The "Time Out" series designed by the Satellite Technology Demonstration (STD) used a variety of formats, vehicles, and characters to explain career concepts to junior high school students. A science fiction set with a futuristic approach, called the Time Control Center (TCC) used vehicles to move forward and backward in time to access a computer for information on making career decisions. The TCC crew members were characters who were career specialists. Characters were also used with the Matter Analogue Projector (MAP), a futuristic machine used to project a person's mental image on a screen. The STD demonstrated the possibility of developing formats and vehicles that would be acceptable to junior high school students; however, it was concluded that more investigation should be done to improve television programing. Evaluation of the field testing is shown in statistical tables.

(Author/DS)
PROGRAM FORMATS, VEHICLES, AND CHARACTERS
FOR JUNIOR HIGH SCHOOL AUDIENCES

A. J. CONNOLLY

HELEN C. LONSDALE
INTRODUCTION

Although there are maturational differences in early childhood, the emotional development, interests, and experiences of preschool and primary-grade children are quite similar. These similarities have been well documented, and the resulting data base has been used by educators to develop appealing, educational programming. Examples include the Children's Television Workshop ("Sesame Street") and the Bilingual Children's Television ("Villa Alegre").

By the time young people reach adolescence, however, they become less similar. In an educational setting, for example, the achievement level of eighth graders, who are exposed to the same courses, ranges as much as eight grades. This difference, added to variations in adolescent emotions, interests, and experiences, makes it difficult to develop appealing, educational television programming for adolescents.

Recognizing this difficulty, the STD examined many formats and vehicles before integrating several elements into its junior high school series, called "Time Out!" The series focused on career development.

This paper describes the formats and vehicles that were selected for the "Time Out!" series. It concludes by briefly examining some data on audience acceptance of the selected program elements and by making some recommendations for future, similar efforts.

DESCRIPTION OF THE FORMATS, VEHICLES, AND CHARACTERS USED IN THE "TIME OUT!" SERIES

A distinction must be made among a format, vehicle, and character. Format refers to the emotional and physical framework which creates perceptions in an audience. The format sets the stage for the entire program series. A vehicle is the means by which an idea, or a concept, is expressed or achieved. Examples of vehicles are mechanical devices, such as visual displays, and characters. Characters are people who have unique traits, feelings, and opinions. In words and actions, these people convey ideas in certain settings.
The "Time Out!" series used a variety of formats, vehicles, and characters to explain career concepts. The Time Control Center (TCC), a major format, was a science fiction set with a futuristic approach. It provided vehicles to move forward or backward in time, to access a computer for information about making career decisions, to recall films about different working situations, and to make transitions from one format to another—for example, from the TCC to Crossroads Corner, which featured teenagers in a rural setting.

Major characters in the "Time Out!" series included: the TCC monitors, a group of career specialists; Dr. DOT, a carnival "barker," who explained the career categories in The Dictionary of Occupational Titles; Nick Garter, a comic detective; the monster puppets, who represented different approaches to learning; and Aunt Frumpy, who answered letters from students.

Presented below are detailed descriptions of the formats, vehicles, and characters that were used in the STD's "Time Out!" student programming.

TIME CONTROL CENTER

The Time Control Center (TCC) was a special place, located somewhere in the future—a place where time and space did not apply, where imagination was free, yet where basic human traits were depicted. The TCC took students on a journey through time—past, present (including 1974-75), and future—and finally to a point where they were fully equipped to make career decisions on their own.

Several vehicles and characters were tied to this futuristic set. One vehicle was the concept of time travel, in which TCC characters traveled back to the past to conduct historical research about choosing careers. Another was the Matter Analogue Projector (MAP), an imaginative device, located within the TCC, which displayed visual images on a screen. Students were asked to imagine a banker's office; one by one, the furnishings appeared on the MAP screen—first, the desk; then, the chairs; and finally, the banker. Another visual display, located within the TCC, was the Quantum Light Display (QLD), which presented color films and slides related to careers. The Synthetic Articulating Machine (SAM), a TCC computer, often was used to introduce QLD program segments.
TCC crew members (characters) were career specialists, who operated specific stations in the control center. Each had particular traits, exemplifying different career aptitudes, talents, and interests. These characters are described below.

Kerra

Kerra, the Perceptor, was the director of the Time Control Center. As a model for the decision-making, in-action process, she collected information about careers, weighed alternatives, and selected strategies. Her relationship with other crew members was friendly, respectful, and dignified. Kerra represented the ideal executive—a person who grew into her job through years of experience and was aware, at all times, of her leadership role.

Ben

Ben, Communications Monitor, served as the primary narrator for the TCC. He spoke directly to the audience and provided introductions and summaries to program segments, primarily those involved with the QLD, SAM, and Samantha, who is described below. Ben also projected many of the characters used in the MatterAnalogue Projector vehicle.

Debra

Debra, the Matter Analogue Director, was confident, intelligent, and quiet. Like Kerra, she was a model of the decision-making, in-action process, but she was less forceful and less verbal than Kerra.

Marvin

Marvin, the Perceptor-in-Training, was undergoing on-the-job training. Because he was not well suited to many aspects of the job, he provided a negative example. He was objective in terms of analyzing facts, but his ability to communicate with others was limited. He spent the entire series learning from a variety of experiences. Finally, he made a decision that was based on a thorough self-assessment of his interests and capabilities.

Robin

Robin, the Data Monitor, handled the TCC data systems which retrieved and analyzed information. Robin was an optimistic and enthusiastic person, who was attentive to detail and...
Sensible to the feelings of others. She provided information that helped others to develop personal goals.

**Darien**

Darien, the Travel Monitor, operated time travel equipment and monitored time travel. He remained an elusive character for the writers and the actor. In the series, Darien appeared to be an example of an adolescent seeking to define himself and his relationship to others.

**Maria**

Maria, a Time Traveler, was a transitional character. She provided a physical link between TCC and Crossroads Corner and TCC and other points in time. In Crossroads, Maria was a photographer; her research involved interviewing people from a variety of careers and organizations throughout history. Her special aptitudes included technical skills, language skills, and intuitive intelligence, which was manifest in her sensitivity to others.

**Jason**

Jason, another Time Traveler, was a futuristic scholar—well-informed about many things, including history. He blended into a variety of time-travel situations, because of his ability to listen, to ask questions, and to collect information.

**SAM, Samantha, and the QLD**

SAM and Samantha were the voices of the Synthetic Articulating Machine, a type of computer used most often in conjunction with the QLD (Quantum Light Display). The QLD was, in reality, a chroma-key device which presented most of the film footage and slide materials about career development. SAM and Samantha often narrated filmic materials and also participated in a series of "games" with the crew. The computers took on human characteristics to greater and lesser extents in various program segments.

**CROSSROADS CORNER**

Crossroads Corner presented a real-life situation; it was a present day country store/gas station/post office, located at a crossroads somewhere in the Rocky Mountains. This
locale was especially useful as a forum not only for the adolescents who populated Crossroads Corner, but also for the experts (celebrities, educators, and working people) who visited the Corner from time to time.

Sharon*

Sharon operated the business at Crossroads Corner. Her other interests included making jewelry and writing technical articles. (From her conversations, we learn that Sharon is married to a geologist, junk sculptor, and out-doorsman, named Rick, but we never see her husband in the series.) Sharon was confident, capable, and interested in others. Her relationship with her son, Eddie, had its ups and downs, but was usually easy going.

Eddie*

Eddie, Sharon's adopted son, was a South American orphaned by some catastrophe. He was very interested in art, but less interested in other school subjects. Eddie demonstrated occasional frustration and impatience.

Other Teenagers

The teenagers were supposed to be 13 or 14 years old, but were, in reality, performed by 15 or 16 year old actors. Joe, Eddie's best friend and classmate, was similar in attitude to Eddie. Joe and Eddie had a comfortable relationship, allowing them to tease and criticize each other in a constructive way. Joe was especially interested in sports reporting.

Eddie's other classmates included: Rita Ortega, a confident, friendly, and intelligent girl who sometimes served as a "teacher" to the other teenagers; Mary, an attractive girl, who was interested in stock breeding; Peggy, who, when first introduced, was listless and unmotivated, but gradually became interested in mechanical things; and Joanne, who was full of energy and assertive.

Other Residents

Ms. LaSalle was the career education teacher at the local school. She often served as a "referee," especially in relation to giving assignments.

*Sharon and Eddie did not represent a "typical" family. The present-but-absent father was unrealistic; so, too, was the absence of siblings. Without these characters, the programs seemed a bit static. It would have been better to include a more realistic family setting, thus creating the potential for conflict and interaction.
Ms. LaSalle was joined by: Mr. Guthrie, an older man, who owned a local dairy farm; Coach Duvall, a junior high school football coach; Mrs. Ortega, Maria's mother and a frequent visitor to the store; Mrs. Bastanchury, a volunteer worker at the local medical clinic; and Mrs. Bastanchury's daughter, Betty, who was a county extension agent.

Matter Analogue Projector

The Matter Analogue Projector (MAP) was a futuristic machine, which was used to project a person's mental images on a screen. The characters who were projected on MAP included the following:

1. Nick Garter. Nick Garter, Private Eye, was a negative example of decision-making. In spite of reminders from his detective school professor, Hank Savage, Nick did not remember even the most fundamental steps in the decision-making process. He was sloppy and unmotivated.

2. Dr. DOT and Calvin. Dr. DOT (from The Dictionary of Occupational Titles) and his assistant, Calvin, were part of a "traveling career caravan." The script writers wanted Dr. DOT to be a "flowery" character—a combination of the Music Man and W. C. Fields—but this characterization did not materialize; instead, Dr. DOT became authoritarian, impatient, and bungling.

3. The Monster Puppets. Dr. Sponge, the owner of the castle and creator of Godfrey, was a narrow person, incapable of collecting all pertinent information and of overcoming biases. Godfrey, the "Monster," was an eager, curious learner. Count Slurp served as Godfrey's alter ego, furnishing comments from the conscience.

4. The Employment Office Puppets. Hermione and Fletcher first represented the importance of carefully examining one's aptitudes, interests, and temperaments. Then, they assisted other characters by providing information and examples of various careers.

5. Captain Consumer. Captain Consumer was a negative example of a good consumer; his arch enemy was Randolf Ripoff. Ripoff was always foiled, but never by Captain Consumer. Consumerism was used to exemplify the decision-making process.
6. **Aunt Frumpy.** Aunt Frumpy—a delightful, if slightly senile, lady—provided information on many topics. But, while giving advice to others, she did not tell people what to do. She suggested things to look into and to think about and thus served more as a catalyst than as an instructor.

7. **The Rocky Mountain Dramatic Reading Society.** This society was a modified repertory company. Three to four characters—standing behind podiums—read a variety of parts; they used inflection and expression to emphasize the scripts.

8. **The Mimes.** A male and female mime were also projected on the MAP; they were usually more serious than the other MAP characters. The mimes focused on self-assessment; specifically, self-assessment as it relates to work conditions, physical demands, and seasonal employment.

9. **The Blackout Characters.** Eleven blackout spots were used in the "Time Out!" series. Each blackout showed two teenagers, in silhouette, verbally reacting to the statements of a television announcer. The announcer extolled the virtues of different DOT occupational categories, or steps, in the decision-making process. This brief (no longer than two minutes) spot presented an opportunity to comment on the programming, thus helping to reinforce content objectives in a manner that was neither didactic nor serious.

**STUDENT ACCEPTANCE OF PROGRAM ELEMENTS**

This section discusses some evaluations of program elements in the "Time Out!" series. The evaluations were made by the STD's research staff.

**May, 1974 Evaluation**

A field evaluation was conducted May 15, 16, and 17, 1974, with four videotaped program segments. These segments were shown to a student population of seventh, eighth, and ninth graders from four school districts in Colorado. The districts represented three rural areas and one inner-city location.

The participating students viewed four program segments: two set in the Time Control
Center (TCC); two, in Dr. Sponge's castle (the puppets) Ben, the Program Narrator, and
Marvin, the Perceptor-In-Training, appeared in the TCC excerpt. Dr. Sponge, Godfrey, and the
Count were the puppet characters.

Several open-ended questions were asked; then, the data was developed through a content
analysis process. This process involved:

1. Carefully reading the data and selecting key phrases, which indicated different
degrees of acceptance.
2. Taking the selected phrases and putting them into an organizational scheme for
analysis.
3. Reading the data a second time and recording each use of a key
phrase.
4. Adding up the number of times each phrase occurred.

Figure 1 shows the matrix that was developed to evaluate the program segments.

<table>
<thead>
<tr>
<th>VERY POSITIVE</th>
<th>POSITIVE</th>
<th>NEGATIVE</th>
<th>VERY NEGATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Very good, good, really good, excellent, great</td>
<td>Pretty good, all right, okay</td>
<td>Fair, not the greatest I've ever seen</td>
<td>Poor, wouldn't want to watch it all the time</td>
</tr>
<tr>
<td>Super interesting, very informative, got the point across well</td>
<td>Interesting, informative, educational</td>
<td>Not very interesting, boring at times</td>
<td>Boring, no point to it</td>
</tr>
<tr>
<td>I liked it/him, more for kids my age</td>
<td>A little more grown up</td>
<td>A little on the babyish side</td>
<td>Strictly for little kids, I didn't like him/it</td>
</tr>
<tr>
<td>Funny, cute, neat, far out, cool</td>
<td>Somewhat funny, somewhat neat, amusing, enjoyable, nice</td>
<td>A little silly, a little stupid, a little dumb</td>
<td>Silly, dumb, stupid, sick</td>
</tr>
<tr>
<td>Easy to understand</td>
<td>Mostly understandable</td>
<td>Hard to understand</td>
<td>Couldn't understand it at all</td>
</tr>
</tbody>
</table>

Figure 1. The Evaluation Matrix for Program Segments
The data for all open-ended questions was reported in two forms: (1) the overall score within each major category of the matrix; and (2) the total for each cell of the matrix. Only data applicable to student acceptance of program elements has been reported here.

Figure 2 shows the major categorical data for the responses to two open-ended questions:

1. The tape about the Time Control Center was

2. The tape about the puppets was

<table>
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<tr>
<th></th>
<th>Seventh</th>
<th>Eighth</th>
<th>Ninth</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Very positive</td>
<td>33</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>(2) Positive</td>
<td>30</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>(3) Negative</td>
<td>14</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>(4) Very negative</td>
<td>14</td>
<td>26</td>
<td>9</td>
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The tape about the puppets was:

<table>
<thead>
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<th>Seventh</th>
<th>Eighth</th>
<th>Ninth</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Very positive</td>
<td>85</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>(2) Positive</td>
<td>16</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>(3) Negative</td>
<td>8</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>(4) Very negative</td>
<td>6</td>
<td>19</td>
<td>8</td>
</tr>
</tbody>
</table>

Figure 2. Major Categorical Data for the Program Segments

As shown in the above figure, all grades demonstrated greater acceptance of the puppets than of the Time Control Center. Seventh graders showed the highest acceptance levels. The eighth graders demonstrated a positive response, with greater acceptance of the puppets; and the ninth graders demonstrated a positive response, with a slightly greater acceptance of the puppets.

The students then were asked to describe some characters in the segments. Students included many remarks, which were analyzed according to the matrix shown in Figure 1. The following figure shows the results of that analysis.
The responses to the puppets were the most positive, with the seventh and ninth graders showing the most positive acceptance and the eighth graders showing the most negative acceptance. Godfrey proved to be the most popular puppet and the most easily-understood puppet; Dr. Sponge and the Count, the hardest to understand. Ben received mostly positive responses. Marvin received many more negative responses than positive responses.

This limited field evaluation led to some decisions about program elements. These included: (1) using more puppet vehicles; (2) attempting to eliminate or minimize characters with heavy accents; and (3) scripting situations in which Marvin appeared more "human," but still retained his role as a negative example of the decision-making process.
RECOMMENDATIONS

The STD demonstrated the possibility of developing formats and vehicles that would be acceptable to junior high school students. A great deal more investigation should be done in future efforts to develop instructional television programs that will be even more acceptable and interesting to these students.

Suggestions for further study include more comprehensive investigation of the acceptance of a variety of program elements, as well as the effectiveness of different program elements. There may be a point at which entertainment becomes counter-productive to learning. Appropriate mixtures of entertainment and more formalized instructional formats should be analyzed.

Negative examples have been somewhat successful in STD program elements: At this point, it appears that negative examples may not be useful or acceptable until the viewer knows something about the concept being presented. Puppets and animation should be investigated for use with junior high school student programming, a fine balance seems to exist between appearing "babyish" and "too sophisticated," but that balance is attainable.

Further work should be done on the types of characters who elicit strong audience identification among junior high school students. The STD made the assumption that students would identify with actors older than themselves, and this was not always the case.

More specific recommendations include the following:

1. Audience Assessment. An extensive initial assessment of audience preferences on formats and vehicles should be done to assist production units in making decisions about program elements. These assessments may include evaluations of color, music, and length-of-segment preferences.

2. Field Testing. Representative video productions of each proposed format, vehicle, and character should receive field testing prior to inclusion in scripts. Data should include measurements and evaluations of both the appeal and the educational effectiveness of the particular elements. Field testing should also attempt to analyze the elements in comparison to other commercial and educational television programming.
3. **Commitment to Prototyping.** Initial field testing should be followed by more extensive prototyping of program segments. Resources should be allocated to provide for the modification of program elements which do not meet the desired acceptance and effectiveness standards.

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