Title of Session: Experience One Teacher Per Child at the BEEweb!

Moderator: Jordan Pollack

Title of File: BEEorg **Date:** July 25, 2007

Room: Playing to Learn Group

BjB: Jordan, can we start with a couple things first, please?

JBPollack bows, and awaits instruction from moderators

BiB: Welcome, everyone to One Teacher Per Student: BEE web

BjB: JB Pollack, aka Jordan Pollack from Brandeis University is the leader of this

discussion

BjB: he will be projecting urls

DoloresG: Can I just click on the link?

BjB: this means that a new window will pop up automatically on your screen

BjB: if you don't turn off pop ups, you may be knocked off

BjB: if you don't get the pop up you can still click on the url to open it

BjB: everyone ready?

EmilyH: yes

JoyJ: yes

ScottLy: I think so

BjB . o O (a reminder also to go to Actions and click on detach)

DoloresG: yes

BjB: to make it easier to read your chat

BjB hands the virtual floor over to Jordan

SerenaP: got it

BjB. o O (the first slide Jordan shared was http://laius.cs.brandeis.edu/tappin/Slide1.jpg)

JBPollack: Hi I'm Jordan,

JBPollack: I'm a professor at Brandeis in Computer Science and Complex Systems, and Beeweb is my project.

BjB cheers for Beeweb! It's amazing!

JBPollack: I'm gonna try to project about 20 jpgs from a powerpoint while I type...ready?

BjB nods

SusanneN: ok

KeikoSc is ready

DoloresG: ok

SherylM: yes

JBPollack: Then we will try to play the games

EmilyH: ok

KeikoSc . o O (play games!)

JoyJ: ok

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide2.jpg

BjB checks...everyone get that?

ScottLy: yes

EmilyH: yes

JoyJ: yes

DoloresG: ok

DavidWek smiles

VickiLM: yes

JBPollack: Bee stands for Brandeis Engaged Education. It's based on a discovery from my lab about open-ended evolution, and I realized it could save the world by providing a human teacher for every student

DavidWek . o O (interesting concept)

DavidWek . o O (1:1 teaching)

SusanneN: Wow, save the world; we need more of this

JBPollack: http://laius.cs.brandeis.edu/tappin/Slide4.jpg

JBPollack: my lab is not in an education school. We mainly work on simulating evolution and applications.

JBPollack: famous for the GOLEM project, where we used evolution to design robots which could be built by automatic factories - robots building robots... here comes the nytimes front page!!!

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide5.jpg

EmilyH: wow

KeikoSc: wow

JBPollack: now your wondering what self-building robots has to do with finding a human teacher for every child in the world,... right?

EmilyH: right

JoyJ: right

DoloresG: yes

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide6.jpg

JBPollack: The idea of evolution is sort of like a bunch of species playing a game and learning from the others in the game to get better and better, sort of like an arms race.

SusanneN: if kids could build their own robot teacher...

DavidWek . o O (if kids could build their own parents...)

JBPollack: The robot teacher is an old failed idea of AI (if we had AI, it would be like Manna)

CelesteR: I saw that idea with X_men

JBPollack: So how does learning work in evolution, so that life forms get more and more complex over time, without a superhumanly intelligent designer?

JBPollack: We study in using games and evolutionary software mainly, and discovered that COMPETITION...

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide8.jpg

JBPollack: DOESNT WORK (Mathematically)

KeikoSc: how interesting

DavidWek likes Memory Loss == Business Cycle

EmilyH nods

JBPollack: It is the western mindset, from Adam Smith onward, and we organize lots of systems (spectrum auctions, college admission, etc) based on competition. But Alfie Cohn wrote about it not working in schools...

JBPollack: We discovered a new way of arranging learning agents.

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide9.jpg

DavidWek . o O (guided evolution?)

JBPollack: not guided per se, but

KeikoSc: quite interesting

JBPollack: self-managed competition, where the self-interest of each player drives the learning of the entire group

JBPollack: We realized this would be a neat way to have children play learning games against each other on the internet, and started developing the beeweb project. First it was called CEL, then we build spellbee as a prototype for testing. It is not a spelling bee but something altogether different

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide10.jpg

DavidWek . o O (Star Logo?)

EmilyH: interesting

BjB smiles...good old ZPD

JBPollack: So beeweb is a new app of the research I do on open-ended evolution.

KeikoSc . o O (how educational!)

JBPollack: like the robots!

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide11.jpg

JBPollack: after spellbee, we started creating a lot more games. Some of the things which are teacher friendly are in this slide

JBPollack: we have 4 games working now and have been reliable for a year.

JBPollack: There are over 50,000 signups, but daily use fluctuates a lot.

JBPollack: We have 3 more (history, music, algebra) in development for this year.

ScottLy: great idea...non-commercial and engaging....

DoloresG: What are the costs associated with this?

JBPollack: The structure of each game, and I'll give more science stuff later, is that a student acting as "teacher" creates a problem for their student, the student tries to solve it, and the student and teacher both get points.

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide12.jpg

JBPollack: Dolores: It's free (but someday I have to figure out how to sustain the organization)

JBPollack: both students act in both roles like this:

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide13.jpg

JBPollack: with a server in the middle acting as mediator and gateway. There is no "chat"

SerenaP: sounds wonderful

DavidWek . o O (NSF-funded, currently?)

EmilyH: great

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide14.jpg

JBPollack: NSF ran out (:

DavidWek . o O (that is sad)

DavidWek . o O (same as TI)

JBPollack . o O (there is a big problem in sustaining innovation in E.T. which NSF and DOE ignore)

JBPollack: Instead of more science, let's try to play spellbee.

SerenaP: k!

JBPollack: go to http://spellbee.org

JBPollack: click on SIGN UP NOW, and then on TEACHERS

JBPollack: That way, you can add some of your own students later

JBPollack: Hopefully you won't run into nasty firewall issues and have cookies

turned on!

ScottLy: do we register

JBPollack: we now have a cool AJAX nickname checker which blocks all cursewords

DavidWek smiles

DavidWek . o O (rats!)

EmilyH smiles

SusanneN: My nick is susny

DavidWek . o O (davidw)

JBPollack: Students in middle school say the darndest things. We had to get a text book on English cursing for our database. http://www.amazon.com/English-Second-cking-Language-Effectively/dp/sitb-next/031214329X

DavidWek is glad there IS a database

JBPollack: After you get signed up lets pair off and play spellbee.org.

EmilyH: you have to love the middle schoolers

DavidWek figures the intersection of IM language and standard cursing might NOT be the empty set

JoyJ: how do we pair off and how do we start to play

SusanneN: To become a fluent language speaker I might need that book for myself

JBPollack: I see Tadie and MrShelmich in the room...

JBPollack: Login and then PLAY THE GAME

JBPollack: the game play is both-consent to play, so when you check somebody, you go yellow on their screen, when you check someone yellow, the game starts.

DavidWek: very cool

JBPollack: Now pick a word for your partner to spell, and they pick a word for you to

spell...

SusanneN: I've checked pariser and now what do we do?

CelesteR: Back

JBPollack: click on someone yellow to start a game.

EmilyH: cool!

JBPollack: Also, have audio turned on!!!!!!!!!!!!

DavidWek: yes

SusanneN: oh oh, nobody else wait to play now :-(

CelesteR: I think this goes well with my ESOL and low core 10th graders

DavidWek is up to 39 points

CelesteR: I had 47

DavidWek is up to 47

CelesteR ;-0

DavidWek smiles

JBPollack: damn I spelt a word wrong!

DavidWek laughs

DavidWek . o O (more than one)

JBPollack: Anyone Not getting in??

BjB crosses out damn and puts in darn

SusanneN: I'm in and do not see how to spell

DavidWek . o O (dang?)

JBPollack: Suzanne, did you find a partner in there, or waiting for another person?

DavidWek starts to think about strategy

BjB thinks this game is rigged! I'm not hearing the word correctly in the audio

EmilyH: me either

BjB digs out the spuds from her ears

SusanneN: I found BJ as my partner and I think I'm getting it

JBPollack: there is a REPLAY Audio button

SerenaP: So I have to guess what the word is without a word bank?

DavidWek passes out the Q-tips

DavidWek has used the REPLAY Audio button several times

JBPollack: now I'm beating David 53 50

JoyJ: The audio replay button is very beneficial

DavidWek focuses

JBPollack: we did the first 1000 words with a human voice model, then went to ATT

text-to-speech.

JBPollack: losing now

DavidWek: can I figure out who my partner is?

SusanneN: this is fun indeed

SerenaP: oh.. haha didn't have audio turned on

DavidWek smiles

DavidWek: Audio is definitely helpful (perhaps essential)

JBPollack: http://aeaea.cs-i.brandeis.edu:8080/spellbee/game.jsp should open a window with current games ongoing...

JBPollack: then click on new game...

DavidWek: has there been some educational research done on students using the game?

BjB: thanks, Sus...good game

BjB . o O (still found the audio very difficult to understand in some of the sentences)

BjB: but it was fun!

JBPollack: We have done a lot of research on this paradigm, but no formal large classroom studies on whether standardized test scores go up

CelesteR: Listening skills for my students

SusanneN: I would never have thought that courage could be spoken this way, so I made an estimated guess

DavidWek smiles

BjB . o O (even if I was creamed!)

DavidWek: "read" past tense/present tense discrepancy on one of my audio prompts

ScottLy: cool game

ScottLy: I won

BjB cheers for Scott

DoloresG: How come I do not see the word I am being ask to spell?

BjB: you have to listen for the word, Dolores

JBPollack: http://laius.cs.brandeis.edu/tappin/Slide28.jpg for example, shows that students are sensitive to how the video game rewards them for choosing easy and hard problems, and http://laius.cs.brandeis.edu/tappin/Slide29.jpg shows different learning curves for students under different teacher payoff strategies.

SherylM: Do the students start to compete with each other by selecting words that are more difficult

SusanneN: if I have more points, next time, I seem to be offered less points in case my partner is wrong

SherylM: or do they try to cooperate and give words so that both get more points

DorethiaM: this is great.

ScottLy: Can you choose a grade level to play?

JBPollack: Anyone ready to move onto patternbee?

SusanneN: I started to look out for more points after a while

EmilyH: I really like the student choice aspect

SusanneN: yes yes next game!

ScottLy: yes

JoyJ: next!

DoloresG: Yes

BjB thinks we should move to the next game...only 15 minutes left

SherylM: yes

DorethiaM: sounds good

JoyJ: yes

SerenaP: o.k. so can you choose a grade level?

BjB wonders if Jordan should schedule a repeat session for September

DorethiaM: 7

JBPollack: Lets all go to patternbee by clicking on it from the bottom icon, or by going to http://patternbee.org and re-logging in.

JBPollack: so far I saw sss1...

SusanneN: I like the Google map of visitors

JBPollack: Suzanne, wait till you see the graphs of your students progress..

DavidWek is logging in

JBPollack: entering a game with sss

JBPollack: in pattern bee, we use a rare asymmetric kind of tangram. Instead of picking a word, you make up a tangram puzzle with 1-6 pieces and send it across the internet

DavidWek smiles

DavidWek likes tangrams

JBPollack: You can rotate with the right mouse button, or the rotate button, or the "R" key, and flip with the "F" key

DavidWek: once you select someone to play....?

DavidWek . o O (what next?)

SusanneN: I wish to play with David

DavidWek: okay

SusanneN: but then what

JBPollack: they have to select you (in green instead of yellow)

JBPollack: Then your java app loads and the game starts...

DavidWek: I've selected two people, but I'm still waiting...

JBPollack: somebody please pick David!!!!

DavidWek sees the list of people, some of whom are busy

DavidWek smiles

SusanneN: Ok, so you're blue

DoloresG: I have selected, but am also waiting.

SusanneN: I already DID pick David

DavidWek: I'm hearing some tones...

DavidWek: but still seeing the names

JBPollack: David, can you see anyone in green?

DavidWek: yes

SusanneN: I only see sunnyone in green

JBPollack: click on them!

DavidWek: susny is Susanne, I think

SusanneN: yes I'm susny

DavidWek: did

ScottLy: tough game

DavidWek: thanks

SusanneN: ok!

SerenaP: someone wanna parter up?

JBPollack: kids are better than adults at this one:)

DavidWek sucks at these puzzles

EmilyH: What is the beeping for

DavidWek checks "sucks" against the database

DoloresG: I do not know what I did, but my choices were changed.

DorethiaM: great for visual spatial and brain training for kids with learning disabilities.

CelesteR: My system went off for a few minutes...:- {

JBPollack: The screens each have a timeout; You can hit READY in the racing car scene to jump ahead..

DoloresG: What are the bells and the whistle

SusanneN: noise

JoyJ: Some of these are difficult.

DavidWek ran out of time

DavidWek: good puzzle, Sus

DorethiaM: I get the hang of it.

JBPollack: Spatial reasoning, back tracking, constraint satisfaction, creativity, you name

it Patternbee's got it:)

EmilyH: indeed

JBPollack: undergrads chose the sound track, unfortunately

SusanneN: I liked yours

JBPollack: In the last 5 minutes I'd like to project a couple final slides...

SusanneN: Yay, I made it Dave

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide31.jpg

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide31.jpg

DavidWek: good

DavidWek just lost the game when the last slide was projected

BjB: always difficult to teach money concepts and find good resources

DavidWek smiles

SusanneN smiles back at her play mate

JBPollack: moneybee is a pre algebra guess-and-check and conservation of number

game.

DavidWek smiles

EmilyH: Do you have an estimate for when the algebra game will be up and running?

DavidWek . o O (RSN)

JBPollack: Geograbee is very popular state-capital (which everyone hates to teach but

has to)

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide32.jpg

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide32.jpg

JBPollack: Welcome to try at anytime.

JBPollack: Please add your students at spellbee, then you can monitor their progress

SerenaP: I love state capitals!

DavidWek smiles

DavidWek . o O (Trenton?)

SerenaP: Jersey!

DavidWek smiles

SerenaP: this is great. thanks!

JBPollack projects http://laius.cs.brandeis.edu/tappin/Slide34.jpg

JoyJ: how close is the music one to being up?

SusanneN: Yes, I definitely enjoyed this too, as a learner :-)

BjB: Thanks, Jordan. I'm serious about doing a repeat session in September or

October...please keep in touch

DavidWek: Great last slide

EmilyH: thanks!

JBPollack: Melobee by end of 07.

DavidWek agrees with Bj's suggestion about another presentation in TI

JBPollack: Thanks for hosting me. I'll be back whenever BJ calls.

JoyJ: what musical aspect will it be covering?

CelesteR: I can't wait to use this, it engages and makes students independent.

JBPollack: I want a game which students make constructions for each other with on screen compass and straightedge

ScottLy: Thanks for the information.

SusanneN: Thanks a lot Jordan for taking your time

DavidWek: That would be an interesting project to work on - collaborative geometry

BjB hugs Jordan...this was terrific!

JBPollack hugs BJ Back. See you again!

KeikoSc: THANK YOU for your presentation!

JBPollack bows

KeikoSc: I have read some sign in forms with comments.

KeikoSc: Everybody LOVED IT.

KeikoSc: And the festival keeps going STRONG!

ScottLy: nice job...I have to go...I'll be back

SherylM: waves goodbye