

**Title of Session:** FIRST Robotics

**Moderator:** Patricia Chen

**Title of File:** 20070313robotics

**Date:** March 13, 2007

Room: Robotics (K-12) Group

**PatriciaCh:** Hello

**BJB2:** hi, Victoria and welcome back, Stephanie!

**PatriciaCh:** Welcome...we will start introductions in a few minutes

**BJB2:** welcome to today's Robotics discussion

**MarjorieSh:** so how many people usually come to these things?

**BJB2:** Pat is the discussion leader today. She has some resources in this room, so you might want to come back here later and take a look

**PatriciaCh:** usually a few.

**PatriciaCh:** let me introduce myself ....

**BJB2:** we start all Tapped In discussions with introductions. After Pat introduces herself, please let her know where you are located and what brings you to the discussion.

**PatriciaCh:** I am a middle school math teacher ...also a mentor for robotics for 8 years

**PatriciaCh:** I am from Florida

**VictoriaG:** Hi, Steph and I are writing a paper on the benefits of on-line communities for teachers. We thought this discussion would be interesting and that we could benefit from it.

**StephaniHa:** Vicky and I are from PA

**BJB2:** I am a remedial communications teacher and find that the robotics program provides a lot of cross curricular opportunities

**BJB2:** . o O ( I'm also in PA )

**MarjorieSh:** I'm Marjorie from NC, I just quit my job of second grade but am interviewing for 5th grade math tutor tomorrow... I always liked electronics

**PatriciaCh:** for elementary school level...it is LEGO robotics

**MarjorieSh:** ok

**PatriciaCh:** in certain ways..... the robotic community is an on line one

**PatriciaCh:** the organization is FIRST ....

**PatriciaCh:** it will be easier if you tell me what you want to know or learn

**MarjorieSh:** I just came to listen actually... know nothing of the topic

**VictoriaG:** We did do some research on FIRST and spoke briefly about it.

**MarjorieSh:** sorry that doesn't help you

**StephaniHa:** How can we use robotics in the classroom...that is what I want to know

**PatriciaCh:** what grade level do you teach?

**MarjorieSh:** how can you tie it to math science etc...

**StephaniHa:** I teach 4th grade

**VictoriaG:** I teach 5th grade language arts. I have 7 students with special needs. We are always trying to discover new ways to promote learning.

**PatriciaCh:** in elementary level..... the competition requires students to build a robot out of legos....program it to do certain task.

**StephaniHa:** One of my students does this already

**PatriciaCh:** the programming part involves the mathematical - logical thinking

**StephaniHa:** Today he brought in a robot that he built with gears, a motor, and a bicycle pump

**PatriciaCh:** part of the competition involves researching the topic ... this involves writing or other LA skills

**PatriciaCh:** is this student building on his own or he is on a team?

**VictoriaG:** Do you mean the students could research the topic and come up with creative ideas for their own learning?

**StephaniHa:** on his own at home

**PatriciaCh:** Yes to Victoria...

**PatriciaCh:** when you are on a team ....you have to learn to cooperate and listen to each other ideas ....

**PatriciaCh:** teams cannot have more then 10 students

**VictoriaG:** The research I did was on Tapped In links, it wasn't student friendly. Do you have any sites in particular for students age 11?

**PatriciaCh:** when students build a robot ....it can be of any configurations

**MarjorieSh:** what kind of tasks can they do?

**PatriciaCh:** please give me your email....I will have to search for a particular site I have in mind....and send it to you

**PatriciaCh:** each year's game is different.....so students will build and program the robot to do specific task

**BJB2:** something else you can do as a teacher is create a student group for your class and allow them to come to this resource room to research FIRST Robotics

**PatriciaCh:** if all you want to do is encourage student learning ..you can create the tasks yourselves

**PatriciaCh:** in other words ....look at past games ...and try to develop it for your classroom

**PatriciaCh:** you will need LEGO Mindstorms kits ....the site that I have in mind...also helps with the programming aspects

**PatriciaCh:** when you program...please remember to use the flow chart concept....have the students write down every step they want the robot to do

**PatriciaCh:** it is like using Inspiration

**PatriciaCh:** please continue to ask questions...

**PatriciaCh:** as BJ wrote ..students can ask questions on this site as well

**StephaniHa:** What type of robotics have the children built?

**PatriciaCh:** LEGO are used in elementary and middle school...high school ...they have VEX and FIRST robotics

**PatriciaCh:** Stephanie - any kind of robot they want ...there is no one perfect robot...

**PatriciaCh:** this is where their imagination can run ..... but they need to remember one caveat...keep it simple

**VictoriaG:** I am going to start by logging students on to Tapped in to research some of the sites. I'll go ahead and research more on google. They can write about their findings or present them in a Power Point. I'll put kids into teams and challenge them to create something as a team. If students struggle, I'll just take it slow and we'll all work on the same project.

**StephaniHa:** Impressive idea...Vickster!

**BJB2:** Victoria, are you creating a K-12 Student group for your students?

**PatriciaCh:** look in Carnegie Mellon....they have a summer camp program...this might be more helpful to you instead of reinventing the wheel

**PatriciaCh:** they already have 2 games developed

**BJB2:** . o O ( I don't recommend you bring K-12 students to the main TI campus )

**PatriciaCh:** Victoria - excellent idea

**PatriciaCh:** students love challenges

**BJB2:** if you need help setting up a student group, I'm happy to help

**PatriciaCh:** my email is [chenp@martin.k12.fl.us](mailto:chenp@martin.k12.fl.us) is you have any questions

**PatriciaCh:** about setting up the games

**PatriciaCh:** if you check the FIRST website.....go into FLL FIRST LEGO League...you can check to see if a school in your district participates in FLL

**StephaniHa:** Could I get some ideas of games that the students have done in the past?

**MarjorieSh:** what's that website

**VictoriaG:** I'll either create a student group or just utilize a SMART BOARD where students can view the sites as I go into them. I would only be showing "links".

**PatriciaCh:** [www.usfirst.org](http://www.usfirst.org)

**MarjorieSh:** tks

**PatriciaCh:** this year's theme was - nanotechnology

**VictoriaG:** usfirst is a good link, you can read about the vision statement, individuals involved.....

**PatriciaCh:** the easy thing to do is find a school that is involved...they have the old game mats ...you can borrow them and create you own mission

**PatriciaCh:** last year's theme was the ocean ...keep it clean and safe ...so the game board involved ocean themes

**StephaniHa:** so what did the kids create?

**PatriciaCh:** I mean mat not board

**PatriciaCh:** the students ...create the robot to perform the missions on the game mat ...6 missions in all

**VictoriaG:** what's a game mat?

**MarjorieSh:** the thing the robot moves around on

**PatriciaCh:** the game mat contains....the missions ....it is like a monopoly board

**StephaniHa:** Thanks for the information.

**VictoriaG:** Thanks for all of the information, I'll start my research and check back next time. Have a good evening!

**PatriciaCh:** Carnegie Mellon created 2 different scenarios .....but you have to create the game mat....

**PatriciaCh:** check in 2 weeks and let me know how you are doing

**PatriciaCh:** if you do a search ...type in the name and lego robotics ...it should bring you to their site

**PatriciaCh:** <http://www-education.rec.ri.cmu.edu/>

**PatriciaCh:** that link is really what you want to check into

**PatriciaCh:** it is very hard to tell someone ...what kind of robot the student should build.... there is no right answer

**PatriciaCh:** also building into your curriculum .... it is your call

**PatriciaCh:** for me ...I have a 43 minute period.... I don't have the time

**PatriciaCh:** so I do a club - for after school