

Informed Consent

Project Name: **4. NASA Game —Prototype Usability (Playtesting)**

Overview: When NASA invited Ray Bradbury, *The Martian Chronicles* author, to the Jet Propulsion Laboratory to view photos from the first landing on Mars as they first arrived, the famed writer said his own excitement about space and the inspiration of many scientists had been the fantastic technology envisioned in pre-Space Age science fiction. NASA and the NASA-sponsored Classroom of the Future (COTF) seek to inspire tomorrow's scientists in a similar way, but this time not with the written word, but through a medium today's kids relate to—an online game, albeit an educational one.

Purpose of the research study. NASA thinks games can prepare people with just the right knowledge to be successful at learning. The *NASA Game* introduces players age 13-18 to concepts about NASA science. Classroom of the Future™ researchers at the Center for Educational Technologies® (CET) will track players' gameplay to study how the *NASA Game* environment helps them to learn.

Expected duration. Each playtester will spend up to 40 hours in game playtesting activities.

Procedures to be followed.

- Playtesters will be recruited through Wheeling Jesuit University student, faculty, and staff affiliates and local media.
- Any playtesters under the age of 18 must have this informed consent form cosigned by a parent or guardian.
- Playtesters will play the NASA game by themselves and participate in one-on-one, small group, and focus group discussion about the gameplay.
- CET staff will schedule all playtesting sessions.
- All playtester activities, including gameplay, will occur within the CET facility.
- One-on-one sessions will ask the playtester to think out loud while playing the game. A researcher will take notes about the player's responses.
- Group discussions will address the following questions:
 - A. What worked in this game?
 - B. What didn't work?
 - C. How would you change what didn't work?
 - D. What was fun in playing this game?
 - E. What wasn't fun about playing this game?
 - F. How would you change what wasn't fun?
 - G. Did you feel in control?
 - H. Did you feel that your decisions impacted your chance of success in the game?
 - I. What did you learn about [targeted concept]?
 - J. How did playing the game help you to learn this?
 - K. Did the pace of your gameplay sometimes slow down?
 - L. When did this happen?
 - M. Was the game as engaging when gameplay was slow as when it was fast?
 - N. What was your level of skill at playing the game?
 - O. Were there times when your level of skill was greater or less than what you needed to succeed in playing the game?
 - P. What was your level of challenge in playing the game?

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Q. Were there times when the level of challenge was too great or too low? If so, how did you feel when this occurred?

R. What did you like about the game?

- Playtesters will register to play the game with a unique, made-up user name. The game will assign a password to each player.
 - Playtesters must record their user name and password in a safe place. The game will not collect any personally identifiable information, so a player who forgets user name and password will not be able to access the game.
 - *The NASA game* will ask each playtester to provide:
 - Mother's/Female guardian's highest levels of education (no high school degree, high school degree, college degree, master's degree, Ph.D., or M.D. degree).
 - Father's/Male guardian's highest levels of education (no high school degree, high school degree, college degree, master's degree, Ph.D., or M.D. degree).
 - Player's gender (male/female).
 - Player's ethnicity/race (African, African-American, Asian, Caribbean, Hispanic, mixed, Native American, white, other).
 - Player's school grade level.
 - Player's academic grade point average (A-F: Please translate numeric GPAs as 4.0=A, 3.0-3.9=B, 2.0-2.9=C, 1.0-1.9=D, 0-0.9=F).
 - City, state, and ZIP code.
- Playtesters will not provide any personal contact information or their names to the game.
- Playtesters will complete an introductory module, level one of the game, and level two of the game.
 - The game will track all player actions in a database.
 - All playtester data is anonymous. All player activity will be logged to the player's made-up user name and password.
 - Throughout gameplay the *NASA Game* will ask each playtester to report his/her level of skill and challenge. The prompt will ask two questions:

When you were prompted. . .

	Low				High				
How challenging was the activity?	1	2	3	4	5	6	7	8	9
How skilled were you at the activity?	1	2	3	4	5	6	7	8	9

Any foreseeable risks or discomforts. There should be no risks associated with this study beyond those normally experienced in everyday life. Playtesters will volunteer to act as paid playtesters. They may withdraw from participation as a playtester at any time. There is no penalty or loss of status to playtesters who withdraw; however, they will be paid only for hours they work.

Benefits to subject or to others which may result from this research. Playtesters are to be paid \$7 for each scheduled playtester hour worked, up to a maximum of 40 hours.

Alternative procedures or courses of treatment. There are many ways to deliver instruction, the NASA game is one way. The NASA game is designed to prepare players for future learning. The

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project does not provide alternative instructional delivery systems for teaching about NASA science.

Confidentiality. All data collection is anonymous. No player names, contact information, or personal identifiers will be collected by the *NASA Game*. Please note that for each player, the game system will track all gameplay and all usage of the site. Playtester one-on-one comments will be logged to user ID but not to the individual's name or any other identifiers.

Wheeling Jesuit University and the Center for Educational Technologies *will* use playtester names and contact information to schedule playtesting sessions, to record playtester hours worked, and to report these to WJU Finance for stipend payment. Personal identifiers will never be connected to playtesters' gameplay.

Participant rights. The participant has the right to ask pertinent questions about the research, subjects' rights, and research-related injury to the subject. Subjects can contact the *NASA Game* research team through e-mail at [to be determined] or by telephone (304-243-2479) between 9:15 a.m. and 2 p.m. Eastern time Monday through Thursday.

Project Lead Researcher	Project Research Assistant
Dr. Debbie Denise Reese Center for Educational Technologies Wheeling Jesuit University 316 Washington Ave. Wheeling, WV 26003	Lisa McFarland Center for Educational Technologies Wheeling Jesuit University 316 Washington Ave. Wheeling, WV 26003 Phone: 304-243-2479 E-mail: [to be determined]

Participant responsibilities.

- Keep the details of the *NASA Game* a secret from others, except the playtesting group.
- Keep the registration access code a secret from others.
- Keep user name and password secret.
- Never share user name and password except with the *NASA Game* research team during playtesting.
- Never let anyone else use his or her user name and password to access the game or site.

NASA game expectations.

- *The NASA Game* expects each playtester to try hard to accomplish game goals.
- *The NASA Game* expects each playtester to complete the entire study session.
- *The NASA Game* will track all playtester interaction with the *NASA game*.
- *The NASA Game* owns all data collected through the *NASA Game* and playtesting.

Institutional Review Board. The Institutional Review Board at Wheeling Jesuit University has approved this study. Participants with questions about their rights as human subjects may contact the board chair, Dr. Beverly Carter at 304-243-2340 or carter@wju.edu.

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Playtesters Ages 18 and older:

By signing this form, I am signifying that **I am 18 years of age or older** and I agree to participate in the *NASA Game* study as a playtester, as summarized above. I have the physical and mental ability to see and react to the computer screen images, hear the computer's audio signal, and physically manipulate the mouse and computer keyboard. I realize that the *NASA Game* password and access code must remain confidential, and I may not share it with any other person. I realize I must give an honest effort to play the *NASA Game* from the beginning of the study session to the end although I may withdraw from the study by notifying a *NASA Game* researcher in writing. I realize the *NASA Game* will track all player activity while logged onto the *NASA Game* site. Because I am a playtester, the *NASA Game* research team will ask me questions and record my responses. They may also ask me to play the *NASA Game* in a one-on-one setting, taking notes on what I say as I think out loud while playing the game. I will be paid a stipend of \$7 per hour for a maximum of 40 hours.

Print your first name.

Print your last name

Your signature

Date

Parental permission for playtesters ages 13-17.

By signing this form, I am agreeing that my child/ward,

Print minor's first and last names

may participate in the *NASA Game* study as a playtester, as summarized above. My child/ward is 13-17 years old. My child has the physical and mental ability to see and react to the computer screen images, hear the computer's audio signal, and physically manipulate the mouse and computer keyboard. I realize that the *NASA Game* password and access code must remain confidential, and my child/ward may not share it or details of the game with any other person, except an assigned *NASA Game* researcher. I realize that my child/ward must give an honest effort to play the *NASA Game* from the beginning of the study session to the end although my child may withdraw from participation as a playtester at any time. I realize the *NASA Game* will track all player activity while logged onto the *NASA Game* site. Because my child is a playtester, the *NASA Game* research team will ask my child questions and record his or her responses. The researchers may also ask my child to play the *NASA Game* in a one-on-one setting, taking notes on what my child says as he or she thinks out loud while playing the game. My child will be paid a stipend of \$7 per hour for each playtesting hour worked, for a maximum of 40 hours.

Print your first name.

Print your last name

Your signature

Date