



1  
00:00:01,250 --> 00:00:02,250  
[MUSIC]

2  
00:00:02,250 --> 00:00:03,560  
This is the story of NASA and Angry Birds.

3  
00:00:03,560 --> 00:00:08,280  
An unlikely duo pushing the boundaries of  
Science, Technology, Engineering and Mathematics

4  
00:00:08,280 --> 00:00:10,660  
education through video games...

5  
00:00:10,660 --> 00:00:11,660  
Wait.

6  
00:00:11,660 --> 00:00:13,670  
Video games?

7  
00:00:13,670 --> 00:00:19,170  
Seriously video games partnering with deep  
space exploration agency; NASA?

8  
00:00:19,170 --> 00:00:21,060  
Did this really happen?

9  
00:00:21,060 --> 00:00:25,560  
At least....that is how this Hollywood story  
started.

10  
00:00:25,560 --> 00:00:27,940  
[ROCKET NOISE]

11  
00:00:27,940 --> 00:00:29,130  
WHOOAAA!

12  
00:00:29,130 --> 00:00:30,320  
[MUSIC]

13  
00:00:30,320 --> 00:00:39,600  
Pluto is a dwarf planet once it was a planet  
but then it was reclassified in 2006.

14  
00:00:39,600 --> 00:00:44,050  
Pluto was smaller than a number of moons in  
our solar system, including the Earth's

15  
00:00:44,050 --> 00:00:45,050  
moon

16  
00:00:45,050 --> 00:00:50,160  
Ok, now they have the head of NASA's Planetary  
Science Division talking about Pluto, in the

17  
00:00:50,160 --> 00:00:53,570  
presence of some annoyed piggies?

18  
00:00:53,570 --> 00:00:56,620  
Someone has to tell me how this started.

19  
00:00:56,620 --> 00:01:00,250  
Ironically it was through a tweet.

20  
00:01:00,250 --> 00:01:07,210  
Seing this twitter conversation go on about  
how polwerful the mobile phone devices are

21  
00:01:07,210 --> 00:01:12,100  
today as being more powerful than they were  
during the Apollo era and that we sent humans

22  
00:01:12,100 --> 00:01:14,720  
to the moon and they shot birds at pigs.

23  
00:01:14,720 --> 00:01:23,100  
And I didn't quite understand what shooting  
birds at pigs was so I had avoided on purpose

24  
00:01:23,100 --> 00:01:33,240  
a lot of the Facebook and mobile gaming material  
so called someone and they said they are referring

25  
00:01:33,240 --> 00:01:37,280  
to Angry Birds was like ok I'm going to  
have to look at this now

26  
00:01:37,280 --> 00:01:43,020  
After a bit of research – code for game  
play – he tweeted an offer to help the birds

27  
00:01:43,020 --> 00:01:44,619  
get to space.

28  
00:01:44,619 --> 00:01:49,450  
And Rovio, the makers of Angry Birds saw this  
and immediately responded.

29  
00:01:49,450 --> 00:01:54,939  
Well who would not want to work with NASA  
it was amazing opportunity to combine a super

30  
00:01:54,939 --> 00:01:59,360  
popular game with exciting educational content.

31  
00:01:59,360 --> 00:02:07,300  
Twitter, mobile gaming, space, and, BUT WAIT,  
now a Hollywood 3D CG-animated movie?

32  
00:02:07,300 --> 00:02:09,710  
Ok so this is getting better...

33  
00:02:09,710 --> 00:02:13,170  
[WOOD SLAMS TO GROUND]

34  
00:02:13,170 --> 00:02:15,310  
[MUSIC]

Greetings from my world.

35

00:02:15,310 --> 00:02:16,760

The world of the pigs.

36

00:02:16,760 --> 00:02:18,319

What's a pig?

37

00:02:18,319 --> 00:02:23,400

I am a pig

38

00:02:23,400 --> 00:02:25,260

This combo was pretty darn cool.

39

00:02:25,260 --> 00:02:32,420

NASA informed kids and adults about space exploration, orbital mechanics, microgravity,

40

00:02:32,420 --> 00:02:34,090

and its pioneering work...

41

00:02:34,090 --> 00:02:40,250

through Rovio's game.....all while slinging birds around on mobile devices!

42

00:02:40,250 --> 00:02:45,120

Well Angry Birds is not just any video game it has to do with trajectories it has to do

43

00:02:45,120 --> 00:02:52,040

with velocities it has to do with accelerations where you're shooting little birds around

44

00:02:52,040 --> 00:02:54,900

as projectiles and asteroids and things like that.

45

00:02:54,900 --> 00:03:02,209

And I'm going to show the trajectory that

Red Bird is going to have when I fire him

46

00:03:02,209 --> 00:03:05,620

with this orbital sling shot.

47

00:03:05,620 --> 00:03:13,909

All of them involves physics, all of this involves science and so Angry Birds is a venue

48

00:03:13,909 --> 00:03:21,000

to get kids wrapped up into the game and then you slide a little science in at the same

49

00:03:21,000 --> 00:03:22,600

time you slide in a little physics

50

00:03:22,600 --> 00:03:25,379

That's an example of a trajectory.

51

00:03:25,379 --> 00:03:29,230

Guess what Astronauts have to worry about these things because if you're in a rocket

52

00:03:29,230 --> 00:03:35,260

and you're trying to get from one orbit and rendezvous with space station you end

53

00:03:35,260 --> 00:03:40,330

up going in curved trajectories and you need to know how to fire your rocket engines so

54

00:03:40,330 --> 00:03:44,000

you can go from where you are to where you want to be.

55

00:03:44,000 --> 00:03:49,710

With 265 million downloads of Angry Birds Space alone that's over 6 billion sessions

56

00:03:49,710 --> 00:03:52,040  
of "interplanetary education"!

57  
00:03:52,040 --> 00:03:57,519  
It has been so successful that the ANGRY BIRDS  
got noticed by Hollywood and they will now

58  
00:03:57,519 --> 00:04:00,769  
make a debut appearance on the silver screen!

59  
00:04:00,769 --> 00:04:02,150  
Who would've thought!

60  
00:04:02,150 --> 00:04:03,740  
An ANGRY BIRDS MOVIE!

61  
00:04:03,740 --> 00:04:05,659  
Yeah when birds fly.

62  
00:04:05,659 --> 00:04:10,379  
After a few years, millions and millions of  
downloads, major updates about everything

63  
00:04:10,379 --> 00:04:15,549  
from asteroids to Mars, and countless public  
events... the epic struggle between birds

64  
00:04:15,549 --> 00:04:17,130  
and pigs continues!

65  
00:04:17,130 --> 00:04:22,590  
The future of the Angry Birds keeps expanding  
with knowledge and exploration at its core.

66  
00:04:22,590 --> 00:04:28,520  
From the International Space Station to deep  
into the cosmos.

67  
00:04:28,520 --> 00:04:35,930

We are interested in giving back to society  
and helping teach the next generation to come

68

00:04:35,930 --> 00:04:41,090

and do our job is part of our current job  
and when it's time for me to sit in a rocking

69

00:04:41,090 --> 00:04:49,280

chair I'm hoping some of the kids that have  
seen these educational teachings that myself