NASA TV Education File Customer Survey

Steven McGee, Ph.D., & Jennifer Kirby Classroom of the Future Wheeling Jesuit University

NASA is considering moving the NASA-TV Education File to one transmission per day. The Classroom of the Future conducted a survey to answer two primary questions. Would teachers tolerate one transmission per day? If so, what time slot would be best? COTF created an online questionnaire to answer these questions. An announcement was sent to the Spacelink Express listserv (where the NASA TV schedules are posted) requesting teachers to complete the questionnaire online. Teachers were given a two-week window in November 2001 to complete the questionnaire. A reminder was sent to the same Spacelink Express listserv a few days before the deadline. There were a total of 47 respondents during the two-week window. The overall survey results are given below.

A review of the demographic data indicates that the survey respondents represent a cross-section of the NASA-TV audience. The number of teachers across the various grade levels was fairly evenly split, with middle school having the most (question 1). Teachers used the NASA-TV Education File mostly with their science classes, but they also used it with a variety of other classes (question 2). More than half of the respondents used the NASA-TV Educational File at least several times, and one-fourth of the teachers reported using it frequently (question 3). Of the respondents who watched the NASA-TV Education File last year, most reported that they taped it (question 4).

Most teachers stated that they used the NASA-TV Education File as a curriculum supplement to introduce new topics and to show real-life examples of what the students were studying (question 7). Some teachers stated that they used the materials to illustrate the different careers in science and at NASA. Other teachers used the materials to start discussions about current events.

The teachers seemed to like the idea of a NASA-TV Education Channel (question 8). In their descriptions they mostly listed topics of interest on such a channel: science, mathematics, astronomy, chemistry, and demonstrations of experiments. Teachers were also interested in astronaut biographies and stories on careers at NASA.

In answer to the primary survey question, the results indicate that it is possible to move the Education File to one time slot with minimal repercussions (question 6). The 10-11 a.m. time slot would seem to work the best. The main reason that there would be minimal repercussions is that most of the teachers tape the programs anyway.

NASA TV Education File Survey Results

1. What grade levels did you teach last year?

Selections	Number of Responses	Percentage of Responses
K-4	15	20%
5-8	28	37%
9-12	17	23%
Postsecondary	15	20%

2. In which courses did you use the NASA-TV Education File?

Selections	Number of Responses	Percentage of Responses
Science	25	37%
Math	10	15%
Current events	15	22%
Other	5	7%
None	13	19%

Others: Aviation education, English as a second language, planetarium programs at all levels, promote it to educators, space operations classes, language arts, social studies

3. How often did you use the NASA-TV Education File in your classroom last year?

Selections	Number of Responses	Percentage of Responses	
Never	14	30%	
Once	6	13%	
Several times	14	30%	
Once per month or more	12	26%	

4. When you used the NASA-TV Education File last year, what percentage of time did your students watch it live vs. on tape? Enter the percentage of time for each type of use.

The percentages below represent the responses that actually watched last year.

Selections	Average of Responses
Percentage of time students watched NASA-TV live	9.55%
Percentage of time students watched NASA-TV from tape	69.76%

5. If your students watched it live last year, what percentage of time did they watch during the following times?

The percentages below represent the responses that actually watched NASA-TV live last year.

Selections	Average of Responses	
2-3 p.m.	59.17%	
5-6 p.m.	2.08%	
8-9 p.m.	2.50%	
11 p.m12 a.m.	0.42%	
2-3 a.m.	0.17%	

6. NASA is considering moving the NASA-TV Education File to one time slot per day. Please select which of the time slots below, Eastern Standard Time, would be most convenient for you.

Selections	Number of Responses	Percentage of Responses
10-11 a.m.	10	24%
2-3 p.m.	3	7%
Neither of them is convenient. I would no longer use the NASA-TV Education File.	2	5%
Doesn't matter, I tape it.	18	44%
I wasn't planning on using NASA-TV this year.	8	20%

7. Please describe how you have used the NASA-TV Education File in your classroom?

Summary: Most teachers stated that they used the NASA-TV Education File as a curriculum supplement to introduce new topics and to show real-life examples of what the students were studying. Some teachers stated that they used the materials to illustrate the different careers in science and at NASA. Other teachers used the materials to start discussion about the live and current events.

Responses:

- When covering space science, I used it to illustrate life in space and careers with NASA.
- We've used the video file as a bit of a current events type of video. I don't teach in a school, but rather in a planetarium. People love to hear the latest in space exploration and this file is perfect for that.
- I have been using NASA-TV for about 6 years in my regular science class, especially during the times when missions were ongoing and my students could watch events in real time. I have used it to explain NASA's mission, microgravity, Newton's Laws, career opportunities, etc. There are so many ways to use it—whatever grabs my fancy at the time is where I go. I do not use the historical material very much because I already have a very nice library of NASA videos from Marshall, Stennis, and Johnson Space Centers. That way I get to choose which subjects fit with my present curriculum.
- We use almost all live events from passport to knowledge you transmit in the Education File, as an interactive teleconference, using e-mail to ask the NASA experts. We use also the Education File as a stock audiovisual material for conferences in the museum.
- Information and discussion.
- Videotapes from Newmast and NASA library.
- We unfortunately do not have the TV linkup in our school. I can only use the information that is available on NASA via the Internet.
- I've copied a couple of shows for viewing in my classroom to supplement the curriculum.
- To show the applicability of mathematics.
- The application of geometry into flying objects.
- Last year I taught math and science to 7th grade. I used the Education File and Video Gallery when doing Earth science and some NASA Connect in Math. I have to tape the programs at home because our school doesn't get NASA on the local cable channel. This year I have 5 classes of English and one current events classes, so I have not used it as much. Even though I don't teach science this year, I enjoy watching NASA. I've always been interested in space. I teach at a small school and might have to teach science again.
- I have used NASA-TV educational programming to augment and update traditional planetarium programs and highlight current events and missions that NASA-TV includes in its programming. I also point classroom teachers to this resource for use in their own classrooms.
- To watch launches and specific videos we knew were going to air.
- I have recently started working here as the media specialist and, to my knowledge, this program is not being utilized in our classrooms on a regular basis.

- Whenever a launch or landing was scheduled, I'd have in on all day in class, and if there was something interesting on, we'd stop class and watch it.
- I can't find NASA schedule on my PBS station at home. I am unable to use TV at school so I tape programming from home to use at school. Where is the schedule of programs and availability for me to check? I would use it if I could find it on my cable. I tape other programming and use it in school as I do the tapes I received from the teacher workshop from NASA.
- I have not used NASA-TV as we are not able to receive it.
- Until recently, it wasn't available to us.
- I am just learning about this program and plan to use it in the near future.
- When our students participated in Signatures in Space, I may have sought assistance from NASA-TV to get a film of our mission. In the end a local TV station had a film to share with us.
- I tell my preservice elementary teachers about it so perhaps they will use it when they begin teaching. I wish that we could watch it more in our classes, but we have only a quarter to teach them ALL they need to know about teaching science.
- I couldn't locate a way to use it in my area. I would like to, though. If I could have used it, it would likely have been a taped version due to scheduling concerns, and I would have shown it in science classes, three times per day to approx. 65-70 students.
- We view the video and discuss. I sometimes view the video before conducting related experiments because the students are even more eager to do them when they see real-world applications.
- Actually we in this part of the globe do not have access to NASA information. Occasionally, when there is a launch onto another planet, then we get some news from CNN. Then we teach these.
- Programs on algebra were used visually to help promote understanding of concepts. The Connect series
 was used for hands-on activities. These were especially valuable in teaching observation and
 documentation of data.
- I used it as a startup for a new lesson, a review of information covered. As an example, for a writing activity.
- Present use is unknown as there is presently no way to record how, when, or where 4-H staff utilize this
 resource. I promote NASA-TV to 4-H field staff in Alabama and throughout the nation periodically. It
 would be good to consider other strategies, as 4-H youth development has significant involvement with
 schools in enrichment type programs throughout the country. I would be interested in discussing this
 potential further.
- In support of curriculum. To inspire students to careers in science. To allow them to dream about the future. Environmental education.
- I have used videotapes that have been dubbed by NASA for me, but I don't have the ability to get live broadcasts in my classroom. I'm not sure if I am interpreting the questions correctly.
- In the planetarium we use clips for educational programs.
- Supplementing the regular curriculum in space-related topics. Talking about electromagnetic imaging.
 Careers in science.
- History of space exploration and supplemental material for the 8th grade space unit of study.
- I teach a lot about space, the space shuttle, ISS, and aviation so I check to see what is on the schedule for the month and then tape whatever I can use. We also watch or tape the shuttle launches. Also I monitor when there are going to be live showings from ISS or other NASA launches or events. It is very helpful to me. Please show more live shots from the shuttle and ISS of daily activities. The children love to watch them going about their daily routine.
- Used videotapes of NASA-TV's programs concerning science, flight, current events, new ideas, etc.
- They supplement a topic of discussion.
- Using clips from NASA-TV for the teaching of English as a 2nd language to Japanese college students.
- Really as a current events discussion.
- We haven't found your channel. I would like to use the NASA Education File, but our media specialist doesn't know how to get it.

3/23/04 4

8. If NASA were to create a NASA Education Channel, what would you like to see offered on that Channel and how might you use it?

Summary: Topics that the teacher would like to see discussed on a NASA Education Channel: science, mathematics, astronomy, chemistry, experiments, astronaut biographies, and careers at NASA.

Responses:

- More science taught or illustrated at a lower level for students. Also, shows narrated by famous stars or other children since the kids relate better to these types of individuals.
- Being a professional in a planetarium, I would prefer to see NASA keep things how they are. An extra
 channel would end up costing us extra money. We receive NTV via Dish Network and are afraid that we
 have to spend more money.
- Selections from the video offered through CORE with a schedule on the web site and repeats just in case I forgot to tape it the first time. This should be during the school day. Live programming from NASA centers of presentations done by AESP and other professionals.
- Please we need at least two time slots per day, because sometimes we have trouble in the reception and then we use other schedule. The main programs we use are the live events from passport to knowledge "Live from...," and we use them as interactive teleconferences.
- Interactive experiments, inside stories of missions (what makes it happen and the people involved).
 Curriculum ideas.
- Management decisions have threatened the status of our school. We may not exist next year. I have no idea where I'll be assigned.
- I would use all of the space exploration and living in space information that would be provided.
- More applications of mathematics.
- If NASA can create a channel like Discovery Channel or National Geography, then we from here, Turkey, could effectively and willingly participate.
- Experiments, programs on astronomy, biographies of astronauts, and jobs at NASA might encourage some students to pursue careers in space science and technology; technology.
- I would like to see ongoing reports on current missions and the science and people associated with them. Interviews and anecdotes are always good to give students (and the public) a sense that this is how we use science to learn things and develop technologies. Stories from professional scientists and engineers illustrate different career paths and often spark interest in pursuing specific goals among audience members.
- Homework help for students, especially for the time slot after school from 3-6 p.m. There are many afterschool programs that could incorporate NASA-TV into their programming if this was available at a time convenient for them. It would also hit the students at home, waiting for parents to get there and to have help with their homework.
- Not sure I understand the question...if it's a channel, wouldn't it be a stand-alone? Or would it only be a few hours of programming a day on an existing channel?
- A variety of things...i.e. the experiments and investigations provided on NASA Explores pages. Kids
 working with NASA engineers and models of space station and shuttle, etc. Maybe a place to get kids'
 ideas about space and space exploration, new book reviews on space-related topics, teacher's corner with
 school ideas.
- Live space station coverage!
- The same types of things that are now offered. Plus the live space launches and communications from the ISS. And interviews/presentations by real NASA scientists about their work. To include people like Dr. David Young and his work from the University of Michigan.
- I think a NASA Education channel would be exciting if it included biographies of space personnel, shows on what all the different NASA jobs are like, a sort of "how stuff works" (maybe Marshall Brain of "How Stuff Works" would relish this opportunity) show about anything related to space and aeronautics. Shows featuring specifically the women of space and aeronautics. Shows that promote the importance of the space program in our everyday lives, not to mention all the other sciences. Of course, live feeds of all the current events in space and NASA happenings. All for now, hope this helps.

3/23/04 5

- I came back from the NEW experience and started a Young Astronaut Group. A TV program modeled after something like www.howstuffworks would be great, only using space-related technology? Thanks for your great products. I use them a lot.
- Challenging problems for the students to solve. Contact with NASA scientists.
- More of the same types of offerings on the Education File, only more of them. It would be convenient if NASA would do block feeds by grade level so that it is convenient to tape in sequence.
- News about success in exploring MARS. The use of space information.
- More programs involving chemistry to demonstrate basic principles.
- Relating info to math, science, or language arts.
- Block feeds in the mornings for teachers— 4 a.m.- 6 a.m. E.G. Liftoff To Learning series. Suggestion: When the shuttle is up and things are a bit slow, an image of the shuttle's path is broadcast. I tape it and then play it FF. Teams of students try and write down the countries of the world the shuttle flies over. One-to two-minute drill covers much of the world. We then go back and play it at regular speed and argue as to which answers are correct. NASA might be able to set up a competition where teams could compete over the Internet.
- Lower elementary topics relating to space with hands-on activities in guides to supplement.
- Not sure how this would complement the regular NASA-TV channel. Some of what is important to use are
 current events in the space program. Educational programs like "Live From A Black Hole" are good. The
 "Live From Mars" material varied. One must keep the quality level high to sustain an entire channel as
 opposed to infrequent broadcasts.
- My problem is that I have had so much problem getting feeds when I want them. Something always seems to go wrong. I have no idea how to tape it. Live things happen at noon too often when we are at lunch. I have more than one class, so I like having things available live...it really seems to impress the kids when it is live.
- I would like to see lots of shows on living and working in space, how microgravity affects us in space, science experiments, and on aviation subjects. I use this type of material to teach and reinforce concepts. I am teaching about space and aviation.
- The latest news on space shuttle, planets, toys in space, living in space, and gravity, how it affects humans.
- Something like "Bill Nye The Science Guy". game show?
- Current missions and status reports. Some mission data on a weekly basis even if it is just a photo and a brief summary. Discussion of purpose of mission and applications to A)life on Earth, B) science, C) future projects. Timetable for upcoming missions and changes in that time table as they occur. A session where a panel talks about how missions are picked, how they are scheduled, updates as schedules slide and the reasons for the changes. A periodic discussion of budget applications how the funds are split up why shortages occur and a running comparison of NASA budget compared to A) the overall national budget, B) compared to defense, social services and finally compared to any other agency that has a similar budget. The purpose is to show the citizens that changing the space exploration budgets will not significantly affect any other major program that the U.S. govt. has. A question-and-answer period for call-ins or e-mail questions. Interview space scientists about their knowledge in their particular field, how this mission will answer questions or yield new data. Take the "magic" out of space exploration. In other words, get down to the details of how a particular piece of equipment works, what scientific principles are applied, why it is that the particular data they are studying contains the kind of information the scientists are looking for. How the data is extracted and turned into data or pictures. I would use this kind of data for school groups who visit my planetarium, adult audiences who come for updates on current events in NASA activities, astronomical knowledge, the current night sky. I would use some of the information for college-level astronomics courses.
- I like the idea of a NASA Education channel very much. If this does happen, I would very much like to request (once again) that even when important events happen, such as an upcoming shuttle launch, that the Education File be kept to inviolate time... such as the 11pm showing (without dumping it as so often happens). For example, yesterday I set the timer to receive Destination Tomorrow #4, but yet again it was dumped, though admittedly I set the timer for the 8 p.m. showing. Please keep one showing alive for teachers and not change the scheduling either? Rather than create an entirely new channel, why not make the one you already have a better one? Thanks! John Lander
- First of all I'd LOVE it. I think so much programming is junk and this offers a terrific alternative.