was no statistically significant difference between the knowledge base of either ideology or in classroom practices. While participants were convicted in their belief system most educators shifted toward emergent literacy practices.

When teachers are able to strike a balance of instructional methods that facilitate learning for students with various abilities teacher-student rapport is formed. This rapport as well as teachers' knowledge and perceptions regarding their influence on students' learning tends to change as they gain experience. In one study that compared pre-service and in-service teachers, results indicated that in-service teachers were more knowledgeable about language structure than pre-service teachers while neither group scored high on assessment. Both groups of teachers indicated that holistic instruction was important to the children's literacy development, however, there was a gap in this

perception and the level of preparation teachers felt they had received to adequately teach phonemic awareness and phonics (Mather, Bos & Babur, 2001).

Kowalski, Pretti-Frontczak, and Johnson (2001) asked preschool teachers to indicate their beliefs concerning what skills were most important for young children to learn. Teachers responded (n=470) that social-emotional growth items were more important than language and literacy and early math items. While these findings may indicate why there is frequently a gap in knowledge of incoming Kindergartners, it is also an indication that teachers recognize the importance of social-emotional growth during this developmental period. Grouping literacy learning with activities that also foster academic learning would allow children to grow across all developmental domains.

Additionally, a teacher's ability to promote engaged reading early on in literacy learning begins the intrinsic motivation that is present in skilled, avid readers. Engaged reading is "when [students] read frequently for interest, enjoyment and learning, [where] the investment of time is rewarded by the experience of immersion in the text itself." These students are able to seek out knowledge, make relevant transfers and employ cognitive strategies to achieve comprehension (Baker, Dreher & Guthrie, 2000, p.2).

In order to set children up for success we must provide teachers with adequate training and resources. Teachers' attitudes and perceptions about literacy learning affect those of the students when learning how to read. Providing teachers with strategies that they are trained to implement increases the chances of student success.

Collaboration and Resources

When teachers, parents and other classroom personnel model cooperative behaviors that are inherent in collaboration, children learn to work cooperatively with both peers and mentors. This cooperative environment is fostered in the early childhood classroom as students work in centers and learn to play and interact with their peers. In a longitudinal study that examined the predictability of work-related skills to academic outcomes, 540 students were followed from the beginning of Kindergarten to the end of

the second grade. Learning related social skills such as interpersonal and work-related skills were linked to academic achievement. "Children with poor work-related skills performed significantly worse on all academic measures compared to children in the overall sample at the fall of kindergarten and the end of second grade." Appropriate socialization of children by family and childcare providers prior to the entrance into kindergarten may have both academic and social benefits for the child (McClelland, Morrison, & Holmes, 2000).

Yaden and Tam (2000) conducted a four-year longitudinal study that capitalized on teacher-researcher collaboration. Findings highlight the differences of opinion and priorities in delivery and implementation of the intervention. A true collaborative effort was made on the part of the teachers and the researchers in order to agree on a method that both parties felt comfortable with and that was child-centered.

The Reading Instructional Methods of Efficacy (RIME) project was developed to provide collaborative opportunities between universities and elementary schools. Four themes that emerged during the two-year project included focus on explicit instruction, integration of new information into teaching practice, adaptation to student needs and development and challenges to implementation. Each theme was measured or tracked with a descriptive instrument or technique. Observations and surveys indicate professional growth in each of the four areas as well as effective problem solving due, by and large, to the collaborative component (Bos, Mather, Silver-Paciulla, & Narr, 2000).

Many aspects of the learning environment create reciprocal effects. An environment that models positive peer interactions and provides adequate resources for play tends to evoke rich language experiences. Children are then engaged in talking to, and playing with, one another and the cycle of growth and meaningful learning experiences begins (Morrow & Tracey, 1997). As previously discussed, a print-rich environment contributes to language use and socialization through learning experiences and sharing ideas.

Stone and Twardosz (2000) investigated the quality, accessibility, and reasons for teachers' choices of children's books in child care classrooms. Following interviews, questionnaires, book list analyzation, and observation of 21 early childhood teachers, it was determined that most teachers selected books they read out loud for specific purposes. However, books that were made available for children to read in the classroom were not considered as high in quality. Problems cited included available monetary resources, teacher education and support.

Teachers face a wide variety of challenges today. Limited monetary and professional resources, large class size, and poor administrative support all contribute to teacher "burnout". Collaboration and innovative programs foster creativity, excitement and a forum for sharing and implementing new ideas and techniques. Ultimately, both students and their families reap the benefits of teacher satisfaction.

Literacy and the Home Environment

A child's home environment has the greatest sphere of influence in building a communication repertoire. As the definition of a family system and the way that these various systems function and communicate have changed over the years, so have the needs of the children entering formal educational institutions. Of the many external factors that influence a child's communication, verbal communication between parents or caregivers and children were discussed briefly in an earlier portion of this work. Other factors controlled by the parent or caregiver that may play a significant role in shaping a child's perception and experience include exposure to mass media, cultural background and socio-economic status.

Television programming is part of most American households and the average American child spends three to five hours watching television per day (U.S. Department of Education, 2002; University of Maine Cooperative Extension). In an effort to assess the effect of a widely known, popular show, Wolfe and Stambaugh (1993) conducted a

descriptive study analyzing 21, 1-hour Sesame Street programs. This study sought to classify and categorize the various ways that music was used in this television production. Results indicated that 71% of the segments utilized music, five segments per program taught academic skills, and three taught social skills. The majority of songs were sung by male voices and tempi were upbeat and lively.

Subsequently, Wolfe and Jellison (1995) interviewed children after having them watch a musical video segment with Sesame Street puppets or animated figures singing songs that "taught a message." Answers given by children in this study were most accurate and appropriate when questions were specific and addressed explicit information from the videos. Few children were able to make meaningful transfer from the video to themselves. However, children were able to more effectively answer the questions about the upbeat, colorful video.

There is a body of research that indicates that children from low-income families have a greater risk of reading difficulties, letter knowledge, language development, and phonological sensitivity (Dubow & Ippolito, 1994; Griffith & Gough, 1986; Smith & Dixon, 1995 as cited in Lonigan, 1999). Rush (1999) found a correlation between caregiver-child interactions, home environment and early literacy and language development of preschool children from low-income environments. Children who were engaged in frequent language interactions and literacy-related activities developed more advanced literacy skills than peers that had not had the same home and school experiences. In 1999, Lonigan found a correlation between emergent literacy skills and behavior problems prior to formal schooling regardless of whether children were from low or middle income families. Moreover, "this relation was not due to factors associated with general cognitive abilities." In other words, children who have difficulty staying on-task are frequently deficient in emergent literacy skills as well. These problems may contribute to difficulty in developing skilled reading.

Scott and Marcus (2001) discuss similar issues of the home-school connection as they are related to the African American community. They outline and define

discontinuities between home and school that present a unique challenge to African Americans, as well as other “non-mainstream” groups. They cite a gap in language structure and function and the way that literacy functions in the home and school environments as part of the problem in providing child-centered, effective literacy instruction. In essence, a greater effort must be made to create a dialogue between the home and school with accommodation for “meeting” the child where they are. Recognition of the roles that home, cultural and social environments play in the indirect education of children fine-tunes our understanding of a child’s experience and influences that have shaped their awareness prior to their formal education.

The home environment is the primary sphere of influence for children prior to entering school. Many children begin their “formal” education in Kindergarten and therefore come from a wide variety of environments and experiences. Factors such as parent/caregiver-child interaction, exposure to media and print, and parent/caregiver education all play a role in building a child’s communication system. The transition to the school environment must include a communication system between those in the home environment and the teacher(s) in order to maximize the child’s learning.

Arts and Literacy

According to the National Association for the Education of Young Children (1997), art, drama, dance and music are sometimes the “explicit focus” of a child’s learning experience and are also part of an integrated curriculum. The creative process inherent in participation in an arts experience facilitates growth at any developmental stage. The arts are play-based in nature, allowing children to interact with one another and with their environment. In addition to the emotional expression fostered in various arts activities, interaction with diverse materials supports fundamental growth.

Movement and music help children define personal boundaries and capabilities while fostering gross motor skills. Drawing is a means of communicating a message

through a symbol system that is child-centered, giving the child a "voice" and a frame of reference for learning the communication modes of reading and writing (Varnon, 1997). Creating and presenting materials and performances are individual but inter-related goals to facilitate student learning using the arts. Looking at criticisms and aesthetics as well as past and present contexts helps children to develop creativity and critical thinking skills (McPherson, 1995).

Krechevsky and Malkus (1997) discuss another means of evaluating children's progress through the arts. The Spectrum assessment framework is based on Howard Gardner's theory of multiple-intelligence, as well as David Feldman's theory of non-universal development. This assessment is designed to be comprehensive and evaluates a broad range of abilities, including those based in the arts. The seven areas of evaluation include: Movement, language, mathematics, science, socialization, visual arts and music. Assessments are based on both structured and unstructured classroom experiences.

Pellegrini (1997) believes that trust, modeling and mutual reinforcement are important aspects of close relationships which effect children's development. Through dramatic play children develop more sophisticated language and communication. However, research that examines these particular issues is virtually exiguous. Studies that pinpoint specific conditions that foster such cooperative and interactive play are needed.

Broad impact of the arts on students' behaviors, attitudes and academic performance include: (1) development of self-discipline, imagination and creativity, (2) willingness to work toward long-term goals, (3) increased concentration and focus, (4) improved divergent thinking and problem solving, (5) increased self-esteem, and (6) increased affective capacity, particularly empathy and compassion. Music, like literacy, is a fundamental form of communication. Integration of the arts with other academic disciplines provides a more comprehensive, multi-sensory learning experience (Heymsfeld, 1997, Hitz, 1987).

Music Experiences in Early Childhood

"When the art of play and the art of music merge to form a unique pathway to learning, music can enrich a child's experiences in countless ways "(Palmer, 1993).

Research literature supports musical participation as a means of rousing other brain functions and a vehicle by which other non-musical information is transported (Gates, 2000) Music is fun and supports all developmental levels. Children are able to play out roles, practice and master gross and fine motor tasks, develop social roles and awareness, explore affective responses and expand creativity while building on their innate musical abilities (van der Linde, 1999).

The use of music to facilitate this growth is, in its very nature, developmentally appropriate. Children learn by doing, being immersed in an experience. Musical exploration lends itself to child-centered learning through planned and spontaneous activities (Andress & Walker, 1992). By incorporating music throughout children's daily routines as well as in center experiences, we as teachers, are modeling that music is a valid and valuable part of our lives as well as an effective communication medium (Tower, Davis & Parker, 1989; Calogero, 2002).

In order to gain increased understanding of the effects of music on the lives and education of young children, it is important to assess the means by which we are attempting to expose them to music. Standley and Hughes (1996) documented the developmentally appropriate objectives and benefits of music therapy in an early intervention program. Early intervention, group music therapy sessions were video-taped and observed for session content, teacher-aide interactions, student participation, group attentiveness and individual success. Results of this study indicated that 92.5-93% of the music activities used were instructional and students responses were 94.5% in group 1 and 92% correct in group 2. Mean percent of on-task behavior ranged from 96-97.5%. The lesson plans used reflected other curriculum areas that were addressed via live music experiences.

Humpal (1990) discusses the implications for music therapy in the early intervention classroom. Music can be used as an intervention strategy for children experiencing delays in communication and language development. The use of music in individual and group settings to enhance communication and group dynamics is supported throughout the literature. Music allows children to gain essential skills and knowledge while interacting appropriately with their peers and children are motivated to participate because they perceive the activities as fun and play-based (Camillieri, 2000).

One of the primary challenges of music in the early childhood setting is the availability and the quality of services made available to children. Early childhood teachers often have limited education with little or no training in music. While teachers recognize the benefits that music experiences provide children, they feel uncomfortable implementing music in their classroom (Gharavi, 1993; Register, 2001).

Research in Reading and Music

The use of music to convey or teach specific, non-music information is not a new idea. Tucker (1979) provides a summary of early writings published between 1916 and 1979 that support the potential relationship between music and reading. Common principles cited in each of these articles include active participation in preference to passive participation, use of materials that have a purpose, and each discipline requires repetitive practice. Transfer learning is enhanced if the opportunity is provided to apply principles of each domain to a variety of tasks, and learning is enhanced when the conditions are kind to the personality adjustment and social growth of the learner. There are no references to the links between music reading and literary reading as reflected in current literature.

Songwriting, coupled with the Language Experience Approach, is cited in music therapy literature as an effective tool to assist remedial readers in acquiring more advanced skills. This program utilizes a 10-step process where children identify and talk about a selected topic, establish a reason for writing a song and create the song. Advantages and

disadvantages are discussed but the program has not formally collected data in order to measure efficacy (Gfeller, 1987)

In a post-hoc study, Harding (1989) found a strong relationship between language development and early music experiences of second grade students in a public school setting. Total reading, expressive language, and spelling scores “showed a significant relationship at the .01 level” with musical experience. Because of the spontaneous nature of children to engage in activities that are rhythmic and that include music, making music is an ideal tool for teaching facets of language such as speaking, listening, reading, and writing (Kolb, 1996). Likewise, Brown and Brown (1997) describe specific applications of music to teach literacy concepts. Techniques include lyric charts, pocket charts with sentence strips, picture books of songs, dramatic experience, beat competency active listening, music and lyric writing, and counting music.

There is no shortage of articles that outline specific music experiences and activities that support early literacy components. Areas such as concepts of print, sense of story and sequence, phonemic awareness and phonics, background knowledge and vocabulary of a given subject, basic spelling patterns and early writing activities are easily incorporated in music experiences. Opportunities for collaboration among individuals from various professions, such as music and early childhood, are encouraged but are not frequently discussed in research-based literature.

While the summarization and comparison of skills required for both literary reading and music reading make music and reading a natural fit, there is not yet a significant amount of evidence to glean why or how this transfer of learning may occur (Butzlaff, 2000; Burton, Horowitz, & Abeles, 2000). Parallel skills in music and reading include phonological awareness, phonemic awareness, sight identification, orthographic awareness, cueing systems awareness, and fluency. There are preliminary studies that correlate children's ability to read with their ability to discriminate pitches accurately (Fisher & McDonald, 2001; Hansen & Bernstorff, 2002). Additionally, Anvari, Trainor,

Woodside and Levy (2002) found significant correlations between music skills, phonological awareness and reading development of 4- and 5-year-old children.

Cutietta (1995, 1996) compiled the work of several doctoral dissertations that support the need for further research regarding the music, reading and language connection. The studies summarized by Cutietta reported significant growth but studies were limited in scope and size. However, results indicated that participants had better discrimination for perceiving language, clearer articulation and were able to make positive transfers from music skills to the development of language and reading skills. Likewise, Braithwaite and Sigafoos (1998) had similar findings in their study of music use to facilitate oral communication. Children had higher percentages of appropriate communication responses during the musical antecedent condition than during the non-music treatment. Results support the embedding of communication opportunities within a musical experience in order to increase appropriate communication responses of children with developmental disabilities or delays.

Colwell (1988) tested the effects of music and non-music groups to determine the effect of music paired with a beginning phonics program on the reading readiness program of pre-school and Kindergarten children. No significant difference was found in the order that letters were taught. However, there was a significant difference in scores of those letters that were taught and the ones that were not taught with music. The highest percentage increase of scores was on alphabet recognition, same-different auditory discrimination and in areas that did not require letter identification from phonic sound. There were also significant differences in pre- to post-test scores for both groups but no difference between music and non-music groups.

Feeman (1988) investigated the effects of teaching academic material through song use compared with a lecture format. The researcher controlled for male versus female instructors and peer tutors were provided to one group. Treatment took place twice a week for four weeks and students were post-tested three weeks after the last intervention. Results indicated significant gains in the experimental group scores over the control

groups' scores. Learning was significantly enhanced by the use of academic songs when taught by an adult (as opposed to the peer tutor) and was not affected by gender.

Additionally, Madsen (1991) also found that music enhanced new word learning and the child's ability to transfer the words learned. Sixty subjects were divided into 3 treatment groups. Group 1 used music-gesture for learning new words, group 2 used gesture only and group 3 served as the control group. Groups were then taught eight nonsense words. During post-testing students were asked to recall the nonsense words, as well as perform a transfer task using the nonsense words. The number of words learned in the music-gesture treatment was greater than that of the gesture-only group. Furthermore, students in the music-gesture group were able to transfer a greater number of words into a different context. The music may have added contextual clues and/or served as reinforcement. Additionally, those students in the music gesture treatment group exhibited higher on-task behavior.

In addition to the engaging nature of music, there is evidence to support the need for high teacher affect in order to entice students to participate more fully. Sims (1985) found that high teacher affect was associated with higher levels of group attending behavior and that active listening activities elicited higher on-task behavior. There were no significant effects of affect and active listening on piece familiarity, time spent listening or piece recognition. Outcomes led to three conclusions: Teachers who actively attend to the children have students that attend to the music, active listening promotes increased student involvement, and young children may be capable of more sophisticated responses to music than generally assumed.

Wolfe and Horn (1993) conducted a study that included 21 5-year-old children who learned six phone numbers; four were incorporated with musical phrases and two that were spoken. Music was also used as a contingency for some subjects. Results indicated that the mean number of trials it took for students to learn numbers with a familiar melody was significantly less than with the spoken or unfamiliar melody. There was no statistically significant difference between trials with and without contingent music.

In an effort to quantify the therapeutic applications of music in the whole language Kindergarten, a study by Colwell (1994) divided students into 3 groups (9 students per group) and provided three different treatments. Conditions included song rehearsal of text set to music, spoken and song rehearsal of text set to music and spoken rehearsal only. Subjects were videotaped and analyzed for word substitutions and omissions to calculate percentage read correctly. Song rehearsal of text and spoken/song rehearsal facilitated greater accuracy.

Dugan (1996) tested the use of music to teach logo-identification, pre-reading skills and letter-identification to 14 children in an early intervention program. There were no significant differences between material learned through the two treatment conditions, music and non-music. However, there were significant differences in the pre- and post-test results of the two dependent measures taught through music (logo identification and print concepts) and the one taught non-musically (logo identification). Minimal changes in the on-off task behavior indicate that children were more on-task during the music condition.

In a similar study, Clouser (2001) studied the effect of music on story comprehension, vocabulary and attitude towards reading. Fifty preschool children were divided into control and experimental groups and each group received 16 sessions of music therapy. The control group listened to books read aloud and the experimental group listened to books set to music. Results indicated a statistically significant difference between control and experimental scores on children's attitudes about reading indicating that children in the group that received music indicated a more positive attitude about reading. Scores on vocabulary and comprehension measures increased, but were not significant.

Standley and Hughes (1997) investigated the effects of an early intervention music curriculum on the pre-reading and writing skills of 4-year-olds in an early intervention classroom. Dependent measures included Print Awareness Test for Logos, the Print Concept Checklist, and the Developmental Writing and Language Skills checklist. Participants were pre-tested, post-tested at the end of the first semester and post-tested

again at the end of the second semester. Results indicated that music enhanced print concepts and pre-writing skills of subjects and that the children were excited about participating in the activities.

In a follow up study, Register (2001) substantiated the findings of Standley and Hughes. Additionally, general music sessions with a variety of activities that did not specifically address an academic goal were compared to music sessions designed to address literacy goals. Results indicated the need for music sessions designed with specific academic measures in mind in order to affect increased gains in student measures.

Though the literature is sparse there is certainly preliminary evidence to suggest that music has influence on children's learning of other academic material. Current findings indicate that there are similar skills employed for both music and word reading. Several studies indicate that is music paired with academic material is beneficial in helping students recall information. Music is a proven communication medium that warrants further investigation in order to determine more specific effects as well as the type and amount of music necessary to effect lasting change.

Research on the “Between the Lions” television show

With its engaging character and melodic tunes, the children's television show “Between the Lions” incorporates music, stories and puppetry in order to teach early literacy skills to young children. Target audiences range from four to seven years of age and curriculum components include the purposes of reading (for pleasure or information), understanding print awareness concepts, knowledge of alphabet and high-frequency words, and understanding the nature and structure of various texts. Each thirty-minute episode incorporates both holistic and skills-based approaches. A study was conducted with 164 Kindergarten and first-grade children to assess the effects of the show on the emergent literacy skills of the children. Students were pre-tested and assigned to control or experimental groups using stratified sampling to ensure that all groups were starting at the same level. Students in the experimental group viewed a one-half hour episode of the

program each for seventeen consecutive school days. Children in both the experimental and control conditions were tested after viewing 8 episodes and tested again after 17 episodes.

Measures for this study included learning outcomes that were related to specific program content, the commercially published Test of Early Reading Ability-3rd edition (TERA-3) and the Dynamic Indicator's of Basic Early Literacy Skills (DIBELS). Additionally teachers were asked to report frequency of media behaviors in the classroom both before and after the study. Results indicated that Kindergartners that watched the show significantly outperformed non-viewing peers on the program-specific content measures, as well as on letter naming, phonemic awareness, and letter-sound correspondence. Parents of Kindergarten children reported that students who watched the show spent more time writing letters, stories and notes and made more frequent trips to the library and bookstore after the viewing phase ended. Teachers reported that first-grade students who watched "Between the Lions" spent more time writing during their free time at school after the viewing phase was complete (Linebarger, 2000).

Results of this study indicated growth across most of the outcome measures. However, participants were primarily European American (81%) and from middle to upper-class families enrolled in private education programs. Parents of the participants had, on average, 13.7 years of education. The demographics reflected in this study are not characteristic of most public education programs.

Two studies were conducted by Mississippi State University (2002) testing the same program, "Between the Lions", in low socio-economic communities in rural Mississippi. These studies investigated the acquisition of early learning skills of English-speaking children as well as children who were learning to speak English as a second language.

The first study took place in the Mississippi Delta with pre-Kindergarten children attending public education programs. The experimental group (n=40) consisted primarily of students from low-income families (32 of 40 students). The control group (n=29)

consisted of 14 children from centers that serve medium to high income families and 15 from centers that serve low income families. As with the initial study, children were pre-tested on the TERA-3, the Peabody Picture Vocabulary Test (PPVT) and the DIBELS. Following pre-testing, children in the experimental group viewed at least two episodes a week, read a book related to the episode and completed a hands-on activity related to the episode. Treatment occurred over 7 months (October 1– April 30). At the conclusion of the treatment period children were post-tested using the same three measures as the pre-test

The second study utilized the same measures and procedures but was conducted on the Choctaw Indian Reservation. Subjects included 4-year-old children attending a Head Start program (n=45 experimental, n=48 control), and Kindergarten (n=50 experimental, n=51 control) and first grade children (n=50 experimental, n=52 control).

Results of the Mississippi Delta study indicated that there were no significant differences between the control and experimental groups. However, students that watched episodes regularly outperformed peers in the control group on the Alphabet sub-test of the TERA-3. On the Initial Sounds Fluency portion of the DIBELS, children in the experimental group started out significantly lower than the control group. By the end of the study the experimental group out-performed the control group. Though results were not as “dramatic and pervasive” as in the original study, it appears that “Between the Lions” may be a meaningful, enriching addition to the literacy learning environment.

Results of the Choctaw sample indicated that those in the experimental condition outperformed the control group on the TERA-3 composite raw score. There were no other statistically significant differences on any of the remaining measures between the experimental and control groups but were some age effects across groups.

The inconsistencies across the studies conducted using the “Between the Lions” program raises questions about the efficacy of the show across time and with various groups of children.

Purpose

The purpose of this study is to examine the effects of a music therapy program designed to teach reading skills versus the “Between the Lions” television show on the early literacy behaviors of Kindergarten children from a low socio-economic background. Music only and video only group literacy scores will be compared with those in a combined music/video condition and those that received no treatment. Null hypotheses for this study include:

H = There will be no significant difference in teacher perceptions of student’s pre-reading/early literacy behaviors will change from pre- to post-testing.

H = There will be no significant difference in student’s scores on the Dynamic Indicator’s of Basic Early Literacy Skills (DIBELS) tests and the Test of Early Reading Ability-3rd edition (TERA-3) among groups from pre- to post test.

H = There will be no significant difference in experimental children’s off-task behavior by treatment condition.

CHAPTER 3

EXPERIMENT

Method

Subjects

Subjects (n=86) were children, aged 5-7 years, enrolled in one of four different Kindergarten classes at a public elementary school in Northwest Florida. Table 1 shows mean ages and ranges by group. Groups were relatively comparable in age with the control group being slightly older and more diverse in range. The Florida Department of Education “grades” all public schools annually. Grades are based on student performance data and are “designed to stimulate academic improvement and summarize information about school achievement” (Florida Department of Education, 2003). The school in which this study took place received a “C” during the 2001-2002 school year, meaning they met the minimum performing criteria in reading, writing and math for that year.

This TITLE I school receives federal funding under the *No Child Left Behind Act* for supplemental instruction. The Federal Act provides school-wide services because at least 50% of the students enrolled qualify for free or reduced lunch. Eligibility for free or reduced lunch is determined by family income level using the federal government poverty guidelines. Selection for the schools’ participation in the study was based on need and desire for innovative programs that will foster both academic and social growth and a need to test outcomes of previously researched methods with socio-economically disadvantaged children.

Table 1: Table of Means Age by Group

Group	N	Mean	Minimum	Maximum	Std. Deviation
Music/Video	23	5.5	5.1	6.0	2.5
Music	22	5.6	5.1	6.0	.3
Video	21	5.5	5.0	6.6	.4
Control	20	5.8	5.1	6.9	.5

Informed consent was obtained by the classroom teacher, a parent or guardian of the child and assent was obtained from each child as approved by the Florida State University Human Subjects Committee and the Leon County School Board (see Appendices A and B).

Parents were asked to provide information about their child's exposure to various print media and literacy behavior modeling in the home. The survey was distributed (via the student) a minimum of four times in an effort to increase the return rate. By the commencement of this study 68 of the 86 participants (77%) had returned a survey. Group 1 (music and video) had an 87% return rate, group 2 (music only) had a 72% return rate, group 3 (video only) had a 66% return rate and group 4 (control) had an 80% return rate. Percentages on all tables were calculated by group in order to recognize differences among the groups in home literacy environment. Percentages were calculated according to the number of persons that answered each question.

Table 2 reflects the percent of respondents that answered "yes" to the posted question. Less than half of the respondents in all groups receive the newspaper at home, own more than 25 books and/or own a dictionary. Likewise, less than half of the families reported that they own a computer or have cable television. Print and media resources appear to be limited based on the surveys returned. There is little consistency among the groups in exposure to print and media in the home.

Table 2: Subject's Exposure to Print in the Home

Survey Question	Grp. 1 Music/Video	Grp. 2 Music	Grp. 3 Video	Grp. 4 Control
Do you receive the newspaper at home?	40%	40%	35%	19%
Do you receive magazines regularly?	35%	33%	78%	86%
Are there more than 25 books in your home?	25%	0%	29%	0%
Is there a dictionary in your home?	15%	6%	14%	6%
Do you have a computer in the home?	55%	33%	36%	6%
Do you have cable television?	30%	26%	14%	20%

When asked about their child's knowledge of letters and sounds, the majority of parents and caregivers in this study indicated their children knew some or all of the letters and corresponding sounds (see Table 3). Responses were consistent with those of typically developing children during the first few months of the Kindergarten year.

Table 3: Knowledge of Letters and Sounds

Does your child know the letters of the alphabet?	1-Music/Video	2-Music	3-Video	4-Control
All of the letters	5%	46%	57%	61%
Some of the letters	38%	53%	43%	26%
None of the letters	12%	0%	0%	13%
Does your child know what sounds letters make?				
All of the sounds	15%	25%	29%	6%
Some of the sounds	60%	63%	57%	53%
None of the sounds	25%	12%	14%	40%

Again, there is little consistency among the groups of parent's perceptions of children's letter naming and phonemic awareness skills. Responses to the question "about how many children's books does your child have of his/her own" are in conflict with the previously asked question "are there more than 25 books in your home." Most respondents indicated that their child had access to, at the very least, 1-5 books in the home.

Table 4: Number of Children's Books Owned

	None	1-5	6-10	11-25	n>25	Unsure
1-Music/Video	0%	25%	25%	30%	15%	5%
2-Music	0%	13%	12%	31%	38%	6%
3-Video	7%	29%	14%	14%	29%	7%
4-Control	0%	14%	20%	20%	40%	6%

When asked to report on their child's attitude about being read to and about reading on their own, parents and caregivers indicated children express immense enjoyment from reading with someone else and on their own. All respondents indicated that their child enjoyed reading or being read to on some level-either "a lot" or "a little". No parent responded "not at all" to this question.

Table 5: Attitudes about Reading

My child likes being read to	A lot	A little
1-Music/Video	75%	25%
2-Music	93%	7%
3-Video	72%	28%
4-Control	80%	20%
My child likes to read (alone)		
1-Music/Video	84%	16%
2-Music	73%	27%
3-Video	78%	22%
4-Control	93%	7%

Research has shown that U.S. children watch 3-5 hours of television per day (U.S. Department of Education, 2002). Table 6 reports hours of television watched by subjects in this study and these data support the national trend..

Table 6: Hours of Television Watched

Each weekday	1-3 hours	4-6 hours	More than 6
1-Music/Video	40%	20%	40%
2-Music	86%	0%	14%
3-Video	64%	29%	7%
4-Control	33%	40%	27%
On the weekend			
1-Music/Video	26%	16%	58%
2-Music	50%	26%	24%
3-Video	49%	51%	0%
4-Control	13%	33%	54%

Percentages in Table 7 reflect the percentage of home behaviors for all subjects. Results indicated that 1/3 of the respondents did not use computers or videogames and only 1/3 of the parents or caregivers report that they have not taken their child to the library or bookstore. Based on the demographic data provided on the completed parent surveys, children in this study have very limited access to print resources and rich media interactions. However, parents and caregivers indicated that their children enjoy reading. Table 7 shows that children in this study frequently engaged in print-related activities such as writing notes, looking at books alone and having someone read to them. These results also indicate that parents/caregivers read to their children at least once a week.

Table 7: Frequency of behaviors fostered in the home

How often does your child....	Never	1x/mo or less	2-3x month	About 1x/wk	3-4x week	About 1x/day	Several x/day	Total % resp.
Look at books alone?	2%	0%	8%	10%	38%	14%	28%	73%
Ask you to read to them?	3%	3%	6%	15%	37%	26%	9%	75%
You or someone else read to your child?	0%	3%	3%	17%	39%	31%	6%	74%
You suggest that child read a book?	3%	0%	3%	19%	43%	13%	19%	73%
Go to the library or bookstore?	32%	28%	19%	13%	6%	0%	0%	75%
Write letters, notes, stories?	26%	9%	7%	11%	12%	15%	19%	75%
Read or look at magazines?	14%	6%	13%	27%	22%	9%	9%	74%
Use videogames?	31%	12%	9%	15%	12%	12%	8%	75%
Use computers?	32%	11%	14%	19%	9%	11%	3%	73%

Research Design

This study was a multi-sample, pre-post-test design. School administrators randomly assigned children to classrooms prior to the start of the school year, therefore each classroom served as an intact group in the study. Groups included 1) live music to teach emergent literacy skills, 2) televised episodes of *Between the Lions*, 3) live music and televised episodes of *Between the Lions*, and 4) a no-contact control group.

The study occurred in the beginning of the school year, between September and November. All pre-testing was completed within six consecutive school days prior to the start of music and video conditions. Teachers completed a pre-study assessment survey (see Appendix C) for each child and parent surveys (see Appendix D) were sent home with each child. Following the pre-testing period, treatment occurred over seventeen consecutive school days. Post-testing began on the Monday following the last treatment and was completed in six consecutive school days. Subjects in the study were required to complete both pre- and post-testing within the allotted time frame and to attend a minimum of 15 treatment sessions to be included in the study.

Dependent Measures

Measures of perceived student abilities included a pre- and post teacher assessment of student progress. Reading achievement measures included four tests from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) (see Appendix H). The DIBELS test is a widely-used, standardized measure designed for benchmark assessment as well as student progress. Portions utilized in this study include Letter Naming Fluency, Initial Sounds Fluency, Phonemic Segmentation Fluency and Nonsense Word Fluency. Each test is designed to be administered individually and timed (Good and Kaminski, 2001).

The Letter Naming Fluency portion of the DIBELS consists of a page of upper- and lower-case letters arranged in random order in 11 rows of 10 letters each. Subjects are asked to name as many letters as they can in one minute. Subjects are given one point per

letter for each letter named correctly. Alternate form, 1-month reliability for this measure is .88.

The Initial Sounds Fluency portion of the DIBELS is designed to assess a subject's ability to "recognize and produce the initial sound in an orally presented word." The test administrator points to each picture on the page (four per page) and states the name of the picture clearly and then asks the child four questions about the starting sounds of the words on that page. For example, "Which picture starts with the sound /k/?" There are four pages of pictures (sixteen questions) and students are given 1-point for each correct answer. The amount of time it takes for the subject to answer is recorded using a stopwatch. The total number of correct answers is then multiplied by sixty and divided by the total number of seconds that it took the child to answer all questions to calculate the "correct initial sounds per minute". Alternate form reliability for this measure is .72. Both the Letter Naming and Initial Sounds Fluency portions are developmentally appropriate for children during the early portion (fall) of the Kindergarten year and were given as pre- and post-measures.

The Phonemic Segmentation (PS) and Nonsense Word Fluency (NWF) were given as post-only measures as they are designed to be used later in the Kindergarten year. Phonemic segmentation is a timed test which requires subjects to listen to a word and then repeat the word back to the test administrator using the individual phonemes. For example, if the test administrator says "cup" the correct answer provided by the subject should be "/k/-/ŭ/- /p/". Students receive one point for each portion of the word that they say in the one-minute test period. Two-week, alternate form reliability for this measure is .88.

The Nonsense Word Fluency task tests a subject's ability to decode nonsense words using the correct phonemes. Subjects are given one-minute to sound out as many nonsense words as possible. One point is awarded for each correct sound read by the subject. One-month, alternate form reliability for this measure is .83.

The Test of Early Reading Ability-3rd edition (TERA-3) (see Appendix I) is a

commercially produced, standardized test that is designed to identify children that are performing significantly below their peers in reading development, to identify strengths and weaknesses in reading skills, and to document student progress. The TERA-3 is comprised of the Alphabet, Conventions and Meaning subtests. Each test is administered individually using either form A or form B and none of the subtests are timed. The scores of these three subtests are combined to form the Reading Quotient. This total score reflects the comprehensive early reading skills of the student (Reid, Hresko, & Hammill, 2001).

The Alphabet subtest consists of 29 questions that focus on the subject's ability to identify individual letters, ability to determine initial and final sounds of words and knowledge of sounds in printed words. All students started with question 1 and testing was stopped after three consecutive incorrect answers were given. Reliability for form A of the Alphabet subtest is .91 and is .90 for form B.

The Conventions subtest consists of 21 questions that focus on the subject's knowledge of book handling (where to start/stop reading on a page), print conventions (upper- and lower-case) and knowledge of capitalization and punctuation. All students started with question 1 and testing was stopped after three consecutive incorrect answers were given. Reliability for form A and B of the Conventions subtest is .83.

Finally, the Meaning subtest consists of 30 questions that focus on the subject's ability to glean information from the text. All students started with question 1 and testing was stopped after three consecutive incorrect answers were given. Reliability for form A and form B of the Meaning subtest is .90.

The DIBELS and the TERA-3 were administered prior to the beginning of the various treatment conditions. Because the county school system adopted the DIBELS as part of the core battery of tests, DIBELS pre-test measures were administered by county reading specialists and volunteers that attended an all-day training program. The researcher provided training for four research assistants consisting of administration procedures for both the DIBELS and the TERA-3, as well as teaching observation

procedures and establishing reliability among observers. Training was conducted prior to the start of the study and reliability was achieved among observers during practice observations. Reliability on observations was achieved by dividing the total number of agreements between observers by the sum of agreements and disagreements of each observer. Reliability was computed for 20% of the total number of sessions videotaped and equaled .88.

TERA-3 pre-test measures were administered by the researcher and the trained research assistants. Children were taken out of their classroom individually to a designated testing area (either the library or an empty classroom) to complete testing. Following pre-testing, groups were conducted daily for seventeen consecutive school days. Post-testing was conducted by trained research assistants.

Groups were conducted simultaneously (video being shown in one class while another class received music) therefore, video cameras were utilized in the three classrooms that received music and/or video sessions. Videotapes were used to record off-task student behavior and to ensure reliability among observers who watched the tapes. Observers collected off-task data on a specified observation form (see Appendix E) and used an audio tape to cue observing and recording behavior. Each observation interval lasted for 10-seconds and each record interval lasted for 5-seconds. Observers started the audio tape at the beginning of the session observation. The recorded voice said “observe”, followed by a 10-second pause and then said “record”, followed by a five-second pause. This tape was used for the duration of each observation in order to ensure accuracy among observers. Average percent off-task was computed for each session by dividing the number of students’ off-task in one (10-second) interval by the total number of students present for that same interval. Percentages for each interval were then added together and divided by the total number of intervals observed to obtain a mean percentage of group off-task

Procedures

Once consent was obtained from the school district and school administration, teachers were consulted about group selection and scheduling. Teachers were not assigned a treatment group but decided amongst themselves which of the four available treatment groups would best suit their teaching style/schedule. Groups were conducted mid-morning in each classroom. Group 1 (music and video) had music in their classroom from 10:45 - 11:15 a.m. while Group 2 (video only) watched the *Between the Lions* episode in their classroom. From 11:20-11:50 (approximately) the music therapist moved to Group 3 (music only) and Group 1 watched the video in their classroom. The control group was pre- and post-tested on all measures but did not receive music or view the video during the course of the study. Scheduling was agreed upon by teachers prior to the start of the study, and the project was implemented as part of a typical Kindergarten curriculum and daily class activities with minimal disruption.

Classroom teachers completed a post-study questionnaire in order to provide feedback about various aspects of the experience. Questionnaires were distributed to the classroom teachers on the first day of post-testing and were collected one week later. Each of the seven questions were graded using a Likert-type scale ranging from 1 to 3 (1 being the lowest, 3 the highest). Therefore the higher the score, the more progress the student made during the course of the study.

Materials

Television episodes. “Between the Lions” is designed around a comprehensive literacy curriculum which aims to: model behaviors essential to literacy acquisition such as reading, writing, speaking and listening; model (through character dialogue/behavior and storylines) aesthetic pleasure derived from reading and writing; introduce phonemic awareness; reinforce concepts about print and letter-sound correlations; and expose children to a wide variety of print styles, structures and functions. “Between the Lions” is broadcast on public television five days a week at 12:30 p.m. in the region where this

study was conducted. Because this show is broadcast only during school days/times, it was unlikely that school-aged children participating in this study were able to view this program on a regular basis.

Episodes were videotaped from public television by the researcher and tapes were selected based on the episodes (when possible) or on content of the original study. The list of episodes and content of each is listed in Appendix F. Taped episodes were viewed by groups in their classroom. Seating arrangement was determined by the classroom teacher. In one class students remained at their desks and in another class students sat in a group on the floor. No feedback was given to students regarding their behavior unless they were endangering themselves or another student in order to isolate effects of the treatment condition on off-task behavior. Any child endangering him/herself or another child was removed from the group but was still in the room and could see and hear the video.

Music therapy sessions. Groups receiving music were seated in a circle on the floor of their classroom in an area designated for group learning (or “circle time”). Music group plans (see Appendix G) were developed by the researcher and material covered coincided with information/themes of the “Between the Lions” episodes. The primary letter sound and word family of the show being viewed by the children that day was incorporated into the music materials used. Groups lasted 25-30 minutes each and all sessions were conducted by the researcher. Music strategies included singing, movement, and instrument playing. Music strategies were paired with books or letter and word cards to practice letter naming, letter-sound correspondence, word building, rhyming and concepts of print. No feedback was given to students regarding their behavior unless they were endangering themselves or another student in order to control for on- and off-task behavior. Any child endangering him/herself or another child was removed from the group but was still in the room and exposed to the music.

RESULTS

Teacher Survey (Pre- and Post)

The results of the teacher survey, administered prior to treatment and during post-testing, was analyzed using the Wilcoxon Signed Ranks test. Results are shown in Table 8. Questions 4 and 6 were discarded out for the music/video group and the control group, since the teachers marked “not applicable” for all students on both the pre- and post measures.

There were no statistically significant differences between pre- and post measures in the Music/Video group or the control group on any of the questions. For the Music-Only group there were statistically significant differences on questions 1, 4, and 7 indicating students made improvements in their pre-reading skills and were writing more during their free time. However, students talked less frequently about TV characters and shows from pre- to post-testing. For the Video-Only group there were statistically significant differences on questions 6 and 7 indicating student’s in this group used the computer more frequently during free time and talked more about TV shows and characters after the treatment. Overall, no consistent improvement was evidenced on any one question across all groups.

Table 8: Results of Wilcoxon Signed Ranks Test on Pre-Post Teacher Survey by Question

	Q. 1	Q. 2	Q. 3	Q. 4	Q. 5	Q. 6	Q. 7
Music/video							
Z	1.155	1.518	1.000	X	-.378	X	.632
Sig.(2-tailed)	.248	.129	.317		.705		.527
Music only							
Z	2.646*	1.134	1.291	2.000*	1.667	-1.633	-2.714*
Sig.(2-tailed)	.008	.257	.197	.046	.096	.102	.007
Video only							
Z	1.000	1.000	1.414	-.447	-1.000	2.236*	2.000*
Sig.(2-tailed)	.317	.317	.157	.655	.317	.025	.046
Control							
Z	.000	-1.613	-.707	X	1.000	X	1.414
Sig.(2-tailed)	1.000	.107	.480		3.17		.157

*=statistically significant difference

Q.1= Child's pre-reading and early reading skills

Q.2= Proficiency in pre-reading and early reading tasks

Q.3= Reads or looks at books during free time

Q.4= Writes during free time

Q.5= Talks with others about books

Q.6= Uses the computer during free time

Q.7= Talks about TV characters or shows

X = no analysis due to lack of teacher response

Dynamic Indicator's of Basic Early Literacy Skills (DIBELS)

Reading achievement was measured by the Letter Naming and Initial Sounds Fluency subscales of the DIBELS test and by the total raw score of the Test of Early Reading Ability-3rd edition (TERA-3). Each measure was administered before and after the experimental conditions.

Analysis of pre-test scores showed significant differences among groups, therefore a repeated measures analysis of variance (ANOVA) was used in data analysis of the pre- and post-test scores of the letter naming (LN) portion of the DIBELS. Table 9 shows results of the repeated measures ANOVA for Letter Naming. While all groups showed

significant progress on the LN measure from pre- to post testing (TIME), there was no statistically significant difference among groups (TIME x GROUP).

Table 9: Results of Repeated Measures ANOVA for Letter Naming

Between Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Time	1	2301.659	53.935	.000
Time x Group	3	53.724	1.259	.294
Error (Time)	82	42.674		
Within Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Intercept	1	48112.707	133.955	.000
Group	3	899.605	2.505	.065
Error	82	359.171		

Table 10 shows means for the Letter Naming subtest by group and reveals the Music/Video group made the most progress with an increase of 8.3 points over the course of the study, but started well below the other treatment groups at pre-testing. Both the Music Only (8.05) and Video Only (7.9) groups had comparable mean increases almost twice that of the control group (4.05).

Table 10: Table of Means: Letter Naming

Group	N	Pre- Mean	SD	Post Mean	SD
Music/video	23	6.13	7.618	15.43	14.491
Music	22	12.18	10.581	20.23	14.273
Video	21	17.48	16.744	25.38	17.651
Control	20	16.55	14.073	20.60	15.935

Because analysis of pre-test scores for the Initial Sounds Fluency (ISF) measure did not indicate significant differences between the groups, a repeated measures analysis of variance (ANOVA) was used to analyze the pre- and post-test scores. Table 11 shows results of the repeated measures ANOVA for the ISF measure. While all groups showed significant progress on the ISF measure from pre- to post testing (TIME), there was no statistically significant difference among groups (TIME x GROUP).

Table 11: Results of Repeated Measures ANOVA for Initial Sounds Fluency

Between Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Time	1	1468.692	49.134	.000
Time x Group	3	60.570	2.026	.117
Error (Time)	82	29.892		
Within Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Intercept	1	19871.018	233.943	.000
Group	3	115.446	1.359	.065
Error	82	84.940		

Table 12 shows means by group for this sub-test and reveals that the music group made the most progress on the ISF test from pre- to post-testing but started well below the other treatment groups at pre-testing.

Table 12: Table of Means: Initial Sounds Fluency

Group	N	Pre-test Mean	Std. Deviation	Post-test Mean	Std. Deviation
Music/video	23	10.17	7.756	12.87	10.029
Music	22	6.00	6.619	14.27	8.469
Video	21	9.52	6.408	15.71	8.038
Control	20	5.65	5.422	11.90	6.415

Two of the measures were given as post-test only due to the developmental age of the students. An Analysis of Variance was utilized in statistical analysis of the Phonemic Segmentation and Nonsense Word Fluency measures and results are reported in Tables 13 and 15. No statistical significance was found among groups for Phonemic Segmentation. Means for the Phonemic Segmentation measure (Table 14) indicate that the Control group and the Video Only group made the most progress. However, there were statistically significant scores among groups on the Nonsense Word Fluency.

Table 13: ANOVA for Phonemic Segmentation

	<i>df</i>	Mean Square	F	Significance
Between Groups	3	99.145	1.409	.246
Within Groups	82	70.390		

Table 14 shows the mean score by group for phonemic segmentation. Results indicated that both the Video-Only group and the Control group out-performed the Music/Video and Music-Only groups on this measure.

Table 14: Table of Means: Phonemic Segmentation

Group	N	Post-test Mean	Std. Deviation
Music/video	23	2.17	4.25
Music	22	3.55	6.13
Video	21	6.00	10.45
Control	20	6.80	11.23

Table 15: ANOVA for Nonsense Word Fluency

	<i>df</i>	Mean Square	F	Significance
Between Groups	3	243.563	5.199	.002
Within Groups	82	46.849		

In order to determine where the differences among groups occurred, a Scheffe post-hoc analysis was conducted. Results in Table 16 indicate a statistically significant difference between the Music/Video group and the Video Only group. The Video Only group out performed the Music/Video group on this measure.

Table 16: Scheffe Post-hoc analysis

Multiple Group Comparisons		Mean Difference	Significance
Music/Video	Music	-2.09	.788
	Video	-7.91	.004
	Control	-3.59	.413

Test of Early Reading Ability-3rd edition (TERA-3)

A repeated measures analysis of variance (ANOVA) was used to analyze the total raw score of the TERA-3. While all subjects showed progress on the TERA-3 from pre- to post testing (TIME), Table 17 reflects that there was no statistically significant difference between groups (TIME x GROUP).

Table 17: Results of Repeated Measures ANOVA for TERA-3 Total

Between Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Time	1	1413.924	92.248	.000
Time x Group	3	15.110	.986	.404
Error (Time)	82	15.327		
Within Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Intercept	1	84960.340	711.141	.000
Group	3	303.953	2.544	.062
Error	82	119.471		

Table 18 reflects the mean scores of the total TERA-3 on both the pre- and post-test. Both the Music/Video and Video-Only groups made comparable progress from pre- to post-testing.

Table 18: Table of Means: TERA-3 Total

Group	N	Pre-test Mean	Std. Deviation	Post-test Mean	Std. Deviation
Music/video	23	15.75	6.628	22.30	6.477
Music	22	19.55	7.083	23.68	7.599
Video	21	21.95	9.162	28.62	10.181
Control	20	20.30	8.670	25.90	9.508

Findings in the “Between the Lions” study (Mississippi State University, 2002) indicated a need to analyze subtest scores. Therefore, a repeated measures analysis of variance (ANOVA) was used to analyze each composite score of the three subtests of the TERA-3 in the current study. All subjects showed progress on the Alphabet subtest (Table 19) of the TERA-3 from pre- to post-testing (TIME), there was no statistically significant

difference within groups (TIME x GROUP). However, there was a statistically significant difference ($p < .05$) between groups for this measure. Table 20 shows the greatest pre-post progress in the video only group.

Table 19: Results of Repeated Measures ANOVA for the Alphabet Subtest of TERA-3

Between Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Time	1	510.477	58.245	.000
Time x Group	3	2.646	.302	.824
Error (Time)	82	8.764		
Within Subjects				
Source	<i>df</i>	Mean Square	F	Significance
Intercept	1	14589.818	267.670	.000
Group	3	156.175	2.865	.042
Error	82	54.507		

Table 20: Table of Means: TERA-3 Alphabet Subtest

Group	N	Pre- Mean	SD	Post Mean	SD
Music/video	23	5.17	4.745	8.35	4.725
Music	22	7.32	4.912	10.45	5.510
Video	21	9.05	6.508	13.24	6.782
Control	20	8.45	5.520	11.75	6.121

All subjects showed progress on both the Conventions subtest (Table 21) and the Meaning subtest (Table 23) of the TERA-3 from pre- to post-testing (TIME). However there were no statistically significant differences within groups (TIME x GROUP) on the two measures.

Table 21: Results of Repeated Measures ANOVA for the Conventions Subtest of TERA-3

Between Subjects				
Source	df	Mean Square	F	Significance
Time	1	91.930	23.493	.000
Time x Group	3	2.606	.666	.575
Error (Time)	82	3.913		
Within Subjects				
Source	df	Mean Square	F	Significance
Intercept	1	5049.336	377.992	.000
Group	3	28.245	2.114	.105
Error	82	13.358		

Table 22 indicates that both the Music/Video group and the Video-Only had the greatest increase in mean scores from pre- to post-testing on the conventions subtest.

Table 22: Table of Means: TERA-3 Conventions Subtest

Group	N	Pre-test Mean	SD	Post-test Mean	SD
Music/video	23	3.65	2.497	5.52	2.213
Music	22	4.55	2.540	5.32	3.228
Video	21	5.48	2.581	7.19	4.106
Control	20	5.10	2.827	6.60	3.202

Table 23: Results of Repeated Measures ANOVA for the Meaning Subtest of TERA-3

Between Subjects				
Source	df	Mean Square	F	Significance
Time	1	28.659	14.748	.000
Time x Group	3	3.616	1.861	.143
Error (Time)	82	1.943		
Within Subjects				
Source	df	Mean Square	F	Significance
Intercept	1	9880.735	4016.760	.000
Group	3	4.037	1.641	.186
Error	82	2.460		

Table 24 does not show a great deal of change from pre- to post-testing. However, the Music/Video group had the greatest change in mean scores of any of the groups on the meaning subtest.

Table 24: Table of Means: TERA-3 Meaning Subtest

Group	N	Pre- Mean	SD	Post Mean	SD
Music/video	23	6.91	1.276	8.43	1.199
Music	22	7.68	1.323	7.82	1.402
Video	21	7.43	1.777	8.19	1.327
Control	20	6.70	1.658	7.55	1.849

Correlations between the DIBELS and the TERA-3

The Pearson's Correlations Test was used to recognize possible correlations between pre- and post-test scores on the DIBELS measures and TERA-3 test. Analysis of scores for all subjects indicated a statistically significant relationship between five of the six measures, therefore, Pearson's Correlations Tests were computed by group to determine if correlations were consistent among various treatment groups.

Table 25 shows a strong, positive relationship between the pre-test scores on the letter naming and initial sounds fluency test, as well as between the letter naming pre-test and the total raw score of the TERA-3. This finding is supported by the developmental process of acquiring knowledge of letter names and orthographic processing and then learning to associate a particular sound with that letter. The correlation between the LN and ISF tests and the TERA-3 suggest that subjects' awareness of letter names and sounds may be more versed in use and concepts of print. Additionally, a strong, positive correlation was found between the Letter Naming and Initial Sounds Fluency post-tests, as well as between each of those measures and the TERA-3 post-test total raw scores.

Table 25: Pearson's Correlations for all subjects

Measure	N	Correlation	Significance (2-tailed)
Pre-LN/Pre-ISF	86	.285	.008*
Pre-LN/Pre-TERA-3	86	.739	.000*
Pre-ISF/Pre-TERA-3	86	.093	.394
Post-LN/Post-ISF	86	.400	.000*
Post-LN/Post-TERA-3	86	.703	.000*
Post-IS/Post-TERA-3	86	.494	.000*

Table 26 shows the results of the Pearson's Correlations by treatment group and indicates a relationship between the letter naming portion of the DIBELS and the total raw score of the TERA-3 for both the pre- and post-test of the Music/Video group.

Like the correlations of the Music/Video group, score of the Music-Only group indicate a relationship between the letter naming portion of the DIBELS and the total raw score of the TERA-3 for both the pre- and post-test. In addition to those correlations, the Video Only groups' initial sounds fluency post-test scores have a positive correlation with the TERA-3 total raw score post-test as well. Correlations for the no-contact Control group indicated relationships between all measures except the letter naming and initial sound fluency pre-test scores for this group.

Table 26: Pearson's Correlations by Group

Measure	Music/Video	Music	Video	Control
Pre-LN/Pre-ISF	.057	.364	.601*	.426
Pre-LN/Pre-TERA-3	.594*	.469*	.846*	.794*
Pre-ISF/Pre-TERA-3	-.222	-.159	.468*	.502*
Post-LN/Post-ISF	.395	.089	.659*	.425*
Post-LN/Post-TERA-3	.632*	.466*	.853*	.709*
Post-IS/Post-TERA-3	.340	.492*	.726*	.485*
N	23	22	21	20

* = $\alpha < .05$

Observations

Recording of student off-task student behavior occurred each session. Four analyses are graphed: the music sessions for the Music/Video group, the video session for the Music/Video group, and each of the sessions for the Music Only and Video Only groups. Graphic analysis of mean off-task behavior per session indicates that students were more off-task during both video conditions than during the music conditions. Off-task behavior was consistently lower across the 17 sessions for the music sessions which are graphed in yellow and dark blue.

Figure 1: Average % Off-task by group and day

DISCUSSION

There are always variations in teaching and classroom management styles within any given education system, the four teachers (and their classes) that participated in this study are no exception. While all classes utilized the same reading curriculum, each teacher imparted the required material in her own way, employing different strategies and pacing in order to effectively teach the prescribed material and no effort was made to control teacher behavior in this study. It is no wonder then that the teacher's perceptions of their students' early literacy skills and progress over time varied across the four treatment groups.

The teacher of the Music-Only group perceived change from pre- to post-testing, most notably in the areas of students performing at or above grade level and students choosing to write during their free time. The teacher of the Video-Only group perceived changes in the amount of time children spent on the computer during free time and the frequency with which they talked about television shows or characters.

An asset of having such diverse teaching and behavior management styles is that it allows for some variability in student placement in curricular issues. However, these differences were a confounding variable in this study. The fact that pre-existing classrooms were used as a group, as opposed to creating new groups based on children's abilities at the start of the study may have made a difference in the outcome since significant differences were found among groups on several pre-test measures.

Furthermore, groups were not randomly assigned to a particular treatment condition. Teachers were given a brief description of the various treatments and were allowed to choose the treatment that they felt would work best with their teaching style and schedule. This too was a limitation of the study and should be considered in future studies.

The test scores of the treatment groups on the Letter Naming portion of the DIBELS test, while not statistically significant, have mean scores that show a great deal of

growth across a relatively short period of time. All three treatment groups (Music/Video, Music-Only, and Video-Only) had a mean increase in score that was nearly twice that of the control group in this study. In the initial “Between the Lions” study (Linebarger, 2000), students who viewed the show had significant differences in mean performance compared to their non-viewing peers. The “Between the Lions” studies conducted by Mississippi State University (2002) found that control subjects in both studies outperformed the experimental group on all pre-test measures. After watching the show, one viewing group outperformed the control group on the post-test and one viewing group did not. Since letter naming activities were a part of the music activities, it is no surprise that scores increased for the two groups that received music. However, “Between the Lions” does not directly teach letter naming in its programming model. The previous studies attribute increases in Letter Naming scores to increased exposure to and use of letters in the show.

Like the Letter Naming scores, the Initial Sounds Fluency scores were not significantly different among groups but students in the Music-Only group showed the greatest increase in mean score from pre-to post-test. Because this test assesses aural/verbal skills of subjects and their ability to distinguish sound these findings indicate a need for further investigation regarding the effects of music on this area of literacy learning.

While the first “Between the Lions” study did not use the Initial Sounds Fluency (ISF) test as a measure, the Mississippi State University study conducted in the Delta region found that children who viewed the show were able to distinguish more sounds on the ISF and, the skills of the viewing group were growing at a faster rate than their non-viewing peers. However, there was no difference in the scores of viewing and non-viewing subjects in the Choctaw region of the Mississippi State University study. Similarly, subjects in the Video-Only group of the current study had an increase in mean scores comparable to that of the no-contact Control group.

The Phoneme Segmentation test was administered as a post-only measure in this

study due to the time of year the study was conducted and the fact that the test was not developmentally appropriate for the students at that time. Like the Mississippi State University studies, there were no significant differences in scores between groups in this study. The initial “Between the Lions” study found subjects who viewed the show performed significantly better on this measure than their non-viewing peers. While the Mississippi State University studies and the current study have similar subject demographics, the initial “Between the Lions” study was conducted with students from a more educated and affluent portion of the population. Differences in parent education, educational continuity and opportunities may account for the delay in skills. Additionally, activities in the music groups were not focused on teaching this skill. Further investigation controlling for these measures is warranted.

Like the Phonemic Segmentation (PS) test, the Nonsense Word Fluency (NWF) test was administered as a post-test only measure. Results indicated a significant difference among groups and more specifically, the Video-Only group outperformed the Music-Only and Music/Video groups, as well as the Control Group. This finding is congruent with two of the three “Between the Lions” studies that indicated greater mean growth for Kindergarten viewers compared to non-viewers. It should be noted as well that activities in the music groups were not focused expressly on teaching the skills measured by PS and NWF measures.

TERA-3 scores of all groups were analyzed using both the total raw score of all subtests as well as the individual subtest scores for the Alphabet, Conventions and Meaning subtests. While results did not show statistical significance among groups, the means reflected the greatest change from pre- to post-test on mean group scores of the Music/Video and Video-Only groups. The initial “Between the Lions” study found that subjects who viewed the videos had a mean increase in their raw score by 2 points. The mean increase in raw score of the Music/Video group in this study was 6.55, and the mean increase of the Video-Only group was 6.67. These results indicate a need for further investigation of the effects of both music and “Between the Lions” in combination to

increase the many skills measured by this test.

The Mississippi State University studies investigated the individual subtests for growth among a particular measure. Students in the Delta region who viewed the video performed significantly better than their non-viewing peers on the Alphabet subtest. Likewise, analyzation of the Alphabet subtest of this study revealed students in the Video-Only group made the most progress over the course of the study.

Because the Pearson's Correlation test on all subjects for the letter naming, initial sounds fluency, and TERA-3 total raw score revealed a relationship on five of the six interactions, a Pearson's Correlation was conducted by group on each of the aforementioned measures. The only correlations consistent across all groups were the relationship between the letter naming and TERA-3 pre-tests and the post-tests of those same two measures. This finding is supported by the developmental process of acquiring knowledge of letter names and orthographic processing and then learning to associate a particular sound with that letter. The correlation between the LN and ISF tests and the TERA-3 suggest that a subject's awareness of letter names and sounds may develop from greater exposure to reading activities. Due to the diverse backgrounds and experiences of this age the literature in language acquisition suggests that the focus of the curriculum needs to be on letter naming and letter-sound correspondence.

On/off task behavior was not measured in the previous "Between the Lions" studies. Findings in this study indicate that live music interactions caused students to have much higher on-task behavior, and they were able to sustain participation over relatively long periods of time. Students who viewed the video immediately following the music group were no more off-task than their peers that only watched the video. A student's ability to stay on task and manage behavior was better during music conditions, which may assist students in acquiring emergent literacy skills (Lonigan, 1999). This seems to have important long-term implications for children needing lots of repetition to learn critical concepts.

Teacher feedback provided on the post-study questionnaire indicated "the children

thoroughly enjoyed the music...eagerness to participate increased", and children listened more intently. Those teachers also felt that the music group reinforced some of the letters and books being taught in their *Open Court* reading program (consisting of commercially-produced, researched set of prescribed lessons and materials). The perception that the children became more focused and able to follow directions both in and out of music was noted on each of the feedback forms of the teachers whose classes received music. One teacher noted "many of the activities required the students to listen carefully and follow directions."

When asked to rate the efficacy of the music on a scale of 1-10 (1 being ineffective and 10 being highly effective) ratings of 8-10 were given. Teachers noted that reading concepts incorporated the "use of instruments, recorded music and singing helped with behavior." Therefore, children were more on-task which allowed them to "learn (and reinforce) new information and enjoy singing songs and playing the various instruments."

Teachers cited book activities, where children could sing along or play instruments with the story, as the activities most enjoyed by their students. Other favorite activities included songs and activities utilizing rhyming word or word-building cards. When asked to sum up their overall experience with music in their classroom teachers indicated they "hated for music to end" and they found it to be a "very good experience [because] the children used several modalities as part of their learning experiences and I [the teacher] found that some children showed growth where they had not previously."

When asked to discuss changes in student behaviors perceived by teachers as a result of the video one teacher said, "Many of the students gained in phonemic awareness, some hearing rhymes and letter sounds for the first time." As with the teachers whose classes received music, teachers were asked to rate (on a scale of 1-10) how effective they felt the show was in reinforcing early literacy skills. One teacher responded with the score of 8 stating that "the programs were excellent and the students started out very engaged." Another teacher scored the program as 5-6, noting that "it raised awareness in the children of the program [material]. Only certain parts kept their focus totally."

When asked to write any other impressions or comments about the experience, both teachers whose classes viewed the videos stated they found many parts of the video beneficial, particularly "all of the activities that required students to listen and follow directions". One teacher stated that she would continue to incorporate the program into her lesson plans.

Common themes that emerged throughout both written and verbal teacher feedback were the social benefits of the music and, in some cases, the video. Classroom management is a continuous challenge and teachers expressed each of the supplemental programs (both music and video) helped students remain focused and on-task while learning important concepts.

While measurable results on widely-used early literacy assessment tools in this study are disjointed, some test scores and off-task observation outcomes indicate that supplemental resources such as music groups and video viewing may be beneficial for all students. Further research using music should focus on specific literacy tasks such as letter naming and/or sound identification.

Unanticipated challenges of this study included diversity of behavior management techniques and intervention among classroom teachers, variations in staff during pre-testing and the difficulty of implementing treatment over a short period of time. Replication of this study would benefit from consistency in pre- and post-testing staff, controlling for teacher behaviors and lesson planning and intervention scheduled over a longer period of time.

Due to the wide variety of assessment tools used, music groups could not focus on all of the skills covered. Changing music to specifically match test expectations may yield greater gains. Students may have benefited more from music and video treatments coordinated with the reading curriculum which specifically addressed the letters and/or sounds being covered by the teacher on that particular day. Specifically designed music interventions and quality educational videos like "Between the Lions" provide enrichment experiences that reach students through a variety of media. Further investigation regarding

specific activities and planning strategies may produce greater effects on outcome measures. Providing reading enrichment programs that are integrated with the other literacy learning materials being used may yield greater student outcomes.

This study confirms that music increases the on-task behavior of students. Additionally, the combination of music and video enrichment showed gains in four of the eight tests used to measure students' progress. This pattern supports the need for further investigation regarding benefits of enrichment programs specifically designed to enhance curricula for students from low socio-economic backgrounds, particularly programs that incorporate music activities.

APPENDIX A
Parent, Teacher, Child Consent Forms

Dear Parent,

My name is Dena Register and I am a doctoral student at The Florida State University in the School of Music. I am conducting a research study to examine the effects of music and an educational children's television program on the early literacy skills of young children.

Your child's participation will involve participating in a music group and/or watching an educational children's television show ("Between the Lions") in their classroom. This will take place during the school day under the supervision and direction of a music therapist and the classroom personnel. Your child will be videotaped during this time in order to record their participation in the activity. All videotapes will be analyzed by a research team consisting of music therapy students and will be stored in a locked cabinet. Tapes will be used for educational purposes only and will be destroyed by December 31, 2012. All personal and identifying information obtained during the course of the study will remain confidential, to the extent allowed by law.

You will also be asked to complete a questionnaire regarding how often your child watches television and/or reads books at home. Information provided on this questionnaire will remain anonymous.

If you or your child chooses not to participate or to withdraw from the study at any time, there will be no penalty, and it will not affect your child's grade. The results of the research study may be published, but your child's name will not be used.

Although there may be no direct benefit to your child, the possible benefit of your child's participation is an advance in literacy behaviors.

If you have any questions concerning this research study or your child's participation in the study, please call me or Dr. Jayne Standley at 644-4565.

Sincerely,

Dena Register

I give consent for my child _____ to participate in the above study. I understand that my child will be videotaped during their participation in this study. These tapes will be kept by the researcher in a locked cabinet. I understand that only the researcher and trained assistants will have access to these tapes and that they will be destroyed by December 31, 2002.

Parent's Name (PRINTED): _____

Parent's Signature: _____

If you have any questions about your rights as a participant in this research or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Committee, Institutional Review Board through the Vice President for the Office of Research at (850) 644-8633.

Dear Teacher,

My name is Dena Register and I am a doctoral student at The Florida State University in the School of Music. I am conducting a research study to examine the effects of music and an educational children's television program on the early literacy skills of young children.

I am requesting your participation which will involve having your students participate in a music group and/or watching an educational children's television show ("Between the Lions") in the classroom. This will take place during the school day under the supervision and direction of a music therapist and the classroom personnel. Children will be videotaped during this time in order to record their participation in the activity. All videotapes will be analyzed by a research team consisting of music therapy students and will be stored in a locked cabinet. Tapes will be used for educational purposes only and will be destroyed by December 31, 2012. All personal and identifying information obtained during the course of the study will remain confidential, to the extent allowed by law.

You will also be asked to complete a questionnaire regarding the literacy behaviors of your students (*i.e.* how frequently they handle and "read" books) during the school day. Information provided on this questionnaire will remain anonymous.

Although there may be no direct benefit to your students, the possible benefit of their participation is an advance in literacy behaviors.

If you have any questions concerning this research study or your student's participation in the study, please call me or Dr. Jayne Standley at 644-4565 or e-mail me at dregister@hotmail.com.

Sincerely,

Dena Register

Dena Register
The Effects of Live Music Groups Versus an Educational Children's Television Program
on the Emergent Literacy of Young Children

Sample Child Assent Script

Hello, _____. My name is Dena. How are you doing today? I would like your help with a study that I am doing. I would like to ask you to answer some questions about pictures, letters and words. Then I'm going to come back to your classroom on some other days and watch a TV show (and/or have music-where sing and dance and play instruments) with you and the other children in your class.

I'm going to ask the other boys and girls in your class to do these things too. Some of the questions are for older kids and you may not know the answer. That's okay. Just try your best and if you feel funny and don't want to answer any other questions you just tell me and we can stop at any time. You won't get in any trouble and no one will be mad at you. Okay? So can I ask you some questions now?

If "yes" then researcher will proceed with the pretest.

If "no", researcher will ask a set of innocuous questions to rule out the "no" response set. If the "no" response set is ruled out and the child still says "no" when asked to participate a second time, the child will be free to leave, thanked by the researcher and dismissed from the study.

APPENDIX B
Leon County School Board Approval

BOARD CHAIR
Maggie B. Lewis

BOARD VICE-CHAIR
Georgia "Joy" Bowen

DIRECTOR PROGRAM MONITORING
AND EVALUATION SERVICES
Margarida Southard, Ph.D.

SUPERINTENDENT
William J. Montford, III

BOARD MEMBERS
Dee Crumpler
J. Scott Dailey
H. Fred Varn

September 10, 2002

Dena Register
2420 Basswood Lane
Tallahassee, Florida 32308

Topic: *"Music to Foster Emergent Literacy"*

Dear Ms. Register:

The Leon County Research Review Board has approved your request for research. Based on your proposal, the research will be approved for the period of September 2002 through September 2003. In an effort to minimize the disruption of normal school activities during the first weeks of schooling, please start your research activities by the latter part of September. Should you desire to continue your research efforts after this period of time, you must submit a progress report on the status of your research and request renewed approval for continuation of the project. Any significant changes or amendments to the procedures or design of this study must be approved by resubmitting the request for research to the Research Review Board.

You will need to contact the principals of the schools in which you wish to conduct your study as soon as possible. The principal is responsible for making the final approval decision relative to his or her school participation in this study. It is your responsibility to return the enclosed "Principal's Consent for Research Participation," signed by the principal(s) of the school(s) to be involved, prior to the start of any research. Receipt of this consent form by this office will complete the approval process.

In the interest of continued research benefits and the coordination of research interests, please send this office one copy of your results and discussion. This information, and any other relevant information you may have, will be filed in our research library and added to the annotated listing of research projects. We look forward to your results and any suggestions they may offer toward improving the educational process in Leon County Schools.

Please feel free to call me if I can of further assistance. I can be reached at 488-7007.

Sincerely,

Margarida F. Southard, Ph.D
Program Monitoring and Evaluation
Chair, Research Review Board

MFS/db

cc: Michele Crosby/Oakridge Elementary

3955 West Pensacola Street • Tallahassee, Florida 32304-2998 • Phone (850) 488-7007 • Suncom (850) 278-7007

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APPENDIX C
Parent Questionnaire

Child's Name: _____

Date: _____

Parent's Name: _____

Please fill out the following questions about your family and your child's reading
and television use and return it to your child's teacher

1. Does your family get a newspaper regularly?	YES	NO
2 Does your family get magazines regularly?	YES	NO
3. Are there more than 25 books in your home?	YES	NO
4. Is there a dictionary in your home?	YES	NO
5. Do you have a computer in the home?	YES	NO
6. Do you have cable TV?	YES	NO

Does your child know the alphabet?

Knows all the letters

Knows some or most of the letters

Doesn't know or knows a few of the letters

Does your child know what sounds letters make?

Knows all the sounds

Knows some or most of the sounds

Doesn't know or knows a few of the sounds

Can your child read?

My child reads books

My child reads simple sentences

My child reads some words

My child is not reading yet

Is your child able to read storybooks on her/his own?

YES

NO

About how many children's book does your child have of her/his own?

None

1 to 5 books

6 to 10 books

More than 25 books

Don't Know/Not Sure

How much do you think your child likes being read to? A lot
 A little
 Not at all

How much do you think your child likes reading or
 looking at books on their own? A lot
 A little
 Not at all

Please list your child's favorite books. _____

How much time would you say your child spends watching TV or videotapes on a typical
weekday (Monday-Friday)?

_____ hours per day on a **weekday**
 How much time would you say your child spends watching TV or videotapes on a typical
 weekend (**Saturday-Sunday**)?

_____ hours per day on a **weekend**
 Please list your child's favorite TV programs. _____

These questions ask about how often your child participates in different kinds of print activities **at home**
(do not include activities at school). Place a check in the box to indicate how often each activity occurs.

How often does your child...	Never	Once a month	2-3 times a month	Once a week	3-4 times a week	Once a day	Several times a day
Look at books alone?							
Ask you to read to them?							
Do you or someone else read to your child?							
Do you suggest that you child read or look at a book?							
Does your child write letters, notes or stories?							
Does you child go to the library or bookstore?							
Read or look at magazines?							
Use Videogames?							
Use Computers?							

APPENDIX D
Teacher Questionnaire

Name of student: _____ Teacher: _____

1. This child's pre-reading and early reading skills are:

_____ above grade level

_____ at grade level

_____ below grade level

2. In pre-reading and early reading tasks this child has/is having:

_____ no difficulty

_____ a little difficulty

_____ a lot of difficulty

Please check the frequency that this child engages in the following behaviors at school:

	Never	On Occasion	Often	N/A	?
• Reads or looks at books during free time					
• Writes during free time					
• Talks with others about books					
• Uses the computer during free time					
• Talks about TV characters or shows					

APPENDIX E
Off-task Observation Sheet

Name: _____ Videotaped ☐ Date: _____
 Teacher: _____ Live ☐ # of students: _____
 (at beginning of session)

Begin: _____ End: _____ circle one: Music Video

	Obs.	Rec.	#	Obs.	Rec.	#	Obs.	Rec.	#	Obs.	Rec.	#
1												
2												
3												
4												
5												
6												
7												
8												
9												
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21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

Total # of students: _____
 (at end of session)

APPENDIX F
Episode titles and descriptions

- Session 1 Lionel's Antlers**
Word family: -an (-am, -amp)
Target vowel: short "a"
- Session 2 Oh, Yes, It Can!**
Word family: -an (-at, -ant, -am, -ack)
Target vowel: short "a"
- Session 3 Piggyback, Piggyback**
Word family: -ack (-at, -ap, -ab, -ad)
Target vowel: short "a"
- Session 4 Farmer Ken's Puzzle**
Word family : -en (-et, -ed, -est)
Target vowel: short "e"
- Session 5 A Peck of Peppers**
Word family: -ep (-eck, -en, -ess, -et)
Target vowel: short "e"
- Session 6 The Chess Mess**
Word family: -ess (-est, -et, -egg, -etch)
Target vowel: short "e"
- Session 7 Pecos Bill Cleans Up the West**
Word family: -est (-ess, -ell, -et)
Target vowel: short "e"
- Session 8 The Boy Who Cried Wolf**
Word family: -ig (-iggle, -it, -ick, -in)
Target vowel: short "I"
- Session 9 Little Big Mouse**
Word family: -it (-ip, -ick, -in)
Target vowel: short "I"

- Session 10 To the Ship! To the Ship!**
Word family: -ip (-it, -ick, -ickle, ish)
Target vowel: short “i”
- Session 11 Bobby the Hopping Robot**
Word family: -op (-ot)
Target vowel: short “o”
- Session 12 The Fox and the Crow**
Word family: -op (-ox, -ot, -oppy)
Target vowel: short “o”
- Session 13 Hug! Hug! Hug!**
Word family: -ug (-uck, -un, -ut, -ub)
Target vowel: short “u”
- Session 14 The Boy who Cried Wolf**
Word family: -ig (-it, -ick, -iggle, in)
Target vowel: short “i”
- Session 15 Hay Day**
Word family: -ay (-ade, -ame, -ake)
Target vowel: long “a”
- Session 16 Touching the Moon**
Word family: -oon (-ool, -ooth, -oot, oo)
Target vowel: double “o”
- Session 17 The Lucky Duck**
Word family: -uck (-ucky, -ug, -ud)
Target vowel: short “u”

APPENDIX G
Music Therapy Plans

Session 1

Identification of short “a” sound and letter “a” identification

Activity	Materials	Purpose (Pinpoint)
Hello	N/A	Establish routine, Name ID singing/verbal response
The short "a" song	letter/word cards Guitar	Singing, producing short “a” sounds individually and in context of words
Book: Is Your Mama a Llama?	Book, word cards Guitar	Singing, producing and identifying rhyming words
Stamp & Clap	Word Cards Guitar	Movement, spatial awareness Vocalization of words
Triangles and Tambourines	Word Cards Instruments Recording of “The Anvil Chorus”	Following directions instruments playing, common letters/sounds of words
Jack be nimble	Visual prop	Movement, rhythmic vocal response, comprehension of directional words (over, around)
Goodbye	Guitar	Closure, name recognition

Session 2

Identification of short “a” sound and word family “-at”, letter “a” identification

Activity	Materials	Purpose (Pinpoint)
Hello	N/A	Establish routine, Name ID singing/verbal response
Stamp & Clap	Word Cards Guitar	Movement, spatial awareness Vocalization of words
The "-at" song	letter/word cards Guitar	Singing, producing short “a” sounds individually and in context of words
Book: The Very Hungry Caterpillar	Book, instruments puppet	Concepts of print, sequencing
Instrument Play Along	Book, instruments	Following directions, sequencing, aural/visual stimulus matching
Goodbye	Guitar	Closure, name recognition

Session 3

Identification of short “a” sound and word family “-at”, letter “a” identification

Activity	Materials	Purpose (Pinpoint)
Hello	N/A	Establish routine, Name ID singing/verbal response
Talking Drum	Drum	Movement, listening, Start/stop
Walking/Running	Word Cards Drum, “Movement Play” CD	Movement, spatial awareness Listening
This Is What I Can Do- Stamping/Clapping	Word Cards	Movement, spatial awareness Short “a” identification, Verbalization
Book: Miss Mary Mack	Book, Guitar Word Cards	Concepts of print, Short “a” identification, Rhyming, verbalization
Instrument Play Along	Book, Egg Shakers	Following directions, sequencing, aural/visual stimulus matching
Goodbye	Guitar	Closure, name recognition

Session 4

Identification of short “e” sound and word family “-en”, letter “e” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar Letter cards	Establish routine, Name ID singing/verbal response
Bend and Stretch	Word Cards, “Movement Play” CD	Movement, spatial awareness Listening
Alphabet Game	Letter cards	Singing, letter identification
Book: “Big Fat Hen”	Book, egg shakers	Verbalization of rhyming words and short “e”, steady beat, sequencing
It's Rhyme Time	Word/Picture cards	Identify rhyming pairs, singing
Book: “Brown Bear, Brown Bear, What do you see?”	Greg & Steve CD Book	Singing, sequencing, fine motor skills
Goodbye	Guitar	Closure, name recognition

Session 5

Identification of short “e” sound and word family “-ep”, letter “e” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Walking/Running and Bend/Stretch	Word Cards, “Movement Play” CD	Movement, spatial awareness Listening
Alphabet Game	Letter cards	Singing, letter identification
Book: “I Went Walking”	Book	Verbalization of sounds, sequencing
As I went walking down the street	N/A	Movement, spatial awareness sequencing
Book: “Brown Bear, Brown Bear, What do you see?”	Greg & Steve CD Book	Singing, sequencing, fine motor skills
Goodbye	Guitar	Closure, name recognition

Session 6

Identification of short “e” sound and word family “-ess”, letter “e” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar Letter cards	Establish routine, Name ID singing/verbal response
Walking/Running and Bend/Stretch	Word Cards, “Movement Play” CD	Movement, spatial awareness Listening
Text: Elephant Poem	Word Chart Elephant hat	Verbalization of sound and Identification in words
Add movement and instruments	Rhythm Instruments	Key Word identification, Sequencing, verbalization
One Elephant Went Out to Play	N/A	Movement, sequencing, Spatial awareness
Goodbye	Guitar	Closure, name recognition

Session 7

Identification of short “e” sound and word family “-est”, letter “a” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar Letter cards	Establish routine, Name ID singing/verbal response
Mystery Tune	Glockenspiel	Listening, singing
Alphabet Game	Word cards	Letter identification, singing
This Is What I Can Do- “Freeze” Pictures	Picture Cards	Movement, spatial awareness Follow directions, listening
"Red" and "Yellow" Movement	Color/Word cards	Movement, sequencing, Spatial awareness, sound identification
Book: “I Can Do It”	Book	Movement, sequencing, Spatial awareness, verbalization
Goodbye	Guitar	Closure, name recognition

Session 8

Identification of short “i” sound and word family “-ig”, letter “i” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar Letter cards	Establish routine, Name ID singing/verbal response
This Is What I Can Do “Freeze” Pictures	Picture Cards	Movement, spatial awareness Follow directions, listening
Peppermint Twist “Freeze” Pictures	Joanie Bartels CD Word cards	Movement, spatial awareness Follow directions, listening
Instrument Playing	Word cards Instrument cards Rhythm instruments	Following directions, listening, word/sound identification
Mystery Tune	Glockenspiel	Listening, singing
Book: Twinkle, Twinkle Little Star	Doc Sevrinson CD Book	Sound identification, listening, sequencing
Goodbye	Guitar	Closure, name recognition

Session 9

Identification of short “i” sound and word family “-it”, letter “i” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar Letter cards	Establish routine, Name ID singing/verbal response
Body Rock	Greg & Steve CD	Movement, spatial awareness Follow directions, listening
Book: Chicka Chicka Boom Boom	Rhythm Tape Book	Movement, Verbalization, Sequencing
Mystery tune	Glockenspiel	Listening, singing
Book: The Itsy Bitsy Spider	Book	Sound identification, listening, sequencing
Finger Cymbals	Finger Cymbals	Listening
Goodbye	Guitar	Closure, name recognition

Session 10

Identification of short “i” sound and word family “-ip”, letter “i” identification

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Can you name this letter?	Word cards	Letter identification, singing
10 Little Piggies	N/A	Singing, counting, sound identification
Book: Piggies	Book	Fine motor movement, Listening, verbalization
Chicken Dance	Jukebox Dance Party CD	Movement, spatial awareness Follow directions, listening
Play your instrument and make a pretty sound	Ella Jenkins CD Rhythm instruments	Listening, following directions, playing, singing
Goodbye	Guitar	Closure, name recognition

Session 11

Identification of short “o” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Rhyming Game	Word/Picture cards guitar	Identify rhyming pairs, singing
Mystery Tune	Glockenspiel	Listening, singing
Book: Old MacDonald Had a Farm	Book, Puppets	Verbalization of sound and Identification in words
Alphabet Game	Letter cards	Singing, letter identification
Chicken Dance	Jukebox Dance Party CD	Movement, spatial awareness Follow directions, listening
Goodbye	Guitar	Closure, name recognition

Session 12

Identification of short “o” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Book: Over in the Meadow	Book,	Verbalization of sound and Identification in words, Singing
Add Movement	Book	Movement, sequencing, Singing
Add Instruments	Book, Picture & Word cards, Rhythm instruments	Sequencing, singing, instrument playing
Turtle Game	Tortoise puppet Drum	Movement, spatial awareness Follow directions, listening
Down By the Bay	Word/Picture cards guitar	Identify rhyming pairs, singing
Goodbye	Guitar	Closure, name recognition

Session 13

Identification of short “u” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Yes, Oh Yes	Safari Man CD	Movement, spatial awareness Follow directions, listening, Sequencing, singing
Book: Hug	Book, Puppet	Verbalization of sound and Identification in words
The Hug Song	Monkey puppet	Movement, spatial awareness Follow directions, listening, Sequencing, singing
Rumble, Rumble through the jungle	Picture & word cards	Verbalization, steady beat, Word and animal identification
Goodbye	Guitar	Closure, name recognition

Session 14

Identification of long “i” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Jump Jim Joe	N/A	Movement, spatial awareness Follow directions, listening, Sequencing, singing
Book: “What Will the Weather Be Like Today?”	Book	Sound identification, listening, sequencing, Verbalization
Rainstorm	Various instruments Picture & word cards	Listening, sequencing, sound/word identification
When You Put Letters Together	Letter/Word cards guitar	Singing, letter/sound Identification, spatial awareness
Goodbye	Guitar	Closure, name recognition

Session 15

Identification of long “a” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Book: Today Is Monday	Book Word Cards	Sound identification, listening, sequencing, verbalization
Add Instruments	Book, word cards, rhythm instruments	Listening, sequencing, Singing, playing
Play along	CD, word cards, rhythm instruments	Listening, sequencing, Singing, playing
When you put Letters Together...	Letter/Word cards guitar	Singing, letter/sound Identification, spatial awareness
Goodbye	Guitar	Closure, name recognition

Session 16

Identification of “oo” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar Letter cards	Establish routine, Name ID singing/verbal response
Stirring My Brew		
Book: Dem Bones	Book	Sound identification, singing, sequencing
Rhyme Time	Word/Picture cards guitar	Identify rhyming pairs, singing
Book: “Shake Dem Halloween Bones”	Book Egg shakers	Sound identification, listening, sequencing, verbalization
Goodbye	Guitar	Closure, name recognition

Session 17

Identification of short “u” sound

Activity	Materials	Purpose (Pinpoint)
Hello	guitar	Establish routine, Name ID singing/verbal response
Book: “It's Pumpkin Time”	Book Word Cards	Sound identification, listening, sequencing, verbalization
Five Little Pumpkins	Poster Word Cards	Sound identification, listening, sequencing, verbalization
Add Instruments	Book, word cards, rhythm instruments	Listening, sequencing, Singing, playing
Way Down Yonder in the Pumpkin Patch	Small Pumpkins (real or fake), basket	Movement, spatial awareness Follow directions, listening, Sequencing, singing
Goodbye	Guitar	Closure, name recognition

APPENDIX H
Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Scoring Sheets

Benchmark 1
Letter Naming Fluency

Short Form Directions

Here are some letters (point). Tell me the names of as many letters as you can. When I say "begin", start here (point to first letter), and go across the page (point). Point to each letter and tell me the name of that letter. If you come to a letter you don't know I'll tell it to you. Put your finger on the first letter. Ready, begin.

c	c	N	u	Q	M	u	h	S	i
n	b	e	N	F	f	o	a	K	k
g	p	k	p	a	H	C	e	G	D
b	w	F	i	h	O	x	j	I	K
x	t	Y	q	L	d	f	T	g	v
T	V	Q	o	w	P	J	t	B	X
Z	v	U	P	R	l	V	C	l	W
R	J	m	O	z	D	G	y	U	Y
Z	y	A	m	X	z	H	S	M	E
q	n	j	s	W	r	d	s	B	I
r	A	E	L	c	c	N	u	Q	M

Total: _____

Initial Sound Fluency
Short Form Directions

Make sure the long form of directions are readily available to clarify unexpected problems.

Initial Sound Fluency

This is mouse, flowers, pillow, letters. (point to each picture while saying its name) *Mouse* (point to mouse) *begins with the sound /m/. Listen, /m/ mouse. Which one begins with the sounds /fl/?*

CORRECT RESPONSE: Student points to flowers, you say	INCORRECT RESPONSE: If student gives any other response, you say,
<i>Good. Flowers begins with the sounds /fl/.</i>	<i>Flowers</i> (point to flowers) <i>begins with the sounds /fl/ Listen, /fl/ flowers. Lets try it again. Which one begins with the sounds /fl/?</i>

Pillow (point to pillow) *begins with the sound /p/. Listen, /p/ pillow. What sound does letters* (point to letters) *begin with?*

CORRECT RESPONSE: Student says /l/, you say	INCORRECT RESPONSE: If student gives any other response, you say,
<i>Good. Letters begins with the sound /l/.</i>	<i>Letters</i> (point to letters) <i>begins with the sound /l/ Listen, /l/ letters. Lets try it again. What sound does letters</i> (point to letters) <i>begin with?</i>

Here are some more pictures. Listen carefully to the questions.

Progress Monitoring 1
Initial Sound Fluency

This is wolf, raft, hen, frame (point to pictures).

1. Which picture begins with /h/? 0 1
2. Which picture begins with /fr/? 0 1
3. Which picture begins with /r/? 0 1
4. What sound does "wolf" begin with? 0 1

This is breakfast, hamster, grass, lipstick (point to pictures).

5. Which picture begins with /l/? 0 1
6. Which picture begins with /g/? 0 1
7. Which picture begins with /h/? 0 1
8. What sound does "breakfast" begin with? 0 1

This is card, farmer, bank, van (point to pictures).

9. Which picture begins with /f/? 0 1
10. Which picture begins with /v/? 0 1
11. Which picture begins with /k/? 0 1
12. What sound does "bank" begin with? 0 1

This is whale, fence, tools, stick (point to pictures).

13. Which picture begins with /w/? 0 1
14. Which picture begins with /st/? 0 1
15. Which picture begins with /f/? 0 1
16. What sound does "tools" begin with? 0 1

Time: _____ Seconds Total Correct: _____

$$60 \times \frac{\text{Total Correct}}{\text{Seconds}} = \text{Correct Initial Sounds per Minute}$$

Nonsense Word Fluency
Short Form Directions

Look at this word (point to the first word on the practice probe). *It's a make-believe word. Watch me read the word: /s/ /l/ /m/ "sim"* (point to each letter then run your finger fast beneath the whole word). *I can say the sounds of the letters, /s/ /l/ /m/ (point to each letter), or I can read the whole word "sim"* (run your finger fast beneath the whole word).

Your turn to read a make-believe word. Read this word the best you can (point to the word "lur"). *Make sure you say any sounds you know.*

CORRECT RESPONSE: If the child responds "lur" or with some or all of the sounds, say	INCORRECT OR NO RESPONSE: If the child does not respond within 3 seconds or responds incorrectly, say
<i>That's right. The sounds are /l/ /u/ /r/ or "lur"</i>	<i>Remember, you can say the sounds or you can say the whole word. Watch me: the sounds are /l/ /u/ /r/ (point to each letter) or "lur" (run your finger fast through the whole word). Lets try again. Read this word the best you can (point to the word "lur").</i>

Place the student copy of the probe in front of the child.

Here are some more make-believe words (point to the student probe). *Start here* (point to the first word) *and go across the page* (point across the page). *When I say "begin", read the words the best you can. Point to each letter and tell me the sound or read the whole word. Read the words the best you can. Put your finger on the first word. Ready, begin.*

Progress Monitoring 1
Nonsense Word Fluency

f o z	l e z	b o z	m a s	b u k	__/15
m i d	k o l	s e g	f u l	s i v	__/15
z i j	y u l	p e f	n u m	d u v	__/15
j o f	h i z	n a j	s u z	j e k	__/15
s e b	w o z	f e n	i d	a l	__/13
s u c	l o j	v u g	t e g	b u j	__/15
h i k	o b	j o c	r e j	t i s	__/14
j e l	b a v	i c	j a d	d o z	__/14
n i d	s o f	v e k	k o z	n u k	__/15
n a k	w o m	b e n	y i z	n i d	__/15
Total: ____					

Error Pattern:

Phoneme Segmentation Fluency
Short Form Directions

Make sure the long form of directions are readily available to clarify unexpected problems.

Phoneme Segmentation Fluency

I am going to say a word. After I say it, you tell me all the sounds in the word. So, if I say, "sam," you would say /s/ /a/ /m/. Let's try one. (one second pause) Tell me the sounds in "mop".

CORRECT RESPONSE: If student says, /m/ /o/ /p/, you say <i>Very good. The sounds in "mop" are /m/ /o/ /p/.</i>	INCORRECT RESPONSE: If student gives any other response, you say, <i>The sounds in "mop" are /m/ /o/ /p/. Your turn. Tell me the sounds in "mop".</i>
---	--

OK. Here is your first word.

Progress Monitoring 1
Phoneme Segmentation Fluency

put	/p/	/uu/	/t/	fact	/f/	/a/	/k/	/t/	___/7
call	/k/	/o/	/l/	cause	/k/	/o/	/z/		___/6
show	/sh/	/oa/		pull	/p/	/uu/	/l/		___/5
skin	/s/	/k/	/i/	see	/s/	/ea/			___/6
thick	/th/	/i/	/k/	white	/w/	/ie/	/t/		___/6
brook	/b/	/r/	/uu/	blow	/b/	/l/	/oa/		___/7
do	/d/	/oo/		them	/TH/	/e/	/m/		___/5
young	/y/	/u/	/ng/	torn	/t/	/or/	/n/		___/6
taught	/t/	/o/	/t/	bee	/b/	/ea/			___/5
guys	/g/	/ie/	/z/	nail	/n/	/ai/	/l/		___/6
dad	/d/	/a/	/d/	love	/l/	/u/	/v/		___/6
kid	/k/	/i/	/d/	now	/n/	/ow/			___/5
Error Pattern:	Total: _____								

APPENDIX I
Test of Early Reading Ability-3 Scoring Sheet

Section V. Record of Item Performance

Instructions: Begin testing at items indicated below. Discontinue testing when the student misses 3 items in a row. If 3 items in a row are not passed from the beginning point, test backward until 3 scores of 1 are obtained. All items may be repeated. Prompts are provided. Continually check to assure that the child is attending.

Subtest I. Alphabet

Item #	Stimulus	Correct Response	Score 1 or 0
Start Ages 3-6 to 5-11			
1.	Which one says X Y Z?	Points to <i>XYZ</i>	_____
2.	What letter is this?	Names one letter correctly (B, C, or D)	_____
3.	What letter is this?	Names one letter correctly (N, F, or S)	_____
4.	Point to the picture that starts with the letter <i>c</i> ?	Points to <i>car</i>	_____
5.	Which one is a letter?	Points to <i>S</i>	_____
6.	Which one is a letter?	Points to <i>F</i>	_____
7.	Point to the first letter in the word <i>bike</i> .	Points to <i>b</i>	_____
8.	What letter is this?	Names all correctly (P, D, F, and G)	_____
9.	What letter is this?	Names all correctly (a, i, and e)	_____
Start Ages 6-0 to 6-11			
10.	Show me another place where it says <i>car</i> .	Points to <i>CAR</i>	_____
11.	Show me the word <i>stop</i> .	Points to <i>STOP</i>	_____
12.	What is the first letter in <i>baseball bat</i> ?	Says, "b"	_____
13.	This word says <i>girl</i> . What letter does it start with?	Says, "g"	_____
14.	This word says <i>hippopotamus</i> . Can you point to the part that says /s/?	Points to <i>s</i>	_____
Start Ages 7-0 to 7-11			
15.	Which word says <i>no</i> ?	Points to <i>no</i>	_____
16.	Show me the word <i>out</i> .	Points to <i>out</i>	_____
17.	What letter is this?	Names all correctly (j, x, n, and m)	_____
18.	Point to the word <i>poison</i> .	Points to <i>poison</i>	_____
19.	Can you find the word <i>drums</i> anyplace else?	Points to <i>drums</i>	_____
Start Ages 8-0 to 8-6			
20.	Point to the word <i>shoe</i> .	Points to <i>shoe</i>	_____
21.	Which one says <i>papa</i> ?	Points to <i>papa</i>	_____
22.	What does this say?	Says, "Mommy"	_____
23.	Point to the word that goes with this picture.	Points to <i>ship</i>	_____
24.	Read this out loud.	Reads, "My pet is tan."	_____
25.	Look at this word. How many syllables does it have?	Says, "3" (<i>policeman</i>)	_____
26.	Look at this word. How many syllables does it have?	Says, "3" (<i>barbecue</i>)	_____
27.	Look at this word. How many syllables does it have?	Says, "5" (<i>refrigerator</i>)	_____
28.	Look at this word. How many syllables does it have?	Says, "3" (<i>amputate</i>)	_____
29.	How many sounds are there in this word?	Says, "3" (<i>horse</i>)	_____
Raw Score			

Subtest II. Conventions			
Item #	Stimulus	Correct Response	Score 1 or 0
Start Ages 3-6 to 5-11			
1.	Show me the two pictures that have the book right side up . . .	Points to both right-side-up pictures	_____
2.	Show me the top of the book. Show me the bottom of the book.	Points to both <i>top</i> of book and <i>bottom</i> of book	_____
3.	Show me another <i>a</i> .	Points to <i>a</i>	_____
4.	Where does it say "Fresh Orange Juice"?	Points to name	_____
Start Ages 6-0 to 6-11			
5.	Show me the two pictures that have the book right side up . . .	Points to both right-side-up pictures	_____
6.	Which one is a list?	Points to shopping list	_____
7.	What is wrong with this watch?	Says, "It has letters instead of numbers"	_____
8.	Show me the next word I should read.	Points to <i>all</i>	_____
9.	Point to the name of this story.	Points to "Telephone Time"	_____
Start Ages 7-0 to 7-11			
10.	Show me the printing.	Points to " <i>happy</i> " in print	_____
11.	Point to the sentence that asks a question.	Points to the last line	_____
12.	When I read a word, you point to it.	Points to words as examiner reads	_____
13.	Point to any words you know and tell me what they are.	Indicates knowing at least 2 words other than <i>a</i> and <i>I</i>	_____
14.	What are the spaces for?	Says, "to separate words"	_____
Start Ages 8-0 to 8-6			
15.	Point to the word that goes in this sentence.	Points to <i>blew</i>	_____
16.	Point to the word that goes in this sentence.	Points to <i>chilly</i>	_____
17.	What is wrong with this sentence?	Says, "No capital letter in Susan"	_____
18.	Point to the word that goes in this sentence.	Points to <i>crews</i>	_____
19.	What's wrong with this sentence?	Says, " <i>too</i> should be <i>to</i> ; <i>two</i> should be <i>too</i> "	_____
20.	Show me the two sentences that have mistakes.	Indicates both 1 and 3	_____
21.	Which of these would help you?	Answers, "Index"	_____
Raw Score			<input type="text"/>

Subtest III. Meaning			
Item #	Stimulus	Correct Response	Score 1 or 0
Start Ages 3-6 to 5-11			
1.	Tell me about this.	Says, "McDonald's"; "hamburgers, fries," etc.	_____
2.	Which one is bubble gum?	Points to Bubble Yum	_____
3.	Which one is Jell-O?	Points to Jell-O	_____
4.	Show me the word <i>ball</i> .	Points to <i>ball</i>	_____

Subtest III. Meaning (continued)

Item #	Stimulus	Correct Response	Score 1 or 0
Start Ages 6-0 to 6-11			
5.	Where does it say <i>cat</i> ?	Points to <i>cat</i>	_____
6.	What does this say?	Reads <i>knife</i>	_____
7.	What animal is this?	Says, "dinosaur"	_____
8.	Which one is the Apple Juice?	Points to Apple Juice	_____
9.	What are these and where do you see them?	Says, "signs, on the street"	_____
Start Ages 7-0 to 7-11			
10.	Which picture goes with this sentence?	Indicates lady in car	_____
11.	Show me two words that go with this word.	Points to both <i>eight</i> and <i>two</i>	_____
12.	Show me two words that go with this word.	Points to both <i>nine</i> and <i>three</i>	_____
13.	What is this?	Says, "a shopping list"	_____
14.	Show me two words that go with this word.	Points to both <i>green</i> and <i>black</i>	_____
Start Ages 8-0 to 8-6			
15.	Show me two words that go with this word.	Points to both <i>walk</i> and <i>skip</i>	_____
16.	Tell me how old she is.	Says, "2"	_____
17.	What word does not belong?	Says, "pencil"	_____
18.	Which word does not belong?	Says, "dishes"	_____
19.	Point to the one that makes sense.	Points to "Birds live in trees."	_____
20.	What do they name?	Says, "cars," "trucks," "SUVs," or "vehicles"	_____
21.	Tell me the answer to the question at the end of the story.	Indicates that they went to the checkout stand	_____
22.	What word would finish this poem?	Says, "shoe"	_____
23.	Where did the bird come from?	Says, "out of the egg"	_____
24.	Try to figure out what is wrong with the story.	Indicates that Goldilocks is not about pirates and wizards	_____
25.	Point to the one that makes sense.	Points to "Mommy drove the car."	_____
26.	Read this poem and tell me how it ends.	Says, "This is the house that Jack built."	_____
27.	Now you tell the story.	Includes all these ideas: 2 children; fought over the fire truck; in school; and teacher made a rule	_____
28.	Tell me why the students think that Gerry is a computer wizard?	Answers any of the following: that he can do what his dad does; that he can teach the children how to play games; that he can do arithmetic on the computer; or that he can make birthday cards	_____
29.	Read the first sentence of the second paragraph out loud to me.	Reads, "When she saw the giant man ..."	_____
30.	Read these two sentences. Combine them into one sentence.	Says, "The snow fell out of the winter sky" or "It was winter and the snow fell from the sky."	_____
Raw Score			<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>

APPENDIX J
Raw Data

Ss#	Group	Pre-LN	Post-LN	Pre-ISF	Post-ISF	Pre-TERA	Post-TERA	Post-NWF	Post-PS
1	music/video	3	9	7	10	16	18	0	0
2	music/video	0	5	8	4	18	26	0	0
3	music/video	6	8	10	15	17	26	1	4
4	music/video	24	39	18	14	27	31	0	0
5	music/video	6	14	6	4	11	16	0	0
6	music/video	1	0	8	9	13	12	0	0
7	music/video	0	0	23	7	8	10	0	0
8	music/video	12	36	4	5	23	29	0	0
9	music/video	11	34	10	16	10	14	0	0
10	music/video	25	29	5	8	32	33	0	0
11	music/video	0	2	11	14	10	18	0	11
12	music/video	1	13	9	15	12	24	0	0
13	music/video	7	25	36	49	10	30	0	2
14	music/video	9	5	10	5	15	22	1	6
15	music/video	0	45	10	27	14	28	0	10
16	music/video	2	4	13	4	17	23	0	0
17	music/video	3	17	14	18	14	26	0	0
18	music/video	2	8	4	16	11	19	0	2
19	music/video	3	35	2	17	29	27	0	15
20	music/video	20	21	7	9	15	28	0	0
21	music/video	6	6	16	20	19	21	0	0
22	music/video	0	0	3	4	6	15	0	0
23	music/video	0	0	0	6	15	17	0	0
24	music	0	9	5	20	9	20	0	0
25	music	2	16	5	6	12	10	0	0
26	music	1	13	2	2	14	20	0	0
27	music	21	32	19	19	16	25	0	0
28	music	12	17	0	3	27	29	3	2
29	music	2	4	13	26	15	23	0	0
30	music	11	15	5	18	18	29	0	13
31	music	13	22	1	13	26	26	2	2
32	music	3	3	3	13	18	21	0	0

Ss#	Group	Pre-LN	Post-LN	Pre-ISF	Post-ISF	Pre-TERA	Post-TERA	Post-NWF	Post-PS
33	music	8	8	9	26	21	22	0	10
34	music	1	0	2	2	12	11	0	0
35	music	5	15	3	9	12	20	0	0
36	music	27	30	26	18	21	34	0	0
37	music	1	0	6	3	10	10	0	0
38	music	10	36	0	8	27	29	0	0
39	music	9	10	7	21	19	23	0	2
40	music	18	52	0	9	25	14	0	2
41	music	15	25	0	29	27	35	13	14
42	music	38	35	11	25	15	31	17	21
43	music	26	35	0	17	22	26	0	0
44	music	27	39	9	9	28	35	0	0
45	music	18	29	6	18	36	28	13	12
46	video	3	22	14	14	19	23	0	0
47	video	33	43	17	23	27	39	30	8
48	video	0	3	5	5	7	16	0	0
49	video	0	0	3	6	15	8	0	0
50	video	1	0	2	3	13	15	0	0
51	video	15	25	7	11	22	28	0	0
52	video	43	53	22	16	27	35	26	38
53	video	6	12	5	18	18	29	0	0
54	video	1	2	8	14	11	17	0	0
55	video	18	15	11	19	28	38	14	0
56	video	43	50	20	27	42	42	19	0
57	video	0	3	3	8	11	14	0	0
58	video	13	24	19	9	16	24	0	0
59	video	38	44	3	16	26	42	17	8
60	video	38	40	6	9	40	36	18	6
61	video	7	20	1	22	20	28	8	2
62	video	38	39	12	23	27	31	0	29
63	video	3	22	5	7	17	26	0	0
64	video	0	32	9	24	18	35	0	8
65	video	30	38	13	26	33	42	13	19
66	video	32	46	15	30	24	33	23	8

Ss#	Group	Pre-LN	Post-LN	Pre-ISF	Post-ISF	Pre-TERA	Post-TERA	Post-NWF	Post-PS
67	control	0	0	2	7	3	7	0	0
68	control	2	1	2	9	13	20	0	0
69	control	51	61	21	15	43	41	23	33
70	control	33	25	0	23	30	41	15	18
71	control	16	16	10	17	30	36	0	6
72	control	33	34	0	13	15	23	0	33
73	control	14	20	9	17	21	31	0	0
74	control	4	2	0	10	20	25	0	0
75	control	16	24	5	17	18	28	0	0
76	control	20	20	6	3	22	29	0	0
77	control	5	17	14	13	14	18	0	6
78	control	5	7	4	7	11	14	0	1
79	control	35	49	12	18	28	38	22	0
80	Control	9	28	2	7	20	25	0	0
81	Control	29	32	6	26	25	26	0	26
82	Control	14	19	6	9	17	18	0	6
83	Control	2	25	4	2	16	16	0	0
84	Control	24	53	0	8	28	35	13	1
85	Control	19	12	7	5	17	31	0	0
86	Control	0	2	3	12	15	16	0	6

Music/Video Group Treatment: Music Day 1											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
1	21	4.8%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
1	21	4.8%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	1	21	4.8%
0	21	0.0%	0	21	0.0%	1	21	4.8%	1	21	4.8%
1	21	4.8%	3	21	14.3%	2	21	9.5%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	2	21	9.5%	2	21	9.5%
3	21	14.3%	1	21	4.8%	0	21	0.0%	0	21	0.0%
2	21	9.5%	4	21	19.0%	0	21	0.0%	0	21	0.0%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
1	21	4.8%	1	21	4.8%	0	21	0.0%	0	21	0.0%
11	630	1.7%	12	630	1.9%	10	630	1.6%	8	630	1.3%
Average % off-task: 1.6 %											

Music Only Group Day 1											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	2	22	9.1%	0	22	0.0%	1	22	4.5%
2	22	9.1%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%	1	22	4.5%	1	22	4.5%	1	22	4.5%
0	22	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
2	22	9.1%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	1	22	4.5%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	2	22	9.1%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	3	22	13.6%	2	22	9.1%	0	22	0.0%
1	22	4.5%	1	22	4.5%	1	22	4.5%	0	22	0.0%
0	22	0.0%	1	22	4.5%	3	22	13.6%	2	22	9.1%
0	22	0.0%	0	22	0.0%	1	22	4.5%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	1	22	4.5%	3	22	13.6%
0	22	0.0%	0	22	0.0%	2	22	9.1%	0	22	0.0%
0	22	0.0%									
8	637	1.3%	13	614	2.1%	11	614	1.8%	10	615	1.6%
Average % off-task: 1.7%											

Video Only Group Day 1											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	2	21	9.5%	1	21	4.8%
1	21	4.8%	0	21	0.0%	1	21	4.8%	1	21	4.8%
2	21	9.5%	1	21	4.8%	0	21	0.0%	1	21	4.8%
0	21	0.0%	0	21	0.0%	1	21	4.8%	1	21	4.8%
3	19	15.8%	4	19	21.1%	1	19	5.3%	2	19	10.5%
0	19	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	2	20	10.0%	2	20	10.0%	2	19	10.5%
0	19	0.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	1	19	5.3%	2	18	11.1%
2	17	11.8%	0	17	0.0%	0	17	0.0%	0	17	0.0%
2	17	11.8%	1	17	5.9%	1	18	5.6%	4	18	22.2%
3	18	16.7%	2	18	11.1%	1	18	5.6%	1	17	5.9%
3	17	17.6%	1	17	5.9%	1	17	5.9%	1	17	5.9%
4	17	23.5%	1	18	5.6%	2	18	11.1%	2	18	11.1%
3	18	16.7%	3	18	16.7%	2	18	11.1%	1	18	5.6%
2	17	11.8%	3	18	16.7%	2	18	11.1%	4	18	22.2%
3	18	16.7%	0	18	0.0%	0	18	0.0%	2	18	11.1%
0	18	0.0%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	0	19	0.0%	2	19	10.5%
2	19	10.5%	1	19	5.3%	1	19	5.3%	2	19	10.5%
3	19	15.8%	0	19	0.0%	0	19	0.0%	1	19	5.3%
1	19	5.3%	2	19	10.5%	2	16	12.5%	1	15	6.7%
2	15	13.3%	1	16	6.3%	1	16	6.3%	0	16	0.0%
2	16	12.5%	2	17	11.8%	2	17	11.8%	1	17	5.9%
0	17	0.0%	1	17	5.9%	3	18	16.7%	4	18	22.2%
3	18	16.7%	2	18	11.1%	1	18	5.6%			
42	501	8.4%	31	508	6.1%	28	506	5.5%	37	484	7.6%
Average % off-task: 6.9 %											

Music/Video Group Treatment: Music Day 2											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	3	19	15.8%	1	19	5.3%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
0	19	0.0%	2	19	10.5%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	3	19	15.8%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
1	19	5.3%	1	19	5.3%	1	19	5.3%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	2	19	10.5%
2	19	10.5%	2	19	10.5%	2	19	10.5%	3	19	15.8%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
0	19	0.0%	1	19	5.3%	1	19	5.3%	0	19	0.0%
0	19	0.0%	1	19	5.3%	1	19	5.3%	1	19	5.3%
0	19	0.0%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
0	19	0.0%	1	19	5.3%	2	19	10.5%	0	19	0.0%
0	19	0.0%	3	19	15.8%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	1	19	5.3%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
1	19	5.3%	0	19	0.0%	0	19	0.0%	1	19	5.3%
1	19	5.3%	0	19	0.0%	0	19	0.0%	0	19	0.0%
5	570	0.9%	17	570	3.0%	16	570	2.8%	11	570	1.9%
Average % off-task: 2.1 %											

Music/Video Group Treatment: Video Day 2											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	20	0.0%	1	20	5.0%	1	19	5.3%	1	19	5.3%
0	19	0.0%	2	19	10.5%	1	19	5.3%	1	19	5.3%
1	19	5.3%	2	19	10.5%	2	19	10.5%	2	19	10.5%
0	19	0.0%	1	19	5.3%	2	19	10.5%	3	19	15.8%
4	19	21.1%	0	19	0.0%	1	19	5.3%	3	19	15.8%
2	19	10.5%	2	19	10.5%	1	19	5.3%	0	19	0.0%
1	19	5.3%	2	19	10.5%	1	19	5.3%	1	19	5.3%
4	19	21.1%	4	19	21.1%	1	19	5.3%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
1	19	5.3%	0	19	0.0%	2	19	10.5%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	2	19	10.5%
2	19	10.5%	3	19	15.8%	3	19	15.8%	2	19	10.5%
2	19	10.5%	3	19	15.8%	4	19	21.1%	2	19	10.5%
4	19	21.1%	3	18	16.7%	2	18	11.1%	4	18	22.2%
5	18	27.8%	3	18	16.7%	1	18	5.6%	2	18	11.1%
4	18	22.2%	4	18	22.2%	4	18	22.2%	2	18	11.1%
2	18	11.1%	3	18	16.7%	4	18	22.2%	7	18	38.9%
2	18	11.1%	3	18	16.7%	2	18	11.1%	4	18	22.2%
1	18	5.6%	3	18	16.7%	3	18	16.7%	3	18	16.7%
3	18	16.7%	3	18	16.7%	3	18	16.7%	3	18	16.7%
4	18	22.2%	6	18	33.3%	1	18	5.6%	1	18	5.6%
2	18	11.1%	3	18	16.7%	5	18	27.8%	6	18	33.3%
5	18	27.8%	5	18	27.8%	3	18	16.7%	3	18	16.7%
1	18	5.6%	2	18	11.1%	1	18	5.6%	1	18	5.6%
50	447	11.2%	58	446	13.0%	49	445	11.0%	54	445	12.1%
Average % off-task: 11.8 %											

Video Only Group Day 2											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
5	18	27.8%	4	18	22.2%	3	18	16.7%	1	19	5.3%
4	19	21.1%	3	19	15.8%	4	19	21.1%	2	19	10.5%
2	19	10.5%	4	19	21.1%	7	19	36.8%	5	19	26.3%
3	19	15.8%	3	19	15.8%	2	19	10.5%	0	19	0.0%
3	19	15.8%	3	20	15.0%	8	20	40.0%	4	20	20.0%
7	20	35.0%	2	20	10.0%	1	20	5.0%	3	21	14.3%
1	21	4.8%	3	21	14.3%	2	21	9.5%	5	21	23.8%
6	21	28.6%	4	21	19.0%	3	21	14.3%	3	21	14.3%
6	21	28.6%	1	21	4.8%	0	21	0.0%	2	21	9.5%
3	21	14.3%	3	21	14.3%	5	21	23.8%	1	21	4.8%
2	21	9.5%	3	21	14.3%	2	21	9.5%	1	21	4.8%
1	21	4.8%	2	21	9.5%	3	21	14.3%	6	21	28.6%
5	21	23.8%	5	21	23.8%	5	21	23.8%	4	21	19.0%
4	21	19.0%	4	21	19.0%	4	21	19.0%	3	21	14.3%
2	21	9.5%	3	21	14.3%	5	21	23.8%	2	21	9.5%
2	21	9.5%	0	21	0.0%	2	21	9.5%	1	21	4.8%
4	22	18.2%	2	21	9.5%	4	21	19.0%	0	21	0.0%
1	22	4.5%	2	22	9.1%	3	21	14.3%	1	21	4.8%
6	21	28.6%	3	20	15.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	3	20	15.0%	3	20	15.0%
2	20	10.0%	6	20	30.0%	3	20	15.0%	3	20	15.0%
2	20	10.0%	2	20	10.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	3	20	15.0%	3	20	15.0%	4	20	20.0%
7	20	35.0%	4	20	20.0%	4	20	20.0%	5	20	25.0%
4	20	20.0%	4	20	20.0%	4	20	20.0%	4	20	20.0%
5	20	25.0%	6	20	30.0%						
90	529	17.0%	80	528	15.2%	84	507	16.6%	65	509	12.8%
Average % off-task:15.4%											

Music Only Group Day 2											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	2	20	10.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
3	20	15.0%	2	20	10.0%	2	20	10.0%	1	20	5.0%
3	20	15.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	2	20	10.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	2	20	10.0%	3	20	15.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	2	20	10.0%
5	20	25.0%	2	20	10.0%	4	20	20.0%	6	20	30.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	2	20	10.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	2	20	10.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	3	20	15.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
20	500	4.0%	14	500	2.8%	18	500	3.6%	27	500	5.4%
Average % off-task: 4.0%											

Music/Video Group Treatment: Music Day 3											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
1	18	5.6%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	1	18	5.6%	1	18	5.6%	0	18	0.0%
0	18	0.0%	1	18	5.6%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	2	18	11.1%	1	18	5.6%
1	18	5.6%	1	18	5.6%	2	18	11.1%	1	18	5.6%
0	18	0.0%	1	18	5.6%	0	18	0.0%	1	18	5.6%
1	18	5.6%	1	18	5.6%	1	18	5.6%	0	18	0.0%
0	18	0.0%	1	18	5.6%	0	18	0.0%	0	18	0.0%
0	18	0.0%	1	18	5.6%	1	18	5.6%	0	18	0.0%
1	18	5.6%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	1	18	5.6%	1	18	5.6%	1	18	5.6%
1	18	5.6%	0	18	0.0%	0	18	0.0%	0	18	0.0%
1	18	5.6%	1	18	5.6%	1	18	5.6%	1	18	5.6%
1	18	5.6%	1	18	5.6%	1	18	5.6%	2	18	11.1%
3	18	16.7%	1	18	5.6%	1	18	5.6%	2	18	11.1%
2	18	11.1%	2	18	11.1%	2	18	11.1%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	1	18	5.6%
1	18	5.6%	1	18	5.6%	1	18	5.6%	0	18	0.0%
1	18	5.6%	1	18	5.6%	1	18	5.6%	1	18	5.6%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	1	18	5.6%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	2	18	11.1%
2	18	11.1%	2	18	11.1%	2	18	11.1%	3	18	16.7%
5	18	27.8%	1	18	5.6%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	1	18	5.6%	2	18	11.1%
0	18	0.0%	1	18	5.6%	0	18	0.0%	1	18	5.6%
0	18	0.0%	0	18	0.0%	1	18	5.6%	0	18	0.0%
21	540	3.9%	20	540	3.7%	19	540	3.5%	19	540	3.5%
Average % off-task: 3.7%											

Music/Video Group Treatment: Video Day 3											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	1	22	4.5%	1	22	4.5%	1	22	4.5%
1	22	4.5%	1	22	4.5%	1	22	4.5%	1	22	4.5%
2	22	9.1%	3	22	13.6%	0	22	0.0%	1	22	4.5%
1	21	4.8%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	1	21	4.8%	1	21	4.8%	0	21	0.0%
1	21	4.8%	1	21	4.8%	0	21	0.0%	0	21	0.0%
1	21	4.8%	1	21	4.8%	0	21	0.0%	1	21	4.8%
1	21	4.8%	1	21	4.8%	0	21	0.0%	1	21	4.8%
1	21	4.8%	1	21	4.8%	2	21	9.5%	3	21	14.3%
1	21	4.8%	2	21	9.5%	0	21	0.0%	2	21	9.5%
4	21	19.0%	0	21	0.0%	1	21	4.8%	2	21	9.5%
2	21	9.5%	1	21	4.8%	1	21	4.8%	1	21	4.8%
0	21	0.0%	0	21	0.0%	1	21	4.8%	2	21	9.5%
2	21	9.5%	1	21	4.8%	1	21	4.8%	1	21	4.8%
1	21	4.8%	1	21	4.8%	1	21	4.8%	1	21	4.8%
1	21	4.8%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	1	21	4.8%	1	21	4.8%	2	21	9.5%
1	21	4.8%	0	21	0.0%	1	21	4.8%	1	21	4.8%
1	21	4.8%	1	21	4.8%	0	21	0.0%	1	21	4.8%
2	21	9.5%	0	21	0.0%	3	21	14.3%	2	21	9.5%
2	21	9.5%	2	21	9.5%	3	21	14.3%	4	21	19.0%
3	21	14.3%	0	21	0.0%	1	21	4.8%	0	21	0.0%
1	21	4.8%	2	21	9.5%	3	21	14.3%	0	21	0.0%
1	21	4.8%	0	21	0.0%	1	21	4.8%	1	21	4.8%
1	20	5.0%	1	21	4.8%	0	21	0.0%	1	21	4.8%
2	21	9.5%									
34	570	6.0%	22	550	4.0%	23	550	4.2%	31	550	5.6%
Average % off-task: 5.0%											

Video Only Group Day 3											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	2	22	9.1%	1	22	4.5%
0	22	0.0%	0	22	0.0%	2	22	9.1%	1	22	4.5%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	2	22	9.1%	1	22	4.5%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
1	22	4.5%	1	22	4.5%	1	22	4.5%	0	22	0.0%
0	22	0.0%	1	22	4.5%	4	22	18.2%	2	22	9.1%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
2	22	9.1%	2	22	9.1%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
2	22	9.1%	1	22	4.5%	2	22	9.1%	3	22	13.6%
2	22	9.1%	2	22	9.1%	1	22	4.5%	1	22	4.5%
2	22	9.1%	1	22	4.5%	1	22	4.5%	2	22	9.1%
2	22	9.1%	3	22	13.6%	3	22	13.6%	1	22	4.5%
3	22	13.6%	3	22	13.6%	3	22	13.6%	3	22	13.6%
2	22	9.1%	2	22	9.1%	3	22	13.6%	2	21	9.5%
1	21	4.8%	1	21	4.8%	1	21	4.8%	2	21	9.5%
2	21	9.5%	1	21	4.8%	2	21	9.5%	1	21	4.8%
0	21	0.0%	0	21	0.0%	1	21	4.8%	1	21	4.8%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	1	21	4.8%
3	21	14.3%	3	21	14.3%	3	21	14.3%	2	21	9.5%
2	21	9.5%	3	21	14.3%	2	21	9.5%	3	21	14.3%
4	21	19.0%	1	21	4.8%	1	21	4.8%	5	21	23.8%
4	21	19.0%	2	21	9.5%	1	21	4.8%			
34	585	5.8%	29	585	5.0%	35	585	6.0%	32	563	5.7%
Average % off-task: 5.6%											

Music Only Group Day 3											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	2	21	9.5%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	1	21	4.8%	2	21	9.5%	1	21	4.8%
2	21	9.5%	0	21	0.0%	2	21	9.5%	1	21	4.8%
1	21	4.8%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	1	21	4.8%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	1	21	4.8%
1	21	4.8%	1	21	4.8%	1	21	4.8%	0	21	0.0%
2	21	9.5%	3	21	14.3%	3	21	14.3%	0	21	0.0%
0	21	0.0%	3	21	14.3%	3	21	14.3%	1	21	4.8%
2	21	9.5%	2	21	9.5%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	2	21	9.5%
1	21	4.8%	3	21	14.3%	0	21	0.0%	0	21	0.0%
1	21	4.8%	1	21	4.8%	1	21	4.8%	1	21	4.8%
2	21	9.5%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	2	21	9.5%	3	21	14.3%	0	21	0.0%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
13	609	2.1%	23	609	3.8%	22	609	3.6%	11	609	1.8%
Average % off-task: 2.8%											

Music/Video Group Treatment: Music Day 4											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	0	19	0.0%	2	19	10.5%	2	19	10.5%
3	19	15.8%	0	19	0.0%	1	19	5.3%	1	19	5.3%
4	19	21.1%	2	19	10.5%	0	19	0.0%	2	19	10.5%
0	19	0.0%	0	19	0.0%	3	19	15.8%	5	19	26.3%
0	19	0.0%	0	19	0.0%	1	19	5.3%	1	19	5.3%
2	19	10.5%	4	19	21.1%	5	19	26.3%	6	19	31.6%
3	19	15.8%	0	19	0.0%	0	19	0.0%	0	19	0.0%
2	19	10.5%	0	19	0.0%	1	19	5.3%	2	19	10.5%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
2	19	10.5%	0	19	0.0%	3	19	15.8%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
2	19	10.5%	0	19	0.0%	2	19	10.5%	0	19	0.0%
0	19	0.0%	1	19	5.3%	0	19	0.0%	2	19	10.5%
1	19	5.3%	2	19	10.5%	1	19	5.3%	2	19	10.5%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	2	19	10.5%	1	19	5.3%
3	19	15.8%	1	19	5.3%	6	19	31.6%	6	19	31.6%
3	19	15.8%	3	19	15.8%	1	19	5.3%	0	19	0.0%
1	19	5.3%	3	19	15.8%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	1	19	5.3%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
2	19	10.5%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	3	19	15.8%	0	19	0.0%	0	19	0.0%
1	19	5.3%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
1	19	5.3%	0	19	0.0%	3	19	15.8%	0	19	0.0%
2	19	10.5%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
32	570	5.6%	22	570	3.9%	33	570	5.8%	36	570	6.3%
Average % off-task: 5.4%											

Music/Video Group Treatment: Video Day 4											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
5	19	26.3%	3	19	15.8%	2	19	10.5%	1	19	5.3%
2	19	10.5%	4	19	21.1%	5	19	26.3%	4	19	21.1%
5	19	26.3%	4	19	21.1%	4	19	21.1%	4	19	21.1%
6	19	31.6%	5	19	26.3%	2	19	10.5%	4	19	21.1%
1	19	5.3%	2	19	10.5%	1	19	5.3%	2	19	10.5%
3	19	15.8%	3	19	15.8%	2	19	10.5%	0	19	0.0%
2	19	10.5%	3	19	15.8%	1	19	5.3%	0	19	0.0%
1	19	5.3%	2	19	10.5%	2	19	10.5%	2	19	10.5%
4	19	21.1%	7	19	36.8%	4	19	21.1%	3	19	15.8%
5	19	26.3%	3	19	15.8%	2	19	10.5%	1	19	5.3%
0	19	0.0%	0	19	0.0%	3	19	15.8%	3	19	15.8%
2	19	10.5%	0	19	0.0%	1	19	5.3%	0	19	0.0%
2	19	10.5%	2	19	10.5%	0	19	0.0%	1	19	5.3%
1	19	5.3%	4	19	21.1%	2	19	10.5%	4	19	21.1%
3	19	15.8%	4	19	21.1%	2	19	10.5%	4	19	21.1%
3	19	15.8%	3	19	15.8%	2	19	10.5%	2	19	10.5%
3	19	15.8%	7	19	36.8%	4	19	21.1%	3	19	15.8%
2	19	10.5%	1	19	5.3%	3	19	15.8%	4	19	21.1%
4	19	21.1%	3	19	15.8%	3	19	15.8%	4	19	21.1%
3	19	15.8%	3	19	15.8%	2	19	10.5%	2	19	10.5%
4	19	21.1%	5	19	26.3%	2	19	10.5%	5	19	26.3%
3	19	15.8%	0	19	0.0%	2	19	10.5%	3	19	15.8%
3	19	15.8%	2	19	10.5%	2	19	10.5%	2	19	10.5%
2	19	10.5%	3	19	15.8%	5	19	26.3%	5	19	26.3%
3	19	15.8%	4	19	21.1%	3	19	15.8%	2	19	10.5%
2	19	10.5%	4	19	21.1%	3	19	15.8%	3	19	15.8%
6	19	31.6%	4	19	21.1%	2	19	10.5%	7	19	36.8%
80	513	15.6%	85	513	16.6%	66	513	12.9%	75	513	14.6%
Average % off-task: 14.9%											

Video-Only Group Day 4											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
4	21	19.0%	4	21	19.0%	3	21	14.3%	5	21	23.8%
9	21	42.9%	6	21	28.6%	8	21	38.1%	4	21	19.0%
3	21	14.3%	1	21	4.8%	0	21	0.0%	1	21	4.8%
0	21	0.0%	2	21	9.5%	4	21	19.0%	2	21	9.5%
1	21	4.8%	2	21	9.5%	1	21	4.8%	2	21	9.5%
0	21	0.0%	0	21	0.0%	3	21	14.3%	1	21	4.8%
2	21	9.5%	1	21	4.8%	0	21	0.0%	3	21	14.3%
6	21	28.6%	5	21	23.8%	3	21	14.3%	2	21	9.5%
0	21	0.0%	0	21	0.0%	4	21	19.0%	1	21	4.8%
3	21	14.3%	2	21	9.5%	2	21	9.5%	2	21	9.5%
0	21	0.0%	2	21	9.5%	3	21	14.3%	3	21	14.3%
3	21	14.3%	3	21	14.3%	1	21	4.8%	2	21	9.5%
3	21	14.3%	3	21	14.3%	1	21	4.8%	4	21	19.0%
2	21	9.5%	0	21	0.0%	2	21	9.5%	5	21	23.8%
5	21	23.8%	0	21	0.0%	0	21	0.0%	3	21	14.3%
2	21	9.5%	3	21	14.3%	4	21	19.0%	3	21	14.3%
8	21	38.1%	6	21	28.6%	4	21	19.0%	5	21	23.8%
5	21	23.8%	5	21	23.8%	8	21	38.1%	5	21	23.8%
1	21	4.8%	0	21	0.0%	2	21	9.5%	0	21	0.0%
2	21	9.5%	4	21	19.0%	5	21	23.8%	3	21	14.3%
3	21	14.3%	2	21	9.5%	5	21	23.8%	3	21	14.3%
4	21	19.0%	2	21	9.5%	3	21	14.3%	3	21	14.3%
2	21	9.5%	4	21	19.0%	3	21	14.3%	2	21	9.5%
1	21	4.8%	1	21	4.8%	4	21	19.0%	4	21	19.0%
7	21	33.3%	5	21	23.8%	7	21	33.3%	5	21	23.8%
3	21	14.3%	2	21	9.5%	2	21	9.5%	6	21	28.6%
4	21	19.0%	3	21	14.3%						
83	567	14.6%	68	567	12.0%	82	546	15.0%	79	546	14.5%
Average % off-task: 14.0%											

Music-Only Group Day 4											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	20	0.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	3	20	15.0%	5	20	25.0%	1	20	5.0%
1	20	5.0%	6	20	30.0%	4	20	20.0%	2	20	10.0%
6	20	30.0%	1	20	5.0%	1	20	5.0%	0	20	0.0%
4	20	20.0%	3	20	15.0%	0	20	0.0%	0	20	0.0%
5	20	25.0%	3	20	15.0%	7	20	35.0%	0	20	0.0%
2	20	10.0%	2	20	10.0%	6	20	30.0%	2	20	10.0%
1	20	5.0%	5	20	25.0%	2	20	10.0%	2	20	10.0%
3	20	15.0%	2	20	10.0%	0	20	0.0%	0	20	0.0%
3	20	15.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	3	20	15.0%	4	20	20.0%	1	20	5.0%
1	20	5.0%	2	20	10.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	4	20	20.0%	1	20	5.0%
0	20	0.0%	2	20	10.0%	0	20	0.0%	2	20	10.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	2	20	10.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
2	20	10.0%	0	20	0.0%	4	20	20.0%	3	20	15.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
2	20	10.0%	2	20	10.0%	0	20	0.0%	0	20	0.0%
33	560	5.9%	36	560	6.4%	46	560	8.2%	23	560	4.1%
Average % off-task: 6.2%											

Music/Video Group Treatment: Music Day 5											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
5	21	23.8%	2	21	9.5%	1	21	4.8%	1	21	4.8%
3	21	14.3%	2	21	9.5%	0	21	0.0%	0	21	0.0%
1	21	4.8%	1	21	4.8%	0	21	0.0%	1	21	4.8%
3	21	14.3%	1	21	4.8%	2	21	9.5%	1	21	4.8%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
2	21	9.5%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	2	21	9.5%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	20	0.0%	1	20	5.0%	1	21	4.8%	1	21	4.8%
1	21	4.8%	3	21	14.3%	2	21	9.5%	1	21	4.8%
0	21	0.0%	1	21	4.8%	2	21	9.5%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	1	21	4.8%	1	21	4.8%	1	21	4.8%
0	21	0.0%	2	21	9.5%	0	21	0.0%	0	21	0.0%
4	21	19.0%	1	21	4.8%	2	21	9.5%	2	21	9.5%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	3	21	14.3%
2	21	9.5%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	2	21	9.5%
1	21	4.8%	0	21	0.0%	2	21	9.5%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
2	21	9.5%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
27	627	4.3%	19	627	3.0%	17	628	2.7%	18	627	2.9%
Average % off-task: 3.2%											

Music/Video Group Treatment: Video Day 5											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
5	19	26.3%	4	19	21.1%	5	19	26.3%	3	19	15.8%
4	19	21.1%	4	19	21.1%	3	19	15.8%	5	19	26.3%
2	20	10.0%	3	20	15.0%	2	20	10.0%	3	20	15.0%
3	20	15.0%	4	20	20.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	0	20	0.0%	3	20	15.0%	5	20	25.0%
2	20	10.0%	2	20	10.0%	3	20	15.0%	1	20	5.0%
2	20	10.0%	1	20	5.0%	3	20	15.0%	2	20	10.0%
2	20	10.0%	0	20	0.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	3	20	15.0%	1	20	5.0%	5	20	25.0%
2	20	10.0%	1	20	5.0%	4	20	20.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
3	20	15.0%	2	20	10.0%	2	20	10.0%	4	20	20.0%
2	20	10.0%	0	20	0.0%	4	20	20.0%	7	20	35.0%
3	20	15.0%	0	20	0.0%	2	20	10.0%	3	20	15.0%
2	20	10.0%	0	20	0.0%	4	20	20.0%	8	20	40.0%
4	20	20.0%	6	20	30.0%	8	20	40.0%	2	20	10.0%
3	20	15.0%	1	20	5.0%	2	20	10.0%	6	20	30.0%
5	20	25.0%	2	20	10.0%	4	20	20.0%	0	20	0.0%
3	20	15.0%	2	20	10.0%	2	20	10.0%	2	20	10.0%
4	20	20.0%	4	20	20.0%	3	20	15.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
2	20	10.0%	2	20	10.0%	0	20	0.0%	1	20	5.0%
4	20	20.0%	5	20	25.0%	3	20	15.0%	5	20	25.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	2	20	10.0%
2	20	10.0%	4	20	20.0%	3	20	15.0%	2	20	10.0%
6	20	30.0%	2	20	10.0%	7	20	35.0%			
69	518	13.3%	53	518	10.2%	74	518	14.3%	72	498	14.5%
Average % off-task: 13.1%											

Video-Only Group Day 5											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	20	5.0%	2	20	10.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	2	20	10.0%	1	20	5.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
3	20	15.0%	1	20	5.0%	2	21	9.5%	1	21	4.8%
0	21	0.0%	3	21	14.3%	0	21	0.0%	1	21	4.8%
2	21	9.5%	1	21	4.8%	2	21	9.5%	0	21	0.0%
1	21	4.8%	0	21	0.0%	2	22	9.1%	2	23	8.7%
5	23	21.7%	3	23	13.0%	5	23	21.7%	3	23	13.0%
1	23	4.3%	1	23	4.3%	1	23	4.3%	1	23	4.3%
1	23	4.3%	3	23	13.0%	4	23	17.4%	3	23	13.0%
3	23	13.0%	3	23	13.0%	2	23	8.7%	2	20	10.0%
4	20	20.0%	5	20	25.0%	5	20	25.0%	3	20	15.0%
2	21	9.5%	5	21	23.8%	5	21	23.8%	4	21	19.0%
2	21	9.5%	2	21	9.5%	2	22	9.1%	2	22	9.1%
2	22	9.1%	3	22	13.6%	2	22	9.1%	1	23	4.3%
3	23	13.0%	1	23	4.3%	2	23	8.7%	4	23	17.4%
3	23	13.0%	5	23	21.7%	3	22	13.6%	6	22	27.3%
4	22	18.2%	2	22	9.1%	1	22	4.5%	0	22	0.0%
1	22	4.5%	4	22	18.2%	2	22	9.1%	3	22	13.6%
3	22	13.6%	3	22	13.6%	3	22	13.6%	0	22	0.0%
2	22	9.1%	2	22	9.1%	2	22	9.1%	2	22	9.1%
4	22	18.2%	5	21	23.8%	4	21	19.0%	2	22	9.1%
47	475	9.9%	56	474	11.8%	50	476	10.5%	43	476	9.0%
Average % off-task: 10.3%											

Music-Only Group Day 5											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	20	15.0%	1	20	5.0%	3	20	15.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	4	20	20.0%	6	20	30.0%	2	20	10.0%
2	20	10.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	2	20	10.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
3	20	15.0%	2	20	10.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
2	20	10.0%	3	20	15.0%	2	20	10.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	19	0.0%
0	19	0.0%	2	19	10.5%	1	19	5.3%	1	19	5.3%
1	19	5.3%	2	19	10.5%	1	19	5.3%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	3	19	15.8%
24	595	4.0%	29	595	4.9%	29	595	4.9%	23	594	3.9%
Average % off-task: 4.4%											

Music/Video Group Treatment: Music Day 6											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	21	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	1	22	4.5%	1	22	4.5%	1	22	4.5%
1	22	4.5%	1	22	4.5%	2	22	9.1%	0	22	0.0%
0	22	0.0%	4	22	18.2%	3	22	13.6%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	1	22	4.5%
2	22	9.1%	0	22	0.0%	2	22	9.1%	1	22	4.5%
0	22	0.0%	1	22	4.5%	1	22	4.5%	0	22	0.0%
1	22	4.5%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	1	22	4.5%	0	22	0.0%
1	22	4.5%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	2	22	9.1%	0	22	0.0%	1	22	4.5%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	2	22	9.1%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	1	22	4.5%	1	22	4.5%
1	22	4.5%	1	22	4.5%	2	22	9.1%	1	22	4.5%
0	22	0.0%	0	22	0.0%	1	22	4.5%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	21	0.0%	2	21	9.5%
0	21	0.0%	3	21	14.3%	2	21	9.5%	5	21	23.8%
0	21	0.0%	4	21	19.0%	0	21	0.0%	0	19	0.0%
1	19	5.3%	1	19	5.3%	0	19	0.0%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	1	18	5.6%
2	18	11.1%	2	18	11.1%	0	18	0.0%	0	18	0.0%
0	18	0.0%	1	18	5.6%	0	18	0.0%	1	18	5.6%
2	18	11.1%	1	18	5.6%	0	18	0.0%	1	18	5.6%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	15	0.0%
1	15	6.7%	0	15	0.0%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	15	0.0%	1	15	6.7%
1	15	6.7%	0	15	0.0%	1	15	6.7%	0	15	0.0%
15	607	2.5%	26	607	4.3%	17	606	2.8%	18	601	3.0%
Average % off-task: 3.1%											

Music/Video Group Treatment: Video Day 6											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	16	0.0%	1	16	6.3%	1	16	6.3%	1	16	6.3%
2	16	12.5%	5	16	31.3%	5	16	31.3%	4	16	25.0%
2	16	12.5%	4	16	25.0%	6	16	37.5%	2	16	12.5%
5	16	31.3%	0	16	0.0%	1	16	6.3%	1	15	6.7%
0	16	0.0%	0	17	0.0%	3	17	17.6%	4	17	23.5%
3	17	17.6%	0	17	0.0%	2	17	11.8%	2	17	11.8%
3	17	17.6%	1	17	5.9%	4	17	23.5%	1	17	5.9%
2	17	11.8%	2	17	11.8%	5	17	29.4%	4	17	23.5%
3	17	17.6%	1	17	5.9%	3	17	17.6%	4	17	23.5%
4	17	23.5%	3	17	17.6%	3	17	17.6%	4	17	23.5%
2	17	11.8%	0	17	0.0%	4	17	23.5%	6	17	35.3%
2	17	11.8%	6	17	35.3%	4	17	23.5%	2	17	11.8%
4	17	23.5%	4	17	23.5%	5	17	29.4%	2	17	11.8%
1	17	5.9%	2	17	11.8%	1	17	5.9%	1	17	5.9%
0	17	0.0%	4	17	23.5%	5	17	29.4%	6	17	35.3%
6	17	35.3%	3	17	17.6%	4	17	23.5%	0	17	0.0%
0	17	0.0%	1	17	5.9%	3	17	17.6%	2	17	11.8%
0	17	0.0%	0	17	0.0%	2	17	11.8%	2	17	11.8%
3	17	17.6%	2	17	11.8%	4	17	23.5%	2	17	11.8%
3	17	17.6%	4	17	23.5%	5	17	29.4%	6	17	35.3%
2	17	11.8%	2	17	11.8%	4	17	23.5%	4	17	23.5%
3	17	17.6%	6	17	35.3%	3	17	17.6%	1	17	5.9%
2	17	11.8%	4	17	23.5%	2	17	11.8%	1	17	5.9%
0	17	0.0%	1	17	5.9%	5	17	29.4%	4	17	23.5%
3	17	17.6%	2	17	11.8%	4	17	23.5%	3	17	17.6%
0	17	0.0%	1	17	5.9%	4	17	23.5%	5	17	29.4%
4	17	23.5%	3	16	18.8%	5	17	29.4%	3	17	17.6%
5	17	29.4%	6	17	35.3%	10	17	58.8%	5	17	29.4%
5	17	29.4%	6	17	35.3%	6	17	35.3%	7	17	41.2%
5	17	29.4%	5	17	29.4%						
74	505	14.7%	79	505	15.6%	113	489	23.1%	89	488	18.2%
Average % off-task: 17.9											

Video-Only Group Day 6											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
4	23	17.4%	5	23	21.7%	3	23	13.0%	5	23	21.7%
4	23	17.4%	3	22	13.6%	4	22	18.2%	2	22	9.1%
5	22	22.7%	5	22	22.7%	4	23	17.4%	4	23	17.4%
3	23	13.0%	4	23	17.4%	6	23	26.1%	6	23	26.1%
5	23	21.7%	2	23	8.7%	5	24	20.8%	2	24	8.3%
4	24	16.7%	1	24	4.2%	4	24	16.7%	6	24	25.0%
1	24	4.2%	3	24	12.5%	3	24	12.5%	3	24	12.5%
4	24	16.7%	5	24	20.8%	3	24	12.5%	3	24	12.5%
3	24	12.5%	1	24	4.2%	0	24	0.0%	0	24	0.0%
1	24	4.2%	0	24	0.0%	1	24	4.2%	4	24	16.7%
4	24	16.7%	3	24	12.5%	8	24	33.3%	14	24	58.3%
8	24	33.3%	3	24	12.5%	4	24	16.7%	2	24	8.3%
3	24	12.5%	2	24	8.3%	4	24	16.7%	4	24	16.7%
3	24	12.5%	2	24	8.3%	2	24	8.3%	3	24	12.5%
3	24	12.5%	4	24	16.7%	11	24	45.8%	8	24	33.3%
6	24	25.0%	3	24	12.5%	2	24	8.3%	5	24	20.8%
3	24	12.5%	3	24	12.5%	2	24	8.3%	4	24	16.7%
3	24	12.5%	3	24	12.5%	3	24	12.5%	2	24	8.3%
1	24	4.2%	1	24	4.2%	1	24	4.2%	2	24	8.3%
3	24	12.5%	6	24	25.0%	2	24	8.3%	1	24	4.2%
3	24	12.5%	3	24	12.5%	3	23	13.0%	6	24	25.0%
1	24	4.2%	1	24	4.2%	1	24	4.2%	2	24	8.3%
5	23	21.7%	6	23	26.1%	4	23	17.4%	4	23	17.4%
3	23	13.0%	3	23	13.0%	1	23	4.3%	2	23	8.7%
2	24	8.3%	5	24	20.8%	4	24	16.7%	11	24	45.8%
2	24	8.3%									
87	616	14.1%	77	591	13.0%	85	592	14.4%	105	593	17.7%
Average % off-task: 14.8%											

Music-Only Group Day 6											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	22	9.1%	3	22	13.6%	1	23	4.3%	1	23	4.3%
1	23	4.3%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	5	24	20.8%	0	24	0.0%
1	24	4.2%	1	24	4.2%	3	24	12.5%	0	24	0.0%
1	24	4.2%	0	24	0.0%	2	24	8.3%	1	24	4.2%
1	24	4.2%	0	24	0.0%	0	24	0.0%	1	24	4.2%
1	24	4.2%	1	24	4.2%	0	24	0.0%	1	24	4.2%
3	24	12.5%	0	24	0.0%	0	24	0.0%	2	24	8.3%
4	22	18.2%	3	22	13.6%	1	22	4.5%	1	22	4.5%
1	22	4.5%	0	22	0.0%	1	22	4.5%	0	22	0.0%
2	22	9.1%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	1	22	4.5%	1	22	4.5%
1	22	4.5%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	1	22	4.5%	0	22	0.0%
1	22	4.5%	0	22	0.0%	4	22	18.2%	3	22	13.6%
2	22	9.1%	4	22	18.2%	2	22	9.1%	2	22	9.1%
3	22	13.6%	2	22	9.1%	4	22	18.2%	3	22	13.6%
1	22	4.5%	0	22	0.0%	0	22	0.0%	1	22	4.5%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	1	22	4.5%	2	22	9.1%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%									
26	606	4.3%	16	584	2.7%	26	586	4.4%	20	586	3.4%
Average % off-task: 3.7%											

Music/Video Group Treatment: Music Day 7											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	2	19	10.5%	0	19	0.0%	2	19	10.5%
0	19	0.0%	0	19	0.0%	2	19	10.5%	2	19	10.5%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
2	19	10.5%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	2	19	10.5%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	3	19	15.8%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
2	19	10.5%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
2	19	10.5%	1	19	5.3%	1	19	5.3%	2	19	10.5%
0	19	0.0%	2	19	10.5%	0	19	0.0%	0	19	0.0%
2	19	10.5%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	2	19	10.5%	3	19	15.8%	4	19	21.1%
3	19	15.8%	2	19	10.5%	4	19	21.1%	0	19	0.0%
2	19	10.5%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	3	19	15.8%	1	19	5.3%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	3	19	15.8%	0	19	0.0%
0	19	0.0%	0	19	0.0%	2	19	10.5%	3	19	15.8%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
2	19	10.5%	0	19	0.0%	3	19	15.8%	2	19	10.5%
15	570	2.6%	15	570	2.6%	23	570	4.0%	19	570	3.3%
Average % off-task: 3.2%											

Music/Video Group Treatment: Video Day 7											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	20	10.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	3	20	15.0%	3	20	15.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
3	20	15.0%	0	20	0.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	3	20	15.0%	2	20	10.0%
1	20	5.0%	3	20	15.0%	1	20	5.0%	4	20	20.0%
2	20	10.0%	1	20	5.0%	2	20	10.0%	2	20	10.0%
4	20	20.0%	0	20	0.0%	1	19	5.3%	2	20	10.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	3	20	15.0%
2	20	10.0%	3	20	15.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	2	20	10.0%	3	20	15.0%	1	20	5.0%
2	20	10.0%	1	20	5.0%	4	20	20.0%	1	20	5.0%
1	20	5.0%	2	20	10.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	3	20	15.0%	2	20	10.0%	2	20	10.0%
2	20	10.0%	0	20	0.0%	3	20	15.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	2	20	10.0%
2	20	10.0%	5	20	25.0%	5	20	25.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	6	20	30.0%	3	20	15.0%
6	20	30.0%	4	20	20.0%	2	20	10.0%	2	20	10.0%
0	20	0.0%	2	18	11.1%	1	18	5.6%	0	18	0.0%
1	18	5.6%	3	18	16.7%	5	18	27.8%	0	18	0.0%
3	18	16.7%	4	18	22.2%	1	18	5.6%	0	18	0.0%
0	18	0.0%	1	18	5.6%	1	18	5.6%	0	18	0.0%
39	594	6.6%	41	592	6.9%	55	591	9.3%	38	592	6.4%
Average % off-task: 7.3%											

Video-Only Group Day 7											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	21	4.8%	2	20	10.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	3	20	15.0%
2	20	10.0%	2	21	9.5%	3	21	14.3%	2	21	9.5%
0	21	0.0%	0	21	0.0%	2	22	9.1%	0	22	0.0%
2	22	9.1%	1	22	4.5%	0	22	0.0%	0	22	0.0%
1	23	4.3%	3	23	13.0%	2	23	8.7%	1	23	4.3%
2	23	8.7%	4	23	17.4%	2	23	8.7%	1	23	4.3%
2	23	8.7%	2	23	8.7%	1	23	4.3%	0	23	0.0%
1	23	4.3%	3	23	13.0%	0	23	0.0%	0	23	0.0%
1	23	4.3%	1	23	4.3%	2	23	8.7%	1	23	4.3%
0	23	0.0%	0	23	0.0%	0	23	0.0%	1	23	4.3%
3	23	13.0%	1	23	4.3%	1	23	4.3%	2	23	8.7%
3	23	13.0%	4	23	17.4%	1	23	4.3%	2	23	8.7%
1	23	4.3%	1	23	4.3%	1	23	4.3%	2	23	8.7%
2	23	8.7%	1	23	4.3%	1	23	4.3%	0	23	0.0%
0	23	0.0%	2	23	8.7%	1	23	4.3%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	1	23	4.3%	0	23	0.0%	0	23	0.0%
0	23	0.0%	1	23	4.3%	0	23	0.0%	0	23	0.0%
0	23	0.0%	2	23	8.7%	1	23	4.3%	5	23	21.7%
2	23	8.7%	1	23	4.3%	3	23	13.0%	2	23	8.7%
3	23	13.0%	4	23	17.4%	4	23	17.4%	2	23	8.7%
29	562	5.2%	37	562	6.6%	29	563	5.2%	25	563	4.4%
Average % off-task: 5.3%											

Music-Only Group Day 7											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	22	9.1%	1	22	4.5%	1	22	4.5%	1	22	4.5%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
1	21	4.8%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	2	21	9.5%
2	21	9.5%	3	21	14.3%	2	21	9.5%	4	21	19.0%
0	21	0.0%	2	21	9.5%	1	21	4.8%	3	21	14.3%
1	21	4.8%	1	21	4.8%	0	21	0.0%	7	21	33.3%
8	21	38.1%	5	21	23.8%	4	21	19.0%	3	21	14.3%
2	21	9.5%	3	21	14.3%	1	20	5.0%	0	20	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	3	21	14.3%
2	21	9.5%	2	21	9.5%	0	21	0.0%	1	21	4.8%
4	21	19.0%	2	21	9.5%	4	21	19.0%	5	19	26.3%
1	19	5.3%	2	19	10.5%	0	20	0.0%	2	20	10.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	3	20	15.0%
2	20	10.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	3	20	15.0%	0	20	0.0%	1	20	5.0%
2	20	10.0%	0	20	0.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	2	20	10.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	3	20	15.0%	2	20	10.0%	4	20	20.0%
2	20	10.0%	1	20	5.0%	4	20	20.0%	3	20	15.0%
2	20	10.0%	2	20	10.0%	4	20	20.0%	2	20	10.0%
2	20	10.0%	3	19	15.8%	2	19	10.5%	2	19	10.5%
1	19	5.3%	3	19	15.8%	2	19	10.5%	3	19	15.8%
2	19	10.5%	1	19	5.3%	2	19	10.5%	3	19	15.8%
3	18	16.7%	2	18	11.1%	3	18	16.7%	2	18	11.1%
0	18	0.0%	1	18	5.6%	1	18	5.6%	0	18	0.0%
2	18	11.1%	0	18	0.0%	1	18	5.6%	0	18	0.0%
0	18	0.0%	0	18	0.0%	1	18	5.6%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
48	602	8.0%	46	601	7.7%	43	601	7.2%	58	599	9.7%
Average % off-task: 8.1%											

Music/Video Group Treatment: Music Day 8											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
1	17	5.9%	1	17	5.9%	2	17	11.8%	0	17	0.0%
1	17	5.9%	1	17	5.9%	1	17	5.9%	2	17	11.8%
1	17	5.9%	2	17	11.8%	1	17	5.9%	1	17	5.9%
1	17	5.9%	1	17	5.9%	0	17	0.0%	0	17	0.0%
0	17	0.0%	1	17	5.9%	2	17	11.8%	0	17	0.0%
0	17	0.0%	1	17	5.9%	0	17	0.0%	0	17	0.0%
0	17	0.0%	0	17	0.0%	0	17	0.0%	2	17	11.8%
0	17	0.0%	1	17	5.9%	1	17	5.9%	0	17	0.0%
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
1	17	5.9%	2	17	11.8%	2	17	11.8%	1	17	5.9%
1	17	5.9%	2	17	11.8%	2	17	11.8%	1	17	5.9%
0	17	0.0%	1	17	5.9%	0	17	0.0%	2	17	11.8%
1	17	5.9%	2	17	11.8%	1	17	5.9%	0	17	0.0%
2	17	11.8%	2	17	11.8%	1	17	5.9%	1	17	5.9%
2	17	11.8%	2	17	11.8%	2	17	11.8%	0	17	0.0%
0	17	0.0%	1	17	5.9%	1	17	5.9%	1	17	5.9%
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
2	17	11.8%	0	17	0.0%	0	17	0.0%	1	17	5.9%
2	17	11.8%	2	17	11.8%	2	17	11.8%	1	17	5.9%
0	17	0.0%	0	17	0.0%	1	17	5.9%	1	17	5.9%
0	17	0.0%	0	17	0.0%	1	17	5.9%	1	17	5.9%
0	17	0.0%	2	17	11.8%	1	17	5.9%	0	17	0.0%
2	17	11.8%	2	17	11.8%	1	17	5.9%	0	17	0.0%
0	17	0.0%	1	17	5.9%						
17	476	3.6%	27	476	5.7%	22	459	4.8%	15	459	3.3%
Average % off-task: 4.3%											

Music/Video Group Treatment: Video Day 8											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	20	5.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
3	20	15.0%	2	20	10.0%	1	20	5.0%	3	20	15.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
2	20	10.0%	3	20	15.0%	3	20	15.0%	1	20	5.0%
1	20	5.0%	2	20	10.0%	1	20	5.0%	3	20	15.0%
3	20	15.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
2	20	10.0%	1	20	5.0%	4	20	20.0%	4	20	20.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	4	20	20.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	2	19	10.5%	1	19	5.3%	1	19	5.3%
2	19	10.5%	1	19	5.3%	1	20	5.0%	1	20	5.0%
1	20	5.0%	3	20	15.0%	2	20	10.0%	4	20	20.0%
0	20	0.0%	1	20	5.0%	3	20	15.0%	2	20	10.0%
2	20	10.0%	0	20	0.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
2	20	10.0%	0	20	0.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	4	20	20.0%	4	20	20.0%	2	20	10.0%
2	20	10.0%	4	20	20.0%	2	20	10.0%	1	20	5.0%
3	20	15.0%	2	20	10.0%	3	20	15.0%	3	20	15.0%
1	20	5.0%	0	20	0.0%						
35	479	7.3%	37	478	7.7%	39	459	8.5%	41	459	8.9%
Average % off-task: 8.1%											

Video-Only Group Day 8											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	0	19	0.0%	2	19	10.5%	2	19	10.5%
1	19	5.3%	3	19	15.8%	2	19	10.5%	2	19	10.5%
1	19	5.3%	0	19	0.0%	1	19	5.3%	0	19	0.0%
0	19	0.0%	2	19	10.5%	1	19	5.3%	2	19	10.5%
1	19	5.3%	1	19	5.3%	1	19	5.3%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
1	19	5.3%	2	19	10.5%	1	19	5.3%	0	19	0.0%
1	19	5.3%	1	19	5.3%	1	19	5.3%	2	19	10.5%
2	19	10.5%	1	18	5.6%	0	18	0.0%	0	18	0.0%
0	19	0.0%	1	19	5.3%	0	19	0.0%	1	19	5.3%
0	19	0.0%	0	19	0.0%	4	19	21.1%	4	17	23.5%
1	17	5.9%	2	17	11.8%	1	17	5.9%	2	17	11.8%
2	17	11.8%	1	17	5.9%	1	17	5.9%	1	17	5.9%
2	17	11.8%	1	17	5.9%	3	17	17.6%	2	19	10.5%
1	19	5.3%	1	19	5.3%	2	19	10.5%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	1	19	5.3%
2	19	10.5%	1	19	5.3%	1	19	5.3%	2	19	10.5%
2	19	10.5%	2	19	10.5%	3	19	15.8%	3	19	15.8%
2	19	10.5%	0	19	0.0%	0	19	0.0%	1	19	5.3%
3	19	15.8%	3	19	15.8%	5	19	26.3%	2	19	10.5%
3	19	15.8%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	3	19	15.8%
2	19	10.5%	2	19	10.5%	2	19	10.5%	1	19	5.3%
1	19	5.3%	2	19	10.5%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	2	19	10.5%	3	19	15.8%	2	19	10.5%
1	19	5.3%									
29	507	5.7%	29	487	6.0%	35	487	7.2%	36	487	7.4%
Average % off-task: 6.6%											

Music/Video Group Treatment: Music Day 9											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	20	0.0%	0	20	0.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	0	20	0.0%	3	20	15.0%	6	20	30.0%
4	20	20.0%	3	20	15.0%	2	20	10.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	2	20	10.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
2	20	10.0%	1	20	5.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	4	20	20.0%
2	20	10.0%	0	20	0.0%	3	20	15.0%	3	20	15.0%
6	20	30.0%	4	20	20.0%	4	20	20.0%	4	20	20.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	3	20	15.0%	2	20	10.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	5	20	25.0%	5	20	25.0%	4	20	20.0%
3	20	15.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	0	20	0.0%	4	20	20.0%
3	20	15.0%	3	20	15.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	2	20	10.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
29	540	5.4%	25	540	4.6%	30	540	5.6%	37	540	6.9%
Average % off-task: 5.6%											

Music/Video Group Treatment: Video Day 9											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	20	15.0%	4	20	20.0%	2	20	10.0%	2	20	10.0%
2	20	10.0%	5	20	25.0%	5	20	25.0%	3	20	15.0%
2	20	10.0%	3	20	15.0%	3	20	15.0%	6	20	30.0%
4	20	20.0%	2	20	10.0%	1	20	5.0%	2	20	10.0%
2	20	10.0%	3	20	15.0%	3	20	15.0%	0	20	0.0%
1	20	5.0%	3	20	15.0%	4	20	20.0%	2	20	10.0%
3	20	15.0%	1	20	5.0%	3	20	15.0%	4	20	20.0%
1	20	5.0%	3	20	15.0%	3	20	15.0%	2	19	10.5%
3	19	15.8%	3	19	15.8%	1	19	5.3%	3	19	15.8%
1	19	5.3%	3	19	15.8%	2	19	10.5%	1	19	5.3%
5	19	26.3%	2	19	10.5%	4	19	21.1%	6	19	31.6%
3	19	15.8%	2	19	10.5%	4	19	21.1%	3	19	15.8%
1	19	5.3%	0	19	0.0%	1	19	5.3%	4	19	21.1%
4	19	21.1%	2	19	10.5%	2	19	10.5%	3	18	16.7%
1	18	5.6%	3	18	16.7%	3	18	16.7%	3	18	16.7%
5	18	27.8%	2	17	11.8%	4	17	23.5%	3	17	17.6%
2	17	11.8%	2	17	11.8%	0	17	0.0%	0	17	0.0%
2	17	11.8%	3	17	17.6%	0	17	0.0%	0	17	0.0%
0	17	0.0%	2	17	11.8%	3	17	17.6%	2	17	11.8%
0	17	0.0%	1	17	5.9%	2	17	11.8%	0	17	0.0%
0	17	0.0%	2	17	11.8%	2	17	11.8%	0	17	0.0%
0	17	0.0%	0	17	0.0%	0	17	0.0%	0	17	0.0%
0	17	0.0%	0	17	0.0%	3	17	17.6%	0	17	0.0%
2	17	11.8%	2	17	11.8%	4	17	23.5%	3	17	17.6%
47	446	10.5%	53	445	11.9%	59	445	13.3%	52	443	11.7%
Average % off-task: 11.9%											

Video-Only Group Day 9											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
7	21	33.3%	8	21	38.1%	6	21	28.6%	8	21	38.1%
6	21	28.6%	8	21	38.1%	6	21	28.6%	4	21	19.0%
6	21	28.6%	8	21	38.1%	6	21	28.6%	5	21	23.8%
4	21	19.0%	4	21	19.0%	4	21	19.0%	8	21	38.1%
6	21	28.6%	3	21	14.3%	7	21	33.3%	4	21	19.0%
7	21	33.3%	10	21	47.6%	7	21	33.3%	10	21	47.6%
6	21	28.6%	10	21	47.6%	10	21	47.6%	7	21	33.3%
4	21	19.0%	5	21	23.8%	2	21	9.5%	3	21	14.3%
4	21	19.0%	11	21	52.4%	10	21	47.6%	13	21	61.9%
12	21	57.1%	12	21	57.1%	9	21	42.9%	11	21	52.4%
11	21	52.4%	10	21	47.6%	8	21	38.1%	5	21	23.8%
4	21	19.0%	4	21	19.0%	4	21	19.0%	7	21	33.3%
6	21	28.6%	7	21	33.3%	8	21	38.1%	5	21	23.8%
3	21	14.3%	4	21	19.0%	5	21	23.8%	4	21	19.0%
2	21	9.5%	2	21	9.5%	2	21	9.5%	1	21	4.8%
2	21	9.5%	1	21	4.8%	2	21	9.5%	1	21	4.8%
4	21	19.0%	4	21	19.0%	6	21	28.6%	3	21	14.3%
5	21	23.8%	4	21	19.0%	1	21	4.8%	1	21	4.8%
0	21	0.0%	2	21	9.5%	5	21	23.8%	3	21	14.3%
2	21	9.5%	3	21	14.3%	4	21	19.0%	3	21	14.3%
2	21	9.5%	1	21	4.8%	1	21	4.8%	1	21	4.8%
1	21	4.8%	2	21	9.5%	4	21	19.0%	5	21	23.8%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	2	21	9.5%	3	21	14.3%	3	21	14.3%
4	21	19.0%	3	21	14.3%	3	21	14.3%	7	21	33.3%
108	525	20.6%	128	525	24.4%	123	525	23.4%	123	525	23.4%
Average % off-task: 23.0%											

Music-Only Group Day 9											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	20	15.0%	4	20	20.0%	0	20	0.0%	0	20	0.0%
2	21	9.5%	0	21	0.0%	2	21	9.5%	0	21	0.0%
0	21	0.0%	0	21	0.0%	2	21	9.5%	1	21	4.8%
5	21	23.8%	0	21	0.0%	7	21	33.3%	0	21	0.0%
6	21	28.6%	5	21	23.8%	10	20	50.0%	3	20	15.0%
2	20	10.0%	5	20	25.0%	0	20	0.0%	2	20	10.0%
3	20	15.0%	2	20	10.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	2	20	10.0%	0	20	0.0%	5	20	25.0%
3	20	15.0%	2	20	10.0%	0	20	0.0%	2	20	10.0%
2	21	9.5%	2	21	9.5%	0	21	0.0%	2	21	9.5%
2	21	9.5%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	20	0.0%
0	20	0.0%	4	21	19.0%	6	21	28.6%	5	21	23.8%
6	21	28.6%	3	21	14.3%	1	21	4.8%	1	21	4.8%
1	21	4.8%	3	21	14.3%	1	21	4.8%	0	21	0.0%
0	21	0.0%	3	21	14.3%	0	21	0.0%	0	21	0.0%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	2	21	9.5%
0	21	0.0%	3	21	14.3%	3	21	14.3%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	4	21	19.0%
4	21	19.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
2	21	9.5%	0	21	0.0%	2	21	9.5%	3	21	14.3%
5	21	23.8%	3	21	14.3%	0	21	0.0%	5	21	23.8%
6	21	28.6%	2	21	9.5%						
53	519	10.2%	43	520	8.3%	36	498	7.2%	37	497	7.4%
Average % off-task: 8.3%											

Music/Video Group Treatment: Music Day 10											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	22	0.0%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
2	22	9.1%	1	22	4.5%	1	22	4.5%	0	22	0.0%
1	22	4.5%	0	22	0.0%	1	22	4.5%	0	22	0.0%
1	22	4.5%	1	22	4.5%	1	22	4.5%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%	0	22	0.0%	0	22	0.0%	2	22	9.1%
1	22	4.5%	1	22	4.5%	0	22	0.0%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	1	22	4.5%	0	22	0.0%	1	22	4.5%
0	22	0.0%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	1	22	4.5%	1	22	4.5%	0	22	0.0%
0	22	0.0%	3	22	13.6%	1	22	4.5%	1	22	4.5%
3	22	13.6%	0	22	0.0%	2	22	9.1%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%	2	22	9.1%	1	22	4.5%	1	22	4.5%
0	22	0.0%	1	22	4.5%	1	22	4.5%	1	22	4.5%
1	22	4.5%	3	22	13.6%	1	22	4.5%	1	22	4.5%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%									
15	616	2.4%	16	594	2.7%	10	594	1.7%	10	594	1.7%
Average % off-task: 2.1%											

Music/Video Group Treatment: Video Day 10											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	22	9.1%	2	22	9.1%	2	22	9.1%	2	22	9.1%
2	22	9.1%	2	22	9.1%	3	22	13.6%	3	22	13.6%
4	22	18.2%	3	22	13.6%	3	22	13.6%	4	22	18.2%
8	22	36.4%	4	22	18.2%	2	22	9.1%	3	22	13.6%
3	22	13.6%	4	22	18.2%	3	22	13.6%	3	22	13.6%
3	22	13.6%	3	22	13.6%	1	22	4.5%	2	22	9.1%
1	22	4.5%	3	22	13.6%	3	22	13.6%	1	22	4.5%
1	22	4.5%	1	22	4.5%	1	22	4.5%	1	22	4.5%
2	22	9.1%	2	22	9.1%	2	22	9.1%	3	22	13.6%
4	22	18.2%	5	22	22.7%	3	22	13.6%	4	22	18.2%
3	22	13.6%	4	22	18.2%	2	22	9.1%	1	22	4.5%
2	22	9.1%	2	22	9.1%	1	22	4.5%	1	22	4.5%
3	22	13.6%	5	22	22.7%	3	22	13.6%	2	22	9.1%
2	22	9.1%	3	22	13.6%	2	22	9.1%	4	22	18.2%
3	22	13.6%	4	22	18.2%	5	22	22.7%	2	22	9.1%
6	22	27.3%	4	22	18.2%	3	22	13.6%	2	22	9.1%
2	22	9.1%	3	22	13.6%	2	22	9.1%	4	22	18.2%
5	22	22.7%	6	22	27.3%	4	22	18.2%	5	22	22.7%
6	22	27.3%	8	22	36.4%	7	22	31.8%	3	22	13.6%
2	22	9.1%	7	22	31.8%	5	22	22.7%	3	22	13.6%
2	22	9.1%	2	22	9.1%	4	22	18.2%	4	22	18.2%
3	22	13.6%	1	22	4.5%	1	22	4.5%	1	22	4.5%
2	22	9.1%	1	22	4.5%	1	22	4.5%	1	22	4.5%
1	22	4.5%	1	22	4.5%	2	22	9.1%	1	22	4.5%
1	22	4.5%	1	22	4.5%	1	22	4.5%	1	22	4.5%
3	22	13.6%	1	22	4.5%						
76	572	13.3%	82	572	14.3%	66	550	12.0%	61	550	11.1%
Average % off-task: 12.7%											

Video-Only Group Day 10											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	12	8.3%	0	12	0.0%	1	18	5.6%	4	18	22.2%
4	18	22.2%	3	18	16.7%	3	18	16.7%	5	18	27.8%
3	18	16.7%	4	18	22.2%	4	18	22.2%	2	18	11.1%
5	18	27.8%	3	18	16.7%	5	18	27.8%	3	16	18.8%
5	16	31.3%	3	16	18.8%	2	16	12.5%	0	16	0.0%
2	16	12.5%	2	16	12.5%	1	16	6.3%	1	16	6.3%
4	16	25.0%	1	16	6.3%	2	16	12.5%	1	16	6.3%
1	19	5.3%	2	19	10.5%	3	19	15.8%	4	19	21.1%
3	19	15.8%	1	19	5.3%	2	19	10.5%	4	19	21.1%
4	19	21.1%	6	19	31.6%	7	19	36.8%	7	18	38.9%
0	18	0.0%	1	19	5.3%	0	19	0.0%	2	19	10.5%
3	19	15.8%	1	19	5.3%	0	19	0.0%	3	19	15.8%
3	19	15.8%	3	19	15.8%	3	19	15.8%	2	19	10.5%
3	19	15.8%	3	19	15.8%	4	19	21.1%	2	19	10.5%
3	19	15.8%	5	19	26.3%	2	19	10.5%	1	19	5.3%
3	19	15.8%	2	19	10.5%	2	19	10.5%	1	19	5.3%
4	19	21.1%	1	19	5.3%	3	19	15.8%	4	19	21.1%
3	19	15.8%	5	19	26.3%	3	19	15.8%	5	19	26.3%
5	19	26.3%	5	19	26.3%	3	19	15.8%	6	19	31.6%
8	19	42.1%	6	19	31.6%	5	19	26.3%	2	19	10.5%
5	19	26.3%	8	18	44.4%	2	18	11.1%	2	18	11.1%
3	18	16.7%	3	18	16.7%	4	18	22.2%	2	18	11.1%
0	18	0.0%	2	18	11.1%	2	18	11.1%	1	18	5.6%
3	18	16.7%	2	18	11.1%	0	18	0.0%	1	18	5.6%
2	18	11.1%	3	18	16.7%	2	18	11.1%	4	18	22.2%
8	18	44.4%	11	18	61.1%						
88	469	18.8%	86	469	18.3%	65	457	14.2%	69	454	15.2%
Average % off-task: 16.7%											

Music-Only Group Day 10											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	15	0.0%	0	15	0.0%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	16	0.0%	0	16	0.0%
0	16	0.0%	0	16	0.0%	0	16	0.0%	0	16	0.0%
0	16	0.0%	0	16	0.0%	0	16	0.0%	2	16	12.5%
4	16	25.0%	1	16	6.3%	2	16	12.5%	1	16	6.3%
0	16	0.0%	0	16	0.0%	0	16	0.0%	0	16	0.0%
0	16	0.0%	1	16	6.3%	0	16	0.0%	0	16	0.0%
0	16	0.0%	0	16	0.0%	0	16	0.0%	0	16	0.0%
0	16	0.0%	0	16	0.0%	2	16	12.5%	0	16	0.0%
0	16	0.0%	0	16	0.0%	0	16	0.0%	0	16	0.0%
0	16	0.0%	0	16	0.0%	0	16	0.0%	0	16	0.0%
1	16	6.3%	1	16	6.3%	0	16	0.0%	0	16	0.0%
1	16	6.3%	0	16	0.0%	0	16	0.0%	0	16	0.0%
0	16	0.0%	1	16	6.3%	1	16	6.3%	1	15	6.7%
0	15	0.0%	1	15	6.7%	0	15	0.0%	0	15	0.0%
1	15	6.7%	0	15	0.0%	0	15	0.0%	1	15	6.7%
0	15	0.0%	1	16	6.3%	0	16	0.0%	0	16	0.0%
1	15	6.7%	1	15	6.7%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	2	15	13.3%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	1	15	6.7%	1	15	6.7%
1	15	6.7%	3	15	20.0%	1	15	6.7%	1	15	6.7%
2	15	13.3%	2	15	13.3%	3	15	20.0%	2	15	13.3%
0	15	0.0%	1	15	6.7%	2	15	13.3%	2	15	13.3%
2	15	13.3%	2	15	13.3%	2	15	13.3%	1	15	6.7%
7	15	46.7%	4	15	26.7%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	2	15	13.3%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	15	0.0%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	15	0.0%	0	15	0.0%
20	462	4.3%	19	463	4.1%	18	464	3.9%	12	463	2.6%
Average % off-task: 3.7%											

Music/Video Group Treatment: Music Day 11											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	22	0.0%	0	22	0.0%	3	22	13.6%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
0	22	0.0%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	0	22	0.0%
1	22	4.5%	3	22	13.6%	2	22	9.1%	4	22	18.2%
0	22	0.0%	2	22	9.1%	3	23	13.0%	4	23	17.4%
5	23	21.7%	6	23	26.1%	8	22	36.4%	5	22	22.7%
2	22	9.1%	5	22	22.7%	5	22	22.7%	2	22	9.1%
1	22	4.5%	3	22	13.6%	5	22	22.7%	4	22	18.2%
2	22	9.1%	3	21	14.3%	1	21	4.8%	2	21	9.5%
0	21	0.0%	1	21	4.8%	3	21	14.3%	2	21	9.5%
3	21	14.3%	1	21	4.8%	2	21	9.5%	4	21	19.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	1	21	4.8%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	2	21	9.5%	0	21	0.0%
2	21	9.5%	0	21	0.0%	1	21	4.8%	1	21	4.8%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
2	21	9.5%	3	21	14.3%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
3	21	14.3%	4	21	19.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	5	21	23.8%	1	21	4.8%	4	21	19.0%
7	21	33.3%	6	21	28.6%	6	21	28.6%	6	21	28.6%
0	21	0.0%	6	21	28.6%	8	21	38.1%	6	21	28.6%
3	21	14.3%	2	21	9.5%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	4	21	19.0%
31	557	5.6%	51	556	9.2%	52	556	9.4%	49	556	8.8%
Average % off-task: 8.2%											

Music/Video Group Treatment: Video Day 11											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
4	19	21.1%	4	19	21.1%	3	19	15.8%	2	19	10.5%
0	19	0.0%	2	19	10.5%	2	19	10.5%	1	19	5.3%
0	19	0.0%	0	19	0.0%	1	19	5.3%	2	19	10.5%
1	19	5.3%	2	19	10.5%	1	19	5.3%	2	19	10.5%
3	19	15.8%	0	19	0.0%	2	19	10.5%	2	19	10.5%
5	19	26.3%	1	19	5.3%	1	19	5.3%	2	19	10.5%
3	19	15.8%	2	19	10.5%	1	19	5.3%	0	19	0.0%
4	19	21.1%	3	19	15.8%	4	19	21.1%	3	19	15.8%
2	19	10.5%	1	19	5.3%	0	19	0.0%	0	19	0.0%
5	19	26.3%	4	19	21.1%	2	19	10.5%	3	19	15.8%
6	19	31.6%	5	19	26.3%	4	19	21.1%	4	19	21.1%
5	19	26.3%	4	19	21.1%	2	19	10.5%	3	19	15.8%
2	19	10.5%	1	19	5.3%	0	19	0.0%	1	19	5.3%
2	19	10.5%	4	19	21.1%	2	19	10.5%	1	18	5.6%
0	18	0.0%	1	18	5.6%	1	18	5.6%	1	18	5.6%
1	18	5.6%	1	18	5.6%	1	18	5.6%	1	18	5.6%
1	18	5.6%	1	18	5.6%	2	18	11.1%	1	18	5.6%
2	18	11.1%	2	18	11.1%	3	18	16.7%	4	18	22.2%
3	18	16.7%	2	18	11.1%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
1	18	5.6%	0	18	0.0%	0	18	0.0%	1	17	5.9%
2	17	11.8%	4	17	23.5%	1	16	6.3%	3	16	18.8%
3	16	18.8%	1	16	6.3%	2	16	12.5%	1	15	6.7%
2	15	13.3%	0	15	0.0%	2	15	13.3%	3	15	20.0%
0	15	0.0%	0	15	0.0%	0	15	0.0%	0	15	0.0%
0	15	0.0%	1	15	6.7%	1	15	6.7%	0	15	0.0%
2	16	12.5%	1	16	6.3%	2	16	12.5%	3	16	18.8%
4	16	25.0%									
63	502	12.5%	47	486	9.7%	40	485	8.2%	44	482	9.1%
Average % off-task: 9.9%											

Video-Only Group Day 11											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	23	4.3%	3	23	13.0%	1	23	4.3%	0	23	0.0%
1	23	4.3%	2	23	8.7%	1	23	4.3%	1	23	4.3%
1	23	4.3%	1	22	4.5%	2	21	9.5%	2	21	9.5%
5	21	23.8%	3	21	14.3%	3	21	14.3%	4	21	19.0%
8	20	40.0%	4	20	20.0%	2	20	10.0%	0	18	0.0%
2	18	11.1%	1	18	5.6%	2	18	11.1%	2	18	11.1%
3	18	16.7%	1	18	5.6%	1	18	5.6%	2	18	11.1%
1	18	5.6%	2	18	11.1%	2	18	11.1%	3	18	16.7%
0	18	0.0%	0	18	0.0%	2	18	11.1%	2	17	11.8%
1	18	5.6%	0	18	0.0%	2	18	11.1%	2	18	11.1%
1	18	5.6%	3	19	15.8%	2	19	10.5%	3	19	15.8%
5	19	26.3%	5	19	26.3%	8	19	42.1%	6	19	31.6%
7	19	36.8%	8	19	42.1%	10	19	52.6%	9	19	47.4%
6	19	31.6%	8	21	38.1%	11	21	52.4%	12	21	57.1%
9	20	45.0%	7	20	35.0%	6	20	30.0%	6	22	27.3%
2	22	9.1%	5	22	22.7%	7	22	31.8%	6	22	27.3%
4	22	18.2%	4	22	18.2%	7	22	31.8%	5	22	22.7%
3	22	13.6%	4	22	18.2%	5	22	22.7%	4	21	19.0%
3	21	14.3%	4	21	19.0%	2	21	9.5%	2	21	9.5%
5	21	23.8%	4	21	19.0%	2	20	10.0%	4	20	20.0%
4	20	20.0%	2	20	10.0%	1	20	5.0%	3	20	15.0%
5	20	25.0%	4	20	20.0%	6	20	30.0%	7	20	35.0%
7	20	35.0%	4	20	20.0%	5	20	25.0%	5	20	25.0%
7	20	35.0%	6	20	30.0%	4	20	20.0%	4	20	20.0%
4	20	20.0%	5	19	26.3%	4	19	21.1%	3	19	15.8%
95	503	18.9%	90	504	17.9%	98	502	19.5%	97	500	19.4%
Average % off-task: 18.9%											

Music-Only Group Day 11											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	23	0.0%	0	22	0.0%	3	23	13.0%	2	23	8.7%
0	23	0.0%	0	23	0.0%	0	23	0.0%	1	23	4.3%
0	23	0.0%	2	23	8.7%	2	23	8.7%	3	23	13.0%
0	23	0.0%	2	23	8.7%	3	23	13.0%	1	23	4.3%
4	23	17.4%	2	23	8.7%	4	23	17.4%	6	23	26.1%
2	23	8.7%	1	23	4.3%	2	23	8.7%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
4	23	17.4%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	2	23	8.7%
0	23	0.0%	0	23	0.0%	0	23	0.0%	1	23	4.3%
2	23	8.7%	3	23	13.0%	4	23	17.4%	3	23	13.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	3	23	13.0%
2	23	8.7%	0	23	0.0%	3	23	13.0%	1	23	4.3%
0	23	0.0%	0	23	0.0%	3	23	13.0%	3	23	13.0%
2	23	8.7%	2	23	8.7%	3	23	13.0%	2	23	8.7%
5	23	21.7%	5	23	21.7%	2	23	8.7%	2	23	8.7%
3	23	13.0%	0	23	0.0%	2	23	8.7%	0	23	0.0%
2	23	8.7%	2	23	8.7%	3	23	13.0%	2	23	8.7%
0	23	0.0%	0	23	0.0%	0	23	0.0%	2	23	8.7%
0	23	0.0%	0	23	0.0%	2	23	8.7%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	1	23	4.3%	1	23	4.3%	0	23	0.0%
1	23	4.3%	0	23	0.0%	1	23	4.3%	0	23	0.0%
2	23	8.7%	0	23	0.0%	2	23	8.7%	0	23	0.0%
0	23	0.0%	2	23	8.7%	0	23	0.0%	1	23	4.3%
0	23	0.0%	0	23	0.0%	0	23	0.0%	1	23	4.3%
0	23	0.0%	1	23	4.3%	1	23	4.3%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
29	690	4.2%	23	689	3.3%	41	690	5.9%	36	690	5.2%
Average % off-task: 4.7%											

Music/Video Group Treatment: Music Day 12											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
2	20	10.0%	2	20	10.0%	1	20	5.0%	3	20	15.0%
3	20	15.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	2	20	10.0%
2	20	10.0%	3	20	15.0%	1	20	5.0%	2	20	10.0%
1	20	5.0%	2	20	10.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	2	20	10.0%	0	20	0.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	2	20	10.0%	0	20	0.0%	2	20	10.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	3	20	15.0%
2	20	10.0%	2	20	10.0%	0	20	0.0%	2	20	10.0%
0	20	0.0%	2	20	10.0%	4	20	20.0%	2	20	10.0%
2	20	10.0%	3	20	15.0%	2	20	10.0%	0	20	0.0%
3	20	15.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	1	20	5.0%
1	19	5.3%	2	20	10.0%	0	20	0.0%	2	19	10.5%
1	20	5.0%	2	20	10.0%	2	20	10.0%	0	20	0.0%
1	20	5.0%	2	20	10.0%	1	20	5.0%	3	20	15.0%
2	20	10.0%	3	20	15.0%	2	20	10.0%	3	20	15.0%
4	19	21.1%	3	18	16.7%	2	19	10.5%	2	20	10.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
0	19	0.0%	1	19	5.3%	1	19	5.3%	2	19	10.5%
1	19	5.3%	1	19	5.3%	0	19	0.0%	0	19	0.0%
33	516	6.4%	38	516	7.4%	26	517	5.0%	38	517	7.4%
Average % off-task: 6.5%											

Music/Video Group Treatment: Video Day 12											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	17	17.6%	2	17	11.8%	1	17	5.9%	2	17	11.8%
7	17	41.2%	17	17	100.0%	17	17	100.0%	17	17	100.0%
17	17	100.0%	17	17	100.0%	17	17	100.0%	13	17	76.5%
13	16	81.3%	13	17	76.5%	7	17	41.2%	4	17	23.5%
3	17	17.6%	2	17	11.8%	3	17	17.6%	2	17	11.8%
5	17	29.4%	1	17	5.9%	2	17	11.8%	3	17	17.6%
6	17	35.3%	2	17	11.8%	2	16	12.5%	2	16	12.5%
1	16	6.3%	1	16	6.3%	1	16	6.3%	1	16	6.3%
2	16	12.5%	2	16	12.5%	2	16	12.5%	2	16	12.5%
1	15	6.7%	0	15	0.0%	1	15	6.7%	0	15	0.0%
0	15	0.0%	0	15	0.0%	0	16	0.0%	0	15	0.0%
1	15	6.7%	0	15	0.0%	0	15	0.0%	2	15	13.3%
2	15	13.3%	2	16	12.5%	1	16	6.3%	2	16	12.5%
1	16	6.3%	4	16	25.0%	2	16	12.5%	2	16	12.5%
2	16	12.5%	1	16	6.3%	1	16	6.3%	1	16	6.3%
1	16	6.3%	1	16	6.3%	2	16	12.5%	1	16	6.3%
1	16	6.3%	0	16	0.0%	2	16	12.5%	2	16	12.5%
2	16	12.5%	2	16	12.5%	2	16	12.5%	1	16	6.3%
2	16	12.5%	2	16	12.5%	2	16	12.5%	2	16	12.5%
2	16	12.5%	2	16	12.5%	0	16	0.0%	2	16	12.5%
2	16	12.5%	3	16	18.8%	3	16	18.8%	2	16	12.5%
3	16	18.8%	1	16	6.3%	2	16	12.5%	1	16	6.3%
1	16	6.3%	1	16	6.3%	2	15	13.3%	1	15	6.7%
1	15	6.7%	3	15	20.0%	2	15	13.3%	4	15	26.7%
2	15	13.3%	3	15	20.0%	0	14	0.0%	0	15	0.0%
0	16	0.0%	0	16	0.0%	1	16	6.3%			
81	416	19.5%	82	418	19.6%	75	416	18.0%	69	400	17.3%
Average % off-task: 18.6%											

Video-Only Group Day 12											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	20	10.0%	2	20	10.0%	2	19	10.5%	2	19	10.5%
1	19	5.3%	2	19	10.5%	3	20	15.0%	1	19	5.3%
1	18	5.6%	1	18	5.6%	1	18	5.6%	1	18	5.6%
2	18	11.1%	1	18	5.6%	2	18	11.1%	2	18	11.1%
1	18	5.6%	0	18	0.0%	1	18	5.6%	1	19	5.3%
1	19	5.3%	1	19	5.3%	0	19	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
2	20	10.0%	2	20	10.0%	1	20	5.0%	2	20	10.0%
2	19	10.5%	1	20	5.0%	1	18	5.6%	1	19	5.3%
1	19	5.3%	2	18	11.1%	2	18	11.1%	1	18	5.6%
0	18	0.0%	1	18	5.6%	2	18	11.1%	3	18	16.7%
3	18	16.7%	4	18	22.2%	2	18	11.1%	1	18	5.6%
2	18	11.1%	1	19	5.3%	1	18	5.6%	3	18	16.7%
1	18	5.6%	2	18	11.1%	0	19	0.0%	2	19	10.5%
3	19	15.8%	3	19	15.8%	2	19	10.5%	1	19	5.3%
1	19	5.3%	1	19	5.3%	2	19	10.5%	2	19	10.5%
1	19	5.3%	1	19	5.3%	1	19	5.3%	2	19	10.5%
1	19	5.3%	0	19	0.0%	0	19	0.0%	0	18	0.0%
2	18	11.1%	2	18	11.1%	1	18	5.6%	3	18	16.7%
1	18	5.6%	1	18	5.6%	1	18	5.6%	0	18	0.0%
0	18	0.0%	2	18	11.1%	3	18	16.7%	5	18	27.8%
3	19	15.8%	3	19	15.8%	3	19	15.8%	5	19	26.3%
35	491	7.1%	36	492	7.3%	35	490	7.1%	42	491	8.6%
Average % off-task: 7.5%											

Music-Only Group Day 12											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	22	0.0%	1	22	4.5%	0	22	0.0%	0	22	0.0%
0	22	0.0%	2	22	9.1%	2	22	9.1%	1	22	4.5%
2	22	9.1%	0	22	0.0%	2	22	9.1%	0	22	0.0%
1	22	4.5%	2	22	9.1%	2	22	9.1%	3	22	13.6%
0	22	0.0%	4	22	18.2%	4	22	18.2%	1	22	4.5%
1	22	4.5%	2	22	9.1%	2	22	9.1%	2	22	9.1%
3	22	13.6%	1	22	4.5%	2	22	9.1%	0	22	0.0%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
0	22	0.0%	1	22	4.5%	2	22	9.1%	1	22	4.5%
0	22	0.0%	0	22	0.0%	2	22	9.1%	0	22	0.0%
0	22	0.0%	0	22	0.0%	2	22	9.1%	0	22	0.0%
2	22	9.1%	3	22	13.6%	2	22	9.1%	0	22	0.0%
2	22	9.1%	3	22	13.6%	3	22	13.6%	3	22	13.6%
0	22	0.0%	1	22	4.5%	0	22	0.0%	0	22	0.0%
2	22	9.1%	1	22	4.5%	2	22	9.1%	2	22	9.1%
2	22	9.1%	1	22	4.5%	1	22	4.5%	1	22	4.5%
1	22	4.5%	0	22	0.0%	0	22	0.0%	1	22	4.5%
1	22	4.5%	0	22	0.0%	2	22	9.1%	2	22	9.1%
2	22	9.1%	1	22	4.5%	1	22	4.5%	4	22	18.2%
1	22	4.5%	3	22	13.6%	1	22	4.5%	7	22	31.8%
1	22	4.5%	1	22	4.5%	1	22	4.5%	1	22	4.5%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
2	22	9.1%	0	22	0.0%	0	22	0.0%	2	22	9.1%
1	22	4.5%	1	22	4.5%	1	21	4.8%	1	22	4.5%
0	21	0.0%	0	21	0.0%	1	22	4.5%	2	22	9.1%
0	22	0.0%	0	22	0.0%	0	22	0.0%	1	22	4.5%
1	22	4.5%	1	22	4.5%	1	22	4.5%	1	22	4.5%
1	22	4.5%	2	22	9.1%	2	22	9.1%	2	22	9.1%
2	22	9.1%	2	22	9.1%	2	22	9.1%	0	22	0.0%
1	22	4.5%	2	22	9.1%	1	22	4.5%	1	22	4.5%
29	659	4.4%	35	659	5.3%	41	659	6.2%	41	660	6.2%
Average % off-task: 5.5%											

Music/Video Group Treatment: Music Day 13											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	23	4.3%	3	23	13.0%	2	23	8.7%	1	23	4.3%
0	23	0.0%	0	23	0.0%	0	23	0.0%	2	23	8.7%
0	23	0.0%	0	23	0.0%	2	23	8.7%	3	23	13.0%
0	23	0.0%	3	23	13.0%	2	23	8.7%	1	23	4.3%
3	23	13.0%	0	23	0.0%	0	23	0.0%	0	23	0.0%
2	23	8.7%	3	23	13.0%	0	23	0.0%	1	23	4.3%
1	23	4.3%	0	23	0.0%	0	23	0.0%	0	23	0.0%
2	23	8.7%	0	23	0.0%	0	23	0.0%	0	23	0.0%
0	23	0.0%	1	23	4.3%	1	23	4.3%	2	23	8.7%
0	23	0.0%	0	23	0.0%	0	23	0.0%	2	23	8.7%
2	23	8.7%	3	23	13.0%	2	23	8.7%	3	23	13.0%
3	23	13.0%	4	23	17.4%	4	23	17.4%	1	23	4.3%
2	23	8.7%	3	23	13.0%	0	23	0.0%	0	23	0.0%
2	23	8.7%	1	23	4.3%	0	23	0.0%	2	23	8.7%
0	23	0.0%	3	23	13.0%	0	23	0.0%	5	23	21.7%
8	23	34.8%	3	23	13.0%	0	23	0.0%	0	23	0.0%
2	23	8.7%	0	23	0.0%	2	23	8.7%	1	23	4.3%
2	23	8.7%	0	23	0.0%	4	23	17.4%	0	23	0.0%
4	23	17.4%	2	23	8.7%	2	23	8.7%	4	23	17.4%
6	23	26.1%	0	23	0.0%	3	23	13.0%	4	23	17.4%
0	23	0.0%	1	23	4.3%	2	23	8.7%	2	23	8.7%
5	23	21.7%	1	23	4.3%	3	23	13.0%	4	23	17.4%
3	23	13.0%	2	23	8.7%	0	23	0.0%	2	23	8.7%
2	23	8.7%	0	23	0.0%	0	23	0.0%	2	23	8.7%
0	23	0.0%	1	23	4.3%	2	23	8.7%	0	23	0.0%
0	23	0.0%	1	23	4.3%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	0	23	0.0%	5	23	21.7%
0	23	0.0%	1	23	4.3%	0	23	0.0%	0	23	0.0%
0	23	0.0%	2	23	8.7%	0	23	0.0%	3	23	13.0%
2	23	8.7%	2	23	8.7%	0	23	0.0%	5	23	21.7%
52	690	7.5%	40	690	5.8%	31	690	4.5%	55	690	8.0%
Average % off-task: 6.4											

Music/Video Group Treatment: Video Day 13											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	19	10.5%	2	19	10.5%	1	19	5.3%	6	19	31.6%
4	19	21.1%	2	19	10.5%	2	19	10.5%	2	19	10.5%
4	19	21.1%	4	19	21.1%	3	19	15.8%	1	19	5.3%
1	19	5.3%	1	19	5.3%	1	19	5.3%	1	19	5.3%
2	19	10.5%	1	19	5.3%	7	19	36.8%	7	19	36.8%
6	19	31.6%	7	19	36.8%	7	19	36.8%	5	19	26.3%
2	19	10.5%	3	19	15.8%	4	19	21.1%	3	19	15.8%
2	19	10.5%	2	19	10.5%	4	19	21.1%	3	19	15.8%
5	19	26.3%	4	19	21.1%	2	19	10.5%	8	19	42.1%
2	19	10.5%	3	19	15.8%	3	19	15.8%	1	19	5.3%
2	19	10.5%	2	19	10.5%	3	19	15.8%	2	19	10.5%
7	19	36.8%	5	19	26.3%	3	19	15.8%	1	19	5.3%
1	19	5.3%	3	19	15.8%	5	19	26.3%	2	19	10.5%
0	19	0.0%	1	19	5.3%	0	19	0.0%	2	19	10.5%
3	19	15.8%	4	19	21.1%	5	19	26.3%	3	19	15.8%
1	19	5.3%	3	19	15.8%	2	19	10.5%	2	19	10.5%
4	19	21.1%	2	19	10.5%	1	19	5.3%	5	19	26.3%
5	19	26.3%	4	19	21.1%	4	19	21.1%	5	19	26.3%
3	19	15.8%	4	19	21.1%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	4	19	21.1%	5	19	26.3%	8	19	42.1%
5	19	26.3%	9	19	47.4%	8	19	42.1%	7	19	36.8%
0	19	0.0%	2	19	10.5%	0	19	0.0%	0	19	0.0%
1	19	5.3%	1	19	5.3%	2	19	10.5%	1	19	5.3%
0	19	0.0%	1	19	5.3%	2	19	10.5%	10	19	52.6%
11	19	57.9%	5	19	26.3%	4	19	21.1%	8	19	42.1%
10	19	52.6%	11	19	57.9%						
83	513	16.2%	91	513	17.7%	78	494	15.8%	93	494	18.8%
Average % off-task: 17.1%											

Video-Only Group Day 13											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	20	15.0%	2	20	10.0%	3	20	15.0%	6	20	30.0%
5	20	25.0%	10	18	55.6%	6	19	31.6%	4	19	21.1%
7	18	38.9%	6	18	33.3%	5	19	26.3%	4	19	21.1%
7	19	36.8%	5	20	25.0%	3	20	15.0%	1	20	5.0%
5	21	23.8%	5	20	25.0%	5	20	25.0%	7	19	36.8%
6	20	30.0%	3	21	14.3%	4	21	19.0%	2	22	9.1%
7	22	31.8%	3	22	13.6%	2	21	9.5%	4	21	19.0%
2	21	9.5%	4	21	19.0%	2	21	9.5%	1	21	4.8%
5	21	23.8%	1	21	4.8%	3	21	14.3%	2	21	9.5%
1	22	4.5%	2	22	9.1%	1	21	4.8%	2	21	9.5%
2	22	9.1%	6	22	27.3%	3	22	13.6%	4	22	18.2%
3	22	13.6%	2	22	9.1%	4	22	18.2%	2	22	9.1%
3	22	13.6%	2	22	9.1%	3	22	13.6%	2	22	9.1%
3	22	13.6%	2	22	9.1%	2	22	9.1%	2	22	9.1%
2	22	9.1%	2	22	9.1%	1	22	4.5%	1	22	4.5%
2	22	9.1%	2	22	9.1%	1	22	4.5%	3	22	13.6%
2	22	9.1%	4	22	18.2%	4	22	18.2%	4	22	18.2%
3	22	13.6%	4	22	18.2%	2	22	9.1%	1	22	4.5%
3	22	13.6%	2	22	9.1%	2	22	9.1%	1	21	4.8%
2	21	9.5%	4	21	19.0%	4	21	19.0%	2	21	9.5%
4	21	19.0%	5	21	23.8%	6	21	28.6%	3	21	14.3%
2	21	9.5%	3	20	15.0%	2	20	10.0%	2	20	10.0%
5	20	25.0%	6	21	28.6%	7	20	35.0%	2	20	10.0%
8	20	40.0%	3	21	14.3%	8	21	38.1%	10	21	47.6%
7	20	35.0%	6	21	28.6%	10	21	47.6%	14	21	66.7%
8	21	38.1%									
107	546	19.6%	94	526	17.9%	93	525	17.7%	86	524	16.4%
Average % off-task: 17.9%											

Music-Only Group Day 13											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
2	24	8.3%	2	24	8.3%	6	24	25.0%	5	24	20.8%
3	24	12.5%	4	24	16.7%	1	24	4.2%	0	24	0.0%
2	24	8.3%	0	24	0.0%	0	24	0.0%	1	24	4.2%
0	24	0.0%	1	24	4.2%	1	24	4.2%	2	24	8.3%
2	24	8.3%	3	24	12.5%	0	24	0.0%	1	23	4.3%
2	23	8.7%	1	23	4.3%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	3	23	13.0%	1	23	4.3%
3	23	13.0%	3	23	13.0%	6	23	26.1%	5	23	21.7%
3	23	13.0%	1	23	4.3%	1	23	4.3%	1	23	4.3%
3	23	13.0%	2	23	8.7%	2	23	8.7%	1	23	4.3%
2	23	8.7%	2	23	8.7%	0	23	0.0%	0	23	0.0%
0	23	0.0%	0	23	0.0%	1	23	4.3%	1	23	4.3%
1	23	4.3%	5	23	21.7%	8	23	34.8%	7	23	30.4%
5	23	21.7%	3	23	13.0%	3	23	13.0%	2	23	8.7%
0	23	0.0%	5	23	21.7%	2	23	8.7%	2	23	8.7%
0	23	0.0%	3	23	13.0%	1	23	4.3%	3	23	13.0%
3	23	13.0%	2	23	8.7%	5	23	21.7%	3	23	13.0%
4	23	17.4%	3	23	13.0%	4	23	17.4%	2	23	8.7%
5	23	21.7%	1	23	4.3%	2	23	8.7%	6	23	26.1%
3	23	13.0%	0	23	0.0%	2	23	8.7%	3	23	13.0%
4	23	17.4%	4	23	17.4%	2	23	8.7%	3	23	13.0%
2	23	8.7%	3	23	13.0%	2	23	8.7%	4	23	17.4%
4	23	17.4%	4	23	17.4%	6	23	26.1%	3	23	13.0%
4	23	17.4%	0	23	0.0%	2	23	8.7%	3	23	13.0%
0	23	0.0%	0	23	0.0%	3	23	13.0%	4	23	17.4%
5	23	21.7%	2	23	8.7%	4	23	17.4%	0	23	0.0%
1	23	4.3%	3	23	13.0%	3	23	13.0%	2	23	8.7%
2	23	8.7%	0	23	0.0%	0	23	0.0%	0	23	0.0%
3	23	13.0%	4	23	17.4%	6	23	26.1%	5	23	21.7%
68	672	10.1%	61	672	9.1%	76	672	11.3%	70	671	10.4%
Average % off-task: 10.2%											

Music/Video Group Treatment: Video Day 14											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	21	14.3%	6	21	28.6%	4	20	20.0%	2	20	10.0%
3	20	15.0%	2	20	10.0%	2	20	10.0%	7	20	35.0%
3	20	15.0%	3	20	15.0%	3	20	15.0%	3	20	15.0%
3	20	15.0%	6	20	30.0%	3	20	15.0%	7	20	35.0%
4	20	20.0%	3	20	15.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	2	20	10.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
4	20	20.0%	3	20	15.0%	2	20	10.0%	4	20	20.0%
4	20	20.0%	2	20	10.0%	5	20	25.0%	4	20	20.0%
2	20	10.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	1	20	5.0%	2	20	10.0%	0	20	0.0%
1	20	5.0%	8	20	40.0%	6	20	30.0%	6	20	30.0%
3	20	15.0%	3	20	15.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	7	20	35.0%	1	20	5.0%	1	19	5.3%
5	19	26.3%	2	19	10.5%	8	19	42.1%	10	19	52.6%
12	19	63.2%	10	19	52.6%	2	18	11.1%	5	18	27.8%
4	18	22.2%	3	18	16.7%	11	18	61.1%	4	18	22.2%
4	18	22.2%	5	18	27.8%	3	18	16.7%	3	18	16.7%
4	18	22.2%	5	18	27.8%	8	18	44.4%	4	18	22.2%
3	18	16.7%	5	18	27.8%	2	18	11.1%	2	18	11.1%
0	18	0.0%	2	18	11.1%	2	18	11.1%	4	18	22.2%
3	18	16.7%	2	18	11.1%	2	18	11.1%	2	18	11.1%
6	18	33.3%	1	18	5.6%	7	18	38.9%	3	18	16.7%
2	18	11.1%	1	18	5.6%	1	18	5.6%	3	18	16.7%
18	18	100.0%	18	18	100.0%	14	18	77.8%	2	18	11.1%
3	18	16.7%									
100	499	20.0%	100	481	20.8%	95	479	19.8%	80	478	16.7%
Average % off-task: 19.4%											

Video-Only Group Day 14											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	18	5.6%	2	18	11.1%	4	18	22.2%	5	18	27.8%
4	18	22.2%	5	18	27.8%	5	18	27.8%	9	17	52.9%
10	17	58.8%	6	18	33.3%	5	17	29.4%	4	17	23.5%
5	17	29.4%	2	17	11.8%	6	18	33.3%	5	18	27.8%
7	16	43.8%	8	16	50.0%	10	16	62.5%	9	16	56.3%
6	16	37.5%	5	16	31.3%	7	16	43.8%	9	16	56.3%
7	17	41.2%	7	17	41.2%	4	18	22.2%	2	17	11.8%
7	17	41.2%	0	18	0.0%	3	18	16.7%	2	18	11.1%
4	18	22.2%	2	18	11.1%	4	18	22.2%	2	18	11.1%
6	18	33.3%	5	18	27.8%	5	18	27.8%	2	18	11.1%
3	18	16.7%	5	18	27.8%	4	17	23.5%	6	17	35.3%
5	17	29.4%	4	17	23.5%	3	17	17.6%	3	17	17.6%
6	17	35.3%	3	17	17.6%	3	17	17.6%	4	15	26.7%
3	15	20.0%	1	15	6.7%	2	15	13.3%	2	15	13.3%
4	15	26.7%	5	15	33.3%	4	15	26.7%	3	15	20.0%
4	16	25.0%	3	18	16.7%	5	18	27.8%	3	18	16.7%
3	18	16.7%	2	18	11.1%	2	18	11.1%	4	18	22.2%
5	18	27.8%	3	18	16.7%	4	18	22.2%	4	18	22.2%
2	18	11.1%	2	18	11.1%	6	18	33.3%	3	18	16.7%
3	18	16.7%	4	18	22.2%	4	18	22.2%	4	18	22.2%
5	18	27.8%	4	18	22.2%	2	18	11.1%	2	18	11.1%
2	18	11.1%	3	18	16.7%	2	18	11.1%	3	18	16.7%
3	18	16.7%	4	18	22.2%	7	18	38.9%	3	18	16.7%
3	18	16.7%	8	18	44.4%	6	18	33.3%	7	18	38.9%
6	18	33.3%	5	18	27.8%	6	18	33.3%	4	18	22.2%
114	432	26.4%	98	436	22.5%	113	436	25.9%	104	432	24.1%
Average % off-task: 24.7%											

Music-Only Group Day 14											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	2	19	10.5%	2	19	10.5%	2	19	10.5%
0	19	0.0%	2	19	10.5%	0	19	0.0%	1	19	5.3%
2	19	10.5%	2	19	10.5%	2	19	10.5%	2	19	10.5%
0	19	0.0%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	3	19	15.8%	0	19	0.0%
0	19	0.0%	0	19	0.0%	2	19	10.5%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
4	19	21.1%	2	19	10.5%	4	19	21.1%	3	19	15.8%
0	19	0.0%	3	19	15.8%	3	19	15.8%	4	19	21.1%
5	19	26.3%	4	19	21.1%	0	19	0.0%	3	19	15.8%
2	19	10.5%	2	19	10.5%	2	19	10.5%	0	19	0.0%
2	19	10.5%	0	19	0.0%	0	19	0.0%	0	19	0.0%
2	19	10.5%	2	19	10.5%	2	19	10.5%	1	19	5.3%
1	19	5.3%	0	19	0.0%	2	19	10.5%	1	19	5.3%
2	19	10.5%	0	19	0.0%	1	19	5.3%	1	19	5.3%
1	19	5.3%	0	19	0.0%	0	19	0.0%	0	19	0.0%
3	19	15.8%	3	19	15.8%	4	19	21.1%	3	19	15.8%
2	19	10.5%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	2	19	10.5%	0	19	0.0%	2	19	10.5%
26	380	6.8%	25	380	6.6%	27	380	7.1%	24	380	6.3%
Average % off-task: 6.7%											

Music/Video Group Treatment: Music Day 15											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	20	5.0%	1	20	5.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	0	20	0.0%	0	20	0.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
2	20	10.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	5	20	25.0%	5	20	25.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
7	20	35.0%	5	20	25.0%	7	20	35.0%	8	20	40.0%
4	20	20.0%	4	20	20.0%	10	20	50.0%	20	20	100.0%
0	20	0.0%	4	20	20.0%	2	20	10.0%	2	20	10.0%
4	20	20.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
4	20	20.0%	0	20	0.0%	2	20	10.0%	1	20	5.0%
3	20	15.0%	2	20	10.0%	3	20	15.0%	2	20	10.0%
0	20	0.0%	2	20	10.0%	2	20	10.0%	2	20	10.0%
37	600	6.2%	23	600	3.8%	43	600	7.2%	52	600	8.7%
Average % off-task: 6.5%											

Music/Video Group Treatment: Video Day 15											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	19	15.8%	2	20	10.0%	3	21	14.3%	3	21	14.3%
5	21	23.8%	10	21	47.6%	3	21	14.3%	4	21	19.0%
5	21	23.8%	4	21	19.0%	8	21	38.1%	9	21	42.9%
5	21	23.8%	4	21	19.0%	5	21	23.8%	3	21	14.3%
4	21	19.0%	3	21	14.3%	3	21	14.3%	3	21	14.3%
3	21	14.3%	3	21	14.3%	5	21	23.8%	3	21	14.3%
2	21	9.5%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	4	21	19.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	1	21	4.8%
3	21	14.3%	2	21	9.5%	4	21	19.0%	3	21	14.3%
1	21	4.8%	0	21	0.0%	2	21	9.5%	1	21	4.8%
5	21	23.8%	4	20	20.0%	2	21	9.5%	2	21	9.5%
2	21	9.5%	2	21	9.5%	3	21	14.3%	1	21	4.8%
9	21	42.9%	7	21	33.3%	6	21	28.6%	3	21	14.3%
3	21	14.3%	3	21	14.3%	3	21	14.3%	2	21	9.5%
2	21	9.5%	4	21	19.0%	2	21	9.5%	1	21	4.8%
0	21	0.0%	1	21	4.8%	3	21	14.3%	1	21	4.8%
0	21	0.0%	2	21	9.5%	1	21	4.8%	3	21	14.3%
4	21	19.0%	3	21	14.3%	7	21	33.3%	5	21	23.8%
5	21	23.8%	4	21	19.0%						
61	418	14.6%	64	418	15.3%	62	399	15.5%	48	399	12.0%
Average % off-task: 14.4%											

Video-Only Group Day 15											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
5	19	26.3%	5	19	26.3%	7	19	36.8%	5	19	26.3%
3	19	15.8%	6	19	31.6%	6	20	30.0%	6	20	30.0%
4	20	20.0%	4	20	20.0%	5	20	25.0%	3	20	15.0%
2	20	10.0%	3	20	15.0%	4	20	20.0%	4	21	19.0%
2	20	10.0%	4	20	20.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	2	21	9.5%	5	21	23.8%	6	21	28.6%
3	21	14.3%	1	21	4.8%	1	21	4.8%	1	21	4.8%
1	21	4.8%	1	21	4.8%	1	21	4.8%	1	21	4.8%
4	21	19.0%	1	21	4.8%	1	21	4.8%	2	21	9.5%
2	21	9.5%	3	21	14.3%	2	21	9.5%	3	21	14.3%
2	21	9.5%	3	21	14.3%	2	21	9.5%	2	21	9.5%
1	21	4.8%	1	21	4.8%	1	21	4.8%	2	21	9.5%
2	21	9.5%	2	21	9.5%	2	21	9.5%	1	21	4.8%
1	21	4.8%	1	21	4.8%	2	21	9.5%	4	21	19.0%
3	21	14.3%	2	21	9.5%	1	21	4.8%	2	21	9.5%
2	21	9.5%	1	21	4.8%	1	21	4.8%	1	21	4.8%
2	21	9.5%	2	21	9.5%	2	21	9.5%	2	21	9.5%
1	21	4.8%	1	21	4.8%	2	21	9.5%	2	21	9.5%
1	21	4.8%	2	21	9.5%	2	21	9.5%	5	21	23.8%
4	21	19.0%	5	21	23.8%	4	21	19.0%	6	21	28.6%
5	20	25.0%	3	20	15.0%	1	21	4.8%	2	21	9.5%
5	21	23.8%	3	21	14.3%	3	21	14.3%	1	21	4.8%
2	21	9.5%	3	21	14.3%	4	21	19.0%	1	21	4.8%
4	21	19.0%	6	21	28.6%	3	21	14.3%	4	21	19.0%
2	21	9.5%	2	21	9.5%	3	21	14.3%	4	21	19.0%
1	21	4.8%	8	21	38.1%	5	21	23.8%	9	21	42.9%
66	537	12.3%	75	538	13.9%	72	540	13.3%	80	541	14.8%
Average % off-task: 13.6%											

Music-Only Group Day 15											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	1	19	5.3%	0	19	0.0%	1	19	5.3%
3	19	15.8%	1	19	5.3%	0	19	0.0%	1	19	5.3%
1	19	5.3%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	2	19	10.5%
1	19	5.3%	1	19	5.3%	0	19	0.0%	1	19	5.3%
2	19	10.5%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
1	19	5.3%	0	19	0.0%	0	19	0.0%	3	19	15.8%
4	19	21.1%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	2	19	10.5%	2	19	10.5%
2	19	10.5%	4	19	21.1%	4	19	21.1%	2	19	10.5%
4	19	21.1%	3	19	15.8%	3	19	15.8%	3	19	15.8%
3	19	15.8%	1	19	5.3%	1	19	5.3%	0	19	0.0%
2	19	10.5%	0	19	0.0%	1	19	5.3%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
1	19	5.3%	0	19	0.0%	0	19	0.0%	1	19	5.3%
2	19	10.5%	2	19	10.5%	1	19	5.3%	0	19	0.0%
1	19	5.3%	1	19	5.3%	2	19	10.5%	2	19	10.5%
4	19	21.1%	7	19	36.8%	5	19	26.3%	4	19	21.1%
3	19	15.8%	4	19	21.1%	6	19	31.6%	2	19	10.5%
2	19	10.5%	3	19	15.8%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	1	19	5.3%	0	19	0.0%
36	456	7.9%	30	456	6.6%	28	456	6.1%	29	456	6.4%
Average % off-task: 6.7%											

Music/Video Group Treatment: Music Day 16											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
1	20	5.0%	1	20	5.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
1	20	5.0%	1	20	5.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	0	20	0.0%	0	20	0.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	1	20	5.0%	2	20	10.0%	2	20	10.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	1	20	5.0%	1	20	5.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
1	20	5.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
0	20	0.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
2	20	10.0%	0	20	0.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	5	20	25.0%	5	20	25.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
7	20	35.0%	5	20	25.0%	7	20	35.0%	8	20	40.0%
4	20	20.0%	4	20	20.0%	10	20	50.0%	20	20	100.0%
0	20	0.0%	4	20	20.0%	2	20	10.0%	2	20	10.0%
4	20	20.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
2	20	10.0%	0	20	0.0%	0	20	0.0%	1	20	5.0%
4	20	20.0%	0	20	0.0%	2	20	10.0%	1	20	5.0%
3	20	15.0%	2	20	10.0%	3	20	15.0%	2	20	10.0%
0	20	0.0%	2	20	10.0%	2	20	10.0%	2	20	10.0%
37	600	6.2%	23	600	3.8%	43	600	7.2%	52	600	8.7%
Average % off-task: 5.5%											

Music/Video Group Treatment: Video Day 16											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	19	15.8%	2	20	10.0%	3	21	14.3%	3	21	14.3%
5	21	23.8%	10	21	47.6%	3	21	14.3%	4	21	19.0%
5	21	23.8%	4	21	19.0%	8	21	38.1%	9	21	42.9%
5	21	23.8%	4	21	19.0%	5	21	23.8%	3	21	14.3%
4	21	19.0%	3	21	14.3%	3	21	14.3%	3	21	14.3%
3	21	14.3%	3	21	14.3%	5	21	23.8%	3	21	14.3%
2	21	9.5%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	4	21	19.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	1	21	4.8%
3	21	14.3%	2	21	9.5%	4	21	19.0%	3	21	14.3%
1	21	4.8%	0	21	0.0%	2	21	9.5%	1	21	4.8%
5	21	23.8%	4	20	20.0%	2	21	9.5%	2	21	9.5%
2	21	9.5%	2	21	9.5%	3	21	14.3%	1	21	4.8%
9	21	42.9%	7	21	33.3%	6	21	28.6%	3	21	14.3%
3	21	14.3%	3	21	14.3%	3	21	14.3%	2	21	9.5%
2	21	9.5%	4	21	19.0%	2	21	9.5%	1	21	4.8%
0	21	0.0%	1	21	4.8%	3	21	14.3%	1	21	4.8%
0	21	0.0%	2	21	9.5%	1	21	4.8%	3	21	14.3%
4	21	19.0%	3	21	14.3%	7	21	33.3%	5	21	23.8%
5	21	23.8%	4	21	19.0%						
61	418	14.6%	64	418	15.3%	62	399	15.5%	48	399	12.0%
Average % off-task: 8.0%											

Video-Only Group Day 16											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
5	19	26.3%	5	19	26.3%	7	19	36.8%	5	19	26.3%
3	19	15.8%	6	19	31.6%	6	20	30.0%	6	20	30.0%
4	20	20.0%	4	20	20.0%	5	20	25.0%	3	20	15.0%
2	20	10.0%	3	20	15.0%	4	20	20.0%	4	21	19.0%
2	20	10.0%	4	20	20.0%	2	20	10.0%	1	20	5.0%
2	20	10.0%	2	21	9.5%	5	21	23.8%	6	21	28.6%
3	21	14.3%	1	21	4.8%	1	21	4.8%	1	21	4.8%
1	21	4.8%	1	21	4.8%	1	21	4.8%	1	21	4.8%
4	21	19.0%	1	21	4.8%	1	21	4.8%	2	21	9.5%
2	21	9.5%	3	21	14.3%	2	21	9.5%	3	21	14.3%
2	21	9.5%	3	21	14.3%	2	21	9.5%	2	21	9.5%
1	21	4.8%	1	21	4.8%	1	21	4.8%	2	21	9.5%
2	21	9.5%	2	21	9.5%	2	21	9.5%	1	21	4.8%
1	21	4.8%	1	21	4.8%	2	21	9.5%	4	21	19.0%
3	21	14.3%	2	21	9.5%	1	21	4.8%	2	21	9.5%
2	21	9.5%	1	21	4.8%	1	21	4.8%	1	21	4.8%
2	21	9.5%	2	21	9.5%	2	21	9.5%	2	21	9.5%
1	21	4.8%	1	21	4.8%	2	21	9.5%	2	21	9.5%
1	21	4.8%	2	21	9.5%	2	21	9.5%	5	21	23.8%
4	21	19.0%	5	21	23.8%	4	21	19.0%	6	21	28.6%
5	20	25.0%	3	20	15.0%	1	21	4.8%	2	21	9.5%
5	21	23.8%	3	21	14.3%	3	21	14.3%	1	21	4.8%
2	21	9.5%	3	21	14.3%	4	21	19.0%	1	21	4.8%
4	21	19.0%	6	21	28.6%	3	21	14.3%	4	21	19.0%
2	21	9.5%	2	21	9.5%	3	21	14.3%	4	21	19.0%
1	21	4.8%	8	21	38.1%	5	21	23.8%	9	21	42.9%
66	537	12.3%	75	538	13.9%	72	540	13.3%	80	541	14.8%
Average % off-task: 5.3%											

Music-Only Group Day 16											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	19	0.0%	1	19	5.3%	0	19	0.0%	1	19	5.3%
3	19	15.8%	1	19	5.3%	0	19	0.0%	1	19	5.3%
1	19	5.3%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	1	19	5.3%	2	19	10.5%
1	19	5.3%	1	19	5.3%	0	19	0.0%	1	19	5.3%
2	19	10.5%	1	19	5.3%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
1	19	5.3%	0	19	0.0%	0	19	0.0%	3	19	15.8%
4	19	21.1%	0	19	0.0%	0	19	0.0%	0	19	0.0%
0	19	0.0%	0	19	0.0%	2	19	10.5%	2	19	10.5%
2	19	10.5%	4	19	21.1%	4	19	21.1%	2	19	10.5%
4	19	21.1%	3	19	15.8%	3	19	15.8%	3	19	15.8%
3	19	15.8%	1	19	5.3%	1	19	5.3%	0	19	0.0%
2	19	10.5%	0	19	0.0%	1	19	5.3%	1	19	5.3%
0	19	0.0%	0	19	0.0%	0	19	0.0%	2	19	10.5%
0	19	0.0%	0	19	0.0%	1	19	5.3%	0	19	0.0%
1	19	5.3%	0	19	0.0%	0	19	0.0%	1	19	5.3%
2	19	10.5%	2	19	10.5%	1	19	5.3%	0	19	0.0%
1	19	5.3%	1	19	5.3%	2	19	10.5%	2	19	10.5%
4	19	21.1%	7	19	36.8%	5	19	26.3%	4	19	21.1%
3	19	15.8%	4	19	21.1%	6	19	31.6%	2	19	10.5%
2	19	10.5%	3	19	15.8%	0	19	0.0%	0	19	0.0%
0	19	0.0%	1	19	5.3%	1	19	5.3%	0	19	0.0%
36	456	7.9%	30	456	6.6%	28	456	6.1%	29	456	6.4%
Average % off-task: 4.6%											

Music/Video Group Treatment: Music Day 17											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	2	21	9.5%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	2	21	9.5%	0	21	0.0%
2	21	9.5%	1	21	4.8%	1	21	4.8%	2	21	9.5%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
2	21	9.5%	1	21	4.8%	2	21	9.5%	2	21	9.5%
1	21	4.8%	0	21	0.0%	0	21	0.0%	1	21	4.8%
0	21	0.0%	5	21	23.8%	3	21	14.3%	0	21	0.0%
2	20	10.0%	4	20	20.0%	3	20	15.0%	4	20	20.0%
2	20	10.0%	4	20	20.0%	3	20	15.0%	3	20	15.0%
3	20	15.0%	0	20	0.0%	2	20	10.0%	0	20	0.0%
2	20	10.0%	1	20	5.0%	1	20	5.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	0	20	0.0%	0	20	0.0%
0	20	0.0%	0	20	0.0%	2	20	10.0%	1	20	5.0%
14	477	2.9%	17	477	3.6%	21	477	4.4%	15	477	3.1%
Average % off-task: 3.5%											

Music/Video Group Treatment: Video Day 17											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
6	21	28.6%	3	21	14.3%	1	21	4.8%	4	21	19.0%
4	21	19.0%	1	21	4.8%	2	21	9.5%	5	21	23.8%
0	21	0.0%	2	21	9.5%	0	21	0.0%	0	21	0.0%
3	21	14.3%	4	21	19.0%	4	21	19.0%	3	21	14.3%
3	21	14.3%	2	21	9.5%	1	21	4.8%	5	21	23.8%
2	21	9.5%	1	21	4.8%	3	21	14.3%	3	21	14.3%
3	21	14.3%	4	21	19.0%	1	21	4.8%	2	21	9.5%
2	21	9.5%	0	21	0.0%	1	21	4.8%	1	21	4.8%
5	21	23.8%	3	21	14.3%	4	21	19.0%	2	21	9.5%
2	21	9.5%	2	21	9.5%	2	21	9.5%	1	21	4.8%
3	21	14.3%	4	21	19.0%	1	21	4.8%	1	21	4.8%
6	19	31.6%	1	19	5.3%	2	19	10.5%	1	19	5.3%
1	19	5.3%	5	19	26.3%	5	18	27.8%	3	18	16.7%
3	18	16.7%	0	18	0.0%	1	18	5.6%	1	18	5.6%
2	18	11.1%	2	18	11.1%	2	18	11.1%	1	18	5.6%
1	18	5.6%	3	18	16.7%	3	18	16.7%	3	18	16.7%
3	18	16.7%	1	18	5.6%	0	18	0.0%	4	18	22.2%
2	18	11.1%	3	18	16.7%	4	18	22.2%	2	18	11.1%
1	18	5.6%	2	18	11.1%	1	18	5.6%	1	18	5.6%
3	18	16.7%	2	18	11.1%	2	18	11.1%	0	18	0.0%
0	18	0.0%	1	18	5.6%	2	18	11.1%	4	18	22.2%
2	18	11.1%	2	18	11.1%	1	18	5.6%	1	18	5.6%
4	18	22.2%	3	18	16.7%	5	18	27.8%	2	18	11.1%
61	449	13.6%	51	449	11.4%	48	448	10.7%	50	448	11.2%
Average % off-task: 11.7%											

Video-Only Group Day 17											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
3	16	18.8%	1	16	6.3%	2	16	12.5%	3	16	18.8%
3	16	18.8%	4	16	25.0%	1	16	6.3%	2	16	12.5%
2	17	11.8%	2	18	11.1%	1	18	5.6%	2	18	11.1%
2	17	11.8%	1	17	5.9%	1	17	5.9%	1	17	5.9%
1	17	5.9%	2	17	11.8%	1	17	5.9%	3	17	17.6%
2	17	11.8%	1	17	5.9%	1	17	5.9%	2	17	11.8%
0	17	0.0%	0	16	0.0%	1	16	6.3%	2	16	12.5%
1	16	6.3%	2	17	11.8%	1	18	5.6%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	2	18	11.1%	3	18	16.7%
0	18	0.0%	0	18	0.0%	0	18	0.0%	2	18	11.1%
2	18	11.1%	1	18	5.6%	1	18	5.6%	0	18	0.0%
2	18	11.1%	2	18	11.1%	1	18	5.6%	0	18	0.0%
0	18	0.0%	1	18	5.6%	2	18	11.1%	0	18	0.0%
1	18	5.6%	2	18	11.1%	3	18	16.7%	3	18	16.7%
2	18	11.1%	2	18	11.1%	1	18	5.6%	1	18	5.6%
0	18	0.0%	0	18	0.0%	1	18	5.6%	2	18	11.1%
2	18	11.1%	1	18	5.6%	1	18	5.6%	0	18	0.0%
2	18	11.1%	3	18	16.7%	2	18	11.1%	2	18	11.1%
2	18	11.1%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
1	18	5.6%	0	18	0.0%	0	18	0.0%	1	18	5.6%
0	18	0.0%	0	18	0.0%	0	18	0.0%	0	18	0.0%
0	18	0.0%	2	18	11.1%	2	18	11.1%	1	18	5.6%
3	18	16.7%	3	18	16.7%	2	18	11.1%	3	18	16.7%
31	439	7.1%	30	440	6.8%	27	441	6.1%	33	441	7.5%
Average % off-task: 6.9%											

Music-Only Group Day 17											
# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task	# off-task	Total in grp	% off-task
0	21	0.0%	0	21	0.0%	0	21	0.0%	0	21	0.0%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	1	21	4.8%
2	21	9.5%	1	21	4.8%	1	21	4.8%	2	21	9.5%
1	21	4.8%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	1	21	4.8%	0	21	0.0%
0	21	0.0%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	1	21	4.8%	3	21	14.3%	3	21	14.3%
1	21	4.8%	2	21	9.5%	4	21	19.0%	2	21	9.5%
0	21	0.0%	0	21	0.0%	1	21	4.8%	0	21	0.0%
1	21	4.8%	2	21	9.5%	2	21	9.5%	1	21	4.8%
1	21	4.8%	1	21	4.8%	1	21	4.8%	0	21	0.0%
1	21	4.8%	0	21	0.0%	0	21	0.0%	2	21	9.5%
2	21	9.5%	3	21	14.3%	0	21	0.0%	2	21	9.5%
1	21	4.8%	1	21	4.8%	2	21	9.5%	2	21	9.5%
1	21	4.8%	2	21	9.5%	4	21	19.0%	2	21	9.5%
1	21	4.8%	2	21	9.5%	0	21	0.0%	2	21	9.5%
1	21	4.8%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	2	21	9.5%	0	21	0.0%	0	21	0.0%
1	21	4.8%	1	21	4.8%	0	21	0.0%	0	21	0.0%
0	21	0.0%	2	21	9.5%	1	21	4.8%	1	21	4.8%
1	21	4.8%	0	21	0.0%	0	21	0.0%	0	21	0.0%
15	483	3.1%	26	483	5.4%	22	483	4.6%	20	483	4.1%
Average % off-task: 4.3%											

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