

Title of Session: FIRST Robotics

Moderator: Patricia Chen

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Room: Robotics (K-12) Group

BjB smiles...good job, Karah!

KarahH: Ok, thank you.

BjB . o O (now all we need is the discussion leader)

BjB : but while we wait, explore the resources in this room

BjB : is this your first visit to the student campus, Amy and Karah?

AmyK: Nope.

KarahH: No

BjB nods

BjB : what is your interest in robotics?

PatriciaCh joined the room.

PatriciaCh: Hello

BjB . o O (whew! there she is!)

BjB hugs Pat

BjB : you had me worried!

PatriciaCh: Sorry...we have severe T storms

BjB : oh, rats.

PatriciaCh: and my power keeps going on and off

BjB : well, you have two participants today...Amy and Karah

BjB : I've just asked them what their interest is in Robotics

BjB . o O (still waiting for an answer)

KarahH: Where are you from Patricia?

PatriciaCh: let's do introductions

PatriciaCh: I am from Florida...lightening capital

BjB : I'm in Pennsylvania. Teach remedial communication

PatriciaCh: I teach math in middle school

AmyK: I am a pre-service math / science teacher, high school.

PatriciaCh: what is pre-service?

KarahH: My name is Karah, I am going to school in Kingsville, Texas for education (math) 4-8.

AmyK: I'm still in school.

BjB . o O (student teacher, Pat)

PatriciaCh: yes....middle school level....

AmyK: Me? I'm going to teach high school.

PatriciaCh: I enjoy teaching middle school I have taught 6th and 7th

PatriciaCh: what is 4-8?

KarahH: I am wanting to teach 4 and 5th grade.

PatriciaCh: oh..darn...don't let the middle school hormones or stories ...discourage anyone about teaching 6-8

KarahH: I will be able to teach grades from 4 grade to the 8th grade.

AmyK: I have an engineering background and am interested in teaching higher level math and physics.

KarahH: How long have you been teaching?

BjB thinks Amy would love robotics!

PatriciaCh: in Florida ...we do not have specialist teaching math in 4 -5

RyanWB joined the room.

BjB : welcome, Ryan. Can you please introduce yourself?

PatriciaCh: hello...I am Pat and a teacher in florida

RyanWB: I'm Ryan, a teacher and track coach in Virginia

BjB . o O (where you are and what you teach or hope to teach)

RyanWB: I teach 7th grade Civics

BjB : Pat is the leader of this discussion but she's currently dodging lighting and may disappear

PatriciaCh: I have been involved in robotics for about 7 years

PatriciaCh: it started with high school and now I have added LEGO League as well

RyanWB: ah OK

AmyK: what is a LEGO league?

PatriciaCh: the site that is helpful is www.usfirst.org

RyanWB: what type of missions do the robots accomplish?

PatriciaCh: LEGO League compose of elementary and middle school students...

PatriciaCh: the VEX and FRC program involves the high schoolers

PatriciaCh: the missions for the robots - at the middle school levels..changes every year

RyanWB: we did something last year where students had to use a robot to clean up an oil tanker spill the a coral reef

PatriciaCh: yes ...that was last year's game

RyanWB: so same program?

PatriciaCh: yes

RyanWB: We did it through a program called NStarr

RyanWB: gotcha

RyanWB: It was a very difficult task but the students learned a lot of problem solving skills

PatriciaCh: US FIRST is the organization that heads all of this

AmyK: NStarr, that's with the Navy base at Dahlgren?

RyanWB: Yes

PatriciaCh: kids learn that there is no right or wrong way to do the missions

KarahH: What do the younger students do?

RyanWB: They come up with some crazy robots too

PatriciaCh: the kids also learn to work with each other

RyanWB: Yes

PatriciaCh: the younger students do the same thing

KarahH: That is great.

PatriciaCh: the high schoolers build robots that are 130 lbs and about 5 feet tall

KarahH: Learning to work together is hard for some kids to do.

RyanWB: yes

RyanWB: good gracious

PatriciaCh: There is a big competition in Atlanta this weekend

RyanWB: How many competitors are expected to turn out

KarahH: So you teach and do this on the side?

PatriciaCh: for LEGO ---- first you have the regionals - then go to state if you qualify then to World Competition - the end of the week at the Georgia Dome

PatriciaCh: I do this on the side....

KarahH: How would someone get into a program like this?

PatriciaCh: go to the website...you can join by registering

KarahH: ok, thank you.

PatriciaCh: you cannot have more than 10 students per team - (LEGO)

KarahH: Where do you get the equipment to build the robot?

RyanWB: a kit

BjB . o O (about the Atlanta competition:
<http://www.usfirst.org/community/frc/default.aspx?id=966>)

KarahH: oh, that is cool.

PatriciaCh: LEGO - you buy the Mindstorm kit....it comes with all the pieces you need

RyanWB: Standard/Assessment

RyanWB: Evidence

RyanWB: Standard 1

RyanWB: Computer System Use

RyanWB: Worksheets completed on forms in Microsoft word (example):
<http://mrbayne.net/unit3/ch18/181worksheetform.doc>

RyanWB: Standard 2

RyanWB: Vocabulary

RyanWB: <http://mrbayne.net/unit3/ch18/ch18ws.doc>

RyanWB: Standard 3

RyanWB: Word Processing

RyanWB: Standard 4

RyanWB: Desktop Publishing

RyanWB: <http://mrbayne.net/unit3/ch18/pizzashop.doc>

RyanWB: Standard 5

RyanWB: Spreadsheet

RyanWB: <http://prefonbayne.googlepages.com/parties.xls>

RyanWB: Standard 6

RyanWB: C/T 6-8.6

RyanWB: Use databases and spreadsheets to evaluate information.

RyanWB: President Database using Microsoft Access

RyanWB: Business Plan spreadsheet using Microsoft Excel

RyanWB: Standard 7

RyanWB: C/T 6-8.8

RyanWB: Select and use appropriate tools and technology resources to accomplish a variety of tasks.

RyanWB: Standard 8

RyanWB: C/T 6-8.9

RyanWB: The student will use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

RyanWB: Using a message board (at www.mrbayne.net) and had students respond to a message.

RyanWB: Standard 9

RyanWB: Standards of Learning Management

RyanWB: <http://school.discovery.com/quizzes35/mrbayne/ExecutiveBranchQuiz.html>

RyanWB: Standard 10

RyanWB: Curriculum Management

RyanWB: <http://prefonbayne.googlepages.com/mr.bayne%27shomepage> Standard 11

RyanWB: Instructional Differentiation

RyanWB: Standard 8

RyanWB: Copyright & Acceptable Use

RyanWB: <http://mindstorms.lego.com/>

PatriciaCh: when you decide to participate in the competition

RyanWB: whoops

RyanWB: sorry

RyanWB: I did not mean to type all that

PatriciaCh: order the field kit...it comes with all the pieces

PatriciaCh: thanks Ryan....

AmyK: so, you don't have to be super robot savvy to lead a group?

PatriciaCh: save me the trouble

PatriciaCh: oh no

AmyK: my background is civil, not electrical engineering

KarahH: Do you have sponsors or who pays for the kit?

PatriciaCh: the kids are quite capable...it is the programming that is a bit tricky

RyanWB: that's what I've experienced

PatriciaCh: usually the school will pay

AmyK: what language is the programming in?

RyanWB: if you have kids in groups, you'll usually have one good programmer

RyanWB: it comes with its own program

PatriciaCh: the language is a modified version of C

AmyK: does it have its own GUI?

PatriciaCh: AMY - what grade level do you teach

PatriciaCh: what is a GUI

AmyK: I'll be teaching 11th and 12th

RyanWB: graphic user interface

RyanWB: yes.

PatriciaCh: if it is programming for LEGO....it is not that complicated...we use pictures

PatriciaCh: I tell the kids to write it in old fashion flow chart then translate into symbols

AmyK: that's cool. Flowcharting is a good skill to have.

PatriciaCh: okay..Amy- for you - the robotics choices are VEX or FRC

AmyK: thanks

PatriciaCh: VEX is a metal version of K'NEX...at least that is what I envision it to be

PatriciaCh: and FRC is the most fun..you build big robots

AmyK: neat!

PatriciaCh: you need major sponsors for FRC....

PatriciaCh: machining capabilities

AmyK: how do you get sponsors?

RyanWB: FRC is where you get the four and five footers, right

PatriciaCh: through the school system

PatriciaCh: Ryan - yes

PatriciaCh: loads of fun

RyanWB: Do you have your own class for this or is it mainly an after school type thing?

KarahH: Can the students get scholarships?

AmyK: so FRC requires a little more mechanical savvy.

PatriciaCh: depends on the school....if the school is a science magnet school...they have it as part of their curriculum

PatriciaCh: for us ...it is an afterschool activity

AmyK: we don't have magnet schools here in VA

PatriciaCh: do you get NASA tv?

RyanWB: No

AmyK: nope

KarahH: no

RyanWB: I hear that channel is out of this world though!

PatriciaCh: give me a moment....I have to log back in ...I am going to try to get you all a link the event at Georgia Dome

PatriciaCh: We are pleased to announce that the Friday (4/13) and Saturday (4/14) Nano Quest World FLL Rounds will be broadcast on NASA TV - full details can be found at: <http://www.nasa.gov/multimedia/nasatv/index.html>.

PatriciaCh: You can also watch the live webcast of all three days of competition by clicking on: http://robotics.nasa.gov/events/webcasts/nationals_2007.php

AmyK: Cool. I love watching things on the web.

PatriciaCh: if you log into the site.... you can see the different robotics competitions

AmyK: It's nice to know what you're getting yourself into.

KarahH: that is cool.

PatriciaCh: it is a lot of work....but to me it is worth it

PatriciaCh: I got involved....because of my son....now that he and my daughter are in college...I am still very much involved

PatriciaCh: it brings out the kid in all of us adult mentors

KarahH: What kind of robots did your son and daughter build?

PatriciaCh: I am not sure who loves it most

PatriciaCh: my two kids were involved with FRC....the big bots

PatriciaCh: when they were younger...LEGO league was not in existence even though they would have loved it

KarahH: Are they all over the world? the leagues

PatriciaCh: LEGO is very popular - so it is truly world wide

RyanWB: hmm

PatriciaCh: FRC is getting popular...internationally - it is in Israel , Canada, Great Britain, Brazil and Puerto Rico....I am sure there are more....but I don't know off hand

PatriciaCh: VEX is a new program for high school...FRC is expensive...so they created VEX so it is more affordable

KarahH: Do you get to travel and present?

PatriciaCh: if you qualify

PatriciaCh: you do that by going to a regional event

KarahH: That is great.

PatriciaCh: please try to see some of the events.....it is mind boggling

KarahH: ok

RyanWB: can you view any entries from the past online

PatriciaCh: Atlanta - this will be the FINAL FOUR event for the Geeks

PatriciaCh: I teach math in middle school, Florida

PatriciaCh: if you can attend just one event next year...you will understand....how exciting this whole competition is

KarahH: Are there any in Texas?

RyanWB: We had a field trip last year to an expo where students from across the county displayed their work

AmyK: Is there an event near Richmond, VA or Washington D.C.?

RyanWB: there were some impressive accomplishments

PatriciaCh: yes....in Houston...the Lone Star Regional

KarahH: That will work I am just 4 hours from Houston.

PatriciaCh: Yes....VCU - in Richmond or the Chesapeake Regional

PatriciaCh: it is scary....that I remember this

KarahH: You would not happen to know when would you?

PatriciaCh: The regionals have taken place...thus Atlanta is the Championship event

PatriciaCh: regionals are in the month of March...

PatriciaCh: let me check one site....SOAP ...it is a team that records the events..let me get you their site

AmyK: I have to go now. Thank you for your expertise. I'll definitely check it out. Ciao!

BjB waves bye to Amy

AmyK left the room (signed off).

KarahH: Ok, thank you **BjB**.

PatriciaCh: I cannot find the link

PatriciaCh: they must have taken it off

BjB : drat!

PatriciaCh: yes....

PatriciaCh: it is good to see the robots in action

PatriciaCh: I must complain to the fearless leader

KarahH: It was nice talking to you, I have to go to another class, hope to talk to you later.

PatriciaCh: Karah = do you have any other questions?

KarahH: No, this was very interesting, I would like to one day start this in a school that I am teaching in

KarahH: bye

PatriciaCh: good bye

KarahH left the room.