

**Title of Session:** FIRST Robotics

**Moderator:** Patricia Chen

**Title of File:** 20070814robotics

**Date:** August 14, 2007

Room: Robotics Group (K-12)

**BjB**: Welcome to Robotics, everyone. The discussion will start in about 5 minutes

**PatriciaCh**: We will do introductions once everyone is here

**BjB** sighs happily...you have no idea how hard everyone worked on learning how to get to this group room, Pat!

**BjB** hopes that everyone comes back for more monthly chats after working so hard

**PatriciaCh**: I had trouble in the beginning too

**PatriciaCh**: Let's do introductions now

**PatriciaCh**: My name is Pat, I am 7th grade math teacher in Florida and very involved in robotics

**BjB**: Welcome to this month's Robotics chat...the first one of this school year!

**JosephAW**: My name is Joseph. I am a college student in McAllen, TX.

**AraceliaG**: I am a full time student and a pre-k teacher aide Robotics sounds very interesting

**LoriOl**: my name is Lori...senior at the university of Texas Pan American.

**JacquelynP**: I'm an English major from Harlingen, TX

**NoraEG**: I am a full time student @UTPA

**VictoriaNG**: Torie a full time student at utpa

**IrmaalcatG**: I am from Edinburg, TX and I am a senior at UTPA

**AidalinS**: my name is Aida and I am a full time student at utpa

**AidalinS**: me too Irma

**LoriOl**: I think we are all here for doc browns class at utpa

**NoraEG:** Oh yea I am a senior too

**LoriOl** smiles

**NikkiC:** yep, me too

**VanessaT:** hi I'm a college student at UTPA and I'm a senior

**IrmaalcatG:** oh that's great

**NuviaS:** I'm a full time student @ pan am

**JasmineR:** My name is Jasmine I will be graduating soon this December from the university of Texas Pan American

**PatriciaCh:** what does Dr. Brown teach?

**AraceliaG:** oh and I will graduate on Saturday

**NikkiC:** I'll be graduating in..09

**LoriOl:** English

**NikkiC:** English...this is "Composition Techniques"

**AidalinS:** I will graduate in December as well

**GracielaC:** I will graduate this Saturday too

**NancySal:** I am going to be a graduate student on Saturday

**PatriciaCh:** What is his or her assignment

**JacquelynP:** just attend for extra credit

**JacquelynP:** and write what you learned

**NoraEG:** extra credit

**LoriOl:** to visit a online presentation and see how this can help us teach

**JosephAW:** She wants us to integrate technology into our pedagogy.

**IrmaalcatG:** her assignment is to attend to get extra credit

**AraceliaG:** one presentation is required

**JasmineR:** not really it is also an assignment

**NuviaS:** is an extra credit assignment

**PatriciaCh:** ah ....

**NikkiC:** ditto, extra credit

**AidalinS:** thank god for extra credit

**AidalinS** smiles

**PatriciaCh:** nice teacher ... I wish I had someone like that when I was an undergrad

**NoraEG:** that's right also, our professor wants for us to integrate pedagogy

**JasmineR:** it is useful b/c we get to meet teachers like yourself

**LoriOl:** yeah she makes you think about stuff you never thought about

**VictoriaNG:** yea

**AidalinS:** yeah

**NoraEG:** I have learned a lot so far

**NuviaS:** good teacher right

**IrmaalcatG:** yeah me too

**AraceliaG:** she has taught us a lot in a short amount of time

**AidalinS:** yes very good

**PatriciaCh:** Let me give you background info .... the website that I will be referring to is [www.usfirst.org](http://www.usfirst.org)

**PatriciaCh:** Dean Kamen founded the FIRST organization ... hoping to excite kids to study science, engineering, etc

**PatriciaCh:** robotics .... transcends through the k - 12 ....

**VictoriaNG:** when does this start?

**NuviaS:** so let's start

**BjB:** Patricia has started...remember the 10 steps to having a successful discussion?

**NikkiC:** yes

**VanessaCas:** yes

**AidalinS:** yes

**IrmaalcatG:** yes

**PatriciaCh:** the younger students k - 3 uses the big blocks, 4 - 8, uses the regular LEGO, high schoolers have the big robots as well as VEX ... smaller metal robots

**BjB:** o O ( listen to the discussion leader was on that list )

**PatriciaCh:** the aim of FIRST is to teach students to work together ... collaborate ...

**AidalinS:** yes I agree

**NoraEG:** interesting

**PatriciaCh:** each year FIRST... creates a game scenario ... the kids have to create a robot to play the game

**NoraEG:** I bet they have to do a lot of thinking

**AraceliaG:** blocks are very good for my pre-k kids

**NuviaS:** it sounds interesting

**VictoriaNG:** creative

**PatriciaCh:** a different scenario is created for each grade level .... so if you visit the FIRST site ... you will see the past years' game

**NancySal:** It sounds difficult

**IrmaalcatG:** yeah

**NancySal:** is it the tennis

**PatriciaCh:** as the grade level goes up ... other components are added ... there are research projects that are part of the game

**PatriciaCh:** no it is not tennis and it does sound difficult ... but it is not

**PatriciaCh:** even if you do not participate in the games ... you can use the concept to teach in your classroom

**PatriciaCh:** any one would like to guess how?

**IrmaalcatG:** I didn't know about this

**NoraEG:** no

**IrmaalcatG:** no

**GracielaC:** no

**NuviaS:** no

**NikkiC:** that's a tough one

**VanessaT:** nope don't know

**JacquelynP:** I don't know

**IrmaalcatG:** to work as a group?

**PatriciaCh:** yes ... work as a group

**NancySal:** maybe by watching what is going on you can have an idea on how to interact this to your class

**PatriciaCh:** let's say you have to make a robot out of LEGOs .. program it to go forward

**NancySal:** how would you do that

**PatriciaCh:** is there more than one way to create this robot?

**NuviaS:** by pushing it

**IrmaalcatG:** yes I guess

**PatriciaCh:** this is how we teach kids to learn to listen and compromise

**NancySal:** yes maybe by pushing it

**NikkiC:** well...you can use different schematics you mean?

**NikkiC:** I'm a bit confused :(

**PatriciaCh:** yes

**NuviaS:** yes you can also create a robot from paper and other materials

**VanessaCas:** this is cool

**PatriciaCh:** Nikki your robot can look different from mine

**AraceliaG:** very interesting

**AidalinS:** yes very interesting

**PatriciaCh:** the whole point is for kids to learn to listen and compromise

**IrmaalcatG:** but what do you mean? like students should follow the teacher instructions?

**PatriciaCh:** no ... students should think for themselves

**AidalinS:** this website is very useful

**VictoriaNG:** I agree

**PatriciaCh:** just like what Nuvia was doing

**VanessaCas:** I see now

**IrmaalcatG:** oh ok

**PatriciaCh:** kids learn that there is no right or wrong way ...

**IrmaalcatG:** they have to figure it out by themselves

**PatriciaCh:** yes ... we provide guidance

**NancySal:** wow

**AidalinS:** yes but the students should find out for themselves

**IrmaalcatG:** oh ok

**LoriOl:** got it thanks

**PatriciaCh:** and for kids who never feel that they are good at something

**PatriciaCh:** you should see their faces

**VanessaCas:** you just tell them basic steps and then they use their imagination to be creative

**NikkiC:** aww, it raises self esteem

**PatriciaCh:** yes it does

**NikkiC:** and makes them more capable

**IrmaalcatG:** oh that's great

**AidalinS:** yes I agree with Nikki

**LoriOl:** some people are hands on learners...this is perfect for them

**PatriciaCh:** and for kids who are not as tech oriented ... there are other facets ...

**AidalinS:** yes it is

**PatriciaCh:** like doing a presentation explaining how to solve a problem

**NuviaS:** yes I agree presentations really help

**PatriciaCh:** the kids learn to work together ....and appreciate each other as teammates

**PatriciaCh:** this is also good for kids who do not play sports

**JasmineR:** yes, that would accommodate my needs I'm really not a tech person

**LoriOl:** social skills are integrated...that's good

**JosephAW** raises hand with question: What sort of problems (social, technical...)

**IrmaalcatG:** yeah I wish I had that too

**PatriciaCh:** the problem is ... the mission of the game

**PatriciaCh:** two years ago ... the mission was to solve ocean pollution

**AidalinS:** yes that is the problem

**NancySal:** oh I see

**PatriciaCh:** so how to we go about doing that

**NuviaS:** I see it toooo

**PatriciaCh:** first you have to learn what is polluting the water in your area

**IrmaalcatG:** yeah

**PatriciaCh:** find solutions

**LoriOl:** ok

**PatriciaCh:** how will it be implemented ..etc

**VanessaT:** true

**NuviaS:** very true

**PatriciaCh:** the kids have lots of great ideas

**LoriOl:** and if they work...that would be awesome

**AraceliaG:** and they feel involved and they are making a difference

**PatriciaCh:** now ... in your classroom ... you can create a scenario

**PatriciaCh:** and asked them to solve it

**VanessaCas:** that's neat

**VictoriaNG:** interesting

**JasmineR:** I like that

**NikkiC:** it's weird...kids seem to have some of the best ideas because they're not afraid that they'll seem farfetched or anything--and then when they say them it's like hey, why didn't I think of that

**IrmaalcatG:** cool

**PatriciaCh:** but make it meaningful ... no fluff

**JosephAW** thinks of incorporating with Lord of the Flies lesson

**PatriciaCh:** the younger they are ... the best ideas come out of them

**VanessaT** agrees with Nikki



**NancySal:** true

**PatriciaCh:** terrific ... this extends into all subject area

**NuviaS:** yes it's true the younger they are the more ideas they develop

**LoriOl:** so do you use this in your classroom Patricia?

**PatriciaCh:** Joseph if you do that ... please come back and let me and everyone know ... how it went

**JosephAW:** Will do

**PatriciaCh:** yes .... not building ... but the concept

**NuviaS:** the concept is what counts

**PatriciaCh:** like solving word problems ... as a math teacher ..I use algebraic concepts

**IrmaalcatG:** and how they feel about it?

**NuviaS:** good method

**JasmineR:** awesome

**PatriciaCh:** but kids can solve the problem in other ways .. it doesn't have to be "my way"

**AidalinS:** yes very good method

**PatriciaCh:** as long as they can explain .. and get the right answer .. why not?

**LoriOl:** critical thinking

**IrmaalcatG:** yeah as long as they solve the problem and learn

**AidalinS:** I like critical thinking

**PatriciaCh:** yes ... and it helps with the high stake testing

**NuviaS:** as long as they understand what they are doing

**PatriciaCh:** confession time

**JasmineR** has a question

**PatriciaCh:** yes

**LoriOl:** uhh ohh

**PatriciaCh:** question?

**JasmineR:** how can this be used in writing? can it be used in it in any form?

**NikkiC:** good question...

**NoraEG:** good one

**VictoriaNG:** very good

**JosephAW:** Problem solving is used in discourse.

**PatriciaCh:** when you teach writing ... do you only have one way?

**NoraEG:** no

**IrmaalcatG:** no

**NikkiC:** of course not

**JasmineR:** nope

**VanessaT:** no

**NuviaS:** nooooo

**BjB** puts in a plug for the WriteTalk group

**PatriciaCh:** What I am trying to say is .... your introduction can be different from mine

....

**BjB:** [www.nwp.org](http://www.nwp.org)

**VanessaCas:** there are many ways for everything

**JasmineR:** that's true

**NuviaS:** of course

**PatriciaCh:** Some people have a great first sentence .... and some has a "blah" one ...

**PatriciaCh:** as long as the student follows the rule .. so to speak ... it works

**PatriciaCh:** again I relate it back to math ... there is one correct answer.. but many ways to solve it

**NoraEG:** oh yes

**IrmaalcatG:** yeah that's right

**VanessaT:** I see

**NuviaS:** yes because there's many ways to get a correct answer

**IrmaalcatG:** but some times teachers want you to solve it their way

**PatriciaCh:** this is also another way to differentiate instructions

**VictoriaNG:** that's true

**NoraEG:** that is also true

**NuviaS:** yes, but that is not the right way to teach

**IrmaalcatG:** yeah you are right

**PatriciaCh:** it is very sad for those teachers

**IrmaalcatG:** but I guess those teacher don't know that

**PatriciaCh:** well ... I was kind of that teacher once ...

**IrmaalcatG:** really?????

**PatriciaCh:** but robotics ... really help me to see things better

**JosephAW** listens

**IrmaalcatG:** and how you changed that?

**PatriciaCh:** we math teachers are "anal retentive" ..

**IrmaalcatG:** ho ok

**LoriOl:** lol

**NikkiC:** yeah you guys are!

**JosephAW:** NOOO

**VanessaT:** lol

**IrmaalcatG:** lol

**JasmineR:** I'm sorry for my ignorance, what is that?

**NikkiC:** but I don't know, with math you sort of have to be though right...because sometimes you'll get the right answer the "wrong way" but it only works sometimes

**LoriOl:** what is anal retentive?

**NikkiC:** a lot of times you can get the wrong answer

**NikkiC:** like...

**NikkiC:** constipated

**PatriciaCh:** something about robotics ... learning that there are more than one way ...

**PatriciaCh:** math teachers are known to be inflexible ....

**NuviaS:** of course they are

**IrmaalcatG:** and why is that?

**PatriciaCh:** that is what anal retentive means ... and there are lots of us

**AidalinS:** I wonder why

**JosephAW** thinks they are like grammarians

**PatriciaCh:** I have no clue

**IrmaalcatG:** yeah me too

**PatriciaCh:** yes Joseph .. you are right

**PatriciaCh:** but that is hard on kids ....

**IrmaalcatG:** well nobody born knowing everything

**LoriOl:** frustration sets in

**PatriciaCh:** some times ... they can reason it out ... and get the right answer ... but not do it the teacher way

**NoraEG:** I bet

**JasmineR:** but sometimes those teacher's ways of teaching help you in the long run

**NuviaS:** yessss

**JasmineR:** they have certainly helped me now in college

**LoriOl:** or can hurt you in the long run!!!

**PatriciaCh:** the whole idea is to teach "smart"

**PatriciaCh:** math is not hard ...

**NoraEG:** I love math and that's because I also had one bad teacher

**PatriciaCh:** well a bad teacher can turn you off a subject area

**PatriciaCh:** okay ... aside from Joseph .. anyone has an idea how they may implement this in their classroom?

**VictoriaNG:** that is very true. being a creative teacher makes it interesting to learn the subject

**AraceliaG:** true

**LoriOl:** this gives me good ideas

**PatriciaCh:** any creative ideas?

**JasmineR** thinking

**LoriOl:** well I am now thinking about how to clean the ocean :)

**PatriciaCh:** okay .. how?

**BjB:** I think for new teachers, the hardest thing to do is learn that if your lesson doesn't work one way, try something different

**JasmineR:** in politics perhaps? on war issues or such?

**JosephAW:** Teaching is a problem solving subject in itself. Could involve a lot of trial and error.

**LoriOl:** ok...scientifically pH can effect everything...would it help clean up the ocean???

**LoriOl:** changing the pH I mean

**NoraEG:** I guess some of us are afraid of trying

**NuviaS:** by using different kinds of manipulative

**PatriciaCh:** think small ...

**NancySal:** good one Nuvia

**PatriciaCh:** small tasks

**VanessaT:** well by one just picking up trash and little things at our beach

**PatriciaCh:** terrific ...

**VanessaT:** and go on from there

**JosephAW:** or starting a clean up campaign

**AraceliaG:** that's a start big improvement

**PatriciaCh:** yes .... that is what a kid will say ... and another child will add to it

**NuviaS:** I believe that hands on will always help students because since they are actually seeing what they are doing

**LoriOl:** that's too small though....it wont help the big picture

**PatriciaCh:** kids what to see the results .... and it makes them appreciate things

**PatriciaCh:** every little effort adds up

**VanessaT:** kids think small and then it will get bigger

**LoriOl:** yes

**AidalinS:** yes

**JosephAW:** not doing it does hurt though, Lori

**GracielaC:** I agree

**IrmaalcatG:** yeah

**PatriciaCh:** the "pass it on" concept

**VanessaT:** yeah the pass it on

**AidalinS** smiles

**PatriciaCh:** when you have big ideas .. implementation is overwhelming

**NuviaS:** the pass it on concept would just make the students more involved

**VictoriaNG:** letting the students think on their own really helps make it easier to learn

**PatriciaCh:** absolutely ...

**LoriOl:** ok...so we clean our beach....then what?

**LoriOl:** clean it again...and again...and again

**IrmaalcatG:** we need to keep it clean

**LoriOl:** we have to stop the pollution

**PatriciaCh:** do you have sewer runoffs?

**AidalinS:** yes we do need to stop the pollution

**LoriOl:** stop the pollution and there is no need for cleaning

**IrmaalcatG:** because the hard thing is to maintain it clean

**AidalinS:** no

**PatriciaCh:** create a reef for the fishes

**NoraEG:** I did yesterday

**NikkiC:** what are some of the creative ideas that kids have given you about pollution and the ocean clean ups

**NikkiC:** or...is that just an example?

**PatriciaCh:** aside from beach clean up .... in Florida ... we are concerned about the "creatures" that inhabit the water

**PatriciaCh:** Nikki .. it was an actual game one year

**NikkiC:** oh?

**PatriciaCh:** we have manatees that are hurt by boat propellers ... how can we help them

**VictoriaNG:** engineering new manatee safe propellers

**PatriciaCh:** the ocean was the main idea but the students came up with beach pollution and save the manatees

**LoriOl:** have state vets go out there and help

**NikkiC:** wow

**PatriciaCh:** actually the kids were thinking like Victoria

**VictoriaNG** smiles

**NuviaS:** woooooow

**GracielaC:** wow

**IrmaalcatG:** kids said that?

**IrmaalcatG:** wow

**PatriciaCh:** other schools that came to the competition ... their focus were on other things

**VanessaT:** very interesting

**PatriciaCh:** yes Irma

**IrmaalcatG:** wow

**NuviaS:** what other things

**IrmaalcatG:** yeah what other things?

**VanessaCas:** that's very interesting

**PatriciaCh:** depending on your area ... there are runoff problems, causes for the red tide , etc.

**PatriciaCh:** I told the kids ... what the main concept ... I let them talk it out



**NoraEG:** good concept

**NancySal:** yes

**PatriciaCh:** I had 6- 8 grade kids ...

**LoriOl:** we live by Mexico, who dumps into the Rio Grande river, which then goes into the gulf of Mexico.....dealing with a different country is much harder

**NancySal:** true Lori

**JasmineR:** yeah

**NoraEG:** so what do we do

**PatriciaCh:** yes ... you have that problem states and cities too

**JosephAW:** Does anything come out of these creative answers...Beyond FIRST?

**LoriOl:** we can clean and clean...but they dump and dump

**AraceliaG:** very serious problem

**NoraEG:** I would say

**GracielaC:** yeah

**PatriciaCh:** Joseph .. what do you mean?

**NuviaS:** We got to do something about this

**NancySal:** the more you try to help the bigger the problem gets

**JosephAW:** Are some solutions taken higher up (sort of speak)?

**LoriOl:** like some of the inventions the kids come up with?

**PatriciaCh:** I do not remember the specifics ... but I remember one team's idea was presented to some group ...

**PatriciaCh:** it had to do with helping the handicapped

**LoriOl:** that would be awesome....global warming solved by an 8 year old :)

**NuviaS:** very interesting

**PatriciaCh:** the founder Dean Kamen invented the insulin pump

**JasmineR:** wow

**PatriciaCh:** he was in high school at the time

**LoriOl:** wow

**IrmaalcatG:** wow

**JosephAW:** nice.

**JasmineR:** genius

**PatriciaCh:** even if the ideas sort of do not go anywhere... the kids are inspired to think

**IrmaalcatG:** by himself or in group?

**LoriOl:** I wonder if he had diabetes?!

**PatriciaCh:** himself ... his brother was a diabetic

**VanessaT:** wow

**IrmaalcatG:** oh ok

**JosephAW:** I work at a science and technology high school that does that sort of thing.

**PatriciaCh:** his company invented the Segway

**NikkiC:** are you from TX Joseph?

**PatriciaCh:** some of the kids who are involved in robotics goes on to study science, etc ... and some do not ... and it is okay

**AidalinS:** what is the segway

**PatriciaCh:** A Segway is a motorized scooter

**PatriciaCh:** you stand on it and it runs on electricity

**BjB:** [www.segway.com](http://www.segway.com)

**AidalinS:** very interesting

**LoriOl:** we see those at school

**PatriciaCh:** some police departments uses it

**BjB:** MAY I HAVE YOUR ATTENTION, PLEASE?

**BjB:** This has been a wonderful discussion, everyone!

**PatriciaCh:** yes it has been ... please let me know how your lessons turn out

**IrmaalcatG:** yeah I like it

**BjB:** I hope you appreciate Pat sharing so much of her experience with you!

**AidalinS:** yes I do

JoanieP: yes

**JasmineR:** I certainly did

**NancySal:** oh yes I appreciate it

**LoriOl:** I do...awesome job

**NoraEG:** good job Pat

**NuviaS:** thank you Pat

**NikkiC:** thanks Pat

**VanessaT:** thanks

**JasmineR:** Great Job Pat

**IrmaalcatG:** yeah it was great

**AidalinS:** clap

**NancySal** clapping

**BjB:** Pat leads a Robotics discussion twice a month. The next one will be on August 28

**PatriciaCh:** Thanks ... as a veteran teacher ... I am willing to share

**NoraEG:** Yuppi

**GracielaC:** clapping

**LoriOl:** gold stars for Pat ..LOL!!

**JosephAW:** Thank you Pat

**PatriciaCh:** I hope to see some of you in the next session

**AidalinS:** great job Pat

**BjB:** Save some of that applause for yourselves...great input

**NuviaS:** claps claps

**NoraEG:** you sure will

**PatriciaCh:** thanks

**IrmaalcatG:** yeah thank u Pat

**GracielaC:** good job Pat

**LoriOl:** when is your next session

**PatriciaCh:** 8-28

**AidalinS:** very interesting presentation

**LoriOl:** ok...thanks again to both of you

**VictoriaNG:** very good

**AraceliaG:** thanks really enjoyed it

**PatriciaCh:** it is a different way of thinking how to teach

**AidalinS:** is the presentation over already

**BjB:** yes, Aida...an hour has flown already!

**AidalinS:** ok thank you all

**NikkiC:** bye everyone!

**GracielaC:** thank you everyone

**PatriciaCh:** good night everyone

**JacquelynP:** thank you, it was very interesting

**IrmaalcatG:** ok thank u BJB and Pat

**JacquelynP:** have a good night everybody